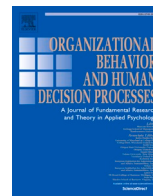




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Are you too happy to serve others? When and why positive affect makes customer mistreatment experience feel worse

Randy Lee^{a,1}, Ke Michael Mai^{b,*}, Feng Qiu^c, Remus Ilies^d, Pok Man Tang^e

^a Department of Management, Lingnan University, 8 Castle Peak Road, Tuen Mun, Hong Kong, China

^b Department of Management and Organisation, NUS Business School, National University of Singapore, 15 Kent Ridge Drive, Singapore 119245, Singapore

^c Department of Management, Isenberg School of Management, University of Massachusetts Amherst, 121 Presidents Drive, Amherst, MA 01003, United States

^d Department of Management and Technology, Bocconi University, Via Roentgen 1, 20136 Milano, Italy

^e Department of Management, Terry College of Business, University of Georgia, 600 South Lumpkin Street, Athens, GA 30602, United States

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ABSTRACT

Service employees encounter frequent mistreatments on the job, and these mistreatments can occur unexpectedly. Despite the overall favorable impact of positive affect on coping with negative events, we argue that it could create an expectancy disconfirmation for service employees when they face customer mistreatment. Drawing from expectancy disconfirmation theory, we predict that such expectancy disconfirmation heightens service employees' need for self-regulation and thus consumes self-control resources. Using a total of 791 service professionals in both online and field (i.e., e-commerce firms in China and a hotel in India) experiments, we found that positive expectancy disconfirmation was positively related to self-control depletion, which led to greater subsequent perceived mistreatment by customers and need for psychological detachment from work (Study 1 and 2). Furthermore, we identified expectation of customer mistreatment as a boundary condition that attenuated the relationship between expectancy disconfirmation and self-control depletion (Study 3 and 4). We discuss the theoretical and practical implications of our work.

The service industry has become the cornerstone of the global economy. In 2018, the service sector accounted for over 61 % of the world's gross domestic product (GDP) (World Bank, 2020) and in 2019, it accounted for over 68 % of the U.S. GDP (U. S. Bureau of Economic Analysis, 2020). Intrigued by the increasingly service-oriented global economies, organizational scholars have spent a great amount of effort studying how organizations should manage service employees' behaviors and support their well-being (J. R. Anderson, 2005). This is critical to the service industry, as it can not only better enhance work morale and retain good service professionals, but also help achieve greater customer satisfaction and sustainable profitability (Bowen & Schneider, 2014; Groth & Goodwin, 2011).

As a matter of fact, service employees encounter frequent customer mistreatments on the job. Prior research has shown that aggression from customers is more likely to occur than aggression from coworkers (LeBlanc & Kelloway, 2002) and that service employees experience

several episodes of customer aggression daily (Grandey et al., 2004). Indeed, customer mistreatment has deleterious consequences such as counterproductive workplace behaviors (Ho & Gupta, 2014), withdrawn helping (Shao & Skarlicki, 2014), absenteeism (Sliter et al., 2012), and sabotage against customers (Wang et al., 2011). Furthermore, research has shown that customer mistreatment can have a negative effect on employees' physical health (Sliter et al., 2011), and cause both negative emotions (Rupp et al., 2008; Yang & Diefendorff, 2009; Yue et al., 2017; Zapata-Phelan et al., 2009) and feelings of exhaustion (Grandey et al., 2004; Zhan et al., 2016).

Given its severity, many scholars have explored the means to cope with customer mistreatment and to neutralize its negative effects. For example, prior studies have shown that personal characteristics, such as moral identity (Skarlicki et al., 2008), low negative affectivity (Walker et al., 2014; Wang et al., 2011), and some organizational factors (e.g., perceived organization support; Wang et al., 2013) can help buffer the

* Corresponding author.

E-mail address: bizmk@nus.edu.sg (K.M. Mai).

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negative effects of customer mistreatment on service employees. Nevertheless, our knowledge about the factors that could positively influence service professionals' reactions to personal experiences of customer mistreatment is still limited (Song et al., 2018). At present, given the negative effects associated with experienced mistreatment, positive affect has been consistently touted to attenuate these negative effects (e.g., Goussinsky, 2011; Harvey et al., 2007).

Indeed, prior work in emotion and affect has emphasized the importance of positive affect in coping with stress (e.g., Folkman & Moskowitz, 2000; Fredrickson & Losada, 2005; Luthans, 2002; Seligman & Csikszentmihalyi, 2000), partly through replenishing one's self-regulatory resources (e.g., Lazarus et al., 1980; Tice et al., 2007). Yet, the universal benefits of positive affect may not always hold true. In fact, a growing amount of evidence suggests that there are costs to maintaining and pursuing positive affect (Baumeister & Vohs, 2016; Frank et al., 2021; Gross, 1998). For instance, people in a state of positive affect are more sensitive than people in a state of neutral affect to the mood-changing consequences of their actions (Wegener & Petty, 1994). Furthermore, positive affect may influence one's information processing tendencies, causing one to be more sensitive about future events (Carver & Scheier, 1998). Contributing to this shift in consensus, organizational research has also shown how people in a state of positive affect may perceive more accounts of incivility (Sliter et al., 2015). Such findings suggest that the implications of holding positive affect may extend beyond a customer service context to more traditional organizational settings, where incivility and aggression from coworkers can be experienced (e.g., Hershcovis et al., 2007).

Given such counterintuitive findings surrounding positive affect and based on what we know about experienced mistreatment so far, we believe it is crucial to explore the nuance of this interaction on an event basis (Morgeson et al., 2015). In particular, drawing from expectancy disconfirmation theory (EDT; Carlsmith & Aronson, 1963) to provide us with the theoretical underpinnings, we theorize how positive affect gives rise to positive expectancies that can be disconfirmed when service employees encounter customer mistreatment, a process we term *positive expectancy disconfirmation*. Positive expectancy disconfirmation triggers information processing and sensemaking, both of which are deliberative thought processes as people attempt to rationalize the causes and reasons behind the disconfirmation (Roese & Sherman, 2007; Rosen et al., 2016). However, such self-regulatory activities consume psychological resources and deplete self-control resources (Baumeister & Vohs, 2016; Johnson et al., 2017). As it stands, then, positive expectancy disconfirmation should lead to self-control depletion. Thus, compared to those who hold neutral affect and then encounter customer mistreatment, service employees in a state of positive affect when they encounter customer mistreatment would experience higher levels of self-control depletion.

Moving beyond the proximal depleting effect associated with positive expectancy disconfirmation, we believe that this depleting effect will translate into more overt behavioral and psychological outcomes for service employees. Thus, to further demonstrate the importance of examining positive expectancy disconfirmation, it is necessary to consider its downstream work consequences. Specifically, we examine how service employees perceive higher levels of subsequent mistreatment and experience a need for psychological detachment from work in reaction to the self-control depletion caused by positive expectancy disconfirmation. In this way, we show how the effects of expectancy disconfirmation experienced triggered by a single episode of mistreatment can perpetuate more perceived mistreatment over the workday. In addition, we show how positive affect, often pursued in recovery activities (e.g., Sonnentag & Fritz, 2015), can ironically lead to a desire for more recovery when the positive expectancies associated with positive affect are disconfirmed. To further support our proposition that positive expectancies associated with positive affect is a key mediating mechanism, we examine how increasing expectation of customer mistreatment can buffer the effects of positive expectancy disconfirmation. We

summarize our theoretical model in Fig. 1.

To examine our theoretical model, we adopt a mixed-methods approach by designing and conducting a series of four studies that (a) employed different research methodologies (e.g., both online and field experiments), (b) recruited participants from different countries (i.e., the United Kingdom, the United States, China, and India), as well as (c) provided a robust examination of our model by accounting for alternative mechanisms. In doing so, our study package helps establish both internal and external validity. Towards this end, our research makes at least three important contributions to research on positive affect, expectancy disconfirmation, and customer-employee service interactions.

First, we address an important yet overlooked stream of research—potential downsides of maintaining and pursuing positive affect—that has begun to gain more attention recently (Frank et al., 2021; Scott et al., 2020). Extant research has painted a consistent picture that positive affect is beneficial for employees engaging in emotional labor and affective delivery (Morris & Feldman, 1996; Trougakos et al., 2008). However, if holding a positive affective state before encountering customer mistreatment in fact makes service employees feel worse, this implies that there are potential drawbacks of positive affect that warrant more research attention. Our work thus contributes to the shift in consensus that maintaining and pursuing positive affect may come at a cost (Frank et al., 2021). Second, we contribute to EDT by theorizing how positive expectancy disconfirmation may occur in the context of customer service (i.e., customer mistreatment disconfirming positive expectations associated with positive affect). We then go on to explicate how positive expectancy disconfirmation triggers a process of self-regulation, which leads to self-control depletion (Baumeister & Vohs, 2016). Third, our studies aim to contribute to research in customer-employee service interactions. Specifically, we show that increasing expectations toward customer mistreatment may attenuate its negative consequences. Consequently, our findings simultaneously provide effective and practical strategies that managers can employ to stem these negative consequences (Koopmann et al., 2015).

1. Positive affect and positive expectancy disconfirmation

Extant work in positive affect has typically associated positive affect with improved self-regulation (e.g., Aspinwall, 1998; Tice et al., 2007). Relatedly, a fair amount of research has demonstrated the recovering effect of positive affect. For example, Tice and colleagues (2007) showed that positive affect can help individuals recover from depletion and restore depleted control capacity. In the health psychology domain, Fredrickson and Levenson (1998) showed that positive emotions speed up recovery from the cardiovascular sequelae of negative emotions. Similarly, Papousek et al. (2010) also found that positive affect was associated with more complete cardiovascular and subjective post-stress recovery.

Despite the far-reaching benefits of positive affect, we believe that our understanding of positive affect might not be complete, particularly its influence on how people perceive and appraise interpersonal interactions. This observation is made based on past research showing how positive affect was related to greater perceptions of incivility (Sliter et al., 2015) and resulted in more negative reactions following experienced undermining (Britton et al., 2012). Although not explicitly tested, possible explanations that these authors postulated are that positive affect may give rise to positive expectations that were unmet or that people in a state of positive affect simply subjected others to a higher standard of interpersonal behavior (Sliter et al., 2015).

