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The effects of employee burnout on customers: An experimental approach

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ABSTRACT

This study investigated the different effects of employee burnout dimensions (depersonalisation and emotional exhaustion) on customer service perceptions. We hypothesised that customers who interact with depersonalising employees will feel angry and hostile, which, in turn, should be related to low service perceptions. Emotional exhaustion was hypothesised to attenuate this effect because customers might perceive exhaustion as a reason for the depersonalising behaviour and may be affected less negatively. Each of the 156 study participants read 12 vignettes in which university employees displayed depersonalisation and emotional exhaustion symptoms. Multilevel analysis showed that employee depersonalisation negatively affected customer perceptions towards employee service and organisation service. Customer anger and hostility mediated this effect. Employee emotional exhaustion moderated the indirect effect such that depersonalisation had the strongest effect on customer service perceptions via anger and hostility when the employee did not display emotional exhaustion. Findings highlight the importance of studying the effects of depersonalisation and emotional exhaustion separately, and taking into account customer affective processes.

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Burnout; emotional exhaustion; depersonalisation; customer service; customer emotions; policy capturing

Burnout, a psychological syndrome that occurs in response to stressors on the job, is a multi-facet construct comprised of three dimensions (i.e. emotional exhaustion, depersonalisation, and reduced personal accomplishment; Maslach, Schaufeli, & Leiter, 2001). Originally, Maslach (1978) termed burnout as a syndrome that occurs among employees who work closely with other people. Later, scholars acknowledged that burnout is not exclusive to the human service sector (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). However, the focus of the burnout literature stayed within service jobs (Leiter, Bakker, & Maslach, 2014). Due to the interpersonal nature of burnout (Maslach, 2003), we address the consequences of burnout for others who interact with burnt-out employees. Customer service perceptions are of special importance because customers are the life-line of most organisations, and their service perceptions have a critical impact on firm success (Halbesleben & Buckley, 2004; Leiter, Harvie, & Frizzell, 1998).

Although earlier studies found a negative relation between employee burnout and customer outcomes (Garman, Corrigan, & Morris, 2002; Halbesleben & Rathert, 2008; Shen

et al., 2015), they could not disentangle the effects of different burnout dimension displays, and did not take into account possible mediators. Therefore, the questions of *what* it is in burnout that affects customers, and *why*, are still open. Moreover, because of their correlational nature, most previous studies could not infer causality. Our experimental study aims at closing this gap and addressing these unanswered questions.

To understand the unique burnout dimensions that affect customers' perceptions, we examine two of the burnout dimensions – emotional exhaustion and depersonalisation – that are most influential in service interactions (Bakker, Demerouti, & Schaufeli, 2005). Importantly, even though emotional exhaustion and depersonalisation are correlated (Lee & Ashforth, 1996; Leiter et al., 1998), the burnout literature acknowledges them as distinct components (Demerouti, Verbeke, & Bakker, 2005; Mäkikangas & Kin-nunen, 2016).

We argue that although emotional exhaustion is often described as the core of burnout (Wright & Cropanzano, 1998), for customers, depersonalisation is, in fact, the more important aspect. This idea was suggested before (Halbesleben & Rathert, 2008), but could not be tested because in order to study the unique effects of emotional exhaustion and depersonalisation, one must be able to differentiate between them on an empirical level. Therefore, we use a within-subject experimental design (i.e. experimental vignettes; Aguinis & Bradley, 2014) that allows us to empirically separate emotional exhaustion and depersonalisation, and to clarify the intricacy of their effects. The setting of the vignettes is a university, with university employees (i.e. lecturer, secretary, and technician) as the characters in the vignettes, and student participants as their natural customers.

To answer the question of why interactions with burnt-out employees affect customer service perceptions, we investigate the psychological process that customers undergo in these interactions. Drawing on affective events theory (Weiss & Cropanzano, 1996), we suggest an affective process in which customer emotions (i.e. feeling angry and hostile) are the explaining mechanism between the event (interaction with a burnt-out employee) and the evaluative judgment (customer service perceptions). We study customer service perceptions from two different angles. One is the service perception customers have regarding the employee they communicate with, and the other is the service perception customers have regarding the organisation as a whole. We do so in order to show that the effects of employee burnout are not restricted to the way in which customers perceive employee service, but have consequences to the overall attitudes that customers have towards the organisation (Bitner, 1990; Bitner, Booms, & Mohr, 1994). This is important because customer perceptions of service organisations relate to the performance of those organisations, and in case of service organisations, to their economic survival (Berry, Wall, & Carbone, 2006).

With this study, we make several contributions to the literature. First, we are among the first to offer causal inference into the research of the effects of burnout on others (Söderlund, 2017). Given that previous studies found customer behaviour to be the predictor of employee burnout (i.e. customer hostility; Dormann & Zapf, 2004), the question of whether employee burnout is a cause of customer outcomes adds to a deeper understanding of the burnout phenomenon and its relevance for the service sector. Our within-subject experimental design (Tomassetti, Dalal, & Kaplan, 2016) allows us an in-depth assessment that establishes burnout as a reason for customers' negative emotions and service perceptions.

Second, by combining the burnout literature with the literature on customer emotions, we provide insights to both. Employee burnout is related to customer outcomes (i.e. customer satisfaction; Yagil, 2012), and customer emotions serve as an explaining mechanism for employee–customer relations (Lemmink & Mattsson, 2002; Tsai & Huang, 2002). Yet, the *link* between employee burnout and customer emotions has not received much attention, and to the best of our knowledge, we are the first to suggest customer emotions as a mediator between employee burnout and customer service perceptions. With this approach, we promote a better understanding of the process that customers go through when interacting with burnt-out employees, and contribute to the burnout literature that mainly focuses on the psychological processes of the burnt-out individual (Schaufeli, 2004). In addition, we add to the literature of customer emotions (Smith & Bolton, 2002) by examining employee burnout as an important predictor of customer negative emotions.

Lastly, by showing that different dimensions of burnout (i.e. emotional exhaustion and depersonalisation) indeed have unique effects on customers, we add to the ongoing debate about the relationship between the burnout dimensions (Demerouti et al., 2005; Lee & Ashforth, 1996; Mäkikangas & Kinnunen, 2016). Moreover, by studying possible interaction effects between emotional exhaustion and depersonalisation, we address unexpected aspects of burnout (e.g. “the bright side” of emotional exhaustion as a buffer of the negative effects of depersonalisation on customers). Organisations also benefit from a clarification of which aspects in burnout affect customers. They might be able to help their employees deal with burnout in a more effective way, and design their service behavioural rules according to what actually matters to customers.

Burnout: A multidimensional construct

Maslach (1978) identified three core dimensions of burnout. The first, emotional exhaustion, captures the individual stress experience. It includes feelings of being overextended, fatigued, and depleted of energy. The second, depersonalisation, is the interpersonal dimension of burnout. Depersonalisation comprises a callous and distanced approach towards service recipients and decrease investment in relationships. The third, reduced personal accomplishment, represents the self-evaluation dimension of burnout and is characterised by a decline in feelings of success (Cordes & Dougherty, 1993; Halbesleben & Buckley, 2004). We focus on emotional exhaustion and depersonalisation because they are strongly related to burnout consequences and therefore more likely to affect customers, which are the focus of the current study (Alarcon, 2011; Bakker et al., 2005). Emotional exhaustion and depersonalisation are correlated, but distinct dimensions, as found in empirical studies and meta-analyses (Lee & Ashforth, 1996; Leiter et al., 1998).

