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**Emotional Labor and Employee Well-being: A Matter of Perceived
Authentic Leadership?**

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Abstract

A within-person design was used to examine the theoretical theorem that authentic leadership moderates the relationship between emotional labor (surface acting, deep acting, and automatic regulation) and emotional exhaustion and work engagement. Daily diary data were collected from 86 employees working in the service sector. The participants completed a general questionnaire, after that they completed daily questionnaires that were sent out for fourteen days. The conducted multilevel analysis showed a significant relationship between automatic regulation and emotional exhaustion, but a non-significant relationship between surface acting and emotional exhaustion. Additionally, surface-, deep-acting, and automatic regulation were significantly related to work engagement. Contrary to the hypotheses, the moderating effect of authentic leadership on the relationship between emotional labor and employee well-being was not found significant. Overall, this study showed the importance of using a within-person design and the moderating effect of authentic leadership on employee emotional labor and well-being relationships.

Keywords: emotional labor, emotional exhaustion, work engagement, authentic leadership, service industry, within-person design, multilevel analysis

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Introduction

The service sector is central to today's economy, the employment level in the service sector is 71% or higher in developed countries such as North America, Europe, and Japan (The World Bank, 2020). Employees operating in the service sector interact daily with others, for example, customers, clients, or students. This partner interaction requires displaying appropriate emotions to favorably influence the behavior of others aligned with organizational goals (Grandey, 2000). The role of emotions in the workforce is becoming increasingly important. One of the reasons is the increasing number of jobs in the service sector that require frequent and intensive interaction with people, and in which displaying and dealing with emotions plays an important role (Nijstad, et al., 2006). In order to provide services with suitable emotions, employees sometimes have to engage in emotional labor, the adjustment of emotional expressions as part of the profession (Hochschild, 1983). Service employees who do not feel the obligated emotions may engage in emotional labor strategies, consisting of two strategies; surface acting and deep acting. When engaging in surface acting, emotions are faked, and true feelings are not adjusted. By contrast, deep acting involves modifying inner feelings to align with organizational expectations (Grandey, 2000). Researchers have complemented a third type of emotional regulation, which is automatic regulation (Diefendorff et al., 2005; Martínez-Iñigo et al., 2007; Zapf, 2002). Automatic regulation implies employees to express naturally felt emotions that are in accordance with emotional display rules (Ashforth & Humphrey, 1993).

Research has shown that emotional labor has both positive as well as negative outcomes on organizations and employee's well-being (Bono & Vey, 2005; Côté, 2005; Zapf & Holz, 2006). Research showed a negative effect of surface acting on employee well-being, which means surface acting is positively related to emotional exhaustion and negatively related to work engagement (Bono & Vey, 2005; Grandey, 2003; Hülshager & Schewe, 2011; Judge

et al., 2009). However, there is inconsistency in the findings regarding the effect of deep acting on well-being, suggesting the influence of moderating variables (Bono & Vey, 2005; Grandey, 2003; Hülshager & Schewe, 2011; Johnson & Spector, 2007). Moreover, there is little research on the effect of automatic regulation on well-being. Studies predict that automatic regulation is positively linked to work engagement (Chan et al., 2010) and negatively linked to emotional exhaustion (Martínez-Iñigo et al., 2007).

Several studies examined the effect of moderators on the relationship between emotional labor and well-being, for example, the role of gender, emotional intelligence, self-monitoring, job autonomy, and extraversion (Johnson & Spector, 2007; Judge et al., 2009; Scott & Barnes, 2011; Schreurs et al., 2014). The theoretical model by Humphrey proposed authentic leadership as a potential moderator to mitigate major obstacles as a result of emotional labor by creating a greater comfort zone for follower emotional expression (Humphrey, 2008). Authentic leaders foster a positive transparent environment and positive psychological capabilities thereby promoting self-cultivation (Walumbwa, et al., 2008). Authentic leaders have access to substantial psychological resources, which enables leaders to replenish service employee's resources to deal with energy-consuming emotional labor. This study builds upon the model of Humphrey by reasoning that authentic leadership provides important resources that moderates the relationship between follower emotional labor and well-being in the service industry.