Indeed, these explanations are in line with past research demonstrating that people not only tend to develop positive expectations and judgments when they experience positive affect (Bower, 1981; Forgas & Bower, 1987), but are also motivated to maintain it (Bower, 1981; Forgas & Bower, 1987; Isen et al., 1978; Isen & Shalcker, 1982; Isen & Simmonds, 1978). For example, prior research has shown that positive affect makes people control themselves by taking less risk in decision-

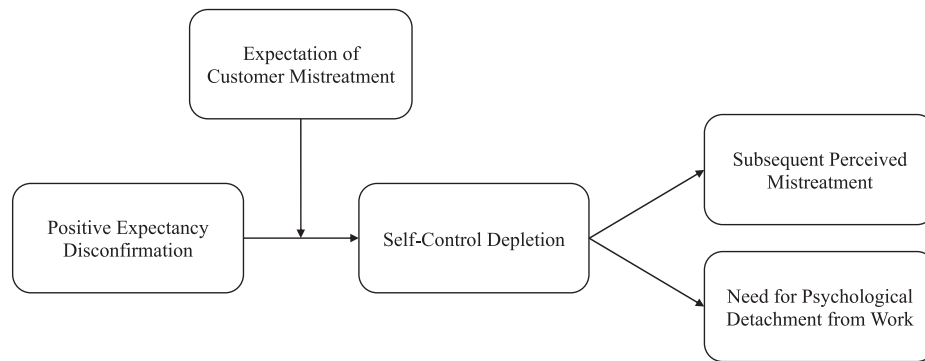


Fig. 1. Proposed Theoretical Model. *Note.* Positive expectancy disconfirmation in this case refers to the process when one holds a state of positive affect prior to encountering simulated customer mistreatment.

making tasks (Isen, 1993; Isen et al., 1988; Isen & Geva, 1987; Nygren et al., 1996). Likewise, past research has also found that people are more sensitive to external stimuli when they are in a state of positive affect in general because of a “more limited set of behavioral alternatives that will lead to hedonic rewards” (Wegener & Petty, 1994, p. 1035).

Perhaps more germane to the present research, highly positive or optimistic people tend to overestimate the probability of positive events and underestimate the probability of negative events happening to them (Bower, 1981; Mayer et al., 1992; Weinstein, 1980; Weinstein & Klein, 1996). This may in turn be detrimental to the self-control process as individuals neglect precautionary behaviors and select inappropriate goals and standards for self-regulation (see Aspinwall, 1998; Clore et al., 1994 for reviews). In this case, encountering customer mistreatment while in a state of positive affect is potentially dangerous for the service professional because customer mistreatment violates one’s positive expectations associated with positive affect and threatens the maintenance of a positive affective state.

However, before delving into the consequences of a disconfirmed expectancy, it is important to understand the role of expectancy for effective human functioning. Roese and Sherman (2007) stated that “Expectancies are beliefs about a future state of affairs, subjective estimates of the likelihood of future events ranging from merely possible to virtually certain” (p. 91). Early work theorized that expectancies are the main drivers behind behavior regulation—guiding and regulating behaviors to either avoid or acquire something (Bandura, 1986; Higgins, 2000; Roese & Sherman, 2007). Thus, it is not surprising to learn that people with high self-efficacy are more confident in pursuing their goals because they expect successful outcomes to be within their control (Bandura, 1982; Bandura et al., 1999). In a similar fashion, positive affect typically energizes ongoing effort (Bandura & Locke, 2003; Erez & Isen, 2002) because it connects people to positive thoughts and allows them to formulate positive expectations (e.g., Isen et al., 1978; Teasdale & Fogarty, 1979; Teasdale & Russell, 1983; Wright & Mischel, 1982). Relatedly, a large body of work in positive affect has documented how people are more likely to engage in broaden-and-build activities when they experience positive affect (Fredrickson, 2001, 2013).

Contrary to the optimistic narrative of positive affect, much less is known about the potential consequences when these affect-induced positive expectancies are disconfirmed. Past research has attempted to examine the effects of expectancy disconfirmation in a variety of domains. For example, in an early marketing study, Anderson (1973) found that the disparity between high consumer expectations and actual product performance caused poorer evaluation of a product compared to a lower level of disparity between expected and actual performance. Further empirical research also found consistent evidence that when people developed high expectations, their reactions to the outcomes were more negative after the expectations were disconfirmed (e.g., Terry, 1971; Terry & Lindsay, 1974; Weaver & Brickman, 1974). According to EDT (Carlsmith & Aronson, 1963), cognitive dissonance is

aroused whenever an event disconfirms one’s expectancy. Carlsmith and Aronson (1963) further suggest that whenever an expectancy is disconfirmed, one would have to reformulate one’s expectations in order to be correct in future. Building on this perspective, more recent examination of expectancy disconfirmation suggests that self-regulation processes such as information processing and sensemaking occur after expectancy disconfirmation (Roese & Sherman, 2007).

Following from the above theorizing, service employees are likely to develop positive expectations (i.e., expecting pleasant service interactions) at work when they are in a positive affective state. However, these expectations can be disconfirmed when service employees encounter customer mistreatment, a process referred to as positive expectancy disconfirmation. As EDT predicts, such positive expectancy disconfirmation arouses dissonance that warrants people’s attention immediately (Carlsmith & Aronson, 1963). This will then be swiftly followed by self-regulatory processes of information processing and sensemaking—finding explanations for the unmet positive expectations and reformulating future expectations to attain work goals (Lord et al., 2010; Roese & Sherman, 2007). Both of these self-regulatory processes also create uneasiness and uncertainty for individuals. Consequently, they consume psychological resources and deplete the reserves needed for subsequent self-control (Baumeister & Vohs, 2016; Johnson et al., 2017). Past research has provided indirect support of the relationship between positive expectancy disconfirmation and self-control depletion by looking at how making decisions under high uncertainty can make people significantly depleted (Conlon et al., 2012; Milkman, 2012). Likewise, mindset switching has also been found to deplete self-regulatory resources (Hamilton et al., 2011). Put together, the self-regulatory processes following positive expectancy disconfirmation should cause people to experience self-control depletion.

Hypothesis 1. Positive expectancy disconfirmation is positively related to self-control depletion.

2. Self-Control depletion and subsequent perceived mistreatment

Recent research suggests that the experience of customer mistreatment is subjective in nature (Bies, 2001; Song et al., 2018) because of variations in judgments and perceptions between and within service employees (Skarlicki et al., 2008). In line with this conceptualization, we expect self-control depletion to influence how service professionals interact with customers, specifically how they subjectively evaluate their interactions with subsequent customers and how they may inadvertently receive (or feel that they receive) more actual customer mistreatment over the workday.

Feelings of depletion trigger a process of resource conservation such that people are less likely to invest resources under the fear of further resource loss (Hobfoll, 2001; Muraven et al., 2006). For instance, past research found that when people experience depletion of self-control

resources, subsequent acts of volition, such as attempts at self-control, are unlikely to occur (Baumeister et al., 2000). Self-control depletion also drives employees to be more protective of their resources and are thus less tolerant to any external stimuli that may result in further resource loss (Baumeister et al., 2000; Muraven et al., 2006). Customers usually approach service employees with enquiries or requests. However, when service employees are depleted, they tend to run on a “short fuse” and are less tolerant toward customers. Hence, even additional enquiries or small requests by customers can be perceived or misinterpreted as overly demanding and mistreating.

When service employees feel depleted, they are also less capable of engaging in positive affective displays or conform to organizational display rules because these actions typically require prior emotion regulation processes that are effortful in nature (Brotheridge & Lee, 2002; Grandey, 2003). As such, customers may feel dissatisfied with the service experience and become rude to the service employees (Harris & Reynolds, 2003; McColl-Kennedy et al., 2009). This is supported by research on customer mistreatment showing that retaliatory actions are largely driven by customers’ negative emotions or feelings of unjustness (Groth & Grandey, 2012; Koopmann et al., 2015). Therefore, service employees who are depleted in self-control resources may inadvertently perceive they receive and actually face more customer mistreatment during the workday.

Hypothesis 2a. Self-control depletion is positively related to subsequent perceived mistreatment.

Hypothesis 2b. Self-control depletion mediates the indirect relationship between positive expectancy disconfirmation and subsequent perceived mistreatment.

3. Self-Control depletion and need for psychological detachment from work

Besides work outcomes, service employees who experience self-control depletion are likely to report a need for recovery that can help replenish lost self-control resources (Johnson et al., 2017; Sonnentag & Zijlstra, 2006). One type of recovery activity is psychological detachment from work, which refers to “(an) individual’s sense of being away from the work situation” (Etzion et al., 1998, p. 579) or simply “switching off” mentally (Sonnentag & Bayer, 2005). Past research has found consistent evidence that when employees are exhausted or have a high amount of workload, they experience a strong urge to psychologically detach from work in the evening because of lingering thoughts associated with work (Sonnentag, 2011; Sonnentag et al., 2014; Sonnentag & Bayer, 2005). Likewise, when one experiences a depletion of self-control resources, one would ideally desire activities that could help stem further resource loss and begin the process of resource replenishment.

The logic of psychological detachment as a recovery mechanism is based on people’s motivation to restore their physiological and psychological systems to baseline levels after significant amount of resources have been depleted (Craig & Cooper, 1992; Linden et al., 1997; Meijman & Mulder, 1998). Self-control depletion triggers a need to engage in recovery activities that regain resources or prevent further resource loss. Indeed, past studies showed that when people experience resource loss, they tend to adopt defensive strategies to minimize any further loss of resources (Hobfoll, 2011; Hobfoll & Shirom, 2000). As such, when service employees experience self-control depletion, the corresponding recovery activity should seek or attempt to attenuate the feeling of depletion. One way to do so would be to seek psychological detachment because it allows employees to curtail the demands and stress associated with the work situation (Etzion et al., 1998).

Hypothesis 3a. Self-control depletion is positively related to need for psychological detachment from work.

Hypothesis 3b. Self-control depletion mediates the indirect relationship between positive expectancy disconfirmation and need for psychological detachment from work.

4. Overview of studies

We employed a mixed-methods approach comprising four studies² (and two supplemental studies) to test our hypothesized theoretical model. Specifically, in Study 1, we manipulated both affect and customer mistreatment in an online experiment (with participants in the United Kingdom and the United States) to provide initial evidence of positive expectancy disconfirmation. Meanwhile, Study 1 also provided an initial test of the relationship between self-control depletion and subsequent perceived mistreatment and need for psychological detachment. In Study 2, using a different set of procedure to manipulate affect for a more robust test of our hypotheses, we tested our theoretical model with a field experiment conducted in China and addressed potential issues in Study 1. Finally, we conducted two follow-up studies—one with participants in the United Kingdom and the United States (Study 3) to specifically tease out the buffering effect of customer mistreatment expectation and one with participants in India (Study 4) to more robustly examine our full hypothesized model in a field setting. Overall, the mixed-methods package that we employed in this research should help provide strong evidence of internal and external validity regarding our hypothesized relationships. The dataset of all four studies can be found at the Open Science Framework’s depository: <https://osf.io/6e5jv>.

5. Study 1: Method

5.1. Participants and design

In Study 1, we provide initial evidence by manipulating both affect and customer mistreatment in an online customer service simulation. 174 customer service professionals from the United Kingdom and the United States on Prolific participated and were compensated \$1.80 each for their effort.³ Prolific is an online crowd-sourcing survey platform where participants from different countries complete research projects for monetary compensation. Using Prolific’s built-in prescreening function, we specifically screened for participants who are employed in a customer-facing role as of the time of the study. The average age of participants was 31.4 years ($SD = 10.69$), 50 % were female and the average job tenure was 11.0 years ($SD = 6.65$). In this study, participants were randomly assigned to one of four conditions in a 2 (affect: *positive vs neutral*) \times 2 (customer mistreatment: *yes vs no*) between-participants factorial design.

