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## **The mediating role of distributive justice perceptions in the relationship between emotion regulation and emotional exhaustion**

### Abstract

This research proposes that employees' use of emotion regulation strategies determines their perceptions of fairness in interactions with clients, which in turn influences their emotional exhaustion. Based on social exchange theory, and models of self-control, the investigation tested whether: (1) the type of emotion regulation strategy employees use to meet the emotional demands of their job role partially influences their perceptions of distributive justice, and (2) these perceptions mediate the relationship between emotion regulation and emotional exhaustion. To test this, a longitudinal field survey study of a sample of primary care workers (General Practitioners and Nurses; N = 233) was conducted. Findings showed that the relationship between emotion regulation and emotional exhaustion, was mediated by perceptions of distributive justice.

A bootstrapping ~~single~~-mediational analysis showed a significant indirect effect of surface acting ~~and deep acting~~ on emotional exhaustion through distributive justice when interindividual differences at T1 and when intra-individual changes between T1 and T2 were considered. Deep acting indirect effects were not significant for intra-individual changes The findings indicate that employees' perception of distributive justice has implications for understanding the impact of emotion regulation on well-being.

**Key words:** Emotional Labor, Distributive Justice, Self-control, Conservation of Resources, Emotional Exhaustion.

**The mediating role of distributive justice perceptions in the relationship between emotion regulation and emotional exhaustion**

The “expression of organizationally desired emotions during interpersonal transactions” (Morris & Feldman, 1996: 987) with clients is the hallmark of emotional labor and forms a pervasive emotional job demand for service employees (Zapf, 2002). Across different settings – including health care, call centers, airline companies, bank clerks and investment bank traders – organizations enforce display rules prescribing the expression of positive emotions during interactions with the public to promote positive attitudes and behaviors of clients (Pugh, 2001; Tsai, 2001; Tsai & Huang, 2002). Negative events at work or from the personal sphere can elicit negative emotions in employees that are incompatible with the “service with a smile” rule, thereby obliging them to intentionally regulate their feelings to meet the organizational display requirement. Employees’ expectation that efforts and returns in a service encounter should be proportionate (Adams, 1965) will be violated if the returns from the interaction with clients do not respond to their efforts to meet emotion regulation goals (Bechtold, Welk, Zapf & Hartig, 2013; Schaufeli, van Dierendonck, & van Gorp, 1996). This violation can be seen as an instance of distributive injustice, which has been defined as person A’s perception of disproportionality between the value to person B of the behaviour A gives to B and the value to A of the behaviour B gives A in return (Homans, 1961), and may be harmful to employees’ well-being.

According with this argument, emotion regulation may be related to the level of distributive justice that employees perceive in their service encounters. Interactions will be perceived as unfair when emotion regulation effort exceeds the returns from the interaction with clients. On the contrary, if the client’s positive-outcomesfeedback from the interaction areis proportional to the employee’s effort, the latter will perceive the social exchange as distributively

fair. Empirical evidence shows that employees' perception of interaction with clients as distributively unfair is a fundamental source of psychological unrest that threatens well-being (Greenberg, 2006; Schaufeli, van Dierendonck, & van Gorp, 1996) and previous research has indirectly shown that the balance between the effort employees put in to the regulation of their emotions and the outcomes they receive from their interaction with their partner mediates the association between their emotion regulation and well-being (Martínez-Iñigo, Poerio, & Totterdell, 2013; Martinez-Iñigo, Totterdell, Alcover & Holman 2007). Consequently, distributive justice may be a mediator in the relationship between emotion regulation and employees' well being.

However, at present this idea is only theoretical because as yet, to the authors' knowledge, no research has directly examined the relationship between emotion regulation, distributive justice perceptions, and emotional exhaustion. The role of perceived justice in this relationship is specially relevant considering that emotion regulation during service delivery is often not explicitly acknowledged by organizations and is poorly remunerated (Glomb, Kammeyer-Mueller, & Rotundo, 2004; Grandey Chi & Diamond, 2013; James, 1993), even though it is an important part of service employees' workload and has strategic value for the organization (Pugh, 2001; Tsai, 2001, Tsai & Huang, 2002).

The present study empirically investigates the mediating role of distributive justice in the relationship between emotion regulation and emotional exhaustion. We propose that the employees' emotion regulation strategies determine their perceptions of fairness in the interactions with clients. Based on the strength model of self-control and the conservation of resources model, we argue that the impact of the type of emotion regulation strategy used to meet the emotional demands of the job role on emotional exhaustion may be explained by its indirect effects through employees perceptions of distributive justices, defined as the employees' perceptions of proportionality between the resources invested in and the outcomes derived from

the interaction. Based on social exchange theory, we propose that distributive justice mediates the relationship between emotion regulation strategies and emotional exhaustion.

#### Emotion Regulation and Distributive Justice

Although the role of distributive justice as a mediator in the relationship between emotion and workplace outcomes appears to be realistic (Cohen-Charash & Byrne, 2008; Schaubroeck & Lam, 2004), previous research has neglected it in the study of the relationship between emotion regulation and well-being. Most studies have focused on the interpersonal and procedural dimensions of justice (Rupp, Holub, & Grandey, 2007; Rupp, McCance, Spencer, & Sonntag, 2008; Rupp & Spencer, 2006). Our study tested a mediational model where the effects of emotion regulation on employees' well-being are expected to be explained by its differential effects on employees' perception of distributive justice (see Figure 1). We first consider why emotion regulation might influence distributive justice perceptions, and then why emotional exhaustion might result from those perceptions.

Emotion regulation at work may involve the enhancing or suppression of employee's emotional display in order to meet organizational display rules prescribing the expression of specific emotions during interaction with clients (Grandey 2000). This goal may be attained through different emotion regulation strategies. In line with previous research on emotional labor, we focus on deep acting which involves changing experienced feeling states in order to display the appropriate emotions, and surface acting which involves displaying appropriate emotions whilst experiencing different feeling states. Although emotion regulation can contribute to the attainment of organizational and personal goals, it can also have detrimental effects for employees, especially on those occasions where the effort the employees put in to the regulation of their emotions is not reciprocated by the interaction's outcomes client or the organization (Bechtoldt, Welk, Zapf & Hartig, 2013).

Emotion regulation strategies requires some effort on the part of employees to match their emotional expression with the required display (Baumeister, Bratslavsky, Muraven, & Tice,

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1998), but differ in terms of the rewards they achieve from the interaction with the client (Coté, 2005; Martínez-Iñigo et al., 2007). According to social exchange theory (Homans, 1961; Pritchard, 1969) whenever the effort the employee puts into the regulation of their emotions falls short of the returns from the client's interaction with the client-feedback, the employee will perceive the relationship as unfair (Schaufeli, van Dierendonck & van Gorp, 1996; Taris et al., 2001).

Drawing on previous research, emotional labor strategies may be characterized in terms of the balance between the effort the employees put into the regulation of their emotions and the outcomes returned from the interaction with the clients' ~~feedback to their emotional expression~~. When compared with other emotion regulation strategies, surface acting is related to higher self-control effort (Richard & Gross, 2000) and to ~~poorer~~ lower returns from outcomes the interactions (Holman, Martínez-Iñigo, Totterdell, 2008). Poorer interaction outcomes following surface acting can be explain as a result of owing to lower positive feedback from the interaction partner, lower self-efficacy and lower self-authenticity. The lower likelihood of interaction partner's positive feedback is due to the perceived inauthenticity of the emotional expression (Brotheridge & Lee, 2002). Grandey, Fisk, Mattila, Jansen, and Sideman (2005) found that the likelihood of client's positive feedback during interaction ~~for surface acting~~ is lower when the interaction partners perceive because of the inauthenticity ~~the interaction partners perceive~~ in the regulators' emotional expression, as it is the case when ~~they employees~~ are suppressing their emotional experience. In addition, perceived inauthenticity may lead to costumers' negative reactions that employees may consider as a negative evaluation of their performance. This negative evaluation can damage employees' perception of self-efficacy (Bandura, 1997). Also, surface acting entails faking emotional displays that lead to experiences of inauthentic expression of the self (Gross & John, 2003), reducing the chances to maintain self-authenticity through interaction with clients.