This research contributes to emotional labor, well-being, and authentic leadership literature in three ways. Firstly, research studies have primarily focused on two emotional labor strategies, which are surface- and deep acting (Grandey et al., 2013). However, most studies have ignored one general form of emotion regulation, which is automatic regulation (Diefendorff, et al., 2005). Additionally, little is known about the relation between automatic regulation and employee well-being (Côté, 2005; Martínez-Iñigo et al., 2007). In addition to

surface and deep acting, this study also investigates the relation between automatic regulation and employee well-being. Secondly, Humphrey (2008) proposed a potential moderator role of authentic leadership on the relation between follower emotional labor and well-being. This study will add to the current literature to find empirical evidence for the moderating effect of authentic leadership on surface acting, and automatic regulation and well-being outcomes (emotional exhaustion & work engagement). Additionally, this study introduces authentic leadership as a moderator to explain the contradictory findings in the relationship between deep acting and well-being. In addition to Humphrey's model, this study proposes resources provided by authentic leaders to moderate the relationship on employee emotional labor. Finally, an important key finding of emotional labor is that emotions are dynamic and fluctuate over time between individuals (Morris & Feldman, 1996). To study the dynamic nature of emotional labor, this study uses a within-person level to record fluctuations within individuals and examine the daily effects of emotional labor (surface acting, deep acting, and automatic regulation) on daily well-being outcomes (emotional exhaustion, and work engagement). This allows the investigation to concentrate on within-person covariations and the moderating effect of authentic leadership on the variations.

Literature Review

Emotional labor

Hochschild expressed emotional labor as “the management of feeling to create a publicly observable facial and bodily display” (1983: p.7). The concept of emotional labor involves displaying desired emotions and behaviors which depend on predefined display rules at work (Ashforth & Humphrey, 1993; Hochschild, 1983). Display rules relate to social norms, professional norms, and norms from the organization (Ashforth & Humphrey, 1993; Rafaeli & Sutton, 1989). Moreover, individual emotions fluctuate throughout the day, the emotions felt

may deviate from the expected emotional display (Morris & Feldman, 1996). To bridge the gap between actually experienced emotions and acting according to display rules, employees engage in emotional regulation (Grandey, 2000). Emotional labor is characterized by two main regulatory strategies, surface acting and deep acting (Grandey, 2000; Hochschild, 1983). When engaging in surface acting employees adjust their emotional expressions to align with prescribed organizational display rules without altering inner feelings (Grandey, 2003). In this regard, surface acting is named “faking in bad faith” (Rafaeli & Sutton, 1989). An example of surface acting is putting on a "fake smile" at work (Grandey, 2000). In contrast, engaging in deep acting involves employees adjusting their inner feelings to comply with required display rules (Grandey, 2000). Just as an actor fully empathizes for a stage role to seem authentic, a service employee empathizes to come across authentic to the customer. In this regard, deep acting is named “faking in good faith” (Rafaeli & Sutton, 1989). Researchers have complemented Hochschild’s fundamental discrimination between surface- and deep acting by the third form of emotional regulation, which is automatic regulation (Diefendorff et al., 2005; Martínez-Iñigo et al., 2007; Zapf, 2002). Automatic regulation refers to the state where employees naturally felt emotions are in accordance with emotional display rules (Diefendorff et al, 2005). Automatic regulation involves an authentic display of desired emotion and does not require any action (Martínez-Iñigo et al., 2007).