5.2. Procedure

We used an interactive simulation to create the context of a typical day of an employee at a local convenience shop (see Supplemental Materials 1). The simulation is designed in the form of a role-play game where participants choose and name a character that would represent them in the simulation. Through built-in program logic, both the image of the character and name were then used throughout the simulation accordingly. To enhance the realism of the simulation, we created a matching task, where participants were told to match three products with their respective shelves as part of a restocking activity. Subsequently, at a work break depicted in the simulation, we manipulated participants’ affect by randomly assigning them to either a positive affect or a neutral affect condition (see below). After the affect

² All four studies received prior approval from the Institutional Review Board of the corresponding author’s institution.

³ Using G*Power to conduct a power analysis, to detect a small effect size of 0.25 at the standard 0.05 alpha error probability and with a power of 0.80 (Cohen, 1992), the recommended sample size is 180 (i.e., 45 per cell). 6 participants did not comply with the attention check, and their responses were thus excluded from analysis.

manipulation, participants were told to resume work. At this point, we told them that a customer had approached them in the store. Here, we again randomly assigned participants to either a customer mistreatment or a no customer mistreatment condition (see below). After participants typed responses to the customer, they answered a short questionnaire containing the manipulation check and dependent measures.

5.3. Affect manipulation

We used a two-part manipulation to increase the salience of the targeted affect. A two-part manipulation is a common practice used in psychology research (e.g., Lerner et al., 2003). Participants in the positive affect condition listened to Mozart's Divertimento in D major, K. 136 "Salzburg Symphony No. 1" and recalled a happy event that took place in the past month. Participants in the neutral affect condition listened to Fauré's (1975) Ballad for Piano and Orchestra (Opus 19) and recalled what they did yesterday. The manipulations used in both affect conditions were adapted from prior research using musical selections and recall tasks to induce positive and ensure neutral affect (e.g., Emich, 2014; Huntsinger, 2011, 2012; Stein et al., 2000).

5.4. Customer mistreatment manipulation

Participants in the customer mistreatment condition listened to two voice recordings of a rude customer. Participants in the no mistreatment condition listened to two voice recordings of a neutral customer (see Supplemental Materials 1 for voice recordings and pretest results).

5.5. Measures

Self-Control Depletion. We measured self-control depletion using the State Self-Control Capacity Scale developed by Twenge et al. (2004). Participants rated on a 5-point scale the extent to which each of the statements reflected their feelings of self-control depletion after responding to the customer in the mistreatment manipulation (1 = *not at all*, 5 = *extremely*). Sample items are, "I feel drained" and "My mind feels unfocused right now." Cronbach's alpha for the scale was 0.96.

Subsequent Perceived Mistreatment. To measure subsequent perceived mistreatment, we first got participants to listen to a voice recording of a customer designed to sound ambiguous after participants reported their feelings of self-control depletion (see Supplemental Materials 1). Participants rated the recording with a 3-item scale developed by Chi et al. (2013) and used in Chi et al. (2018). Compared to other customer mistreatment scales designed for a call-center setting (e.g., Skarlicki et al., 2008; Wang et al., 2011), this scale was chosen to broadly capture customer mistreatment during in-person interactions. Participants rated their agreement to the items on a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*) after listening to the recording. The items are, "The customer complained about my service performance without reason," "The customer made unreasonable demands that I could not fulfill," and "The customer spoke aggressively to me." Cronbach's alpha for the scale was 0.76.

Need for Psychological Detachment from Work. Need for psychological detachment from work was assessed using a 4-item scale developed by Sonnentag and Fritz (2007). We asked participants to report the extent to which they would engage in the following behavior after work in the simulation on a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*). Sample items are, "I forgot about work" and "I did not think about work at all." The Cronbach's alpha for the scale was 0.88.

Manipulation Checks. As a manipulation check for the affect manipulation, we assessed how negative or positive participants felt on a 10-point scale (1 = *very negative*, 10 = *very positive*) immediately after they listened to the music and completed the recall task. Participants in the no affect manipulation condition also reported their affect. As a manipulation check for the customer mistreatment manipulation, we asked participants to rate how rude the customer was on a 5-point scale

(1 = *not at all*, 5 = *extremely*).

6. Study 1: Results and discussion

6.1. Manipulation Check: Affect

A one-way analysis of variance (ANOVA) revealed that participants experienced more positive affect when they listened to music designed to induce positive affect and recalled a past happy event ($M = 7.47$, $SD = 1.58$) than when they listened to music designed to induce neutral affect and recalled what they did yesterday ($M = 6.90$, $SD = 1.84$), $F_{(1, 172)} = 4.77$, $p = .030$, *partial* $\eta^2 = 0.03$. Thus, the results confirmed the intended manipulation effect.

6.2. Manipulation Check: Customer mistreatment

Because the manipulation check questions for customer mistreatment were given after the affect manipulation and the customer mistreatment manipulation, we ran a 2×2 ANOVA on participants' ratings of the rudeness of the customer. Results revealed that participants in the customer mistreatment condition ($M = 4.19$, $SD = 0.85$) rated the customer in the simulation to be ruder than those in the no customer mistreatment condition ($M = 1.82$, $SD = 0.91$), $F_{(1, 170)} = 310.20$, $p < .001$, *partial* $\eta^2 = 0.65$. Neither affect manipulation ($p = .60$) nor the interaction between the two manipulations ($p = .12$) affected participants' rating of the customer rudeness. Thus, the results confirmed the intended manipulation effect.

6.3. Tests of hypotheses

Descriptive statistics, correlations, and reliabilities are reported in Table 1.

Self-Control Depletion. A 2×2 ANOVA on participants' self-control depletion revealed no significant main effect for affect ($p = .33$), but a significant main effect for customer mistreatment ($F_{(1, 170)} = 24.45$, $p < .001$, *partial* $\eta^2 = 0.13$), and a significant interaction effect between the two manipulations, $F_{(1, 170)} = 4.37$, $p = .038$, *partial* $\eta^2 = 0.03$ (see Fig. 2). Pairwise comparisons revealed that among those in the customer mistreatment condition, participants reported significantly higher levels of self-control depletion in the positive affect condition ($M = 3.11$, $SD = 0.78$) than those in the neutral affect condition ($M = 2.75$, $SD = 0.74$), $t_{(81)} = 2.14$, $p = .035$, $d = 0.47$), but there was no significant difference between these two conditions in the no customer mistreatment condition ($p = .43$). Thus, Hypothesis 1 was supported.

Subsequent Perceived Mistreatment. Using Mplus 7.4 (Muthén & Muthén, 2017), we conducted path analyses with both subsequent perceived mistreatment and need for psychological detachment from work as the dependent variables (see Table 2). As shown in Table 2, in the analysis with self-control depletion and the experimental conditions as the independent variables and subsequent perceived mistreatment as the dependent variable, results revealed a positive and significant relationship ($\beta = 0.25$, $p = .001$). Thus, Hypothesis 2a was supported.

Need for Psychological Detachment from Work. As shown in Table 2, after entering self-control depletion and the experimental conditions as the independent variables and need for psychological detachment from work as the dependent variable, results revealed a positive and significant relationship ($\beta = 0.39$, $p < .001$). Thus, Hypothesis 3a was supported.

Mediating Effects of Self-Control Depletion. To test for the mediating effects of self-control depletion, we followed the mediation analysis recommended by Hayes and Preacher (2014) for multi-categorical independent variables. We first dummy coded all unique experimental groups except for the neutral affect and no mistreatment group, which is designated as the reference group. Thus, there are three dummy variables representing participants in neutral affect and mistreatment condition, positive affect and no mistreatment condition, and positive affect

Table 1
Means, Standard Deviations, Correlations, and Reliabilities (Study 1).

Variable		M	SD	1	2	3	4	5
1.	Affect manipulation ¹	0.49	0.50	–				
2.	Customer mistreatment manipulation ²	0.48	0.50	-0.09	–			
3.	Self-control depletion	2.61	0.82	0.03	0.34**	(0.96)		
4.	Subsequent perceived mistreatment	1.80	0.74	0.06	-0.19*	0.16*	(0.76)	
5.	Need for psychological detachment	4.07	0.80	0.02	0.15*	0.40**	0.07	(0.88)

Note. N = 174. Cronbach's alphas are in parentheses.

¹ Affect manipulation: neutral affect condition = 0, positive affect condition = 1.

² Customer mistreatment manipulation: no mistreatment condition = 0, customer mistreatment condition = 1.

* p < .05.

** p < .01.

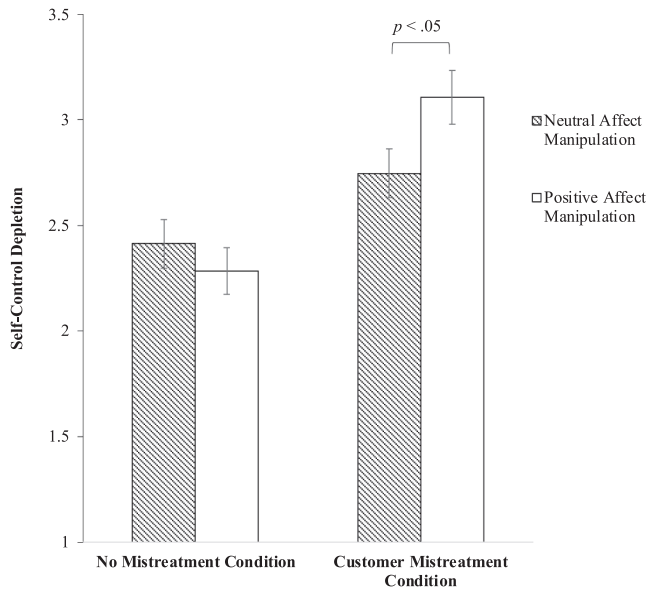


Fig. 2. Means of self-control depletion by condition in Study 1. Note. Error bars represent ± SE.

and mistreatment condition. Next, we conducted ordinary least squares regression analysis on subsequent perceived mistreatment with self-control depletion and these dummy variables as independent variables and with these dummy variables predicting self-control depletion.

Results revealed that relative to the reference group, the indirect effect of the positive affect and no mistreatment condition on subsequent perceived mistreatment through self-control depletion was not significant as the confidence interval included zero (indirect effect = -0.03, SE = 0.04, 95 % bias-corrected confidence interval [-0.117, 0.031]). However, the indirect effects of the neutral affect and mistreatment

condition (indirect effect = 0.07, SE = 0.04, 95 % bias-corrected confidence interval [0.007, 0.177]) and the positive affect and mistreatment condition (indirect effect = 0.14, SE = 0.05, 95 % bias-corrected confidence interval [0.056, 0.260]) on subsequent perceived mistreatment through self-control depletion were significant as the confidence interval did not include zero. Further, the difference between these two indirect effects was significant (difference = 0.07, SE = 0.04, 95 % bias-corrected confidence interval [0.016, 0.173]). Taken together, results demonstrated that the indirect relationship between positive expectancy disconfirmation and subsequent perceived mistreatment through self-control depletion was significantly stronger relative to the other experimental groups. Thus, Hypothesis 2b was supported.