Conceptually, some models of burnout argue that depersonalisation is the result of emotional exhaustion, or a coping mechanism for it (Lee & Ashforth, 1996; Maslach et al., 2001), while others (e.g. the phase model, Golembiewski, Boudreau, Sun, & Luo, 1998), look at depersonalisation as the first phase of the burnout process. These models, as well as more recent ideas regarding the profiles of burnout (Leiter & Maslach, 2016), support the view that different forms of burnout do exist (Maslach & Schaufeli, 1993), and some people, in some phases or situations, may experience only one dimension of burnout (Mäkikangas & Kinnunen, 2016; Schaufeli & Buunk, 2003).

Acknowledging these ideas, we suggest that employees will not necessarily *display* all the dimensions of burnout at once, and different combinations of burnout dimension displays exist (Demerouti et al., 2005; Maslach & Leiter, 2008). If employees show different combinations of burnout dimensions displays, their customers are likely to be affected differently.

The role of depersonalisation in customer service perceptions

Depersonalisation harms people's ability to sympathise with others (Cordes & Dougherty, 1993; Halbesleben & Buckley, 2004). The behavioural symptoms include avoiding others, use of jargon, cynicism, and mechanic behaviour (Kahill, 1988; Maslach & Pines, 1977). While emotional exhaustion can be seen as part of stress, depersonalisation is unique to the burnout construct, and is directed towards other people, especially towards customers (Maslach et al., 2001). As Maslach described: "Staff lose all feeling and concern for their clients and treat them in detached or even dehumanised ways" (Maslach, 1978, p. 111). Accordingly, customers, who are the target of depersonalisation, will be affected by it.

Importantly, as described by Taris (2006), depersonalisation does not always go hand in hand with impaired objective performance. This means that customers might experience depersonalisation from employees while actually receiving adequate service in terms of desired outcomes (Parasuraman, Zeithaml, & Berry, 1988). Going back to the classic example of depersonalisation: The "kidney" in room 212 (Cordes & Dougherty, 1993), the hypothetical patient might have received efficient and professional medical treatment, but felt that the interaction was impersonal and unpleasant.

Therefore, we suggest that for customers, depersonalisation is a distinct experience, which effects the perception of service, and not a *bad service* per se. Even if there is no technical problem in the service, when interacting with employees who display depersonalisation, customers are aware that something is wrong in the interaction. Customers might not term the behaviour *depersonalising*, but they can point to the behavioural symptoms of employee depersonalisation as described in the burnout literature (e.g. employees who show no interest and treat customers impersonally; Bitner, 1990). Accordingly, we suggest that customers rightly interpret depersonalisation symptoms as directed towards them, and perceive the service they receive from those employees less favourably.

Hypothesis 1a: Employee depersonalisation will have a negative effect on customer perception of employee service.

Customers often evaluate organisations by the interpersonal aspects of their interactions with service employees (Groth & Grandey, 2012; Hennig-Thurau, 2004). These interactions are a stronger predictor of customer perceptions towards the organisation than other characteristics of the service provided by the organisation (e.g. speed or accuracy; Berry & Lampo, 2004). Hence, for customers, interactions with front line employees are *the moment of truth* of the whole perception of service organisation (Bitner, 1990; Groth, Hennig-Thurau, & Walsh, 2009). For organisations, customer perception of service is valuable, sometimes critical, because it is related to customer behavioural outcomes (e.g. customer loyalty; Mohr & Bitner, 1995).

We suggest that customers may perceive employee depersonalisation as reflecting the organisation as a whole (Berry et al., 2006). In the *moment of truth* of the organisation, the employee behaves in a callous and impersonal manner (Kahill, 1988). Thus, customer perceptions towards the service delivered by the organisation will be negatively affected.

Hypothesis 1b: Employee depersonalisation will have a negative effect on customer perception of organisation service.

The customer affective process

Although the relationship between staff depersonalisation and customer affect was suggested in the past (Maslach, 1978), empirical support for the psychological process that customers undergo when interacting with depersonalising service employees is missing. Based on affective events theory (AET; Weiss & Cropanzano, 1996) and findings from the service literature (Laros & Steenkamp, 2005; Oliver & Westbrook, 1993), we suggest that customer emotions play an important role in understanding the effects of depersonalisation on customer service perceptions. AET argues that work events lead to discrete emotions, which, in turn, lead to attitudes towards the workplace (Weiss & Cropanzano, 1996). Applying to the customer experience, the service interaction is the event that has the potential to provoke discrete emotions in customers (McColl-Kennedy & Sparks, 2003).

Support for this claim comes from the service literature (Menon & Dubé, 2000). Customers that interact with unresponsive or distanced service employees describe themselves as being mishandled and show anger and frustration (Bougie, Pieters, & Zeelenberg, 2003). In addition, unfavourable treatment is related to specific, negative emotions (i.e. anger, hostility), and not to a general negative affect or other discrete negative emotions (i.e. disgust, anxiety; Barclay, Skarlicki, & Pugh, 2005). This is why we chose to focus on anger and hostility in the current study. Thus, we suggest that customers who interpret depersonalisation displayed by service employees as directed towards them will feel more angry and hostile as a consequence (Maslach, 1978).

According to AET, emotions are the link between events and peoples' attitudes and perceptions. Following the event, people experience emotions and later come up with cognitive evaluations (Judge, Scott, & Ilies, 2006; Weiss & Cropanzano, 1996). Evidence for this relation is also found in the service literature. Customer emotions that arise during the service encounter are antecedents of customer perceptions (Mattila & Enz, 2002; Oliver & Westbrook, 1993). Furthermore, there is empirical support for angry, hostile customers being less satisfied with the service that they receive (Bougie et al., 2003; Kalamas, Laroche, & Makdessian, 2008). Accordingly, we suggest that interacting with employees who show depersonalisation will result in customers feeling more angry and hostile, which, in turn, will reduce their service perceptions regarding the employee service.

Hypothesis 2a: Anger and hostility will mediate the negative effect of employee depersonalisation on customer perception of employee service.

Customers view service employees as representatives of the organisation (Groth & Grandey, 2012). They see the organisation as being accountable for guiding and supervising the behaviour of its employees (Gil, Berenguer, & Cervera, 2008). Therefore, when

customers feel that an employee's behaviour is callous and impersonal, they may blame the organisation for tolerating this behaviour (Gelbrich, 2009). Blaming the organisation as being responsible for employee behaviour tends to trigger anger, as found in empirical studies on service (Bougie et al., 2003; Menon & Dubé, 2000). Thus, we suggest that employee depersonalisation will evoke anger and hostility in customers.

Additionally, the impact of customer emotions on service perceptions is not limited to specific episodes, and the overall assessment of the organisation is highly influenced by the customer emotional state (Kalamas et al., 2008). Therefore, in line with studies from the service literature (Mattila & Enz, 2002), we suggest that customer anger and hostility will act as an explaining mechanism of the negative effect depersonalisation has on customers' perceptions of the service organisation.

Hypothesis 2b: Anger and hostility will mediate the negative effect of employee depersonalisation on customer perception of organisation service.