Emotional labor is a stressor in the workplace that requires resources (Totterdell & Holman, 2003). Both surface and deep acting require the investment of psychological and social resources however, they differentiate in terms of resources invested and perceived benefits (Brotheridge & Lee, 2002; Côte, 2005). The conservation of resources theory showed that surface acting requires a greater investment of resources than deep acting, affecting work-related well-being to a greater extend (Philipp & Schüpbach, 2010). The greater energy

consumed in surface acting compared to deep acting is more related to the loss of cognitive resources. Engaging in surface acting through constantly faking emotional expressions undermines an employee's sense of self-authenticity, thereby decreasing the likelihood that self-authenticity will persevere in future interactions (John & Gross, 2004). This inauthenticity is recognized by interaction partners and may lead to negative feedback, resulting in a less rewarding relationship and increases the stress burden on the employee (Brotheridge & Lee, 2002; Côte, 2005). The negative feedback might be experienced as a negative evaluation of employee's performance resulting in a decrease in their self-efficacy. Engaging in surface acting continuously requires a high level of exertion to suppress negative emotions, which affects the psychological well-being of employees (John & Gross, 2004). Engaging in deep acting consumes resources because it involves energy-consuming effort however, employees could regain resources through displaying authentic expressions to interaction partners. Interaction partners recognize the authentic display and react positively, which generates new positive energy and positively influences well-being (Grandey et al., 2013). Moreover, when engaging in deep acting expressed and felt emotions are equivalent, thereby feelings of authenticity are not affected (Hülshager & Schewe, 2011). Automatic regulation does not consume deliberate resources, it requires a natural effort to display authentic emotions to interaction partners, which leads to positive reactions and gaining positive energy and resources. Engaging in automatic regulation gains resources, which positively affects well-being at work.

A within-person analysis

This study uses a within-person design to examine the effects of emotional labor on emotional exhaustion and work engagement over time. The majority of previous literature on emotional labor has focused on between-person designs. However, research has shown that emotional

labor is very dynamic and fluctuates over time within individuals (Hülsheger et al., 2015; Judge et al., 2005). Moreover, work engagement and emotional exhaustion are recognized as dynamic (Demerouti et al., 2001; Judge et al., 2009). Some studies on emotional labor demonstrated a significant within-person variance (Judge et al., 2009; Totterdell & Holman, 2003). In order to explain the dynamic nature of emotional labor, this study uses a within-person design to record fluctuation within individuals and examine the daily effects of surface-, deep acting, and automatic regulation on daily well-being outcomes.

Effects of emotional labor on well-being

Research has shown that emotional labor has both positive as well as negative outcomes on organizations and employees' well-being (Bono & Vey, 2005; Côté, 2005; Zapf & Holz, 2006). This study focuses on the effects of emotional labor on two specific employee well-being outcomes, emotional exhaustion and work engagement. Hochschild (1983) has described various psychological consequences of emotional labor, including that it can be a stressful process and may result in burnout. Maslach (1982) expressed burnout as a syndrome of emotional and physical exhaustion resulting from exposure to chronic stressors at work (Maslach, 1982). Burnout consists of three primary dimensions: emotional exhaustion, depersonalization, and personal accomplishment (Maslach et al., 2001). Only emotional exhaustion will be discussed in this study, because it is the core dimension of burnout and determined as the state of emotional and physical exhaustion as a result of accumulated stress in personal life, and/or work (Maslach et al., 2001). Emotional exhaustion could result in increased work stressors (demands) such as work pressure, role ambiguity, and role conflict (Demerouti et al., 2001). Employees usually view these requirements as resource losses, because valuable resources must be invested that may not be paid back.

Additionally, this research investigates the positive well-being outcome of work engagement. Emotional labor is positively related to work engagement (Schaufeli et al., 2002; Demerouti et al., 2001). Work engagement is determined as “a positive, fulfilling, work-related state of mind that is identified by vigor, dedication, and absorption” (Schaufeli et al., 2002). Vigor identifies with the effervescence of energy, mental resilience, tirelessness, and perseverance when faced with difficulties. Dedication identifies with a strong feeling of commitment and meaning in job performance. Absorption is identified by being entirely concentrated and absorbed in time and work (Schaufeli & Bakker, 2004). The concept of work engagement has originated from the burnout literature (Schaufeli et al., 2002).