In the case of need for psychological detachment from work as the dependent variable, results revealed that relative to the reference group, the indirect effect of the positive affect and no mistreatment condition on need for psychological detachment from work through self-control depletion was not significant as the confidence interval included zero (indirect effect = -0.05, SE = 0.07, 95 % bias-corrected confidence interval [-0.198, 0.075]). However, the indirect effects of the neutral affect and mistreatment condition (indirect effect = 0.13, SE = 0.07, 95 % bias-corrected confidence interval [0.005, 0.290]) and the positive affect and mistreatment condition (indirect effect = 0.28, SE = 0.09, 95 % bias-corrected confidence interval [0.124, 0.472]) on need for psychological detachment from work through self-control depletion were significant as the confidence interval did not include zero. Further, the difference between these two indirect effects was significant (difference = 0.14, SE = 0.07, 95 % bias-corrected confidence interval [0.017, 0.306]). Taken together, results demonstrated that the indirect relationship between positive expectancy disconfirmation and need for psychological detachment through self-control depletion was significantly stronger relative to the other experimental groups. Thus, Hypothesis 3b was supported.

Table 2
Summary of Regression Results (Study 1).

Variable	DV = Self-control depletion			DV = Subsequent perceived mistreatment			DV = Need for psychological detachment		
	Model 1			Model 2			Model 3		
	B	SE	β	B	SE	β	B	SE	β
Intercept	2.41	0.13	2.94**	1.38	0.18	1.86**	3.06	0.19	3.83**
Affect manipulation	-0.13	0.16	-0.16	0.04	0.11	0.06	0.02	0.11	0.03
Customer mistreatment manipulation	0.33	0.17	0.41*	-0.41	0.12	-0.55*	0.04	0.12	0.04
Affect manipulation × Customer mistreatment manipulation	0.49	0.23	0.60*						
Self-control depletion				0.23	0.07	0.25*	0.38	0.07	0.39**
R ²		0.14*			0.10*			0.16*	

Note. N = 174. DV = dependent variable.

* p < .05.

** p < .01.

6.4. Discussion

The results from Study 1 provided initial support of our hypotheses that positive expectancy disconfirmation was positively related to self-control depletion, and self-control depletion was in turn positively related to subsequent perceived mistreatment and need for psychological detachment from work. Furthermore, self-control depletion mediated the indirect relationship between positive expectancy disconfirmation and subsequent perceived mistreatment and need for psychological detachment from work. However, because Study 1 is an online experiment, our results may not be generalizable to service employees at work. Additionally, we noted that subsequent perceived mistreatment and need for psychological detachment from work were assessed at the same time as when participants reported their feelings of self-control depletion. This may lead to response bias such that the ratings were not reflective of what service employees experienced at work. Furthermore, it is unclear if there were any potential confounds inherent in our positive affect manipulation. To address these issues, we proceeded to conduct Study 2.

7. Study 2: Method

7.1. Participants and design

Study 2 is a field experiment designed to replicate the findings of Study 1 in an actual customer service setting. In addition, to show that positive expectancy disconfirmation is not confounded by our choice of affect manipulation, we employed different affect manipulations for both neutral affect and positive affect in this study.

We recruited customer service professionals from twelve electronic commerce companies, located in a major e-commerce hub in South-Eastern part of the People's Republic of China. From the twelve e-commerce companies, we obtained a final sample size of 139 employees.⁴ The average age of participants was 24.3 years ($SD = 5.52$), 76 % were female and the average job tenure was 1.8 years ($SD = 1.93$). Studying e-commerce customer service employees presented a valuable opportunity for us to test our hypotheses because this is a work environment characterized by rampant customer mistreatments. Moreover, given that the majority of communication takes place over live chats online, customers are less inhibited and more forthright than when communication is over a phone call or face-to-face (Young, 2004).

Owing to the sample size, we decided to manipulate affect but not customer mistreatment in the present study. Given that Study 1 has shown that there was no significant difference in self-control depletion between participants in the no mistreatment condition, we were confident that the relationship between positive expectancy disconfirmation and self-control depletion is driven by our focal conditions (i.e., positive affect and customer mistreatment).

7.2. Procedure

The data collection consisted of three phases. In the first phase (T1), participants completed an initial assessment where we obtained consent and collected basic demographic information. About two weeks later, during a break of a randomly chosen workday, participants began the second phase (T2) of the study. T2 is an at-work in situ experiment. We framed this experiment as a customer service training simulation. Participants were randomly assigned to either a *positive affect* or *neutral affect* condition. Like Study 1, positive expectancy disconfirmation was operationalized by manipulating positive affect before participants were asked to respond to a specifically designed set of customer mistreatment

messages. We developed these messages with two senior customer service managers working at one of the e-commerce firms in our sample. Drawing from their extensive amount of experiences in dealing with customers, all messages used in the simulation were taken from actual cases that they have experienced during their career. In the simulation, participants were told to read through a series of four messages sent by a customer via live chat and rate the likelihood of using the suggested responses provided. To increase the psychological realism, we presented the messages in the form of a live chat to mimic what service employees usually receive from customers (see Supplemental Materials 2). The messages sent from the customers were impolite in nature, and the tone of the messages was insulting and rude. After the simulation, participants answered a short questionnaire containing the manipulation check and dependent measures.

The last phase of the research (T3) occurred on the same day as T2, just before participants ended their day at work. Participants were asked to complete a follow-up survey about their work experience throughout the workday. In this survey, we measured subsequent perceived mistreatment and need for psychological detachment from work. Although we collected a total of 97 complete responses at T3, we took steps to ensure that the responses remain reliable and accurate. First, we compared participants at T3 with those at T2 and found that the attrition rate is similar in both manipulation conditions (23 in positive affect condition and 19 in neutral affect condition). Next, we found that there was no significant difference ($p = .17$) in terms of self-control depletion measured at T2 between participants who completed the T3 survey and those that did not. We address this issue further in the results section.

7.3. Affect manipulation

Like Study 1, we used a two-part manipulation in Study 2. In the positive affect condition, participants watched a humorous video clip of a man giggling and evaluated three happy pictures taken from the International Affective Picture System (IAPS; Bradley & Lang, 2007; Lang, 1995; Lench et al., 2011). In the neutral affect condition, participants watched a silent video clip of people playing "pick-up sticks", and then evaluated three neutral pictures also taken from the IAPS (see Supplemental Materials 2 for all experimental materials used and pretest results for the video manipulation).

7.4. Measures

All surveys and task materials were conducted in Chinese. We followed Brislin's (1986) translation and back-translation procedures to translate all English items into Chinese. We hired a professional English-Chinese translator to translate the measures from English to Chinese. After that, the first three authors of this paper, who are bilingual, evaluated the translation and reconciled any differences through discussion.

Self-Control Depletion (T2). Because the present study took place on a regular workday, we used a shortened measure of self-control depletion adapted from the State Self-Control Capacity Scale (Twenge et al., 2004) used in Study 1 to reduce survey fatigue. The shortened measure consists of five items and was validated in prior research (e.g., Barnes et al., 2017; Lanaj et al., 2014). Participants rated the five items on a 5-point scale (1 = *not at all*, 5 = *extremely*). The Cronbach's alpha for the scale was 0.92.

Subsequent Perceived Mistreatment (T3). At T3, we assessed subsequent perceived mistreatment using an 18-item scale developed by Wang et al. (2011). Each item illustrates possible mistreatment that a customer could enact toward the customer service officer. Some of the items include "Vented their bad mood out on you," "Yelled at you," and "Made demands that you could not deliver." Using a 5-point scale (1 = *never*, 5 = *all the time*), participants rated the frequency of encountering such behaviors from customers they have interacted with throughout the day. The Cronbach's alpha for the scale was 0.95.

⁴ Using G*Power to conduct a power analysis, to detect a small effect size of 0.25 at the standard 0.05 alpha error probability and with a power of 0.80 (Cohen, 1992), the recommended sample size is 128 (i.e., 64 per cell).

Need for Psychological Detachment from Work (T3). We assessed need for psychological detachment from work using the same scale used in Study 1. The Cronbach's alpha for the scale was 0.90.

Controls. Although participants were randomly assigned to their experimental conditions, we included several key variables as controls in our analyses to present a comprehensive examination of our model. Because past research has shown that gender, age, and tenure could affect how work-related stressors affect job performance (Gilboa et al., 2008), we controlled for these demographic variables. Furthermore, past research has suggested that employees may habituate to the depleting effect of their work (Converse & DeShon, 2009). This means that the more customers those participants typically serve, the better they are in coping with customer mistreatment scenarios. Therefore, we controlled for the average number of customers those participants served daily. Although our results remained the same with or without the controls, we decided to include these controls in our analyses for a more conservative test.

Manipulation Check. As a manipulation check for the affect manipulation, we assessed how negative or positive participants felt on a 10-point scale with smileys indicating a range of emotions ranging from sad faces to happy faces. Participants reported how negative or positive they felt twice – once after watching the video and once after viewing the pictures (1 = very negative, 10 = very positive).

8. Study 2: Results and discussion

8.1. Manipulation check

A one-way ANOVA revealed that participants experienced more positive affect when they watched the positive affect video ($M = 8.31$, $SD = 2.06$) than when they watched the neutral affect video ($M = 7.21$, $SD = 2.03$), $F_{video(1, 137)} = 9.81$, $p = .002$, *partial* $\eta^2 = 0.07$. Results for the picture manipulation also indicated that participants experienced more positive affect when they evaluated the positive pictures ($M = 8.79$, $SD = 1.57$) than when they evaluated the neutral pictures ($M = 7.26$, $SD = 2.05$), $F_{picture(1, 137)} = 24.89$, $p < .001$, *partial* $\eta^2 = 0.15$.

8.2. Tests of hypotheses

Descriptive statistics, correlations, and reliabilities are reported in Table 3.

Self-Control Depletion. We conducted a regression analysis with the affect manipulation condition as the independent variable and self-control depletion as the dependent variable. As shown in Table 4, after entering all control variables, results indicated a positive relationship between the affect manipulation condition and self-control depletion ($\beta = 0.38$, $p = .024$). Thus, Hypothesis 1 was supported.

Subsequent Perceived Mistreatment. We conducted path analyses with both subsequent perceived mistreatment and need for psychological detachment from work as the dependent variables (see Table 4). As shown in Table 4, in the analysis with self-control depletion, affect manipulation condition, and control variables as the independent variables and subsequent perceived mistreatment as the dependent variable, results revealed a positive and significant relationship between self-control depletion and subsequent perceived mistreatment ($\beta = 0.29$, $p = .002$). Thus, Hypothesis 2a was supported.