Emotional exhaustion as a moderator

According to attribution theory (Aquino, Douglas, & Martinko, 2004), people look for ways to explain others' behaviour, especially when they feel mistreated or when being in ambiguous interactions (Aquino et al., 2004). Based on the explanation they give to the behaviour, people decide how much blame to put on the other person (Aquino, Tripp, & Bies, 2001; Bradfield & Aquino, 1999). They may consider the intent, responsibility, and severity of the situation and use this information to decide how they will feel and react (Lee & Elkins, 2013). If the person who shows mistreatment is judged to be accountable for the behaviour, an affective process begins, typically involving negative emotions, such as anger and rage (Aquino et al., 2001; Van Vaerenbergh, Orsingher, Vermeir, & Larivière, 2014). If, however, people can explain the other person's behaviour as not intentional (e.g. the employee acted this way because of understandable stress), or blame something else for it (e.g. working conditions), they may become more forgiving and less angry with the other person (Weiner, 2004).

There is support for attribution theory arguments in the service context (Weiner, 2000). Customers blame employees for what they perceive as mistreatment if they believe that the employees are uncaring or could behave differently (Grégoire, Laufer, & Tripp, 2010). However, customers tend to be more forgiving when they can find reasons outside the employee for the employee behaviour (Yagil & Luria, 2016).

We suggest that when customers encounter employee emotional exhaustion symptoms, they may see it as a possible reason for what they otherwise might perceive as intentional mistreatment (Yagil & Luria, 2016), because emotional exhaustion, as opposed to depersonalisation, is *not* directed towards them (Maslach et al., 2001). People are more likely to perceive emotional exhaustion cues as they are – individual responses to stress on the job (Bakker & Schaufeli, 2000).

Hence, emotional exhaustion should attenuate the negative effect of employee depersonalisation on customers, because these manifestations may signal that there is a reasonable cause for the employee's behaviour. Accordingly, if customers do not perceive the service provider as having negative intentions towards them, but as having another reason for their depersonalising behaviour, they may attribute less blame to the employee, and feel

less angry and hostile as a consequence (Aquino et al., 2001; Yagil & Luria, 2016). Thus, we hypothesise that when interacting with employees who display *both* emotional exhaustion and depersonalisation symptoms, the negative effect of depersonalisation on the perception of employee service through anger and hostility will be reduced.

Hypothesis 3a: Emotional exhaustion will moderate the indirect effect of employee depersonalisation on customer perception of employee service, such that the relationship will be weaker when emotional exhaustion is present.

Again, we argue that the moderating effect of emotional exhaustion will not be exclusive to the perception of employee service, but rather, will be generalised to the perception of the overall service provided by the organisation. As discussed above, the interpersonal interactions with service employees often inform the overall service quality perceptions (Brady & Cronin, 2001). There is indeed evidence for customer attributions affecting perceptions both of specific service encounters and of overall satisfaction (Van Vaerenbergh et al., 2014). Therefore, we expect that encountering emotional exhaustion symptoms, and perceiving them as a reason for the depersonalising behaviour of service employees, will buffer the indirect negative effect of depersonalisation on perceived organisation service through anger and hostility.

Hypothesis 3b: Emotional exhaustion will moderate the indirect effect of employee depersonalisation on customer perception of organisation service, such that the relationship will be weaker when emotional exhaustion is present.

Method

Overview

To test the hypotheses, we used a policy-capturing approach, which is a within-subject vignette experiment. This method allows for the study of the judgments and decisions participants make in a systematic manner (Aiman-Smith, Scullen, & Barr, 2002; Atzmüller & Steiner, 2010). During the past years, studies supported the strengths of this approach both methodologically and conceptually (Aguinis & Bradley, 2014; Tomassetti et al., 2016).

In this study, we tested how employee burnout affects customer service perceptions.

University students participated in the study as customers who receive services from university employees. Universities are increasingly using customer service initiatives to attract students, resulting in students perceiving themselves as customers (Cuthbert, 2010). In addition, interpersonal dimensions are especially important in non-profit service settings, such as universities (Garland & Westbrook, 1989). Therefore, student participants are appropriate for the purpose of our study.

Participants

Students from a mid-sized university in Germany participated in this study as part of their degree requirements. The sample included 156 students (84% women) with a mean age of 21.76 years ($SD = 4.25$). About half of the students were psychology students (55%), and the rest were sociology students (45%). In terms of occupational experience, more than half of the students (62.2%) had some occupational experience with a large variance in job tenure. Mean occupational experience was 23.73 months ($SD = 30.61$).

Development of vignettes

Our aim was to get as close as possible to realism of the vignettes, as recommended in the policy-capturing literature (Atzmüller & Steiner, 2010). Accordingly, we built the vignettes around university life to allow our student participants to keep their natural roles. The vignettes described a setting of a university, with background stories based on real-life situations.

We created descriptions of situations in the university in which a university employee is interacting with a student, and performing a service for the student (e.g. signing a university form). To test our hypotheses, we built the vignettes with descriptions of depersonalisation and emotional exhaustion manifestations as manipulation cues. We used several steps for developing the vignettes as done in other policy-capturing studies (Rotundo & Sackett, 2002).

First, we generated a list of depersonalisation and emotional exhaustion displays based on the symptoms described by Maslach et al. (2001), in which, for instance, the university employee used the student number instead of name as a display of depersonalisation. Second, we combined the cues with three different types of university occupations: lecturer, secretary, and technician, because students have regular interactions with these employees in the university. In each vignette, we described a different university employee interacting with a student, displaying the different types of manipulation cues (e.g. secretary displaying emotional exhaustion symptoms). Lastly, we made sure that apart of the manipulated cues, other aspects of the situation were held constant. For example, in all vignettes, the students received the service they needed from the university employee (e.g. a signed form from the secretary), ruling out the outcome of the interaction as a possible confounder. The process of vignette development resulted in 12 vignettes in which depersonalisation cues (displayed or not displayed) and emotional exhaustion cues (displayed or not displayed) were systematically manipulated in a 2×2 within-subject factorial design.

The three roles of university employees presented in the vignettes were fully crossed with the four types of manipulation cues. Because we hypothesised a main effect and an interaction effect, we used the full factorial design with students responding to all possible vignettes (Graham & Cable, 2001). A sample vignette is presented in [Appendix 1](#) (i.e. a lecturer displaying depersonalisation; vignettes were presented in German in the study. The full vignettes are available by request from the first author).

Procedure

To recruit study participants, we used the online survey system of the psychology department. Students logged in to find studies to participate in, which they could choose freely. Our study was named: “Online study regarding university life”, and offered one credit point for participation. Students entered the survey directly when clicking on a link presented in the recruiting system, and could fill in the study from every electronic device.

Students read an introduction page, informing them that we were interested in their university life experience and ensuring them full anonymity. We asked the students to read each vignette carefully and to answer the questions following as if they had actually experienced the situation described. After reading the instructions, the 12 vignettes were

presented in a random order, each followed by a set of questions referring to the specific situation described in the vignette.

Manipulation check

In order to evaluate the manipulations presented in the vignettes, we conducted a manipulation check. About half of the sample (81 participants), was chosen randomly to answer the manipulation check items in addition to the other measures following every vignette. Only half of the participants filled in the manipulation check in order to allow us testing if answering the manipulation check items influenced our core results.

Measures

Table 1 displays the means, standard deviations, intraclass correlation coefficients, and within-person correlations between study variables. All items were presented in German.

Anger and hostility

We used three items of the German version of PANAS-X (Röcke & Grünh, 2003; Watson, Clark, & Tellegen, 1988), with a 5-point scale (1 = *not at all* and 5 = *very much*), to measure anger and hostility following every vignette. Participants responded to the items with respect to how they felt “when reading the description of the situation.” A sample item is “angry”. Cronbach’s alpha was 0.84.