As previously explained in this study, surface acting is featured by the loss of cognitive resources, decline in self-authenticity, less rewarding relationship with interaction partners, decrease of self-efficacy, constantly suppressing negative emotions, and comparing displayed emotions with inner feelings, which all require resources and reduces well-being. It is also strenuous to deal with emotional dissonance because of the contrast between expressed and inner emotions. The job demands-resources model expects that employees are less likely to meet job demands due to a lack of resources, resulting in work disengagement (Demerouti et al., 2001). Surface acting is a conscious controlled strategy that consumes a high level of resources and hence negatively relates to well-being (work engagement) and positively to ill-being (emotional exhaustion) (Bono & Vey, 2005). The meta-analysis on emotional labor has demonstrated a positive relationship between surface acting and emotional exhaustion (Bono & Vey, 2005). Similar research studies also found a positive relation (Grandey, 2003; Judge et al., 2009; Martínez-Iñigo et al., 2007). Research studies supported a negative relation between surface acting and work engagement (Bono & Vey, 2005; Hülshager & Schewe, 2011; Judge et al., 2009). Based on previous studies the following hypotheses are defined.

Hypothesis 1: Daily surface acting is positively related to daily emotional exhaustion.

Hypothesis 2: Daily surface acting is negatively related to daily work engagement.

Although deep acting is an energy-consuming process, it is expected to require less cognitive resources than surface acting (Philipp & Schüpbach, 2010). Once the deep acting regulation is in line with the required emotion, no more energy or resources are needed (John & Gross, 2004). Engaging in deep acting conserves employee's sense of authenticity (Brotheridge & Lee, 2003) and is unrelated to feelings of inauthenticity (Hülshager & Schewe, 2011). Additionally, engaging in deep acting creates a positive mood experience at work and generates rewards from interacting partners, which leads to increased well-being, sense of performance, and identification with the professional role (Brotheridge & Grandey, 2002). Since the processes of resource gain and loss are expected to be equally strong, the effects will cancel out each other, therefore no relationship for deep acting on emotional exhaustion is hypothesized. This is in line with findings of previous studies indicating that there is no significant relationship between deep acting and emotional exhaustion (Brotheridge & Lee, 2002; Grandey, 2003; Totterdell & Holman, 2003). Moreover, research demonstrated contradicting results, they found a significant positive relation (Schreurs et al., 2014) and negative relation (Bono & Vey, 2005) between deep acting and work engagement. Based on the conservation of resource theory, a positive relation between deep acting and work engagement is assumed.

Hypothesis 3: Daily deep acting is positively related to daily work engagement.

Employees engaging in automatic regulation, naturally express their emotions in accordance with prescribed organizational display rules (Diefendorff et al. 2005). This process is

considered effortless and seen as an advantage of truly experiencing positive emotions at work. To date, few empirical studies have investigated the relationship between automatic regulation and emotional exhaustion and work engagement. Martínez-Iñigo and colleagues (2007) showed that automatic regulation is negatively related to emotional exhaustion. Chan and colleagues (2010) predicted that automatic regulation of naturally felt emotions would lead to positive work engagement. The relationship is expected to be stronger than for deep acting (Chan et al, 2010). This study also assumes a negative relationship for emotional exhaustion and a positive relationship for work engagement, because the unconscious strategy of automatic regulation will involve a low level of psychological effort and resources. Secondly, automatic regulation implies displaying authentic positive emotions and will therefore elicit positive responses from interaction partners. Based on previous studies the following hypotheses are defined.

Hypothesis 4: Daily automatic regulation is negatively related to daily emotional exhaustion.

Hypothesis 5: Daily automatic regulation is positively related to daily work engagement.