Need for Psychological Detachment from Work. As shown in Table 4, after entering self-control depletion, affect manipulation condition, and control variables as the independent variables and need for psychological detachment from work as the dependent variable, results revealed a positive and significant relationship between self-control depletion and need for psychological detachment from work ($\beta = 0.36$, $p < .001$). Thus, Hypothesis 3a was supported.

Mediating Effects of Self-Control Depletion. To test for mediation, we conducted a bias-corrected bootstrapping analysis using Mplus 7.4 (Muthén & Muthén, 2017) with maximum likelihood estimation and

20,000 iterations. Instead of removing or imputing incomplete responses, maximum likelihood estimation uses all available data to estimate the missing values (Dempster et al., 1977). With the assumption that the missing values are missing at random, Schafer and Graham (2002) suggested that maximum likelihood estimation is a reliable method of treating missing data. This is supported by previous research using similar data analytic strategies to estimate mediation effects (e.g., Farh et al., 2012; King et al., 2011). Results indicated that self-control depletion mediated the indirect effect of affect manipulation condition on subsequent perceived mistreatment (indirect effect = 0.07, $SE = 0.04$, 95 % bias-corrected confidence interval [0.010, 0.179]). Thus, Hypothesis 2b was supported.

In the case of need for psychological detachment from work as the dependent variable, we repeated the same bootstrapping procedure used to test Hypothesis 2b. Results indicated that self-control depletion mediated the indirect effect of affect manipulation condition on need for psychological detachment from work (indirect effect = 0.15, $SE = 0.09$, 95 % bias-corrected confidence interval [0.028, 0.391]). Thus, Hypothesis 3b was supported.

8.3. Discussion

The results of Study 2 provided further support for our hypotheses in that service employees experienced higher levels of self-control depletion when their positive expectancies were disconfirmed (i.e., holding a state of positive affect prior to encountering customer mistreatment). Furthermore, the effects of self-control depletion persisted, such that service employees who experienced higher levels of self-control depletion at T2 reported higher frequency of subsequent perceived mistreatment over the workday and a greater need for psychological detachment from work at T3. These results suggest that there are downstream consequences of positive expectancy disconfirmation that warrant further investigations. Identifying that positive expectancies associated with positive affect may be key to our effects, we sought to examine theoretically and empirically how increasing expectation of customer mistreatment may buffer the impact of positive expectancy disconfirmation on self-control depletion.

9. Moderating effect of expectation of customer mistreatment

As discussed earlier, the dissonance arising from positive expectancy disconfirmation triggers a process of self-regulation, which leads to self-control depletion. The underlying reason is because positive affect gave rise to positive expectancies that were disconfirmed after service employees encountered customer mistreatment. Put differently, service employees are less likely to expect customer mistreatment when they are in a state of positive affect. If this were true, increasing the expectation of customer mistreatment may help mitigate such effect by reducing their unexpectedness, and consequently lessen the extent of self-control depletion after the mistreatment occurred. To this point, a review on self-control at work pointed out that expectancies may hold the key to understanding why certain individuals do not experience depletion even after self-regulation or self-control exertion (Johnson et al., 2017). Past research has also provided indirect evidence in that unpredictability has often been associated with increased levels of anxiety and fearful response when stimuli are sufficiently aversive (e.g., Grillon et al., 2004; McNally, 1990; Zvolensky et al., 2000). In contrast, increasing predictability helps people prepare psychologically against aversive events (Başoğlu et al., 1997). As such, we predict that expectation of customer mistreatment will attenuate the negative relationship between positive expectancy disconfirmation and self-control depletion.

Hypothesis 4. *Expectation of customer mistreatment before encountering such event will moderate the relationship between positive affect (versus neutral affect) and self-control depletion, such that the relationship is weakened when expectation of customer mistreatment is high.*

Table 3
Means, Standard Deviations, Correlations, and Reliabilities (Study 2).

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Gender ¹ (T1)	1.76	0.43	–							
2. Age (T1)	24.33	5.52	0.16	–						
3. Job tenure (years) (T1)	1.80	1.93	0.11	0.68**	–					
4. No. of customer served daily (T1)	82.64	119.26	0.07	-0.23**	-0.07	–				
5. Affect manipulation ² (T2)	0.56	0.50	0.07	-0.01	0.10	0.04	–			
6. Self-control depletion (T2)	2.23	0.90	-0.12	-0.06	-0.05	-0.13	0.17*	(0.92)		
7. Subsequent perceived mistreatment (T3)	2.14	0.66	-0.29**	-0.10	-0.03	0.04	-0.06	0.31**	(0.95)	
8. Need for psychological detachment (T3)	2.53	1.16	0.10	0.05	0.10	-0.01	0.08	0.36**	0.28**	(0.90)

Note. N = 139. Cronbach’s alphas are in parentheses.

¹ Gender: male = 1, female = 2.

² Affect manipulation: neutral affect condition = 0, positive affect condition = 1.

* *p* < .05.

** *p* < .01.

Table 4
Summary of Regression Results (Study 2).

Variable	DV = Self-control depletion			DV = Subsequent perceived mistreatment			DV = Need for psychological detachment		
	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β
Intercept	2.79	0.51	3.10**	2.61	0.46	3.99**	1.01	0.78	0.88
Gender	-0.23	0.20	-0.25	-0.35	0.15	-0.54*	0.34	0.23	0.30
Age	-0.01	0.02	-0.01	-0.01	0.02	-0.02	-0.01	0.04	-0.01
Job tenure (years)	-0.01	0.05	-0.01	0.04	0.04	0.06	0.07	0.10	0.06
No. of customer served daily	-0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00
Affect manipulation	0.34	0.15	0.38*	-0.17	0.14	-0.26	-0.00	0.24	-0.00
Self-control depletion	–	–	–	0.21	0.07	0.29**	0.46	0.12	0.36**
R ²		0.07			0.17*			0.14*	

Note. N = 139. DV = dependent variable.

* *p* < .05.

** *p* < .01.

10. Study 3: Method

Study 3 is an online experiment designed to test the buffering effect of customer mistreatment expectation. The logic is that if positive expectancy disconfirmation occurs because service employees did not expect to encounter customer mistreatment when they are in a state of positive affect, providing some form of feedback that customer mistreatment is likely to occur should attenuate the relationship between positive expectancy disconfirmation and self-control depletion.

10.1. Participants and design

We recruited 201 service professionals from the United Kingdom and the United States on Prolific, who were compensated \$1.50 each for their effort.⁵ The average age of participants was 30.42 years (*SD* = 9.61), 59.7 % were male and the average job tenure was 9.68 years (*SD* = 6.75). In this study, participants were randomly assigned to one of four conditions in a 2 (affect: positive vs neutral) × 2 (expectation: with vs

⁵ Using G*Power to conduct a power analysis, to detect a small effect size of 0.25 at the standard 0.05 alpha error probability and with a power of 0.80 (Cohen, 1992), the recommended sample size is 180 (i.e., 45 per cell). We collected a slightly larger sample to account for possible failed attention checks. Two participants did not comply with the attention check and their responses were excluded from analysis.

without) between-participants factorial design.⁶

10.2. Procedure

Study 3 used the same customer service paradigm as in Study 1. Participants were told to engage in the interactive simulation that we created in Study 1. At a work break depicted in the simulation, we manipulated participants’ affect by randomly assigning them to either a positive or neutral affect condition. After the affect manipulation, participants were told that there is a briefing from the store supervisor. Here, we randomly assigned participants to one of two expectation conditions (see below). Next, participants were told that a customer had approached them in the store. At this point, all participants listened to the two rude voice recordings used in Study 1. Finally, participants answered a short questionnaire containing the manipulation check and dependent measures.

10.3. Affect manipulation

To provide stronger evidence that positive affect is driving the effect and that our results are not confounded by the content of the manipulation, we used a combination of affect manipulations used in Study 1 and 2. In the positive affect condition, participants watched the

⁶ In an earlier version of the manuscript, we included a third expectation condition in an attempt to manipulate expectation of customer mistreatment more subtly. However, this condition was imprecise, such that we could not determine if the manipulation is indeed a subtle priming of expectation of customer mistreatment. Thus, we decided to remove this condition. In the interest of transparency, the dataset in question can be found at the OSF’s depository.

humorous video clip and recalled a happy event that took place in the past month. In the neutral affect condition, participants watched the silent video clip of people playing “pick-up sticks” and recalled what they did yesterday.

10.4. Expectation of customer mistreatment manipulation

Expectation of customer mistreatment was manipulated through two different supervisor messages presented during the briefing.

In the expectation condition, participants saw the following message:

After your break, your supervisor gathered you and your coworkers for a short briefing. Your supervisor said that the shop is witnessing more occurrences of demanding customers. As such, shop attendants should be ready for any possible mistreatment. Instead of taking the mistreatments personally, shop attendants should simply react professionally and to the best of their abilities.

In the no expectation condition, participants saw the following message:

After your break, your supervisor assigned you and your coworkers tasks to complete.

10.5. Measures

Self-Control Depletion. We measured self-control depletion using the State Self-Control Capacity Scale (Twenge et al., 2004) used in Study 1. The Cronbach’s alpha for the scale was 0.96.

Manipulation Checks. As a manipulation check for the affect manipulation, we assessed how negative or positive participants felt on a 10-point scale (ranging from 1 = *very negative*, 10 = *very positive*) immediately after they watched the video and completed the recall task. As a manipulation check to verify that the supervisor briefings were successful in manipulating expectation of customer mistreatment, we asked participants to report the extent to which they expected customer mistreatment after the supervisor briefing on a 5-point scale (1 = *not at all*, 5 = *extremely*).

11. Study 3: Results and discussion

11.1. Manipulation Check: Affect

A one-way ANOVA revealed that participants experienced more positive affect when they watched the positive affect video and recalled a happy event ($M = 7.48$, $SD = 1.39$) than those who watched the neutral affect video and recalled what they did yesterday ($M = 6.42$, $SD = 1.40$), $F_{(1, 299)} = 28.41$, $p < .001$, $partial \eta^2 = 0.13$. Thus, the results confirmed the intended manipulation effect. We also conducted two supplemental studies (see Study 1S and 2S of Supplemental Materials 3) to show that the difference in positive affect remained significant even after participants had gone through the expectation of customer mistreatment manipulation.⁷

11.2. Manipulation Check: Expectation of customer mistreatment

A one-way ANOVA revealed that participants expected more customer mistreatment in the expectation condition ($M = 3.63$, $SD = 1.13$) than those in the no mistreatment condition ($M = 3.12$, $SD = 1.04$), $F_{(1, 199)} = 10.60$, $p = .001$, $partial \eta^2 = 0.05$. Thus, the results confirmed the intended manipulation effect.