Overall, when employees perform surface acting, there is an imbalance provoked by the absence of reciprocity in the social exchange, which is a major determinant of perceptions of

distributive injustice (Adams, 1965). Even though the quality of the display is lower than when employees deep act or spontaneously feel the required emotion, employees who perform surface acting still make an effort to meet organizational rules by not displaying negative emotions during the interaction with the client. Some experimental studies shown that surface acting uses more effort than deep acting, as surface is more cognitively taxing (Richards & Gross, 1999, 2000). Employees may feel that this effort deserves reciprocity from the client. Deep acting, also requires some effort to align the inner experience with the emotional display (Kanfer & Kantrowitz, 2002) which means that it is draining, but the higher authenticity of the resulting emotional display increases the likelihood of receiving positive feedback from the interaction partner. Also authenticity can increase the interaction partner's positive assessment of employees' performance, promoting their perception of self-efficacy. Finally the alignment of emotional experience and emotional display reduces the threaten to self-authenticity. All these consequences of deep acting -and hence-promotes the balance between the regulator's investment and outcomes in the relationship. The opportunities to regain resources from the effort invested in the interaction have been proposed as an explanation of the relationship between emotion regulation and emotional exhaustion (Martínez-Iñigo et al. 2007) and between distributive justice and emotional exhaustion (Cole, Bernerth, Walter & Holt, 2010). In accordance with these studies, we expect that feedback from the interaction partner will contribute to understanding the relationship between emotion regulation and distributive justice.

As surface and deep acting are related to different ratios between the invested and the recovered resources, the balance between the investment and outcomes associated with surface and deep acting can explain the different levels of perceived distributive justice associated with them. The perception of a lack of reciprocity associated with surface acting makes it plausible that this strategy will contribute to the perception that service encounters are distributively unfair. Bechtoldt et al. (2013) argue that after performing surface acting, employees assess that-whether interactions with clients are unbalanced and deserve restitution from the organization.

Consequently, we hypothesize that surface acting will be negatively related to perceptions of distributive justice (H1a). For deep acting, the likelihood of reciprocation by the partner is higher and thus results from the social interaction will be more balanced, with some instances of equilibrium and other instances where one of the elements in the exchange process – investment or gains – surmounts the other. Previous studies consistently show that the relationship between deep acting and well-being is weak and indirectly supports the idea that the level of psychological effort is either in balance or slightly greater than the resource recovered ~~by positive feedback~~ **received** from the interaction with the partner (Brotheridge & Grandey, 2002; Brotheridge & Lee, 2003; Glomb & Tews, 2004; Grandey, 2003; Totterdell & Holman, 2003). We therefore hypothesize that the relationship between deep acting and distributive justice will be positive (H1b).

#### Distributive Justice and Emotional Exhaustion

Previous research on self-control offers explanations as to why emotional exhaustion could result from perceived distributive injustice. The first explanation considers that the aversive state following the perception of distributive justice increases self-control demands. According to social exchange theory, unfair exchanges trigger an aversive state that motivates attempts to repair the injustice (Adams, 1965; Homans, 1961). In line with the self-control strength model, dealing with this negative state consumes limited self-control resource (Baumeister et al., 1998; Baumeister & Vohs, 2007), which potentially leads to emotional exhaustion. Previous studies have measured ego-depletion in different ways, including emotional exhaustion as an indicator of resource depletion (e.g., Goldberg & Grandey, 2007). Rupp and Spencer (2006) found that employees' negative emotions elicited by clients' interpersonally unfair behaviours (e.g., unwarranted behaviours) increased the emotion regulation effort they exerted to regulate their emotions (Rupp & Spencer, 2006), which could potentially lead to emotional exhaustion.

Additionally, drawing on the Conservation of Resource model (Hobfoll, 1989), the explanation of the relationship between distributive justice and emotional exhaustion does not



depend exclusively on the amount of resources drained by previous self-control activities, but also relies on the opportunities available to recover the resources invested in self-control (Tepper, 2001). From this perspective, Cole et al., (2010), argue that individuals experiencing distributive injustice will perceive that they are not receiving adequate returns on their resource investments. The lack of resource replenishment will leave individuals with fewer assets at their disposal. Because of this imbalance between drained resources and replenishment processes, perception of distributive injustice makes individuals more vulnerable to aversive states, including the feeling of being overextended by their job demands (Wright & Cropanzano, 1998). This experience may increase the likelihood that employees will feel emotionally exhausted during distributively unfair interactions.

Consistent with previous research on the relationship between distributive justice and emotional exhaustion (Cole et al., 2010), we hypothesize that employees' perception of distributive justice will be negatively related to their level of emotional exhaustion (H2).

#### Emotion Regulation, Distributive Justice and Emotional Exhaustion

Emotion regulation and distributive justice constitute sources of stress that may reduce employees' well being (Greenberg, 2006; Tepper, 2001; Quick, Cooper, Nelson Quick & Gavin, 2003). Moreover, emotion regulation strategies involve different balances between the amounts of self-control effort invested in a social encounter and the outcomes returning from the interaction with the partner. Surface and deep acting are therefore expected to predict distributive justice perceptions, which in turn relate to emotional exhaustion.

Some results from related research make it plausible that distributive injustice perceptions will play a mediating role in the relationship between emotion regulation and emotional exhaustion. Especially relevant for the present research is Grandey et al.'s (2013) study of the effects of financial reward on the satisfaction obtained from emotional labor. Their study found that the effects of faking emotion (i.e. high surface acting) on job satisfaction were completely buffered when emotional labor performance was financially rewarded. This result supports the

idea that restoring the balance between inputs and returns in emotional labor, by explicitly increasing the benefits that the self-control effort produces, can reduce the negative impact of surface acting on employees' attitudes. However, evidence for the role of justice perceptions in the relationship between emotion regulation and well-being, rather than attitudes, is lacking.

Schaufeli et al. (1996) found that the lack of reciprocity in social exchange with clients – an antecedent of distributive injustice perceptions – was positively related to employees' burnout, of which one component is emotional exhaustion. From this perspective, the perception of the social exchange between the employee and the client as unfair can lead to emotional exhaustion.

Based on the available theoretical and empirical evidence, we propose a model in which distributive justice mediates between emotion regulation and emotional exhaustion. Specifically, we hypothesize that the positive effect of surface acting (H3a) on emotional exhaustion will be mediated by the employee's perceptions of distributive justice.

~~As for the relationship between deep acting and distributive justice, client feedback is expected to contribute to the employees' perception of distributive justice, which in turn mediates the relationship between deep acting and emotional exhaustion.~~ Deep acting is more likely to elicit client's positive feedback, feelings of self-efficacy and feeling of self-authenticity – which aids the employee's recovery from emotion regulation effort. ~~The compensation between the effort to perform deep acting and the recovery elicited by the authenticity resulting from deep acting has been hypothesized to explain the weak or null relationship between deep acting and emotional exhaustion. Previous research has indirectly shown that feedback from clients mediates the relationship between deep acting and emotional exhaustion (Martínez-Iñigo, et al., 2007) and that the null relationship between effortful interpersonal affect regulation strategies that elicit positive feedback from clients becomes positive when the compensation effect of clients' feedback is controlled for (Martínez-Iñigo et al. 2013).~~ Drawing on these studies, we hypothesise that distributive justice will mediate a positive-negative effect of deep acting on emotional exhaustion ~~when the effects of client's feedback are controlled for~~ (H3b).

## Method

### Research Context

Our study used a longitudinal two-wave field study of primary health care professionals located within the public health system of a large urban community. Emotion regulation during interaction with patients is an inherent demand in the delivery of primary health care (Diefendorff, Erickson, Grandey & Dahling, 2011; Larson & Yao, 2005; Martínez-Iñigo, et al., 2009) that it is usually under-appreciated by the organizations (Henderson, 2001; James, 1993; Smith & Kleiman, 1989; Yanay & Shahar, 1998) and unacknowledged by colleagues, due to the isolation of health professionals in primary care settings. All this makes reciprocity from the patients a core source for professionals' recovery from their emotion regulation effort and a key factor in determining job well-being (Schaufeli et al., 1996). These characteristics point to primary care as a pertinent setting to test our hypotheses.

The two-wave survey design enabled us to longitudinally analyse the mediation of the emotion regulation and emotional exhaustion relationship by perceptions of distributive justice. Longitudinal design cannot in itself establish the causality of relationships but by enabling examination of temporal associations between changes in the variables it can provide stronger evidence than a cross-sectional design.