Authentic leadership

Leadership is an important factor in creating work environments that enhance well-being in the workplace (Kelloway & Day, 2005). Authentic leadership is a rather new and evolving leadership style that has its roots in positive organizational psychology (Avolio, et al., 2009). Authentic leadership is positively related to work outcomes such as follower job satisfaction and performance (Gardner et al., 2005; Wong, 2010). In contrast, authentic leadership is negatively related to burn-out due to high levels of empowerment (Wong et al., 2010). This shows that authentic leadership has a protective effect against burnout by creating a work environment with high empowering conditions. Furthermore, when leaders fail to support

employees, they may struggle to accomplish work goals and become exhausted, leading to diminished well-being (Kelloway & Day, 2005). More importantly, Humphrey (2008) states that authentic leadership might alleviate the damaging effect of emotional labor.

Luthans and Avolio (2003) determined authentic leadership as “a process consisting of both positive psychological capabilities and a highly developed organizational context, which leads to both greater self-awareness and self-regulated positive behavior of leaders and employees, promoting positive self-development” (p.243). The four key components of authentic leadership are self-awareness, internalized moral perspective, balanced processing, and relational transparency (Avolio & Gardner, 2005; Walumbwa et al., 2008). Self-awareness means that leaders have accurate self-knowledge of their strengths and weaknesses and use that knowledge to demonstrate awareness of his/her influence on others. Internalized moral perspective demonstrates the self-regulation of leaders, which is guided by internal moral standards and values rather than by peer, organization, or community pressure (Gardner et al., 2005). Balanced processing identifies to objectively analyzing all relevant information before making a final decision including encouraging others to question or dispute a person's values. Finally, relational transparency is the expose of the authentic true self to others. Trust is promoted because information, thoughts, and feelings are openly and transparently shared (Walumbwa et al., 2008, p. 95).

The moderating role of authentic leadership

To date, there have been rarely studies that examined the effect of authentic leadership on follower's emotional labor and well-being outcomes. Mainly the concepts have been investigated separately, for example, the relation between authentic leadership and well-being outcomes. The study of Luthans & Avolio (2003) mentioned that authentic leadership could

replenish the resources of service employees with new resources and energy to deal with energy-consuming emotional labor. However, the effects of authentic leadership on employee emotional regulation are still unclear. Remarkably, there are almost no studies that investigated this effect, especially because the theoretical model of Humphrey (2008) proposed a moderating role of authentic leadership on emotional labor by creating a greater comfort zone for emotional expressions of followers. There is no empirical evidence that authentic leadership moderates emotional labor. Given the negative effects of emotional labor, it is necessary to identify factors that mitigate negative well-being and stimulate positive well-being. This study builds on Humphrey's model by adding recourses as a construct by which authentic leadership influences employee emotional labor and well-being.

Several underlying reasons rationalize the effect of authentic leadership on emotional labor and well-being, which are aligned with the proposed model of Humphrey (2008). Authentic leaders are aware of their core values; therefore, they are believed to have access to substantial psychological resources. This enables authentic leaders to replenish service employee's resources and deal with energy-consuming emotional labor. Service employees gain psychological resources such as trust, positive emotions, and feelings of hope (Avolio et al., 2004). Furthermore, authentic leaders may also provide social support as a resource to enable employees to better cope with job stressors (Zapf, 2002). The resources could have a positive effect on emotional labor and well-being of followers (Hobfoll, 1989). Surface acting is associated with greater self-control effort and therefore requires a greater investment of resources than deep acting, affecting work-related well-being to a greater extent (Philipp & Schüpbach, 2010). As stated before, surface acting consumes a high level of resources and hence negatively relates to well-being (work engagement) and positively to ill-being (emotional exhaustion) (Bono & Vey, 2005). In contrast, engaging in deep acting results in

gaining resources that compensate for lost resources and hence positively relates to work engagement (Brotheridge & Grandey, 2002). Automatic regulation results in gaining resources and is positively related to work engagement and negatively to emotional exhaustion (Chan et al., 2010; Martínez-Iñigo et al., 2007). When authentic leaders provide sufficient resources the cost of resources for employees to engage in emotional labor is replenished. Employees engaging in deep acting may even gain a resource advantage, which positively influences employee well-being. When the demonstrated level of authentic leadership is low, meaning a low level of resources support is provided, employee's resources to engage in emotional labor are not replenished, which negatively influences employee well-being. A high level of authentic leadership, so providing a sufficient level of resources, which replenishes employee's resources and mitigates the costs to engage in emotional labor, and positively influences well-being. It will be difficult for authentic leaders to fully replenish the high resource cost of employees engaged in surface acting because employees are constantly involved with negative emotions. A Low level of authentic leadership will strongly influence the relation between daily surface acting, whereas a high level of authentic leadership strongly influences deep acting and automatic regulation.