Customer service evaluation

We used three items of the perceived customer orientation scale to measure perception of employee service (Groth et al., 2009), and three items of the satisfaction dimension of the rapport scale to measure perception of university service (Gremier & Gwinner, 2000). The items were translated and back translated from English to German, with a 7-point scale (1 = *strongly disagree* and 7 = *strongly agree*). Participants responded with respect to the description they just read. A sample item of the employee service measure is: “The lecturer

Table 1. Means, standard deviations, intraclass correlation coefficients, and correlations of the study variables.

Variable	<i>M</i>	<i>SD</i>	<i>ICC</i>	1	2	3	4	5
1. Anger and hostility	1.56	0.73	0.36	–	–	–	–	–
2. Service oriented at the employee	3.77	1.39	0.22	–.44**	–	–	–	–
3. Service oriented at the university	4.05	1.35	0.42	–.39**	.63**	–	–	–
4. Manipulation check- emotional exhaustion items	4.88	1.63	0.06	.03	–.17**	–.17**	–	–
5. Manipulation check- depersonalisation items	4.18	1.38	0.14	.12**	–.23**	–.20**	.61**	–
6. Emotional exhaustion cues ^a	–	–	–	.00	–.24**	–.21**	.28**	.09**
7. Depersonalisation cues ^b	–	–	–	.35**	–.35**	–.29**	.11**	.21**
8. Vignette character – lecturer ^c	–	–	–	.06*	–.05	.02	–.02	–.04
9. Vignette character – secretary ^d	–	–	–	–.04	.15**	.04	.02	–.01

Note: *N* = 1872 vignettes; *N* = 156 participants. Answering the manipulation check: *N* = 972 vignettes; *N* = 81 participants.

^{a,b}Emotional exhaustion and depersonalisation cues were coded as 1 = cues presented, 0 = No cues presented.

^{c,d}Role of the character presented in the vignette was coded with two dummy variables. The first variable was coded as 1 = Lecturer character presented in the vignette, 0 = Non-lecturer character presented. The second variable was coded as 1 = Secretary character presented in the vignette, 0 = Non-secretary character presented.

p* < .05; *p* < .01.

had my interest in mind”. Cronbach’s alpha was 0.85. A sample item of the organisational service measure is: “Based on my experience in this situation, I am satisfied with the services offered by this university”. Cronbach’s alpha was 0.89.

Manipulation check

We adjusted items of the German version of the MBI (Büssing & Perrar, 1992; Maslach & Jackson, 1981) in order to capture the perception of depersonalisation and emotional exhaustion cues presented in the vignettes, with a 7-point scale (1 = *strongly disagree* and 7 = *strongly agree*). Specifically, we measured the perception of depersonalisation as a manipulation cue with three items. Sample item: “The lecturer treats some students as if they were impersonal objects”. Cronbach’s alpha was 0.80.

We measured the perception of emotional exhaustion as a manipulation cue with three items. Sample item: “The lecturer feels emotionally exhausted by his work”. Cronbach’s alpha was 0.96.

Demographics

Participants reported their gender, age, field of study, semester of studies, occupational experience, and job tenure at the end of the study.

Construct validity

To test the construct validity of the study variables, we conducted a multilevel confirmatory factor analysis using Mplus 6.1 (Muthén & Muthén, 1998–2011). We tested a three-factor model (anger and hostility, perception of employee service, perception of university service). This model, with all items loading on their respective factors, showed a good fit, $\chi^2 = 236.968$, $df = 64$, $p < .001$, CFI = 0.971, RMSEA = 0.038, and all factor loadings were significant. This three-factor model fit the data better than a two-factor model (anger and hostility, and overall perception of employee and university service), $\chi^2 = 852.714$, $df = 68$, $p < .001$, CFI = 0.867, RMSEA = 0.079, Δ Satorra-Bentler scaled χ^2 (Δ S-B χ^2) = 303.426, $\Delta df = 4$, $p < .001$. A one-factor model with all items did not converge.

To test the construct validity of the manipulation check items, we conducted a separate multilevel confirmatory factor analysis. We tested a two-factor model with one factor comprising manipulation check items of depersonalisation, and one factor comprising manipulation check items of emotional exhaustion. This model, with all items loading on their respective factors, showed an acceptable fit, $\chi^2 = 87.013$, $df = 18$, $p < .001$, CFI = 0.972, RMSEA = 0.063, and all factor loadings were significant. This two-factor model showed a better fit than a one-factor model, with all manipulation-check items loading on the same factor, $\chi^2 = 506.341$, $df = 20$, $p < .001$, CFI = 0.802, RMSEA = 0.158, Δ S-B χ^2 = 543.986, $\Delta df = 2$, $p < .001$.

Data analysis strategy

Due to the data’s two-level structure with vignettes nested within participants (Aguinis & Bradley, 2014), we analysed our data with a multilevel analysis using Mplus 6.1 (Muthén & Muthén, 1998–2011). Because our data structure was a fully crossed design, and our independent variable and moderator were both dichotomous, we had no between-level

variance in these variables. Therefore, we tested our moderated mediation analysis with a multilevel adaption of a moderated mediation model with dummy variables, as suggested by Stride, Gardner, Catley, and Thomas (2015).

We tested our hypotheses separately for perception of employee service and perception of university service. Because employees' roles (i.e. lecturer) might have an effect on the evaluation of the service they provide, regardless of their behaviour, we controlled for the role of the university employee presented in the vignette.

Results

Manipulation check

To test whether our manipulations worked as intended, we conducted a multilevel regression analysis in which the manipulation check items were regressed on the manipulation cues presented in the vignettes. The results show that when reading vignettes in which the character was displaying depersonalisation cues, participants' evaluations of depersonalisation items were significantly higher than when reading vignettes in which the character did not display depersonalisation cues ($B = 2.11$, $SE = 0.13$, $t = 15.3$, $p < .001$). In addition, when reading vignettes in which the character displayed emotional exhaustion cues, participants' evaluations of emotional exhaustion items were significantly higher than when reading vignettes in which the character did not display emotional exhaustion cues ($B = 2.76$, $SE = 0.15$, $t = 18.35$, $p < .001$). These results support the success of our manipulation. The full manipulation check data is available by request from the first author.

In this analysis of the manipulation check, we encountered a noteworthy pattern in participants' answers to the manipulation check items. When reading vignettes in which the character displayed depersonalisation cues, participants also evaluated the emotional exhaustion manipulation check items as higher than when reading vignettes in which the character displayed no manipulation cues at all. The same pattern occurred when reading vignettes in which the character displayed emotional exhaustion cues and answered the depersonalisation manipulation check items. Nevertheless, the confidence intervals of the manipulation check items did not overlap, for emotional exhaustion cues and emotional exhaustion items, 95% CI [2.46, 3.05], for emotional exhaustion cues and depersonalisation items, 95% CI [1.14, 1.56], for depersonalisation cues and emotional exhaustion items, 95% CI [1.32, 1.82], and for depersonalisation cues and depersonalisation items, 95% CI [1.84, 2.38]. Therefore, the effect of depersonalisation cues on depersonalisation manipulation check items is significantly larger than on emotional exhaustion items, and the effect of emotional exhaustion cues on emotional exhaustion manipulation check items is significantly larger than on depersonalisation manipulation check items. All in all, the manipulation was effective.