11.3. Tests of hypotheses

Self-Control Depletion. A 2×2 ANOVA on participants’ self-control depletion revealed no significant main effect for affect ($p = .729$), no significant main effect for expectation of customer mistreatment ($p = .306$), but a significant interaction effect between the two manipulation conditions, $F_{(1, 197)} = 7.94$, $p = .005$, $partial \eta^2 = 0.04$ (see Fig. 3). Pairwise comparisons revealed that in the no expectation condition, participants reported significantly higher levels of self-control depletion in the positive affect condition ($M = 3.10$, $SD = 0.83$) than those in the neutral affect condition ($M = 2.74$, $SD = 0.85$, $t_{(95)} = 2.08$, $p = .040$, $d = 0.42$), but there was no significant difference between these two conditions in the expectation condition ($p = .062$). Thus, Hypothesis 1 was supported.

Expectation of Customer Mistreatment. To test for the buffering effect of customer mistreatment expectation, we conducted further pairwise comparisons. Results revealed that among those in the positive affect condition, compared to those in the no expectation manipulation condition ($M = 3.10$, $SD = 0.83$), participants reported significantly lower levels of self-control depletion in the expectation manipulation condition ($M = 2.67$, $SD = 0.70$, $t_{(109)} = 2.98$, $p = .004$, $d = 0.56$), but there was no significant difference between these two conditions in the neutral affect condition ($p = .251$). Thus, Hypothesis 4 was supported.

11.4. Discussion

The results of Study 3 showed that increasing participants’ expectation of customer mistreatment attenuated the effects of positive expectancy disconfirmation, such that participants reported lower levels of self-control depletion when they expected mistreatment from customers to occur. However, similar to Study 1, Study 3 is an online experiment. Thus, our results may not be generalizable to the field. Furthermore, it is unclear if there were any potential confounds inherent in our expectation of customer mistreatment manipulation. For instance, by telling participants to respond professionally and to the best of their abilities, we may unintentionally suggest possible ways for participants to cope with the mistreatment as opposed to merely increasing their expectation

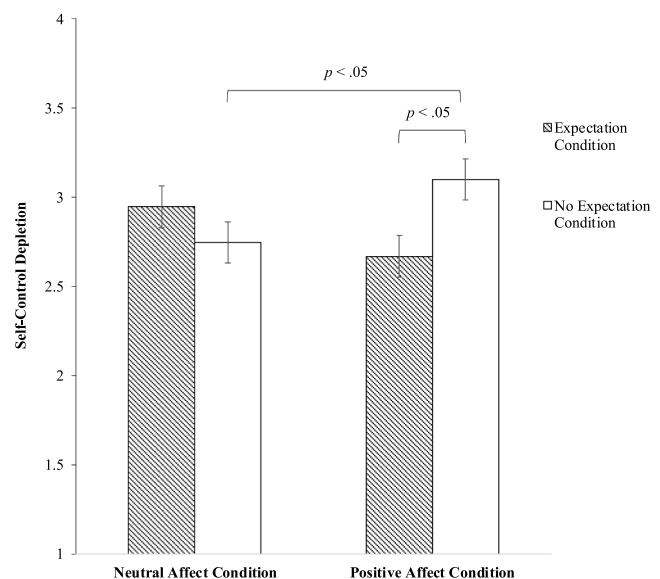


Fig. 3. Means of self-control depletion by condition in Study 3. Note. Error bars represent $\pm SE$.

⁷ We thank an anonymous reviewer for bringing this to our attention.

of mistreatment.⁸ To address these issues, we robustly designed and conducted Study 4.

12. Study 4

Study 4 is a pre-registered in situ field experiment designed to test the complete theoretical model. In Study 4, we used a different set of positive affect manipulations to further demonstrate that our findings are not confounded by the stimuli that we presented to participants. We also used a different expectation of customer mistreatment manipulation to address potential confounds in Study 3.

12.1. Participants and design

We recruited customer service professionals from an Indian hotel located in the Western part of India.⁹ Although we set out to recruit 300 employees, we obtained a final sample size of 277.¹⁰ The average age of participants was 28.82 years ($SD = 6.68$), 61.4 % were female and the average job tenure was 2.77 years ($SD = 2.08$). In this study, participants were randomly assigned to one of four conditions in a 2 (affect: *positive* vs *neutral*) \times 2 (expectation: *with* vs *without*) between-participants factorial design. Like Study 2 and 3, we did not manipulate customer mistreatment in this study.

12.2. Procedure

The data collection was framed as a customer service training simulation that consisted of two phases. In the first phase (T1), we randomly assigned participants to either a *positive* or *neutral* affect condition. After the affect manipulation, participants answered a short questionnaire before they were again randomly assigned to one of two expectation conditions (see below). Once both experimental manipulations were completed, participants were asked to respond to a specifically designed set of customer mistreatment statements. These statements were developed in consultation with the hotel secretariat office. Drawing from the staff's extensive experience in dealing with hotel guests, all statements used in the simulation depict real-life situations encountered by service employees in the hospitality industry. In the simulation, participants were told to read and respond to a series of four statements made by hotel guests. The statements were impolite in nature, and the tone of the messages was insulting and rude. After responding to the customer mistreatment statements, participants answered another set of questionnaire containing the manipulation check and dependent measures. In the second phase of the research (T2), participants complete a follow-up survey just before they ended their workday. In this survey, we measured participants' subsequent perceived mistreatment and need for psychological detachment from work.

12.3. Affect manipulation

To provide stronger evidence that positive affect is driving the effect and that our results are not confounded by the content of the manipulation, we used a different set of positive affect manipulations in Study 4. Following past affect research (e.g., Erez & Isen, 2002; Isen et al., 1987), in the positive affect condition, participants received a packet of sweets when they arrived for the study and were directed to watch the

humorous video used in Study 2 and 3. In the neutral affect condition, participants watched the silent video clip also used in Study 2 and 3, and received the packet of sweets at the end of the study.

12.4. Expectation of customer mistreatment manipulation

Expectation of customer mistreatment was manipulated through two different statements that were presented to participants. The statements were framed as an email sent from the hotel management.

In the expectation condition, participants saw the following message:

Now, before you resume work, you came across an email informing service employees that the hotel has been witnessing a spate of abusive customers. As such, service employees should expect to encounter mistreatment from customers from time to time.

In the no expectation condition, participants saw the following message:

Now, before you resume work, you came across an email informing service employees what promotion the hotel is running at present. As such, where possible, service employees should relay such information to promote the hotel to customers.

12.5. Measures

Self-Control Depletion (T1). We measured self-control depletion using the shortened State Self-Control Capacity Scale (Twenge et al., 2004) used in Study 2. The Cronbach's alpha for the scale was 0.96.

Subsequent Perceived Mistreatment (T2). We assessed subsequent perceived mistreatment using the 18-item scale used in Study 2. The Cronbach's alpha for the scale was 0.97.

Need for Psychological Detachment from Work (T2). We assessed need for psychological detachment from work using the same scale used in Study 1 and 2. The Cronbach's alpha for the scale was 0.93.

Controls. Like Study 2, we controlled for the gender, age, and tenure of participants. Furthermore, because past research has shown that customer mistreatment may cause negative affect in employees (e.g., Wang et al., 2013), we controlled for participants' negative affect after they have responded to the customer mistreatment statements. The Cronbach's alpha for the scale was 0.91.

Manipulation Checks. As a manipulation check for the affect manipulation, we assessed how negative or positive participants felt on a 10-point scale (ranging from 1 = *very negative*, 10 = *very positive*) immediately after they received the sweets and watched the video clip. To verify that the emails were successful in manipulating expectation of customer mistreatment, we asked participants to report the extent to which they expected customer mistreatment on a 5-point scale (1 = *not at all*, 5 = *extremely*).

13. Study 4: Results and discussion

13.1. Manipulation Check: Affect

A one-way ANOVA revealed that participants experienced more positive affect when they received the sweets and watched the humorous video ($M = 7.14$, $SD = 1.61$) than those who watched the silent video and received the sweets at the end of the study ($M = 4.34$, $SD = 1.31$), $F_{(1, 275)} = 252.13$, $p < .001$, *partial* $\eta^2 = 0.48$. Thus, the results confirmed the intended manipulation effect.

13.2. Manipulation Check: Expectation of customer mistreatment

A one-way ANOVA revealed that participants in the expectation condition ($M = 4.38$, $SD = 1.10$) expected customer mistreatment more than those in the no mistreatment condition ($M = 2.38$, $SD = 1.02$), $F_{(1, 275)} = 246.85$, $p < .001$, *partial* $\eta^2 = 0.47$. Thus, the results confirmed the

⁸ We thank an anonymous reviewer for bringing this to our attention.

⁹ During our data collection period, the government has relaxed all COVID-19 related restrictions for the service industry and our sampled hotel was also running at full capacity.

¹⁰ Using G*Power to conduct a power analysis, to detect a small effect size of 0.25 at the standard 0.05 alpha error probability and with a power of 0.95, the recommended sample size is 280 (i.e., 70 per cell).

intended manipulation effect.

13.3. Tests of hypotheses

Descriptive statistics, correlations, and reliabilities are reported in Table 5.

Self-Control Depletion. A 2 × 2 ANOVA on participants' self-control depletion revealed no significant main effect for affect ($p = .429$), but a significant main effect for expectation of customer mistreatment, $F_{(1, 273)} = 144.05, p < .001, \text{partial } \eta^2 = 0.35$, and a significant interaction effect between the two manipulation conditions, $F_{(1, 273)} = 6.51, p = .011, \text{partial } \eta^2 = 0.02$ (see Fig. 4). Pairwise comparisons revealed that in the no expectation condition, participants reported significantly higher levels of self-control depletion when they are in the positive affect condition ($M = 3.83, SD = 0.87$) than those in the neutral affect condition ($M = 3.45, SD = 0.80, t_{(137)} = 2.74, p = .007, d = 0.47$), but there was no significant difference between these two conditions in the expectation condition ($p = .269$). In addition, the results did not change even when we controlled for negative affect in our analyses. Thus, Hypothesis 1 was supported.

Subsequent Perceived Mistreatment. We conducted path analyses with both subsequent perceived mistreatment and need for psychological detachment from work as the dependent variables (see Table 6). As shown in Table 6, in the analysis with self-control depletion, experimental conditions, and control variables as the independent variables and subsequent perceived mistreatment as the dependent variable, results revealed a positive and significant relationship between self-control depletion and subsequent perceived mistreatment ($\beta = 0.14, p = .047$). Thus, Hypothesis 2a was supported.

Need for Psychological Detachment from Work. As shown in Table 6, after entering self-control depletion, experimental conditions, and control variables as the independent variables and need for psychological detachment from work as the dependent variable, results revealed a positive and significant relationship between self-control depletion and need for psychological detachment from work ($\beta = 0.43, p < .001$). Thus, Hypothesis 3a was supported.