### Participants and Procedure

Participants were general practitioners (GPs) and nurses of primary health care public services. Of 972 employees working at the two health areas included in the study, a total of 645 participants – 67.4% of the GPs and 62.8% of the nurses – completed the questionnaire in the first wave (T1), representing a global participation rate of 65.7%. In the second wave (T2), only the 645 participants who took part at T1 were contacted 6 months later. A total of 233 participants completed the survey again. The attrition in participation was partially due to an organizational mobility process that allowed professionals to move into a health area that was not included in the study. The demographics of the sample of participants at both waves were similar

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at T1 and T2 in terms of gender (72.8% vs. 73.5% female), mean age (40.5 yr, SD= 7.9 vs. 40.1 yr; SD= 6.8) and mean tenure in years (16.5, SD = 6.9 vs.15.1, SD = 6.9).

A set of independent samples t-tests were computed to test the presence of a consistent pattern of drop-out in relation to the study variables. The difference at T1 between the group of participants dropping out of the study at T2 and the group of participants completing both T1 and T2 were not significant for: age,  $t(550.8) = 1.02$ , n.s.; organizational monitoring,  $t(528.8) = -.76$ , n.s.; surface acting,  $t(643) = -.96$ , n.s.; deep acting,  $t(643) = -.68$ , n. s.; distributive justice,  $t(643) = 1.62$ , n.s., and emotional exhaustion,  $t(643) = -1.67$ , n.s. Results indicated that participants who dropped out ( $M = 3.91$ ,  $SD = .76$ ) had a significant lower level of autonomy,  $t(643) = -.73$ ,  $p < .01$ , compared with participants who didn't drop out ( $M = 4.08$ ,  $SD = .68$ ).

The survey was administered in the workplace during the 1-hour period between shifts. The study was presented as an investigation of the role and consequences of managing emotions during interaction with patients. Participants were informed that participation was voluntary and that the information they provided would be anonymous.

### Measures

Emotion regulation strategies. Participants were asked to rate to what extent they comply with display rules through surface acting or deep acting. The surface acting measure was a 5-item scale (e.g., "You pretend to have emotions that you don't really have"). Three items were drawn from Brotheridge and Lee's (2003) Emotional Labor Scale (ELS) ("Resist expressing your true feelings", "Hide your true feelings about the situation", and "Pretend to have emotions that you don't really have") and two items were developed for the present study ("To be effective in your job you display the emotions required, even though they do not agree with your true feelings" and "When your emotions are inappropriate, you try to show and behave as if you felt the required emotions"). Deep acting was originally measured with five items, three items from Brotheridge and Lee's (2003) ELS Scale (e.g. "You try to actually experience the emotions you must show", "You make an effort to actually feel the emotions that you need to display", "You really try to

feel the emotions that you must show”) and two items developed for the present study. Ad hoc items do not improved the scale’s reliability and Based-on confirmatory factor analysis results for Brotheridge and Lee’s (2003) original scale were good, thus only the three items from Brotheridge and Lee (2003) were retained for the analysis. The measures used a 5-point response scale ranging from 1 (never) to 5 (very often). The internal consistencies for surface acting were  $\alpha = .70$  and  $.76$  for T1 and T2 respectively, and for deep acting were  $\alpha = .65$  and  $.67$  for T1 and T2, respectively.

Perception of distributive justice. This scale consisted of four items, two from the Distributive Justice Index developed by Price and Mueller (1986; cited in Moorman, 1991) and two items from Colquitt’s (2001) Organizational Justice Scale. Participants were required to rate the fairness of their outcomes considering the cost and effort demanded by the regulation of their emotions. The selected items were, “Considering the cost and effort that is demanded by regulating your emotions during interactions with patients”: “do your outcomes reflect the effort you have put into your work”, “are your outcomes appropriate” (Colquitt, 2001), “do you feel fairly rewarded for the work you have done” and “are you fairly rewarded for the stress and strain that entails” (Price & Mueller, 1986). Responses were made on a 5-point scale ranging from 1 (not at all) to 5 (very much). The internal consistencies of this scale were  $\alpha = .75$  and  $.78$  for T1 and T2, respectively.

Emotional Exhaustion. This was measured using the emotional exhaustion scale from the Spanish version (Seisdedos, 1997) of the Maslach Burnout Inventory (MBI; Maslach, Jackson, & Leiter, 1996). The scale included nine items (e.g., “I feel emotionally drained from my work”) and used a 7-point response concerning frequency of experience ranging from 0 (never) to 6 (every day). The internal consistencies of this scale were  $\alpha = .89$  for both T1 and T2.

Control variables. Previous research has found differences in the emotion regulation process and its outcomes associated with demographic variables including age, gender (Dahling

& Pérez, 2010; Johnson & Spector, 2007), and occupation (Denison & Sutton, 1990; Grandey et al., 2010; Martínez-Iñigo, et al., 2009) and with interactional variables including ~~patients' feedback (Martínez Iñigo, et al 2007, Martínez Iñigo et al., 2009)~~, autonomy in how to meet display rules, and organizational monitoring of display rules (Diefendorff et al., 2005; Morris & Feldman, 1997; Zapf et. al, 1999). The effects of these demographic and interactional variables were controlled for in the data analysis. The interactional variables were measured as follows:

~~Patients' feedback was measured using two items from Bravo, Peiró and Zurriaga's (1991) Work Satisfaction Module Questionnaire for Health Professionals (e.g., "To what extent are you satisfied with the attitudes, dispositions and usual behaviour of patients in surgery?") with a response scale from 1 (very unsatisfied) to 7 (very satisfied).~~ Autonomy was measured using two items from the Frankfurt Emotion Work's emotion control subscale (Zapf et. al, 1999) with a response scale from 1 (low autonomy) to 5 (high autonomy). Internal consistencies of these measures ranged from  $\alpha = .69$  to  $.73$  at T1 and T2. Employees' perception of the frequency of organizational monitoring of display rule compliance was measured with one item ("The organization monitors and penalises non-fulfilment of display rules") on a scale ranging from 0 (never) to 5 (very often).

#### Statistical analysis procedure

Structural equation modelling (SEM) was conducted (Cheung & Lau, 2008) with AMOS 17.0 to test whether the relationship between emotion regulation strategies and emotional exhaustion were mediated by perceptions of distributive justice. First, we tested a cross-sectional model based on the participants responding only at T1. To test the meditational effects, distributive justice at T1 was regressed on surface acting and deep acting at T1. Direct paths from emotion regulation strategies (surface and deep acting) and distributive justice to emotional exhaustion were specified because such paths are necessary to test the indirect effects predicted (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). We allowed surface and deep acting to covary to represent unmeasured common cause related to the emotional regulation strategies.

According with Preacher and Hayes (2008) a product of coefficient approach was used to test simultaneously the indirect effects of surface acting and deep acting on emotional exhaustion. In this approach an indirect effect is demonstrated by a statistically significant product of independent variables, mediator and outcome relationships. Bootstrapping resampling with 1000 samples was conducted to estimate with bias-corrected 95% confidence intervals around the point estimations of the indirect effects. Indirect effects were considered significant when the 95% confidence interval excluded zero (Cheung & Lau, 2008).

Second, we conducted longitudinal SEM to test if intra-individual changes in the emotional exhaustion of participants in both waves (N = 233) were explained by changes in the predictors between T1 and T2 (see Figure 1). We expected the indirect effect of emotion regulation on emotional exhaustion at T2 to coincide temporally because previous research shows that emotional exhaustion is sensitive in the short term to self-regulation effort and to changes in beliefs and expectancies about the self-regulation resource available (Job et al., 2010; Martijn, et al., 2002). Direct paths from emotion regulation strategies at T2 to distributive justice at T2 were estimated. Also direct paths from emotion regulation strategies at T2 and from distributive justice at T2 to emotional exhaustion at T2 were included to test the indirect effects predicted (MacKinnon et al., 2002). Again we allowed surface and deep acting to covary to represent unmeasured common cause related to the emotion regulation. Direct paths from control variables and from the predictors, the mediator and the outcome at T1 to emotional exhaustion at T2 were also specified. Again, the exclusion of zero from the 95% confidence interval estimated with bias-corrected and accelerated bootstrapping with 1000 samples was used as the confirmation of indirect effects.