Hypotheses testing

Hypothesis 1 predicted that depersonalisation cues presented in the vignette will have a negative effect on students' service perceptions. We regressed the two service dimensions on depersonalisation cues and found that depersonalisation predicted perception of

employee service ($B = -0.97$, $SE = 0.05$, $t = -17.94$, $p < .001$) and perception of university service ($B = -0.79$, $SE = 0.05$, $t = -14.87$, $p < .001$). The coefficients of the regression were negative, indicating that students evaluated the service less favourably when depersonalisation cues were present in the vignette than when not, supporting Hypothesis 1.

Hypothesis 2 predicted that students' anger and hostility will mediate the effect of depersonalisation cues on service perceptions. Depersonalisation cues predicted anger and hostility ($B = 0.46$, $SE = 0.03$, $t = 14.14$, $p < .001$), and the positive coefficient indicates that students felt more angry and hostile when depersonalisation cues were present in the vignette than when not. Anger and hostility were significantly related both to perception of employee service ($B = -0.91$, $SE = 0.06$, $t = -14.26$, $p < .001$) and to perception of university service ($B = -0.68$, $SE = 0.06$, $t = -10.67$, $p < .001$). The negative coefficients indicate that students evaluated the service less favourably when feeling more angry and hostile than when feeling lower levels of these emotions. The indirect effect of depersonalisation on both service dimensions through anger and hostility was negative and significant; indirect effect for perception of employee service = -0.42 , $SE = 0.04$, $t = -9.48$, $p < .001$, 95% CI $[-0.511, -0.336]$; indirect effect for perception of university service = -0.32 , $SE = 0.05$, $t = -7.91$, $p < .001$, 95% CI $[-0.400, -0.241]$, supporting Hypothesis 2.

Hypothesis 3 suggested a moderated mediation (Bauer, Preacher, & Gil, 2006), with a first-stage moderation (Edwards & Lambert, 2007) in which emotional exhaustion cues moderate the indirect effect between depersonalisation cues and service perceptions through anger and hostility. The results are displayed in Table 2. Analysis showed a significant interaction term between depersonalisation cues and emotional exhaustion cues ($B = -0.44$, $SE = 0.04$, $t = -10.24$, $p < .001$). Accordingly, emotional exhaustion cues did have a significant effect on the relationship between depersonalisation cues on the one hand, and anger and hostility on the other hand. The conditional indirect effect for perception of employee service was significant when emotional exhaustion cues were present ($B = -0.22$, $SE = 0.02$, $t = -8.06$, $p < .001$), and also significant when emotional exhaustion cues were not present ($B = -0.62$, $SE = 0.06$, $t = -9.11$, $p < .001$). The confidence intervals did not overlap, showing a significant difference between the two conditions (emotional exhaustion cues present 95% CI $[-0.290, -0.166]$; emotional exhaustion cues not present 95% CI $[-0.754, -0.487]$).

Again, the results for perception of organisational service show the same pattern. The conditional indirect effect was significant when emotional exhaustion cues were present ($B = -0.16$, $SE = 0.02$, $t = -6.71$, $p < .001$), and when emotional exhaustion cues were not present ($B = -0.47$, $SE = 0.06$, $t = -7.88$, $p < .001$), and the confidence intervals did not overlap (emotional exhaustion cues present 95% CI $[-0.215, -0.118]$; emotional exhaustion cues not present 95% CI $[-0.588, -0.354]$). As hypothesised, these results show that the presence of emotional exhaustion cues reduced the negative effect of depersonalisation cues on service perceptions through anger and hostility. The simple slope test (Preacher, Curran, & Bauer, 2006) supported the suggested pattern of the interaction, as shown in Figure 1. Anger and hostility were highest when only depersonalisation cues were present, and lower when emotional cues were present as well. These results support Hypothesis 3.

As an additional analysis, we conducted all our analyses separately with the sub-sample that participated in the manipulation check, and with the sub-sample that did not. In both cases, the results were similar. Therefore, the inclusion of the manipulation-check items

Table 2. Multi-level moderated mediation analysis predicting anger and hostility, perception of employee service, and perception of university service.

Variable	Predicting anger and hostility			Predicting perception of employee service			Predicting perception of university service		
	Estimate	SE	t	Estimate	SE	t	Estimate	SE	t
Role: Lecturer	−0.14	0.02	−5.34***	0.02	0.05	0.39	0.06	0.04	1.38
Role: Secretary	−0.12	0.02	−4.88***	0.40	0.05	7.05***	0.11	0.04	2.67**
Depersonalisation cues	0.68	0.04	13.89***	−0.55	0.05	−10.96***	−0.47	0.04	−10.35***
Emotional exhaustion cues	0.22	0.03	6.85***	–	–	–	–	–	–
Depersonalisation cues X emotional exhaustion cues	−0.44	0.04	−10.24***	–	–	–	–	–	–
Anger and hostility	–	–	–	−0.91	0.06	−14.16***	−0.68	0.06	−10.68***
Residual variances	0.20	0.01	12.49***	1.00	0.05	18.83***	0.77	0.05	13.64***
Conditional indirect effect when emotional exhaustion cues presented	–	–	–	−0.22	0.02	−8.06***	−0.16	0.02	−6.71***
Conditional indirect effect when no emotional exhaustion cues presented	–	–	–	−0.62	0.06	−9.11***	−0.47	0.06	−7.88***

Note: $N = 1872$ vignettes; $N = 156$ participants.

Estimates are unstandardised.

*** $p < .001$; ** $p < .01$.

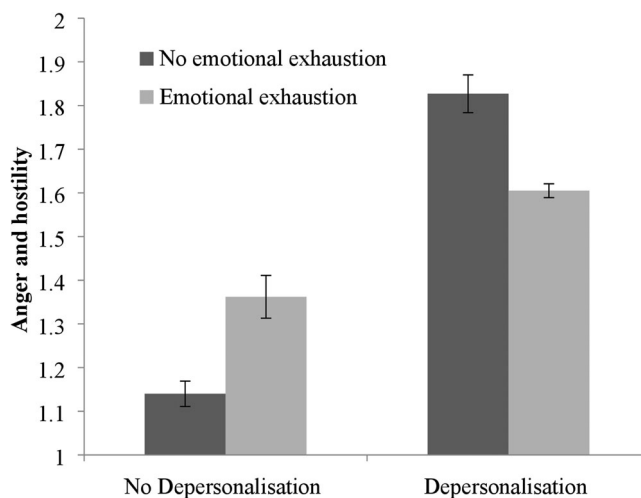


Figure 1. Interaction of depersonalisation cues and emotional exhaustion cues on anger and hostility.

did not have a substantial effect on our results. Moreover, we conducted all our analyses separately depending on the role of the character presented in the vignettes (i.e. lecturer, secretary, and technician). The pattern of the results shows that although there are minor differences, in general, there are strong and significant effects in the hypothesised direction regardless of the role of the employee presented in the vignette. The full data of the additional analyses is available by request from the first author.

Discussion

Our study showed that employee depersonalisation has a negative effect on customer perceptions of employee and organisation service. Customer anger and hostility mediate these effects. Additionally, when customers encountered employees that show both depersonalisation and emotional exhaustion, the negative effects of depersonalisation on customer service perceptions via anger and hostility were weaker.

Theoretical implications

Our findings take research of the multidimensional structure of burnout one step further and stress the theoretical importance of studying the effects of burnout on customers in a way that reveals burnout's multidimensional nature. With our experimental design, we were able to disentangle the effects of emotional exhaustion and depersonalisation on customers. Our approach demonstrates that it is valuable to incorporate such designs into the burnout literature (Aguinis & Bradley, 2014).