Mediating Effects of Self-Control Depletion. To test for mediation, we conducted the same mediation analysis used in Study 1. Because there are four unique experimental groups, we created three dummy variables, such that the neutral affect and no expectation condition is the reference group (Hayes & Preacher, 2014). Results revealed that relative to the reference group, the indirect effects of the neutral affect and expectation condition (indirect effect = -0.19, $SE = 0.08$, 95 % bias-corrected confidence interval [-0.358, -0.058]), positive affect and no expectation condition (indirect effect = 0.05, $SE = 0.03$, 95 % bias-corrected confidence interval [0.006, 0.132]), and positive affect and expectation condition (indirect effect = -0.22, $SE = 0.09$, 95 % bias-

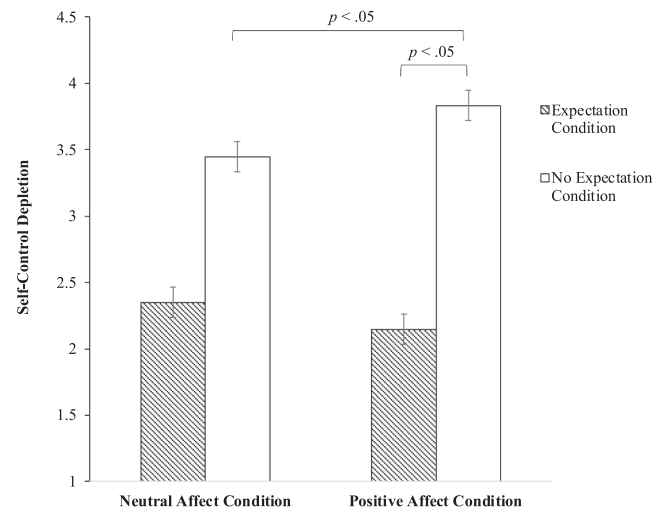


Fig. 4. Means of self-control depletion by condition in Study 4. Note. Error bars represent ± SE.

corrected confidence interval [-0.406, -0.070]) on subsequent perceived mistreatment through self-control depletion were significant as the confidence interval did not include zero. Importantly, only the indirect effect of the positive affect and no expectation condition on subsequent perceived mistreatment through self-control depletion was positive. Taken together, results showed that self-control depletion mediated the indirect relationship between positive expectancy disconfirmation and subsequent perceived mistreatment. Thus, Hypothesis 2b was supported.

In the case of need for psychological detachment from work as the dependent variable, results revealed that relative to the reference group, the indirect effects of the neutral affect and expectation condition (indirect effect = -0.41, $SE = 0.09$, 95 % bias-corrected confidence interval [-0.604, -0.256]), positive affect and no expectation condition (indirect effect = 0.11, $SE = 0.06$, 95 % bias-corrected confidence interval [0.008, 0.236]), and positive affect and expectation condition (indirect effect = -0.48, $SE = 0.09$, 95 % bias-corrected confidence interval [-0.665, -0.315]) on need for psychological detachment from work through self-control depletion were significant as the confidence interval did not include zero. Importantly, only the indirect effect of the positive affect and no expectation condition on need for psychological detachment from work through self-control depletion was positive. Taken together, results showed that self-control depletion mediated the indirect relationship between positive expectancy disconfirmation and need for psychological detachment from work. Thus, Hypothesis 3b was supported.

Table 5 Means, Standard Deviations, Correlations, and Reliabilities (Study 4).

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Gender ¹ (T1)	1.64	0.50	-								
2. Age (T1)	28.82	6.68	-0.06	-							
3. Job tenure (years) (T1)	2.77	2.08	-0.11	0.15*	-						
4. Negative affect (T1)	1.71	0.83	0.04	-0.02	-0.14*	(0.91)					
5. Affect manipulation ² (T1)	0.51	0.50	0.30**	-0.12*	-0.08	-0.01	-				
6. Expectation manipulation ³ (T1)	0.50	0.50	0.09	-0.38**	-0.04	0.09	0.00	-			
7. Self-control depletion (T1)	2.95	1.20	-0.02	0.16**	-0.02	-0.12*	0.04	-0.58**	(0.96)		
8. Subsequent perceived mistreatment (T2)	2.92	0.96	-0.02	0.04	-0.00	-0.02	-0.18**	-0.12	0.16**	(0.97)	
9. Need for psychological detachment (T2)	2.83	1.06	-0.02	0.08	0.00	-0.04	0.04	-0.26**	0.43**	0.10	(0.93)

Note. N = 277. Cronbach's alphas are in parentheses.

¹ Gender: male = 1, female = 2, binary/prefer not to disclose = 3.

² Affect manipulation: neutral affect condition = 0, positive affect condition = 1.

³ Expectation manipulation: no expectation condition = 0, expectation condition = 1.

* $p < .05$.

** $p < .01$.

Table 6
Summary of Regression Results (Study 4).

Variable	DV = Self-control depletion			DV = Subsequent perceived mistreatment			DV = Need for psychological detachment		
	Model 1			Model 2			Model 3		
	B	SE	β	B	SE	β	B	SE	β
Intercept	3.79	0.40	3.17**	2.79	0.39	2.91**	1.63	0.48	1.54*
Gender ¹	0.05	0.11	0.04	0.08	0.12	0.08	-0.04	0.13	-0.04
Age	-0.01	0.01	-0.01	-0.00	0.01	-0.00	0.00	0.01	0.00
Job tenure (years)	-0.02	0.03	-0.01	-0.01	0.03	-0.01	0.01	0.03	0.01
Negative affect	-0.10	0.07	-0.08	-0.00	0.07	-0.00	0.01	0.08	0.01
Affect manipulation	0.32	0.15	0.27*	-0.39	0.12	-0.41*	0.07	0.13	0.06
Expectation manipulation	-1.16	0.18	-0.97**	-0.08	0.14	-0.09	0.00	0.15	0.00
Affect manipulation \times Expectation manipulation	-0.51	0.24	-0.43*						
Self-control depletion				0.11	0.06	0.14*	0.38	0.06	0.43**
R ²	0.36**			0.06			0.19**		

Note. N = 277. DV = dependent variable.

* $p < .05$.

** $p < .01$.

Expectation of Customer Mistreatment. To test for the buffering effect of customer mistreatment expectation, we conducted further pairwise comparisons. Results revealed that among those in the positive affect condition, compared to those in the no expectation manipulation condition ($M = 3.83, SD = 0.87$), participants reported significantly lower levels of self-control depletion in the expectation manipulation condition ($M = 2.15, SD = 1.15, t_{(138)} = 9.81, p < .001, d = 1.66$). Similarly, among those in the neutral affect condition, compared to those in the no expectation manipulation condition ($M = 3.45, SD = 0.80$), participants reported significantly lower levels of self-control depletion in the expectation manipulation condition ($M = 2.35, SD = 1.01, t_{(135)} = 7.06, p < .001, d = 1.21$). Thus, **Hypothesis 4** was supported.

13.4. Supplemental analyses

In this study, we also sought to test our theorizing that positive affect gives rise to positive expectancies and how these expectancies are disconfirmed after participants encountered customer mistreatment.¹¹ Additionally, we wanted to ensure that positive affect did not induce optimism particularly, which might provide an alternate explanation to our effects. To do so, we measured participants' expectations of positive service interaction after the positive affect manipulation with a four-item scale (sample items include, "My customer will greet me," and "My customer will thank me"), participants' overall service experience after the study with a two-item scale (sample items include, "The service interaction was much poorer [better] than expected," and "The customer was much poorer [better] than expected") from [Houston et al. \(2018\)](#), and participants' state optimism after the positive affect manipulation with a six-item scale (sample items include, "In uncertain times, I usually expect the best," and "Overall, I expect more good things to happen to me than bad") from [Scheier et al. \(1994\)](#). Besides Study 4, we also conducted a supplemental study to show that participants in the positive affect condition expected less incivility to occur to them (for details, see Study 2S of Supplemental Materials 3).

Results revealed that participants in positive affect condition expected more positive service interaction ($M = 3.78, SD = 0.72$) than participants in the neutral affect condition ($M = 3.16, SD = 1.11, t_{(275)} = 5.51, p < .001, d = 0.66$). Next, among participants in the no expectation condition, those in the positive affect condition reported that their overall customer service experience was poorer than expected ($M = 2.38, SD = 1.03$) than those in the neutral affect condition ($M = 3.28, SD = 1.44, t_{(137)} = 4.24, p < .001, d = 0.72$). Finally, participants in positive affect condition were not more optimistic ($M = 3.17, SD = 0.64$) than

participants in the neutral affect condition ($M = 3.41, SD = 0.74, t_{(275)} = 2.89, p = .004, d = 0.69$). We discuss these findings in the next section.

13.5. Discussion

Consistent with Study 3, the results of Study 4 showed that increasing participants' expectation of customer mistreatment attenuated the effects of positive expectancy disconfirmation, such that participants reported lower levels of self-control depletion when they built an expectation that mistreatment from customers could occur. Furthermore, in Study 4, we tested our full theoretical model in a field setting and replicated our earlier findings that self-control depletion mediated the indirect relationships between positive expectancy disconfirmation and subsequent perceived mistreatment and need for psychological detachment from work respectively. Finally, supporting our theorizing that positive affect gives rise to positive expectancies that were disconfirmed after encounter customer mistreatment, we found that positive affect was related to more expectations of positive service interaction, which led to poorer perceptions of the overall service interaction after participants encountered customer mistreatment. We also found that positive affect did not influence state optimism in a way that could provide an alternative explanation to our results. Overall, results across the four studies established strong internal and external validity of our hypothesized model.

14. General discussion

The primary goal of this research was to examine how a prior state of positive affect can give rise to positive expectancy disconfirmation when service employees encounter customer mistreatment. In Study 1, we manipulated both affect and mistreatment to establish the phenomenon of positive expectancy disconfirmation and found that positive expectancy disconfirmation was positively related to self-control depletion. We also found that self-control depletion was positively related to subsequent perceived mistreatment and need for psychological detachment, and that self-control depletion mediated the indirect relationship between positive expectancy disconfirmation and subsequent perceived mistreatment and need for psychological detachment. In Study 2, we provided more compelling evidence by replicating our findings with a sample of e-commerce customer service employees in a field experiment that used a different set of affect manipulations during their work. Our findings are consistent with recent work showing that state positive affect is positively related to optimism ([Hill et al., 2021](#)). Optimism, in turn, was found to reverse-buffer undermining possibly because of "disappointment when situations challenge positive expectations" ([Britton et al., 2012, p. 715; Norem & Chang, 2002](#)). Such findings also dovetailed with past work which suggests that highly positive or

¹¹ We thank anonymous reviewers for bringing this suggestion to our attention.

optimistic people tend to overestimate the probability of positive events and underestimate the probability of negative events happening to them (Bower, 1981; Mayer et al., 1992; Weinstein, 1980; Weinstein & Klein, 1996).

In Study 3 and 4, we found that expectation of customer mistreatment attenuated the positive relationship between positive expectancy disconfirmation and self-control depletion in an online and field experimental setting respectively. In particular, Study 4 constructively replicated our results from the previous three studies. Taken together, our research suggests that positive expectancy disconfirmation can lead to undesirable outcomes. However, we show that managers can mitigate these outcomes by reminding their service employees that unexpected events (e.g., customer mistreatment or an increase in customers) can happen at work.