To test the possibility of reverse causation, multiple mediation regression SEM analysis were conducted with surface and deep acting at T2 as mediators of the relationship between distributive justice and emotional exhaustion at T2. As in previous analysis, mediators were allowed to covary. The same control variables and all the variables in the model at T1 were

included. To estimate the indirect effects of each mediator separately, the same SEM analysis was repeated eliminating from the model the indirect path for the other mediator (Preacher & Hayes, 2008).

## Results

Following Diestel and Schmidt (2012), Confirmatory Factor Analysis (CFA) was conducted to test the distinctiveness of emotion regulation strategies and distributive justice. A three-factor model representing surface acting, deep acting and distributive justice was tested. Two deep acting items developed for the study were removed to obtain a good fit of the model at T1 and T2 (Time 1:  $\chi^2(48) = 125.21$ ,  $p < .001$ , RMSEA = .05, CI<sub>90%</sub> = .039-.061, SRMR = .048, CFI = .95, TLI = .93; Time 2:  $\chi^2(48) = 69.53$ ,  $p = .02$ , RMSEA = .044, CI<sub>90%</sub> = .017-.066, SRMR = .068, CFI = .96, TLI = .95). CFA was also conducted for the outcome variable emotional exhaustion and good fit indexes were obtained at both waves (Time 1:  $\chi^2(11) = 21.35$ ,  $p < .05$ , RMSEA = .04, CI<sub>90%</sub> = .012-.062, SRMR = .018, CFI = .99, TLI = .99; Time 2:  $\chi^2(11) = 15.50$ ,  $p = .07$ , RMSEA = .042, CI<sub>90%</sub> = .00-.082, SRMR = .023, CFI = .99, TLI = .99).

Table 1 presents the descriptive statistics and bivariate correlations for the study variables.

SEM was conducted (Cheung & Lau, 2008) on the participants only at T1 to test the hypothesized relationship between emotion regulation and distributive justice (H1a,b); distributive justice and emotional exhaustion (H2) and to test whether the relationship between emotional emotion regulation and emotional exhaustion were mediated by perceptions of distributive justice (H3a,b).

~~SEM was conducted (Cheung & Lau, 2008) on the participants only at T1 to test whether the relationship between emotion regulation strategies and emotional exhaustion were mediated by perceptions of distributive justice. The results from our previous analysis and from research on emotional labor show that perception of patients' feedback may influence the relationship of emotion regulation with distributive justice and emotional exhaustion, so patients' feedback at T1~~



~~was regressed on to emotional exhaustion at T1.~~ The global fit of the model was good ( $\chi^2(16) = 17.22$ ,  $p = .37$ , RMSEA = .014, CI<sub>90%</sub> = .00-.05, SRMR = .031, CFI = .99, TLI = .98). As expected, surface acting and deep acting were negatively ( $\beta = -.14$ ,  $p < .01$ ) and positively ( $\beta = .22$ ,  $p < .001$ ) related respectively to distributive justice, supporting H1a and H1b. As anticipated (H2) distributive justice was negatively related to emotional exhaustion ( $\beta = -.75$ ,  $p < .001$ ).

~~distributive justice was negatively related to emotional exhaustion ( $\beta = -.35$ ,  $p < .001$ ) (H2).~~ To test the significance of the surface acting and deep acting indirect effects on emotional exhaustion, accelerated bootstrapping estimation for 1000 samples was conducted to estimate the bias-corrected confidence interval (see Table 2). The confidence interval for surface acting indirect effects on emotional exhaustion did not include zero ( $\beta = .06$ ,  $p < .05$ ; .01, .10; 95%), so the mediation effect of distributive justice in the positive relationship between surface acting at T1 and emotional exhaustion at T1 was significant (H3a). The direct effect of surface acting at T1 was significant ( $\beta = .21$ ,  $p < .001$ ), reflecting that the mediation effect was partial. The indirect effect for deep acting was also significant ( $\beta = -.09$ ,  $p < .01$ ; -.13, -.05; 95%), supporting but contrary to expected the effect was negative (H3b). The direct effect of deep acting at T1 was not marginally significant ( $\beta = .08$ ,  $p = .29$ ), indicating a near total mediation effect. These results support the idea that effects of emotion regulation on emotional exhaustion are partially explained by its effect on distributive justice perceptions. ~~Contrary to the previous results the relationship between deep acting and distributive justice was positive ( $\beta = .22$ ,  $p < .01$ ) which may be explained by the presence of surface acting in the model.~~

To test if intra-individual changes in the emotional exhaustion of participants in both waves were explained by changes in the predictors between T1 and T2 we conducted longitudinal SEM (see Table 3). The global fit of the model was good ( $\chi^2(53) = 70.11$ ,  $p = .06$ , RMSEA = .04, CI<sub>90%</sub> = .00-.06, SRMR = .06, CFI = .97, TLI = .96). As expected, surface acting at T2 was negatively related to distributive justice at T2 ( $\beta = -.17$ ,  $p < .01$ ). Contrary to expectation (H1b), the relationship between deep acting at T2 and distributive justice at T2 was not significant ( $\beta = -$

~~.07,  $p = .28$ ). As for the cross-sectional model, distributive justice and emotional exhaustion both at T2 was negatively related ( $\beta = -.21, p < .001$ ), supporting H2.~~

~~To test if changes in surface acting between T1 and T2 predicted variation in distributive justice perceptions (H1a), distributive justice at T2 was regressed on surface acting at T2 controlling for the effects of both surface acting and distributive justice at T1. Additionally, control variables for gender, age, occupation, autonomy and display rule monitoring were also specified to predict distributive justice at T2. Accelerated bootstrapping estimation for 1000 samples was conducted to estimate the bias corrected confidence interval. As anticipated (H1a) surface acting was negatively related to perceptions of distributive justice ( $\beta = -.25, p < .001; \chi^2(23) = 23.09, n.s., RMSEA = .004, CI_{90\%} = -.00-.05, SRMR = .05, CFI = .99, TLI = 1.0$ ). Contrary to expectation (H1b), the coefficient for deep acting was not significant ( $\beta = -.09, p = .18; \chi^2(23) = 27.19, n.s., RMSEA = .03, CI_{90\%} = -.06-.82, SRMR = .05, CFI = .97, TLI = .96$ ). To obtain additional evidence for the relationship between deep acting and distributive justice, the effects of patients' feedback at T1 and T2 on distributive justice at T2 were controlled for. Then the coefficient for deep acting became negative but was only marginally significant ( $\beta = -.12, p = .08; \chi^2(34) = 60.86, n.s., RMSEA = .06, CI_{90\%} = -.03-.08, SRMR = .08, CFI = .92, TLI = .87$ ).~~

~~To test if intra individual changes in the emotional exhaustion of participants in both waves were explained by changes in the predictors between T1 and T2 we conducted longitudinal SEM (see Table 3). The global fit of the model was good ( $\chi^2(67) = 106.43, p = .002, RMSEA = .05, CI_{90\%} = .03-.07, SRMR = .08, CFI = .95, TLI = .92$ ). To test the significance of the indirect effect of surface acting at T2 and deep acting at T2 on emotional exhaustion at T2 with distributive justice at T2 as the mediator, accelerated bootstrapping estimation for 1000 samples was conducted to estimate the bias-corrected confidence interval. ~~The confidence interval for surface acting did not include zero (.01, .; 95%), so the mediation effect of distributive justice in the positive relationship between surface acting at T1 and emotional exhaustion at T1 was significant (H3a)~~The confidence interval for surface acting indirect effects did not include zero ( $\beta$~~

~~= .04,  $p < .01$ ; .01, .08) so the mediation effect of distributive justices in the positive relationship between surface acting at T2 and emotional exhaustion at T2 was significant (H3a). The direct effect of surface acting at T2 was significant ( $\beta = .12$ ,  $p < .05$ ), reflecting that the meditation effect was partial. The indirect effect for deep acting (H3b) was not significant ( $\beta = .01$ ,  $p = .28$ ; -.01, .04; 95%). ~~The direct effect of deep acting at T1 was not significant ( $\beta = -.07$ ,  $p = .20$ ). H3b was not supported. The inclusion of both predictors in the same equation may have reduced test power, so separate analysis was conducted for deep acting at T2. Results showed that the deep acting indirect ( $\beta = -.19$ ,  $p < .05$ ; -.00, .19; 95%) and direct ( $\beta = .04$ ,  $p < .05$ ; .01, .04; 95%) effects on emotional exhaustion at T2 were significant, supporting H3b.~~~~

To obtain additional evidence concerning the causal direction of the relationship between variables, multiple mediation regression SEM analysis was conducted with surface and deep acting at T2 as mediators of the relationship between distributive justice at T2 and emotional exhaustion at T2. Contrary to expectation, indirect effects were significant ( $\beta = -.02$ ,  $p < .05$ ; -.06, .00; 95%). The estimation of the indirect effects of each mediator separately showed that surface acting, significantly mediated the relationship between distributive justice and emotional exhaustion ( $\beta = -.02$ ,  $p < .05$ ; -.06, .00; 95%). For deep acting, the indirect effect was not significant ( $\beta = .00$ ,  $p = .54$ ; -.02, .00; 95%). Combined with the previous results, this suggests there was greater support for distributive justice acting as the mediator, rather than deep acting. In the case of surface acting, both directions of causality were supported.