Our findings highlight the importance of bringing back depersonalisation in its classic, customer-targeted form into the burnout research (Schaufeli & Taris, 2005). Though later research tended to study depersonalisation in a broader way (e.g. cynicism; Maslach et al., 2001), we encourage scholars to renew their interest in the original meaning of depersonalisation because burnout studies still often focus on *people work* (Halbesleben &

Buckley, 2004; Taris, Le Blanc, Schaufeli, & Schreurs, 2005). Additionally, there is a tendency to focus on emotional exhaustion when studying burnout (Cropanzano, Rupp, & Byrne, 2003). However, our findings show that incorporating depersonalisation sheds an important light on understanding burnout (Maslach, 2003).

We take into account that the displayed symptoms of depersonalisation might be similar to other symptoms (e.g. symptoms of low customer orientation; Brown, Mowen, Donovan, & Licata, 2002). However, we claim that depersonalisation is a distinct phenomenon that is specific to burnout (Maslach, 2003). First, the dimension of depersonalisation is based on strong theoretical and empirical work of over 40 years (Leiter et al., 2014). Our manipulation check findings also show that other people have acknowledged depersonalisation symptoms, as described in the MBI. Second, although depersonalisation is targeted at customers, it is not targeted towards a specific person, as is ostracism (Williams, 2007). In studies of ostracism, individuals are neglected while being aware that others are not (Williams, 1997). Depersonalisation, by its meaning, flattens the specific characteristics of customers regardless of who they are (Maslach, 1978). Lastly, some of the symptoms of depersonalisation might seem similar to those of low customer orientation (Saxe & Weitz, 1982). However, while depersonalisation is a strain reaction to stress on the job (Maslach et al., 2001), customer orientation is a predisposition of the employee (Brown et al., 2002). Thus, depersonalisation and customer orientation are theoretically distinct constructs. Empirically, customer orientation was found to be a moderator of the negative effects of depersonalisation (Babakus, Yavas, & Ashill, 2009). For organisations, the difference between depersonalisation and low customer orientation is of high importance, as we will discuss in the practical implications section.

Moreover, it is essential to study psychological mechanisms within customers when studying customer-targeted phenomena such as depersonalisation (Maslach & Leiter, 2008). The service literature is often interested in the *bottom line* for organisations (e.g. customer loyalty; Bitner & Brown, 2008). However, customers do not act in a vacuum, and uncovering what guides their behaviour is beneficial for a better understanding of service organisations. The burnout literature also focuses almost exclusively on the psychological processes of burnt-out employees (Maslach et al., 2001). Therefore, our findings regarding the customer affective mechanism offer a broader perspective. Understanding the customer experience is also important for the employees themselves because customer behaviour is an antecedent of employee burnout (Dormann & Zapf, 2004).

Finally, our results show that emotional exhaustion attenuates the negative effect of employee depersonalisation on customers. This finding is not trivial because the literature mainly discusses the dark side of emotional exhaustion (Cropanzano et al., 2003), and so suggesting that emotional exhaustion *reduces* negative effects may seem paradoxical. However, we show that when combined with depersonalisation, emotional exhaustion actually serves as a cue for the customers' attribution process, which leads them to place less blame on depersonalising service employees, and in perceiving them less negatively. Therefore, we offer a unique angle for understanding emotional exhaustion that has not been addressed until today.

Limitations and future directions

Our study is not free of limitations. First, the use of a policy-capturing approach might raise concerns regarding participants' fatigue. In order to reduce it, we chose the lowest

number of short vignettes that allowed us to answer our research question (Atzmüller & Steiner, 2010). Another issue refers to social desirability. Student participants might be careful regarding reporting negative emotions and perceptions towards the university and university employees. However, recent literature supports the idea that policy capturing is actually more resistant to social desirability than other self-report measures (Tomasetti et al., 2016). Moreover, our findings show that our participants did report anger and hostility, as well as lower service perceptions towards the university and its employees.

As in any experimental design, one limitation is generalisability. The policy-capturing literature states that when the quality and familiarity of the manipulated cues are high, the external validity problem is reduced (Aguinis & Bradley, 2014; Aiman-Smith et al., 2002). To ensure a high quality of the manipulation cues, we created them by using the established burnout descriptions by Maslach et al. (2001) and by using a realistic setting of the vignettes. However, we still think it is a good direction for future studies to introduce other experimental designs, such as asking actors to perform the manipulated cues. In addition, a field study could be beneficial in terms of generalisability. In an organisational setting, customers may rate employees on emotional exhaustion and depersonalisation scales of the MBI (Maslach & Jackson, 1981) following real service interactions. In the next step, customers would report their emotions and service perceptions towards the employee and the organisation.

One last concern refers to the accuracy of our participants in differentiating the burnout dimensions. Our manipulation check showed that participants were able to identify the burnt-out employees as burnt out, but also showed a tendency to evaluate emotional exhaustion symptoms as depersonalisation and vice versa. However, this pattern does not raise concern regarding our results because they clearly show that the dimensions of burnout have different effects on customers. Future research could investigate whether customers' accurate distinction between employee emotional exhaustion and depersonalisation affects other parts of the employee–customer relation. Another direction can be to look at the antecedents of customer accurate burnout detection (e.g. customer emotional intelligence; Van Rooy & Viswesvaran, 2004).

Practical implications

We showed that the negative effects of employee burnout is not restricted to customers' perception of employee service, but harmful to the overall organisations' service perceptions. Therefore, organisations should acknowledge employee burnout. Taking into account the relatedness to customer orientation (Saxe & Weitz, 1982), organisations should be cautious to not confuse burnout (that is most likely a consequence of the situation on the job; Maslach, 2003) with employee personal predispositions (e.g. customer orientation; Brown et al., 2002). Especially consider the findings that show that employees high in customer orientation *do burn out* (Babakus et al., 2009), the negative effects of burnout on the organisation cannot be solved by better recruitment processes alone. Organisations should face the problem of employee burnout and put efforts into reducing it, for example with coping with stress interventions (Maslach, 2003).

Additionally, our findings show that different dimensions of burnout affect customers differently. This means that organisational strategy should be dimension-specific, and should focus on lowering employee tendencies to depersonalise customers. Human

resources practices, such as supporting employee autonomy, were found to reduce employee cynicism, and therefore might assist in reducing depersonalisation (Castanheira & Chambel, 2010).

Finally, our findings regarding emotional exhaustion suggest that it is important to shape the behavioural rules in organisations in a way that they actually matter for customers. If customers do not perceive emotional exhaustion so negatively, it might not be worth it to demand employees to hide their own. This point is highly important for organisations because changing emotional displays (i.e. emotional labour) is known as an antecedent for emotional exhaustion (Grandey, 2003), and reducing those demands might assist in breaking the vicious cycle.