Additionally, a few other factors need to be considered to support the moderating effect of authentic leadership. An important way in which authentic leaders affect their followers is through emotional contagion and positive mood (Avolio & Gardner, 2005). Emotional contagion is an important construct by which authentic leaders influence the emotional state of followers, this happens when employees imitate gestures, vocalizations, and expressions of their leaders. Emotional contagion can be quite vigorous because emotions are spread across the workplace and affect group behaviors (Barsade, 2002). The reactions of authentic leaders to emotional obstacles might inspire followers to reassess a given situation. This makes

employees think more positively and overcomes the progressive harmful effects of emotional labor. Authentic leaders who experience positive emotions through self-awareness and relational orientation will provide followers positive energy to face emotional labor obstacles at work (Gardner et al., 2005). Furthermore, value relevance is a key stimulus of the appraisal process underlying emotional responses (Lazarus, 1991), the perceived benevolence of trusted leaders is expected to improve the ability of employees to ignore negative emotions and to experience positive emotions while changing emotional expressions. Employees who change the way of thinking about negative experiences gain higher levels of well-being than employees who only change emotional expressions (John & Gross, 2004). This is consistent with Humphrey's proposed model, which argues that followers of authentic leaders experience more positive emotions after stressors at work than followers of inauthentic leaders (Humphrey, 2008).

Furthermore, in order to use emotional contagion to influence followers, authentic leaders must perform emotional labor themselves to let followers feel expressed emotions. Authentic leaders are determined to uphold values, norms, and beliefs. It might be challenging for a leader to engage in emotional labor, uphold beliefs, and being authentic to followers (Avolio et al., 2004). Therefore, authentic leaders are advised to engage in deep acting or automatic regulation to show true authentic expressions. However, leading with emotional labor is beyond the scope of this research.

Finally, authentic leaders foster an environment of relational transparency, trust, and sharing of information, which encourages followers to speak openly about emotions (Luthans and Avolio, 2003). Sharing emotional experiences assists followers deal with stress more effectively and knowing that you are not alone contributes to releasing tension (Vince & Broussine, 1996). Sharing emotions between leaders and employees, as well as among employees, is a healing process (Miller & Stiver, 1997). This supports Humphrey's argument,

by sharing emotional experiences, followers of authentic leader's better cope with difficult situations and also recover more quickly from negative experiences. These reasons propose that authentic leaders reduce employee's loss of emotional labor resources by providing psychological and social resources, positive emotional contagion, and stimulating a transparent environment. Based on previous research the following hypotheses are defined.

Hypothesis 6: Authentic leadership moderates the positive relationship between daily surface acting and daily emotional exhaustion. The relationship will be weaker for high levels of authentic leadership compared to low levels of authentic leadership.

Hypothesis 7: Authentic leadership moderates the negative relationship between daily automatic regulation and daily emotional exhaustion. The relationship will be stronger for high levels of authentic leadership compared to low levels of authentic leadership.

Hypothesis 8: Authentic leadership moderates the negative relationship between daily surface acting and daily work engagement. The relationship will be weaker for high levels of authentic leadership compared to low levels of authentic leadership.

Hypothesis 9: Authentic leadership moderates the positive relationship between daily deep acting and daily work engagement. The relationship will be stronger for high levels of authentic leadership compared to low levels of authentic leadership.

Hypothesis 10: Authentic leadership moderates the positive relationship between daily automatic regulation and daily work engagement. The relationship will be stronger for high levels of authentic leadership compared to low levels of authentic leadership.