### Discussion

The main purpose of the present study was to understand the role of distributive justice perceptions in the relationship between emotion regulation and employees' emotional exhaustion. The empirical evidence on the role of the distributive dimension of justice in the relationship between emotion regulation and emotional exhaustion is scant. Previous studies have focused on other dimensions of justice and analysed whether their impact on employees' well-being is mediated by their effects on the amount of emotion regulation demanded by the interaction with

clients. Our results supports that for the distributive dimension, justice mediates the relationship between emotion regulation and emotional exhaustion. Empirical analysis of this issue furthers our knowledge of the relationship between emotion regulation and emotional exhaustion by testing whether emotion regulation strategies not only affect the amount of self-control resources depleted and the opportunities to regain those resources, but also influence employees' perceptions of distributive justice, defined as the balance between losses and gains from interaction with clients.

The results support the idea that employees' use of emotion regulation strategies influences their perceptions of the proportionality between their contributions and the benefits they receive during service encounters. These justice perceptions mediated the relationship between emotion regulation and emotional exhaustion. This mediation effect was confirmed for emotion regulation in the form of surface acting ~~and deep acting. This relationship was confirmed~~ when inter-individual differences and intra-individual changes were considered. For deep acting this mediation effect was confirmed only for interpersonal differences. Intra-individual changes on deep acting did not directly predict emotional exhaustion nor indirectly through its effects on emotional exhaustion. Although deep acting is expected to positively impact on distributive justice, these effects rely upon the partner reaction toward the employee's emotional display. It may be the case that during some interactions with patients they do not feedback positively –due to their illness- or that despite the employees' effort to regulate their emotions the performance was poor (example?). Under these circumstances returns may not clearly compensate the effort and explain that the overall relationship between in deep acting and distributive justices were not significant.

The connection between emotion regulation and distributive justice was grounded in two well-established theoretical models: the strength model of self-control and the conservation of

resources model. The characterization of surface acting as an effortful strategy that reduces the likelihood of clients' positive feedback and employees perceiving self-efficacy and self-authenticity during interaction with the client explains its negative relationship with perceptions of distributive justice. For deep acting, a positive relationship with distributive justice was expected due to the higher likelihood of clients' positive feedback, elicited by their perception of authenticity in the employees' emotional display, and the higher chances of increasing employees' perception of self-efficacy and self-authenticity. The balance between the emotion regulation effort invested and the resources recovered through interaction with the clients' in the form of positive feedback, higher self-efficacy or higher self-authenticity made the hypothesized positive relation plausible. Although cross sectional results support this relationship, ~~Contrary to expectation,~~ longitudinal resultsour results show a non-significant relationship. This could be explained by the specific context of research where, because of the caring condition of the interaction, in some interactions the employees' reaction when the patients' feedback may falls slightly short of their ~~effort~~effort and also it is possible that in some interactions with the patient emotion regulation effort is not followed by the expected level of performance (e. g., employee's authentic expression of empathy do not reduces the anxiety of a patient in an acute condition) reducing employee's perception of self-efficacy. may be less intense than in interactions where the care component is not observed. The negative relationship between deep acting and distributive justice that we found when patients' feedback is controlled for supports the idea that the balance between the effort the employee put into the emotion regulation and the opportunities to regain some resource from that effort underlies the relationship between deep acting and distributive justice. In primary health care settings, feedback from interaction with patients is an important source of resource recovery, the presence of a reduced number of interactions where resource do not outweigh the effort to perform deep acting may explain the inconsistencies on the results. Similar inconsistencies have been found in previous research on the relationship between deep acting and emotional exhaustion. ~~during interaction with patients. When its effects are~~

~~controlled for, the balance between effort and gains following deep acting is broken and the relation with distributive justice becomes negative.~~

Our results on the positive relationship between distributive injustice and emotional exhaustion supports previous empirical evidence showing that the aversive reaction following perceptions of distributively unfair interactions may increase the effort the employees exert to regulate their emotions and that potentially leads to a state of emotional exhaustion (Rupp et al., 2006). Additionally, this result supports the idea that distributively unfair encounters where the amount of resource drained by emotion regulation exceeds the resource recovered from the interaction, impacts the actual level of emotional exhaustion (Cole et al., 2010).

A complementary explanation to be tested in future research draws on the experimental evidence of the effects of people's beliefs and expectancies concerning the amount of resources available to deal with self-control tasks on their actual level of emotional exhaustion. The sustained experience of distributively unfair service encounters may influence employees' expectancies about the amount of resources left to deal with forthcoming demands and influence their perception of emotional exhaustion (Boucher & Kofos, 2012; Martijn et al., 2002).

Moreover, the study confirms the importance of integrating the concept of justice in understanding emotional labor. Previous research has analysed the interactional dimension of justice as an antecedent of emotion regulation. Van Jaarsveld and Poster (2013) argue that employees' emotion regulation can be defined as a response to customer mistreatment. Interactional justice focuses on the dignity and respect that is contained in the treatment employees receive from clients, colleagues and supervisors (Bies, 2001). Undeserved derogatory judgments or information withheld in an unreasonable way are two examples of interactional injustice. Empirical evidence indicates that employees' perception of interactionally unfair behaviors is one of the affective events that can increase employees' level of emotion regulation during service encounters (Rupp, et al., 2007; Rupp, et al., 2008; Rupp & Spencer, 2006). Drawing on affective events theory, Rupp et al (2008) argue that the negative affective condition

of clients' interactionally unfair behaviours evokes an automatic response of anger that increases the level of employees' surface acting which, in turn, is negatively related to employees' well being (Rupp et al., 2007; Rupp & Spencer, 2006).

Although distributive justice refers to the results of social exchange, rather than the quality of the interaction, both dimensions are related. As Tepper (2000: 180) points out for supervisor-employee relationships, abusive behaviors "may also influence subordinates' perceptions of the inputs that figure in their evaluation of distributive justice". We consider both perspectives can be integrated when the temporal dimension is considered. Interactional injustice may be one of the events motivating the use of surface acting and thus contributing to the perception of distributive injustice.

The need for a better understanding of the temporal role of organizational justice was evident for its relationship with surface acting. The indirect effects on emotional exhaustion were significant in both directions, when distributive justice acted as the mediator of surface acting and when surface acting was the mediator of distributive justice. The latter result was unexpected but fits with the model explaining the mediational role of emotion regulation in the relationship between interpersonal justice and well-being (Rupp et al., 2007). The aversive reaction generated by distributive injustice increases emotional dissonance and the likelihood of employees surface acting in subsequent interactions. Both effects are not incompatible and may define a vicious circle where surface acting increase the perception of distributive injustice, which in turn increases the need for surface acting to suppress the expression of inappropriate emotions. For deep acting, distributive justice elicits positive emotions compatible with the display rules. The absence of emotional dissonance makes intentional emotion regulation – including deep acting – unnecessary. This could be the reason why the mediational effect of deep acting in the relationship between distributive justice and emotional exhaustion was not significant. Further research is needed to jointly test the temporal role of different dimensions of justice in the emotion regulation and well-being relationship.

The present results also enhance our knowledge of the interpersonal dimension of emotion regulation at work by considering how social exchange conditions modify the effects of self-control processes on individuals' well-being. According to social exchange theory (Kelley & Thibaut, 1978), our results show that the consequences of emotion regulation for emotional exhaustion partly rely on the interdependence of the actors' outcomes in the service encounter. The employee's judgment of the overall outcomes from the interaction depends not exclusively on the employee's behavior, but also on the response of the client.