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References

- Aguinis, H., & Bradley, K. J. (2014). Best practice recommendations for designing and implementing experimental vignette methodology studies. *Organizational Research Methods*, 17, 351–371.
- Aiman-Smith, L., Scullen, S. E., & Barr, S. H. (2002). Conducting studies of decision making in organizational contexts: A tutorial for policy-capturing and other regression-based techniques. *Organizational Research Methods*, 5, 388–414.
- Alarcon, G. M. (2011). A meta-analysis of burnout with job demands, resources, and attitudes. *Journal of Vocational Behavior*, 79, 549–562.
- Aquino, K., Douglas, S., & Martinko, M. J. (2004). Overt anger in response to victimization: Attributional style and organizational norms as moderators. *Journal of Occupational Health Psychology*, 9, 152–164.
- Aquino, K., Tripp, T. M., & Bies, R. J. (2001). How employees respond to personal offense: The effects of blame attribution, victim status, and offender status on revenge and reconciliation in the workplace. *Journal of Applied Psychology*, 86, 52–59.
- Atzmüller, C., & Steiner, P. M. (2010). Experimental vignette studies in survey research. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 6, 128–138.
- Babakus, E., Yavas, U., & Ashill, N. J. (2009). The role of customer orientation as a moderator of the job demand–burnout–performance relationship: A surface-level trait perspective. *Journal of Retailing*, 85, 480–492.
- Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2005). The crossover of burnout and work engagement among working couples. *Human Relations*, 58, 661–689.
- Bakker, A. B., & Schaufeli, W. B. (2000). Burnout contagion processes among teachers. *Journal of Applied Social Psychology*, 30, 2289–2308.
- Barclay, L. J., Skarlicki, D. P., & Pugh, S. D. (2005). Exploring the role of emotions in injustice perceptions and retaliation. *Journal of Applied Psychology*, 90, 629–643.
- Bauer, D. J., Preacher, K. J., & Gil, K. M. (2006). Conceptualizing and testing random indirect effects and moderated mediation in multilevel models: New procedures and recommendations. *Psychological Methods*, 11, 142–163.

- Berry, L. L., & Lampo, S. S. (2004). Branding labour-intensive services. *Business Strategy Review*, 15, 18–25.
- Berry, L. L., Wall, E. A., & Carbone, L. P. (2006). Service clues and customer assessment of the service experience: Lessons from marketing. *Academy of Management Perspectives*, 20, 43–57.
- Bitner, M. J. (1990). Evaluating service encounters: The effects of physical surrounding and employee responses. *Journal of Marketing*, 54, 69–82.
- Bitner, M. J., Booms, B. H., & Mohr, L. A. (1994). Critical service encounters: The employee's view. *Journal of Marketing*, 58, 95–106.
- Bitner, M. J., & Brown, S. W. (2008). The service imperative. *Business Horizons*, 51, 39–46.
- Bougie, R., Pieters, R., & Zeelenberg, M. (2003). Angry customers don't come back, they get back: The experience and behavioral implications of anger and dissatisfaction in services. *Journal of the Academy of Marketing Science*, 31, 377–393.
- Bradfield, M., & Aquino, K. (1999). The effects of blame attributions and offender likableness on forgiveness and revenge in the workplace. *Journal of Management*, 25, 607–631.
- Brady, M. K., & Cronin Jr, J. J. (2001). Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. *Journal of Marketing*, 65, 34–49.
- Brown, T. J., Mowen, J. C., Donavan, D. T., & Licata, J. W. (2002). The customer orientation of service workers: Personality trait influences on self and supervisor performance ratings. *Journal of Marketing Research*, 39, 110–119.
- Büssing, A., & Perrar, K. M. (1992). Die Messung von burnout. Untersuchung einer deutschen Fassung des Maslach Burnout Inventory (MBI-D). *Diagnostica*, 38, 328–353.
- Castanheira, F., & Chambel, M. J. (2010). Reducing burnout in call centers through HR practices. *Human Resource Management*, 49, 1047–1065.
- Cordes, C., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *Academy of Management Review*, 18, 621–656.
- Cropanzano, R., Rupp, D., & Byrne, Z. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88, 160–169.
- Cuthbert, R. (2010). Students as customers? *Higher Education Review*, 42, 3–25.
- Demerouti, E., Bakker, A. B., Nachreiner, E., & Schaufeli, W. B. (2001). The job demands–resources model of burnout. *Journal of Applied Psychology*, 86, 499–512.
- Demerouti, E., Verbeke, W. J., & Bakker, A. B. (2005). Exploring the relationship between a multi-dimensional and multifaceted burnout concept and self-rated performance. *Journal of Management*, 31, 186–209.
- Dormann, C., & Zapf, D. (2004). Customer-related social stressors and burnout. *Journal of Occupational Health Psychology*, 9, 61–82.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general path analytic framework using moderated path analysis. *Psychological Methods*, 12, 1–22.
- Garland, B. C., & Westbrook, R. A. (1989). An exploration of client satisfaction in a nonprofit context. *Journal of the Academy of Marketing Science*, 17, 297–303.
- Garman, A. N., Corrigan, P. W., & Morris, S. (2002). Staff burnout and patient satisfaction: Evidence of relationships at the care unit level. *Journal of Occupational Health Psychology*, 7, 235–241.
- Gelbrich, K. (2009). Beyond just being dissatisfied: How angry and helpless consumers react to failures when using self-service technologies. *Schmalenbach Business Review*, 61, 40–59.
- Gil, I., Berenguer, G., & Cervera, A. (2008). The roles of service encounters, service value, and job satisfaction in achieving customer satisfaction in business relationships. *Industrial Marketing Management*, 37, 921–939.
- Golembiewski, R. T., Boudreau, R. A., Sun, B. C., & Luo, H. (1998). Estimates of burnout in public agencies: Worldwide, how many employees have which degrees of burnout, and with what consequences? *Public Administration Review*, 58, 59–65.
- Graham, M. E., & Cable, D. A. (2001). Consideration of the incomplete block design for policy-capturing research. *Organizational Research Methods*, 4, 26–45.

- Grandey, A. A. (2003). When “the show must go on”: Surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Academy of Management Journal*, 46, 86–96.
- Gremler, D. D., & Gwinner, K. P. (2000). Customer-employee rapport in service relationships. *Journal of Service Research*, 3, 82–104.
- Grégoire, Y., Laufer, D., & Tripp, T. M. (2010). A comprehensive model of customer direct and indirect revenge: Understanding the effects of perceived greed and customer power. *Journal of the Academy of Marketing Science*, 38, 738–758.
- Groth, M., & Grandey, A. A. (2012). From bad to worse: Negative exchange spirals in employee–customer service interactions. *Organizational Psychology Review*, 2, 208–233.
- Groth, M., Hennig-Thurau, T., & Walsh, G. (2009). Customer reactions to emotional labor: The roles of employee acting strategies and customer detection accuracy. *Academy of Management Journal*, 52, 958–974.
- Halbesleben, J. R. B., & Buckley, M. R. (2004). Burnout in organizational life. *Journal of Management*, 30, 859–879.
- Halbesleben, J. R. B., & Rathert, C. (2008). Linking physician burnout and patient outcomes: Exploring the dyadic relationship between physicians and patients. *Health Care Management Review*, 33, 29–39.
- Hennig-Thurau, T. (2004). Customer orientation of service employees: Its impact on customer satisfaction, commitment, and retention. *International Journal of Service Industry Management*, 15, 460–478.
- Judge, T. A., Scott, B. A., & Ilies, R. (2006). Hostility, job attitudes, and workplace deviance: Test of a multilevel model. *Journal of Applied Psychology*, 91, 126–138.
- Kahill, S. (1988). Symptoms of professional burnout: A review of the empirical evidence. *Canadian Psychology/Psychologie Canadienne*, 29, 284–297.
- Kalamas, M., Laroche, M., & Makdessian, L. (2008). Reaching the boiling point: Consumers’ negative affective reactions to firm-attributed service failures. *Journal of Business Research*, 61, 813–824.
- Laros, F. J. M., & Steenkamp, J. B. E. M. (2005). Emotions in consumer behavior: A hierarchical approach. *Journal of Business Research*, 58, 1437–1445.
- Lee, H., & Elkins, T. (2013). Sympathy and anger: The role of attributions in emotional responses to abusive supervision. In W. J. Zerbe, N. M. Ashkanasy, & C. E. Härtel (Eds.), *Individual sources, dynamics, and expressions of emotion (Research on emotion in organizations)* (pp. 53–67). Bingley: Emerald Group Publishing Limited.
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81, 123–133.
- Leiter, M. P., Bakker, A. B., & Maslach, C. (2014). *Burnout at work: A psychological perspective* (pp. 1–9). Hove: Psychology Press.
- Leiter, M. P., Harvie, P., & Frizzell, C. (1998). The correspondence of patient satisfaction and nurse burnout. *Social Science and Medicine*, 47, 1611–1617.
- Leiter, M. P., & Maslach, C. (2016). Latent burnout profiles: A new approach to understanding the burnout experience. *Burnout Research*, 3, 89–100.
- Lemmink, J., & Mattsson, J. (2002). Employee behavior, feelings of warmth and customer perception in service encounters. *International Journal of Retail & Distribution Management*, 30, 18–33.
- Mäkikangas, A., & Kinnunen, U. (2016). The person-oriented approach to burnout: A systematic review. *Burnout Research*, 3, 11–23. doi:10.1016/j.burn.2015.12.002
- Maslach, C. (1978). The client role in staff burnout. *Journal of Social Issues*, 34, 111–124.
- Maslach, C. (2003). Job burnout: New directions in research and intervention. *Current Directions in Psychological Science*, 12, 189–192.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2, 99–113.
- Maslach, C., & Leiter, M. P. (2008). Early predictors of burnout and work engagement. *Journal of Applied Psychology*, 93, 498–512.