Conceptual Model

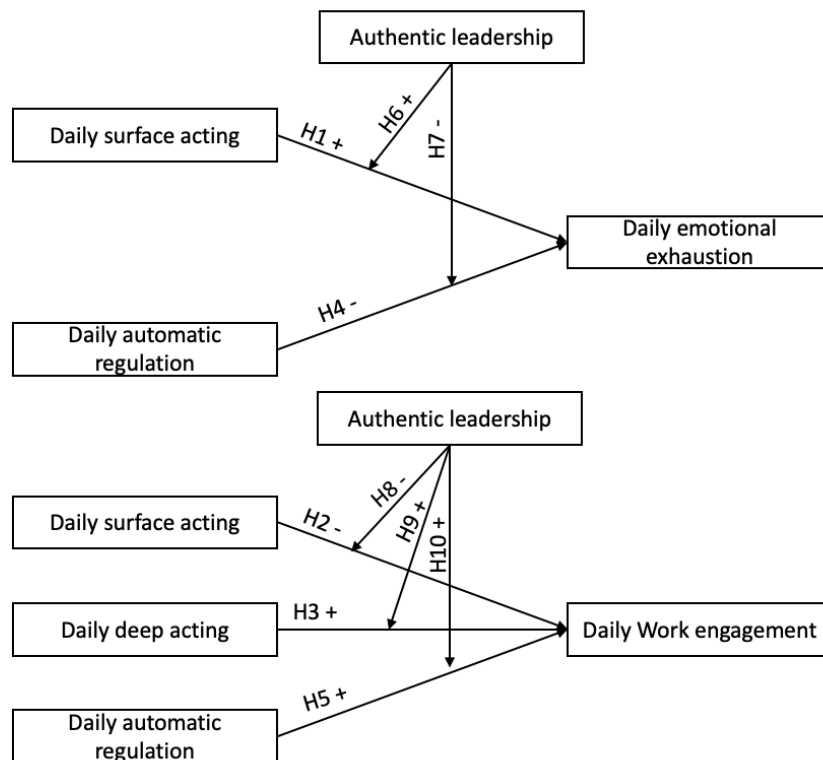


Figure 1. Shows an integrated model demonstrating how the hypotheses relate to each other.

Method

Context

This study aims to evaluate the moderating effect of authentic leadership on the relationship between emotional labor and well-being outcomes (work engagement and emotional exhaustion). This research is a longitudinal study meaning the data was gathered from the same individuals over an extended period of time. Out of the data, a multilevel analysis was performed. The data was collected by a general questionnaire and 14 daily questionnaires. The questionnaires were available in three languages; English, Dutch, and Italian. The general questionnaire was a one-time asked survey and measured for this study the demographics and the moderating variable authentic leadership. This study uses a within-person design, therefore the daily questionnaires measured daily emotional labor and daily well-being. Participants were

informed about the intensive longitudinal nature of the study and that the data was collected and stored anonymously. Participants were asked to sign the declaration of consent for participating in the study “emotions at the workplace”. Participation was voluntary and participants could withdraw from the study at any time with no penalty.

Procedure & Sample

To start with, data was mainly collected from a large car dealership and hotels in the Netherlands that were approached for this research. Secondly, the personal network of friends and families, who are employed in different countries, were asked to take part in this study. The target participants of this study included individual employees operating in the service industry, who are interacting with people while performing the service job. All data was collected using Qualtrics survey software. Participants received an e-mail invitation with a link to the questionnaires on Qualtrics. Additionally, the email provided information regarding the purpose of the study, instructions on how to complete the survey, and the estimated time to complete the general questionnaire (15min) and the daily questionnaire (5min). The invitation e-mail of the general questionnaire was sent first, seven days after completion of the general questionnaire, the daily questionnaires were sent out for 14 days, participants were asked to only fill out the daily survey on working days. The study period of the daily questionnaire was two weeks, as this gives a generalizable sample of the lives of individuals. When an invitee did not complete the daily questionnaire at the end of the day (23:59h), the daily questionnaire expired. At the beginning of every questionnaire, respondents were asked to enter an anonymous personal ID, consisting of the first letter of the respondent’s father’s first name, the birth month of their father, the first letter of their mother’s first name, and the birth month of the respondent’s mother. The anonymous personal ID was requested to match the outcomes of the daily questionnaire to the general questionnaire.