14.1. Contributions to theory and research

Our research makes several theoretical contributions to research on positive affect, EDT, and customer-employee service interactions. Drawing from EDT to test the consequences of holding positive affect prior to encountering customer mistreatment is important because extant research on positive affect has largely focused on its benefits to positive psychology (e.g., Fredrickson, 2001) and how it can attenuate negative emotions when induced after negative events have occurred (Fredrickson & Levenson, 1998). To this extent, much less is known about how positive affect prior to negative affective events may, on the contrary, give rise to more negative reactions. Thus, in this paper, we built our theoretical arguments surrounding how positive affect is related to positive expectancies that can be at risk of disconfirmation. At a broader level, our research joins recent developments in affect research showing that maintaining or pursuing high levels of positive affect may come at a cost, particularly increasing demands for more extensive self-regulation effort (Frank et al., 2021; Scott et al., 2020).

Second, we extend EDT into the domain of customer service research by showing how customer mistreatment may serve as a negative affective event (Yue et al., 2017) that disconfirms service employees' positive expectancies. We then draw further from EDT to theorize how the self-regulation processes of information processing and sensemaking would cause service employees to experience self-control depletion. We note that past research on expectancy disconfirmation has typically focused on people's perception toward the disconfirming stimuli, such as by rating them more negatively (or positively). In our case, we expanded the consequences of expectancy disconfirmation to the self, thus underscoring the importance of examining expectancy disconfirmation.

Third, we contribute to a growing body of research on customer-employee service interactions. We started off the paper by discussing the detrimental effect of customer mistreatment (e.g., Dormann & Zapf, 2004; Grandey et al., 2004, 2007; Wang et al., 2013) and pointed out the relative lack of attention that has been paid to processes that may influence service employees' perceptions of the mistreatment. One exception is recent work done by Song and her colleagues (2018), which showed that perspective-taking and recall of prosocial action interventions can reduce perceived customer mistreatment among service employees. In the same vein, our research demonstrated that increasing expectations of customer mistreatment can attenuate its disconfirming effects on positive expectancies.

Fourth, our research also cautions against treating interventions and programs aimed at increasing positive affect as universal panaceas that should be applied without considerations. Although we acknowledge that positive affect is often related to favorable outcomes at the workplace (Staw et al., 1994) and is beneficial for affective delivery (Rothbard & Wilk, 2011), which could potentially reduce the occurrence of customer mistreatments, service employees do not have absolute control over the occurrence of negative events. Therefore, we argue that the pursuit and encouragement of positive affect at work should consider

the nature of the job in tandem. Our research suggests that for employees who frequently experience negative events at work, it would be prudent to discourage high levels of positive affect to avoid extreme expectancy disconfirmation. This has direct implications on research in workplace recovery and humor because existing research typically suggests that positive affect would be universally beneficial to employee well-being (e.g., Romero & Cruthirds, 2006; Sonnentag, 2003). Moreover, despite adopting a conservative manipulation of positive affect (music, recall tasks, a 62-second video clip, and sweets as opposed to a longer video or more intense methods of inducement), we successfully demonstrated the effects of positive expectancy disconfirmation. Thus, for work environments characterized by frequent negative events, we argue that excessive recovery activities and humor could potentially cause positive expectancy disconfirmation to be even more pronounced and possibly other negative perceptions and effects to ensue.

Finally, the time-lagged experimental design in the field (Study 2 and Study 4) addresses concerns about internal validity (Cook & Campbell, 1979). This allows us to draw causal inferences in the relationships between variables. Furthermore, both our online experiments on Prolific and in the field have clear benefits over standard laboratory designs because they allow us to target customer service employees specifically. This enhances the generalizability of our findings to customer-facing employees at large, making our work achieve high levels of both internal and external validity. Nonetheless, future research is required to extend the impact of positive expectancy disconfirmation to other occupations (see Study 2S of Supplemental Materials 3), particularly those in highly stressful work environment or involving high emotional labor, such as bill collectors (Sutton, 1991), police officers (van Gelderen et al., 2007), nurses (Phillips, 1996) and even professors (Bellas, 1999).

14.2. Practical implications

To be clear, the present research does not suggest that managers should discourage their subordinates from pursuing positive affect at work or engaging in respite activities during their work breaks (e.g., Trougakos et al., 2008). Yet, more importantly, managers should be aware of the situations that their subordinates face on the job. For instance, if an employee is tasked to handle abusive customers frequently, it would be advisable for the supervisor to brief the employee prior to service interactions in order to build expectations for potential mistreatments, such as by highlighting the fact that customer mistreatments are rampant in the industry, and that the employee should simply remain calm and handle customers as professionally as possible. This way, when mistreatment occurs, it would not come across as a terrible shock to the unprepared employee.

Our results also point toward neutral affect as potentially beneficial, at least for service employees. This is consistent with recent research suggesting that neutral affect may improve people's coping response and judgments making by signaling that things are normal (e.g., Gasper et al., 2019; Gasper & Danube, 2016). One way of inducing neutral affect is through mindfulness meditation (Gasper et al., 2019). Notably, past studies found that mindfulness meditation reduces emotional inferences in tasks (Ortner et al., 2007). Therefore, such an exercise could potentially attenuate the negativity of customer mistreatment by reducing the negative affect associated with the mistreatment. Given that mindfulness has increasingly been suggested to be a positive recovery exercise during work breaks (e.g., Chong et al., 2020; Hülshager et al., 2014), our research adds to this growing body of work by suggesting an additional benefit of engaging in mindfulness meditation.

Perhaps more importantly, organizations should enforce measures that prevent customers from mistreating service employees. One common practice in call centers is that customers are informed that the call will be voice-recorded for service and training purposes prior to communicating with the call operators. Given an increasing trend of communication taking place over live chats, it would be necessary for organizations to adopt similar form of deterrence prior to the

communication. For instance, online customers can be informed via an on-screen message that any unacceptable behaviors will be recorded, and their accounts restricted for any future attempts to communicate. This would ensure that service employees face fewer customer mistreatment instances over the day, and that in turn reduces the occurrences and extent of positive expectancy disconfirmation at work.

14.3. Limitations and future research

Despite a number of contributions, our paper is not without limitations, which potentially highlight directions for future research. For example, although we have successfully tested the effects of positive expectancy disconfirmation on self-control depletion in our field experiments, we did not test whether other activities might help to restore or further drain their depleted resources throughout the workday. In the recovery literature, recent studies have shown that respite activities during micro-breaks could attenuate the typical stressor-strain link that many employees experience at work on a daily basis and further help to restore positive affect (Kim et al., 2018). For service professionals, it would be interesting for future research to examine the possibility that those micro-break activities can help employees recover their positive affect, but at the same time expose them to higher levels of self-control depletion caused by positive expectancy disconfirmation following these micro-breaks. Moreover, given that our research showed that individuals are likely to engage in psychological detachment as a means to recover following positive expectancy disconfirmation, this might ironically perpetuate a cycle of positive expectancy disconfirmation and recovery activities.

Second, we acknowledge the limitation of our self-control depletion measure. That is, despite adopting one of the most widely used measure for self-control depletion (Twenge et al., 2004), questions remain as to the theoretical mechanisms and the specific resource underlying self-control depletion (Johnson et al., 2017; Lian et al., 2017). Nevertheless, our research deepens our theoretical understanding of self-control depletion by taking an expectancy angle in explicating our effects. Specifically, we build our theoretical case surrounding the possibility that people in a state of positive affect develop more positive expectancies and downplay the occurrence of negative events happening (see Study 2S of Supplemental Materials 3). In other words, people did not expect to exercise self-control when they experience positive affect. In Study 3 and 4, then, where we manipulated expectation of customer mistreatment, participants were rendered psychologically prepared for customer mistreatment. That is to say, participants expected their self-control resources to be at risk, and defensively conserve their resources even after encountering customer mistreatment (Johnson et al., 2017; Molden et al., 2012; Muraven et al., 2006).

Third, across the four studies, we manipulated customer mistreatment by having participants go through customer service simulations. Although we used professional voice actors and developed realistic customer interaction scenarios with subject experts to enhance the realism of these simulations, we are aware of the concerns regarding potential generalizability of our results. Because participants responded to hypothetical scenarios, we do not know whether our findings would generalize to real ongoing customer service situations. Notwithstanding, we argue that the observed effect should be even more pronounced when participants experience actual mistreatment at their workplace, which arguably creates a stronger disconfirmation effect than when realistic simulations were used. Moreover, participants went through the customer service simulations in a single sitting, whereas customer mistreatments at work are often unpredictable and may occur multiple times during the day. In essence, we believe that the current design represents a conservative test of our model.

Finally, though consistent with studies in the affect literature (e.g., Erez & Isen, 2002; Fredrickson, 2001; Fredrickson & Joiner, 2002), we adopted only a selection of positive affect manipulations. We recognize that there are other manipulations of positive affect with higher

intensity level, for example, telling jokes and watching comedy movies. However, our manipulations fit well with the modern workplace respite activities (e.g., watching videos or viewing pictures in an app or mobile website on a smartphone or tablet), given that working adults are spending nearly six hours per day on videos and pictures (Nielsen, 2018). We also encourage future research to further investigate other predictors of positive affect, including when employees arrive at work in a positive mood (Rothbard & Wilk, 2011). For example, humor research suggests that people who exhibit a sense of humor are more enjoyable to be around as they promote the positive affect of people around them (Bressler & Balshine, 2006; Kalbfleisch, 2013). Specific to the workplace, having leaders or coworkers who constantly display a sense of humor can help elevate service professionals' positive affect, but at the same time put those service professionals at risk of positive expectancy disconfirmation.

15. Conclusion

Positive affect has been generally prescribed by scholars as a remedy for stress recovery. Nonetheless, given that service employees experience frequent mistreatments on the job, it is still unclear if these universal benefits can be generalized to service employees. Based on two online and two field experiments using customer service professionals, we found that participants experiencing customer mistreatment right after the positive affect manipulation reported higher levels of self-control depletion, which made them perceived more instances of customer mistreatment over the workday and a need for psychological detachment from work. We also found that expectation of customer mistreatment attenuated the relationship between positive expectancy disconfirmation and self-control depletion at work. Taken together, our research contributes to current affect and expectancy research by examining how holding positive affect prior to negative events may have negative consequences on work perceptions and behaviors.

CRedit authorship contribution statement

Randy Lee: Conceptualization, Methodology, Investigation, Formal analysis, Writing – original draft, Writing – review & editing, Visualization. **Ke Michael Mai:** Conceptualization, Methodology, Investigation, Formal analysis, Writing – original draft, Writing – review & editing, Supervision, Funding acquisition. **Feng Qiu:** Investigation, Writing – review & editing. **Remus Ilies:** Supervision, Writing – review & editing. **Pok Man Tang:** Investigation, Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.obhdp.2022.104188>.

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