#### Limitations and Future Directions

Although the present findings provide initial support for the view that distributive justice mediates the relationship between emotion regulation and emotional exhaustion, a number of research limitations can be identified:

A first limitation concerns the fact that the study was conducted in a natural setting and control over the variables in the study was absent. Future experimental or quasi-experimental studies might supply stronger evidence on the relationship between the variables under study. Experimental manipulation of participants' perception of distributive justice following the performance of surface and deep acting to assess the impact on ego-depletion would increase the internal validity of results. Research should also be conducted to establish whether the effects of injustice perceptions on emotional exhaustion are explained by its impact on employees' expectancy of the level of resource available for future encounters. Again, experimental manipulation of these expectancies would make the empirical evidence stronger.

Second, the effects of personal characteristics or traits related to the use of emotion regulation were not controlled, resulting in a risk of a third variable explaining the results. However, this possibility is less likely to have affected the results for the intraindividual analysis. Future studies might examine whether traits, such as negative affectivity, can influence the discovered relationships between emotion regulation and distributive justice and their connection with emotional exhaustion.



A third limitation was that the self-reported nature of all the measures may have inflated the relationship between the variables and raises concerns about common-method variance. Restrictions arising from the research context made it unviable to obtain measures from different sources or in separate contexts to reduce common method variance (Podsakoff, et al., 2003). A combination of behavioral and subjective measures would supply additional evidence on the validity of the links between the variables (see Hagger, Wood, Stiff, & Chatzisarantis, 2010). Although it does not eliminate common method variance, CFA showed good fit indices for the measures included in the study. The non-significance of some of the cross-sectional hypothesized correlations (e.g., deep acting with distributive justice and emotional exhaustion) may also indicate that the use of a common method did not unduly inflate all relationships (Spector, 2006). Nevertheless caution is needed in interpreting the results, especially those for deep acting because it also showed a somewhat weak level of internal consistency.

Fourth, this study focuses exclusively on the distributive dimension of justice; the interactional and procedural dimensions were not included in the study. Empirical evidence shows that the negative impact of unfavorable outcomes at work may be ameliorated when the individual perceives that the procedures leading to these outcomes are fair (Brockner et al. 1994). Grandey and Fisk (2004) found that when employees believe that display rules are unfair they have higher levels of emotional exhaustion. A joint analysis of the organizational justice dimensions may contribute to a broader integrated understanding of the relationships between emotion regulation, organizational justice and well-being.

Finally, a multifocal perspective is needed to more fully understand the relationships studied here. A multifocal perspective embraces the idea that injustice perceptions can come from the social exchanges an employee has with multiple sources (e.g., colleagues, supervisors, clients). Drawing on a dual-level social exchange model of burnout (Schaufeli et al., 1996), Bechthold et al. (2013) posit that when employees' perceive that service encounters are distributively unfair, they turn to the organization for restoration of justice and expect the

organization to provide them with rewards for their emotion regulation efforts during the service encounter. Grandey et al. (2013) found that financial rewards from the organization buffer the negative impact of high emotional requirements on service employees' job satisfaction. Despite this possible organizational solution, Glomb, Kammeyer-Mueller and Rotundo (2004) found that organizations do not uniformly reward higher levels of emotional demand with higher wages.

Besides the theoretical relevance of the findings, the consideration of the effects of distributive justice in emotional labor has practical implications for organizations. The enforcement of display rules requiring that employees intentionally regulate their emotions is a common practice for most service organizations. Empirical evidence consistently shows that part of this regulation involves strategies such as surface acting that threaten employees' well-being. Our results support that the negative effect of emotion regulation on employees' well-being may be partially explained by the perception of interaction with clients as distributively unfair ~~because clients' fails to reciprocate to employees' effort~~. This negative effect may be ameliorated when the organization rewards the employee for lack of reciprocity in customer interactions (Bechtoldt et al., 2013). Paradoxically, despite its strategic value (Pugh, 2001; Tamblin et. al., 2007), employees are not often explicitly rewarded for their emotional labor, which constitutes a hazard for their well-being (Schaufeli, et al., 1996). Organizations should therefore assess the presence of emotional demands within employees' work and address their impact in human resource management policies and practices. The current findings suggest that these practices should include establishing mechanisms that allow employees to restore distributive justice after unfair service encounters. The explicit acknowledgement or positive feedback provided by colleagues and team leaders after situations where reciprocity expectation was not met during a service encounter may contribute to restore the overall perception of distributive justice and reduce the negative impact on well-being. When the absence of reciprocity is unwarranted (e.g., a client making unwarranted claims), organizational support may also contribute to restore a sense of distributive justice. As recent research shows, financially acknowledging emotion regulation

effort may contribute to reduce its negative effects (Grandey et al., 2013). Our results are compatible with the development of reward systems contingent on emotion regulation performance, especially when positive interactions are crucial to performance.

#### Conclusion

This study provides preliminary evidence that when health care professionals perform emotion regulation to fulfil interactions with clients, it has effects on their level of emotional exhaustion that is mediated by their perceptions of distributive justice. Additionally, the findings indicate that the consequences of emotion regulation for employees' well-being does not exclusively depend on characteristics of the individual, but also depends on the characteristics of their interpersonal relationships that determine the proportionality between their effort and the outcomes they receive from their interaction partners. Organizations should seek to identify opportunities to develop procedures that offset the deleterious effects of unfair exchanges during service delivery.

### References

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology*, Vol. 2 (pp. 267-299). New York: Academic Press.
- [Bandura \(1997\)](#)
- Baumeister, R. F., & Vohs, K. D. (2007). Self-regulation, ego-depletion and motivation. *Social and Personality Psychology Compass*, 1, 115-128.
- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D.M. (1998). Self-control depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, 74, 1252–1265.
- Bechtoldt, M. N., Welk, C., Zapf, D., & Hartig, J. (2013). Main and moderating effects of self-control, organizational justice, and emotional labour on counterproductive behaviour at work. *European Journal of Work and Organizational Psychology*, 16, 479-500.
- Bies, R. J. (2001). Interactional (in)justice: The sacred and the profane. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organization justice* (pp. 89–118). Palo Alto, CA: Stanford University Press.
- Boucher, H. C., & Kofos, M. N. (2012). The idea of money counteracts ego depletion effects. *Journal of Experimental Social Psychology*, 48, 804-810.
- ~~Bravo, M. J., Peiró, J. M., & Zurriaga, R. (1991). El cuestionario Modular de satisfacción laboral de profesionales de la Salud (BOP) (Health professionals' Job Satisfaction Modular Questionnaire). *Psiquis*, 12, 51-62.~~
- Brockner, J., Konovsky, M., Cooper-Schneider, R., Folger, R., Martin, C. & Bies, R. J. (1994). Interactive effects of procedural justice and outcome negativity on victims and survivors of job loss. *Academy of Management Journal*, 2, 397-409.
- Brotheridge, C.M., & Grandey, A. A. (2002). Emotional labour and burnout: Comparing two perspectives of “people work”. *Journal of Vocational Behavior*, 60, 17-39.

- Brotheridge, C. M., & Lee, R. T. (2002). Testing a conservation of resources model of the dynamics of emotional labor. *Journal of Occupational Health Psychology, 7*, 57-67.
- Brotheridge, C. M., & Lee, R. T. (2003). Development and validation of the emotional labour scale. *Journal of Occupational and Organizational Psychology, 76*, 365-379.
- Cheung, G. W., & Lau, R. S. (2008). Testing mediation and suppression effects of latent variables: Bootstrapping with structural equation models. *Organizational Research Methods, 11*, 296-325.
- Cohen-Charash, Y., & Byrne, Z. S. (2008). Affect and justice – current knowledge and future directions. In N. M. Ashkanasy, & C. L. Cooper (Eds.), *Research companion to emotion in organizations* (pp. 360-391). Edward Elgar Publishers: Cheltenham, UK.
- Cole, M. S., Bernerth, J. B., Walter, F., & Holt, D. T. (2010). Organizational justice and individuals withdrawal: Unlocking the influence of emotional exhaustion. *Journal of Management Studies, 47*, 367-390.
- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of measure. *Journal of Applied Psychology, 86*, 386-400.
- Côté, S. (2005). A social interaction model of the effects of emotion regulation on work strain. *Academy of Management Review, 30*, 509-530.
- Dahling, J. J., & Pérez, L. A. (2010). Older worker, different actor? Linking age and emotional labor strategies. *Personality and Individual Differences, 48*, 574-578.
- Denison, D. R. & Sutton, R. I. (1990). Operating Room Nurses. In J. R. Hackman (Ed.), *Groups that work (and those that don't)* (pp. 293-308). San Francisco: Jossey-Bass Publishers.
- Diefendorff, J. M., Erickson, R. J., Grandey, A., & Dahling, J. (2011). Emotional display rules as work unit norms: A multilevel analysis of emotional labor among nurses. *Journal of Occupational Health Psychology, 16*, 170-186.
- Diefendorff, J. M., Croyle, M. H., & Gosserand, R. H. (2005). The dimensionality and antecedents of emotional labor strategies. *Journal of Vocational Behavior, 66*, 339-357.