- Maslach, C., & Pines, A. (1977). The burn-out syndrome in the day care setting. *Child Care Quarterly*, 6, 100–113.
- Maslach, C., & Schaufeli, W. B. (1993). Historical and conceptual development of burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 1–16). Washington, DC: Taylor & Fran.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422.
- Mattila, A., & Enz, C. (2002). The role of emotions in service encounters. *Journal of Service Research*, 4, 268–277.
- McColl-Kennedy, J. R., & Sparks, B. A. (2003). Application of fairness theory to service failures and service recovery. *Journal of Business Research*, 5, 251–266.
- Menon, K., & Dubé, L. (2000). Ensuring greater satisfaction by engineering salesperson response to customer emotions. *Journal of Retailing*, 76, 285–307.
- Mohr, L. A., & Bitner, M. J. (1995). The role of employee effort in satisfaction with service transactions. *Journal of Business Research*, 32, 239–252.
- Muthén, L. K., & Muthén, B. O. (1998–2011). *Mplus User's Guide*. 6th ed. Los Angeles, CA: Muthén & Muthén.
- Oliver, R., & Westbrook, R. (1993). Profiles of consumer emotions and satisfaction in ownership and usage. *Emotion*, 6, 12–27.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64, 12–40.
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions effects in multiple regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, 31, 437–448.
- Röcke, C., & Grünh, D. (2003). *German translation of the PANAS-X* (Unpublished manuscript). Free University Berlin.
- Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. *Journal of Applied Psychology*, 87, 66–80.
- Saxe, R., & Weitz, B. A. (1982). The SOCO scale: A measure of the customer orientation of salespeople. *Journal of Marketing Research*, 19, 343–351.
- Schaufeli, W. B. (2004). The future of occupational health psychology. *Applied Psychology: An International Review*, 53, 502–517.
- Schaufeli, W. B., & Buunk, B. P. (2003). Burnout: An overview of 25 years of research and theorizing. In M. J. Schabracq, J. A. M. Winnubst, & C. L. Cooper (Eds.), *Handbook of work and health psychology* (pp. 383–425). Chichester: Wiley.
- Schaufeli, W. B., & Taris, T. W. (2005). The conceptualization and measurement of burnout: Common ground and worlds apart. *Work & Stress*, 19, 256–262.
- Shen, B., McCaughy, N., Martin, J., Garn, A., Kulik, N., & Fahlman, M. (2015). The relationship between teacher burnout and student motivation. *British Journal of Educational Psychology*, 85, 519–532.
- Smith, A. K., & Bolton, R. N. (2002). The effect of customers' emotional responses to service failures on their recovery effort evaluations and satisfaction judgments. *Journal of the Academy of Marketing Science*, 30, 5–23.
- Söderlund, M. (2017). Employee display of burnout in the service encounter and its impact on customer satisfaction. *Journal of Retailing and Consumer Services*, 37, 168–176.
- Stride, C. B., Gardner, S., Catley, N., & Thomas, F. (2015). *Mplus code for mediation, moderation, and moderated mediation models*. Retrieved from <http://www.figureitout.org.uk>
- Taris, T. W. (2006). Is there a relationship between burnout and objective performance? A critical review of 16 studies. *Work & Stress*, 20, 316–334.
- Taris, T. W., Le Blanc, P. M., Schaufeli, W. B., & Schreurs, P. J. G. (2005). Are there causal relationships between the dimensions of the Maslach burnout Inventory? A review and two longitudinal tests. *Work & Stress*, 19, 238–255.

- Tomassetti, A. J., Dalal, R. S., & Kaplan, S. A. (2016). Is policy capturing really more resistant than traditional self-report techniques to socially desirable responding? *Organizational Research Methods*, 19, 255–285.
- Tsai, W.-C., & Huang, Y.-M. (2002). Mechanisms linking employee affective delivery and customer behavioral intentions. *Journal of Applied Psychology*, 87, 1001–1008.
- Van Rooy, D. L., & Viswesvaran, C. (2004). Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior*, 65, 71–95.
- Van Vaerenbergh, Y., Orsingher, C., Vermeir, I., & Larivière, B. (2014). A meta-analysis of relationships linking service failure attributions to customer outcomes. *Journal of Service Research*, 17, 381–398.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070.
- Weiner, B. (2000). Attributional thoughts about consumer behavior. *Journal of Consumer Research*, 27, 382–387.
- Weiner, B. (2004). Social motivation and moral emotion. In M. J. Martinko (Ed.), *Attribution theory in the organization sciences: Theoretical and empirical contributions* (pp. 5–24). Tallahassee: Florida State University.
- Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (pp. 1–74). New York, NY: Elsevier Science/JAI Press.
- Williams, K. D. (1997). Social ostracism. In R. Kowalski (Ed.), *Aversive interpersonal behaviors* (pp. 133–170). New York: Plenum Press.
- Williams, K. D. (2007). Ostracism. *Annual Review of Psychology*, 58, 425–452.
- Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology*, 83, 486–493.
- Yagil, D. (2012). The mediating role of engagement and burnout in the relationship between employees' emotion regulation strategies and customer outcomes. *European Journal of Work and Organizational Psychology*, 21, 150–168.
- Yagil, D., & Luria, G. (2016). Customer forgiveness of unsatisfactory service: Manifestations and antecedents. *Service Business*, 10, 557–579.

Appendix 1

Lecturer displaying depersonalisation vignette

You have a meeting with one of your lecturers. You need feedback from him regarding your homework. You come to his office and knock on the door. There is no answer. You wait a minute and knock again. He replies that you can enter. You walk in; he sits at his computer and reading emails. Without looking up, he says: “I’m sorry”. You sit down on the chair opposite him and wait until he is finished. He asks for your student number. You answer and say that you have sent the homework the night before. He says: “All students have their homework sent yesterday,” he finds your homework and tells you that it is okay. He gives you the homework. You thank him and go.