- Diestel, S., & Schmidt, K. H. (2012). Lagged mediator effects of self control demands on psychological strain and absenteeism. *Journal of Occupational and Organizational Psychology*, 85, 556-578.
- Glomb, T. M., & Tews, M. J. (2004). Emotional labor: A conceptualization and scale development. *Journal of Vocational Behavior*, 64, 1-23.
- Glomb, T. M., Kammeyer-Mueller, J. D., & Rotundo, M. (2004). Emotional labor demands and compensating wage differentials. *Journal of Applied Psychology*, 89, 700-714.
- Goldberg, L. S., & Grandey, A. A. (2007). Display rules versus display autonomy: Emotion regulation, emotional exhaustion, and task performance in a call center simulation. *Journal of Occupational Health Psychology*, 12, 301-318.
- Grandey, A. (2000). Emotion regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology*, 5, 95-110
- Grandey, A. (2003). When "the show must go on": Surface and deep acting as predictors of emotional exhaustion and service delivery. *Academy of Management Journal*, 46, 86-96.
- Grandey, A. & Fisk, G. M. (2004). Display rules and strain in service jobs: What's fairness got to do with it? In P. Perrewé, & D. Ganster (Eds.) *Research in Occupational Stress and Well-being*, vol. 4 (pp. 265-293). Emerald.
- Grandey, A., Chi, N. W., & Diamond, J. A. (2013). Show me the money! Do financial rewards for performance enhance or undermine the satisfaction from emotional labor? *Personnel Psychology*, 66, 569-612.
- Grandey, A. A., Fisk, G. M., Mattila, A. S., Jansen, K. J., & Sideman, L. A. (2005). Is service with a smile enough? Authenticity of positive display during service encounters. *Organizational Behavior and Human Decision Processes*, 96, 38-55.
- Grandey, A., Rafaeli, A., Ravid, S., Wirtz, J., & Steiner, D. D. (2010). Emotion display rules at work in the global services economy: the special case of the customer. *Journal of Service Management*, 3, 338-412.

Greenberg, J. (2006). Losing sleep over organizational injustice: Attenuating insomniac reactions to underpayment inequity with supervisory training in interactional justice. *Journal of Applied Psychology*, 91, 58-69.

[Gross, J & John. \(2003\)](#)

Hagger, M. S., Wood, C., Stiff, C., & Chatzisarantis, N. L. (2010). Ego depletion and the strength model of self-control: A meta analysis. *Psychological Bulletin*, 136, 495-525.

Henderson, A. (2001). Emotional labor and nursing: an under-appreciated aspect of caring work. *Nursing Inquiry*, 8, 130-138.

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

[Holman, D., Martínez-Iñigo, D., & Totterdell, P. \(2008\)](#)

Homans, G. C. (1961). *Social behavior: Its elementary forms*. New York: Harcourt Brace Jovanovich Inc.

James, N. (1993). Divisions of emotional labour: Disclosure and cancer. In S. Fineman (Ed.), *Emotion in organizations* (pp. 94-117). London: Sage.

Job, V., Dweck, C. S. & Walton, G. M. (2010). Ego-depletion- Is it all in your head?: Implicit theories about willpower affect self-regulation. *Psychological Science*, 21, 1686-93.

Johnson, H. A., & Spector, P. E. (2007). Service with a smile: Do emotional intelligence, gender, and autonomy moderate the emotional labor process? *Journal Occupational Health Psychology*, 12, 319-333.

Kanfer, R., & Kantrowitz, T. M. (2002). Emotion regulation: Command and Control of emotions in work life. In R. Lord, R. Klimoski, & R. Kanfer (Eds.), *Emotions in the Workplace: Understanding the Structure and Role of Emotions in Organizational Behavior* (pp. 443-472). San Francisco, CA: Jossey- Bass.

Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. New York: Wiley-Interscience.

- Larson, E. B., & Yao, W. (2005). Clinical empathy as emotional labor in the patient-physician relationship. *The Journal of American Medical Association*, 9, 1100-1106.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G. & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7, 83-104.
- Martijn, C., Tenbült, P., Merckelbach, H., Dreezens, E., & de Vries, N. K. (2002). Getting a grip on ourselves: Challenging expectancies about energy loss after self-control. *Social Cognition*, 20, 441-460.
- Martínez-Iñigo, D., Poerio, G., & Totterdell, P. (2013). The association between controlled interpersonal affect regulation and resource depletion. *Applied Psychology: Health & Well Being*, 5, 248-269.
- Martínez-Iñigo, D., Totterdell, P., Alcover, C. M., & Holman, D. (2009). The source of display rules and their effects on primary health care professionals' well-being. *The Spanish Journal of Psychology*, 12, 618-631.
- Martínez-Iñigo, D., Totterdell, P., Alcover, C. M., & Holman, D. (2007). Emotional labour and emotional exhaustion: Interpersonal and intrapersonal mechanisms. *Work and Stress*, 21, 30-47.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory Manual* (3rd ed.). Palo Alto, CA: Consulting Psychologist Press.
- Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology*, 76, 845-855.
- Morris, J. A., & Feldman, D. C. (1996). The dimensions, antecedents, and consequences of emotional labor. *Academy of Management Review*, 21, 986-1010.
- Morris, J. A. & Feldman, D. C. (1997). Managing emotions in the workplace. *Journal of Managerial Issues*, 3, 257-274.



- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903.
- Preacher, K. J. & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Method*, 3, 879-891.
- Price, J. L., & Mueller, C. W. (1986). *Handbook of organizational measurement*. Marshfield, MA: Pittman.
- Pritchard, R. D. (1969). Equity theory: A review and critique. *Organizational Behavior and Human Performance*, 4, 176-211.
- Pugh, S. D. (2001). Service with a smile: Emotional contagion in the service encounter. *Academy of Management Journal*, 44, 1018-1027.
- Quick, J., Cooper, C., Nelson, D., Quick, J. & Gavin, J. (2003). Stress, health and wellbeing at work. In J. Greenber (Ed.), *Organizational behaviour: The state of science* (2<sup>nd</sup> ed., pp. 53-89). Mahwah: Lawrence Erlbaum.
- [Richards, J. M., & Gross, J. J. \(1999\)](#)
- Richards, J. M., & Gross, J. J. (2000). Emotion regulation and memory: the cognitive costs of keeping one's cool. *Journal of Personality and Social Psychology*, 79, 410-424.
- Rupp, D. E., Holub, A S., & Grandey, A. (2007). A cognitive-emotional theory of customer injustice and emotional labor. In D. De Cremer (Ed.), *Advances in the psychology of justice and affect* (pp. 199-226). Information Age Publishing
- Rupp, D. E., & Spencer, S. (2006). When customers lash out: The effect of customer interactional injustice on emotional labor and the mediating role of discrete emotions. *Journal of Applied Psychology*, 91, 971-978.

- Rupp, D. E., McCance, A. S., Spencer, S., & Sonntag, K. (2008). Customer (in)justice and emotional labor: The role of perspective taking, anger, and emotional regulation. *Journal of Management*, 34, 903-924.
- Schaubroeck, J., & Lam, S.K. (2004). Comparing lots before and after: Promotion rejectees' invidious reactions to promotees. *Organizational Behavior & Human Decision Processes*, 94, 33-47.
- Schaufeli, W. B., van Dierendonck, D., & van Gorp, K. (1996). Burnout and reciprocity: Towards a dual-level social exchange model. *Work & Stress*, 10, 225-237.
- Seisdedos, N. (1997). *MBI. Inventario "Burnout" de Maslach. Manual*. Madrid: TEA.
- Smith III, A. C., & Kleiman, S. (1989). Managing emotions in medical school: Student's contacts with the living and the dead. *Social Psychology Quarterly*, 52, 56-69.
- Spector, P. E. (2006). Method variance in organizational research. Truth or urban legend? *Organizational Research Methods*, 9, 221-232.
- Taris, T. W., Peeters, M.C. W., Le Blanc, P. M., Schreurs, P. J. G. & Schaufeli, W. B. (2001). From equity to burnout: The role of job stress. *Journal of Occupational Health Psychology*, 6, 303-323.
- Tamblyn, R., Abrahamowicz, M. Dauphinee, D., Wenghofer, E., Jacques, A., Klass, D. Smees, S., Blackmore, D., Winslade, N., Girard, N. Du Berger, R., Bartman, I., Buckeridge, D. L., & Hanley, J. A. (2007). Physician scores on a National Clinical Skills Examination as predictors of complaints to medical regulatory authorities. *The Journal of the American Medical Association*, 5, 993-1001.
- Tepper, B. J. (2001). Health consequences of organizational injustice: Test of main and interactive effects. *Organizational Behavior and Human Decision Processes*, 86, 197-215.
- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal*, 43, 178-190.

- Totterdell, P., & Holman, D. (2003). Emotion regulation in customer service roles: Testing a model of emotional labor. *Journal of Occupational Health Psychology, 8*, 55-73.
- Tsai, W. C. (2001). Determinants and consequences of employee displayed positive emotions. *Journal of Management, 27*, 497-512.
- Tsai, W. C., & Huang, Y. M. (2002). Mechanisms linking employee affective delivery and customer behavioral intentions. *Journal of Applied Psychology, 87*, 1001-1008.
- van Jaarsveld, D., & Postner, W. R. (2013). Call centers: Emotional labor over the phone. In A. A. Grande, J. M. Diefendorff & D. E. Rupp (eds.) *Emotional Labor in the 21<sup>st</sup> Century. Diverse Perspective on the Psychology of Emotion Regulation at Work* (pp. 153-173). Routledge: New York.
- Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology, 83*, 486-493
- Yanay, N., & Shahar, G. (1998). Professional feelings as emotional labor. *Journal of Contemporary Ethnography, 27*, 346-373.
- Zapf, D. (2002). Emotion work and psychological well-being. A review of the literature and some conceptual considerations. *Human Resource Management Review, 12*, 237-268.
- Zapf, D., Vogt, C., Seifert, C., Mertini, H. & Isic, A. (1999). Emotion work as a source of stress: The concept and development of an instrument. *European Journal of Work and Organizational Psychology, 8*, 371-400.

Figure 1. Proposed model of Distributive Justice as a mediator of the relationship between Emotion Regulation and Emotional Exhaustion.

Emotion Regulation, Distributive Justice and Emotional Exhaustion 1

Table 1.

*Means, standard deviations, and correlations for the study variables (N= 233).*

	Mean	SD	1	2	3	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Time 1												
1. Age	40.11	6.77	--									
2. Display Rule Monitoring	2.07	0.80	-.08	--								
3. Autonomy	4.08	0.68	.00	-.21**	--							
<u>4</u> . Surface Acting	2.96	0.55	.05	.03	-.11 <sup>†</sup>	--						
<u>5</u> . Deep Acting	3.24	0.74	.06	.06	.09	.22**	--					
<u>6</u> . Distributive Justice	2.72	0.71	-.05	-.02	-.00	-.16*	.08	--				
<u>7</u> . Emotional Exhaustion	3.20	1.28	-.11 <sup>†</sup>	.13*	.00	.26**	-.04	-.41**	--			
Time 2												
<u>8</u> . Surface Acting	2.98	0.60	.03	.02	-.04	.61**	.10	-.09	.12 <sup>†</sup>	--		
<u>9</u> . Deep Acting	3.10	0.60	.00	.12 <sup>†</sup>	.09	.11	.51**	.05	-.02	.25**	--	
<u>10</u> . Distributive Justice	2.81	0.69	-.12 <sup>†</sup>	-.09	-.03	-.12 <sup>†</sup>	.00	.49**	-.28**	-.23**	-.06	--
<u>11</u> . Emotional Exhaustion	3.10	1.24	-.06	.08	.01	.31**	.00	-.33**	-.75**	.28**	.07	-.40

*Note.* \*\* $p < .01$ ; \* $p < .05$ ; <sup>†</sup> $< .1$

Table 2

*Indirect effect of emotion regulation on emotional exhaustion through distributive justice for T1 sample (N=413).*

Path /Effect	Bootstrap estimate		95% CI
	B	SE	Bias correction
1 Control variables			
Gender → EEx at T1	.06	.13	-.03, .14
Age → EEx at T1	-.02	.01	-.01, .08
Occupation → EEx at T1	.24**	.11	.16, .33
DRM → EEx at T1	-.00	.06	-.09, .09
Autonomy → EEx at T1	.00	.07	-.09, .09
2. Emotion Regulation			
SA at T1 →DJ at T1	-.14**	.06	-.25, -.03
DA at T1 →DJ at T1	.22**	.05	.13, .31
3. Distributive Justice			
DJ at T1 →EEx at T1	-.41**	.08	-.48, -.33
<b>R<sup>2</sup></b>	<b>.30</b>		
Effects of SA			
Direct effect	.21**	.09	.12, .29
Indirect effect	.06*	.02	.01, .10
Effects of DA			
Direct effect	.04	.08	-.04, .14
Indirect effect	-.09**	.02	-.13, -.05

Note. \*\* $p < .01$ ; \* $p < .05$ ; DRM= Display Rules Monitoring; SA= Surface Acting; DA= Deep Acting; DJ= Distributive Justice; EEx = Emotional Exhaustion.

Table 3

*Indirect effect of emotion regulation on emotional exhaustion through distributive justice for T1 and T2 sample (N=233).*

Path /Effect	Bootstrap estimate		95% CI
	B	SE	Bias correction
1 Control variables			
Gender → EEx at T2	<u>.01</u>	<u>.11</u>	-0 <u>7</u> , <u>.10</u>
Age → EEx at T2	<u>-.00</u>	<u>.01</u>	-0 <u>8</u> , <u>.09</u>
Occupation → EEx at T2	<u>-.04</u>	<u>.11</u>	-.04, .13
DRM → EEx at T2	<u>-.04</u>	<u>.06</u>	-.1 <u>3</u> , <u>.03</u>
Autonomy → EEx at T2	<u>-.00</u>	<u>.07</u>	-.0 <u>9</u> , .09
2. Inter-individual stability			
SA at T1 → EEx at T2	<u>-.04</u>	<u>.12</u>	-.0 <u>7</u> , <u>.15</u>
DA at T1 → EEx at T2	<u>-.01</u>	<u>.08</u>	-.0 <u>6</u> , <u>.15</u>
DJ at T1 → EEx at T2	<u>-.08</u>	<u>.08</u>	-. <u>10</u> , <u>.17</u>
EEx at T1 → EEx at T2	<u>.70</u> **	.04	.61, .77
3. Emotion Regulation			
SA at T2 → DJ at T2	-. <u>17</u> *	.06	-. <u>29</u> , -. <u>05</u>
DA at T2 → DJ at T2	-. <u>06</u>	.06	-. <u>19</u> , <u>.06</u>
4. Distributive Justice			
DJ at T2 → EEx at T2	-. <u>21</u> **	<u>.09</u>	-. <u>30</u> , -. <u>11</u>
<b>R<sup>2</sup></b>	.64		
Effects of SA			
Direct effect	<u>.12</u> **	.06	<u>.06</u> , <u>.23</u>
Indirect effect	<u>.04</u> **	<u>.02</u>	.01, <u>.08</u>
Effects of DA			
Direct effect	<u>.05</u>	.05	-. <u>06</u> , <u>.15</u>
Indirect effect	<u>.01</u>	<u>.01</u>	-. <u>01</u> , <u>.04</u>

*Note.* \*\* $p < .01$ ; \* $p < .05$ ; DRM= Display Rules Monitoring; SA= Surface Acting; DA= Deep Acting; DJ= Distributive Justice; EEx = Emotional Exhaustion