Out of the 86 initial responses for the general questionnaire, 85 respondents remained in the data analysis. The respondent that did not fill out a personal ID and only answered the introductory question was removed. The questionnaire was available in three languages, most respondents completed the survey in Dutch (90.6%), followed by English (4.7%) and Italian (4.7%). Out of the 85 responses, 59.8% were men and 40.2% women, showing a higher number of male participants, which might be due to the questionnaire sent out in the automotive industry. The youngest respondent was 18 and the oldest 64 years old. The average age of respondents was 39.71 years ($SD=14.02$). The level of education showed for lower secondary education (0%), upper secondary education (4.9%), post-secondary non-tertiary education (4.7%), short-cycle tertiary education (40.2%), bachelor's degree (32.9%), master's degree (15.9%), and doctor's degree (1.2%). In terms of working days of the week, most people work between Monday and Friday (83.1%). The descriptive results showed 46 different types of occupations, the most common occupation for this survey was in particular (hotel) receptionist (21.2% = 18 respondents). As part of the service job, the respondents interact with the following persons: customers (32.3%), clients (15.8%), guests (35.3%), patients (1.5%), scholars (0.8%), children (3.8%), students (9%), and other (1.5%). The average tenure of the respondent's profession was 8 years ($SD=9.41$). The average tenure at the respondent's current employer was 7 years ($SD=8.82$). In terms of working hours, the average respondents worked 33 hours ($SD=13.66$). Finally, respondents answered the question if they interact with the regular/same customer to never (1.2%), seldom (15.9%), sometimes (34.1%), often (37.8%), and almost always (11%).

Measures

Authentic leadership. Authentic leadership was measured by the 16-item Authentic Leadership Questionnaire (ALQ) of Walumbwa et al. (2008). The ALQ measured four dimensions of authentic leadership: relational transparency (five items), internalized moral perspective (four items), balanced processing (three items), and self-awareness (four items). A sample item is, “Displays emotions exactly in line with feelings” (relational transparency). Responses were scored on a five-point Likert-scale ranging from 1 (*not at all*) to 5 (*frequently, if not always*). Cronbach’s alpha was .82

Surface acting. Surface acting was measured in the 14-daily questionnaires by the 3 items of Brotheridge and Lee’s (2003) Emotional Labor Survey. Responses were based on a five-point Likert scale ranging from 1 (*never*) to 5 (*always*). When answering the surface acting statements, respondents were asked to think about interactions with partners that they experienced that day. A sample item of surface acting scale is “Today, I resisted expressing my true feelings”. Cronbach alpha’s across the fourteen days ranged from .77 to .98 ($M = .91$).

Deep Acting. Deep acting was measured in the 14-daily questionnaires by the 3 items of Brotheridge and Lee’s (2003) Emotional Labor Survey. Responses were based on a five-point Likert scale ranging from 1 (*never*) to 5 (*always*). When answering the deep acting statements, respondents were asked to think about interactions with partners that they experienced that day. A sample item of the deep acting scale is “Today, I really tried to feel the emotions that I have to show as part of my job.”. Cronbach alpha’s across the fourteen days ranged from .62 to .91 ($M = .81$).

Automatic Regulation. Automatic regulation was measured in the 14-daily questionnaires using 3 items from the automatic regulation scale of Martínez-Iñigo et al. (2007). Responses were based on a five-point Likert scale ranging from 1 (*never*) to 5 (*always*). When answering the automatic regulation statements, respondents were asked to think about interactions with partners that they experienced that day. A sample item of the automatic regulation scale is “Today, my emotions automatically met job requirements”. Cronbach alpha’s across the fourteen days ranged from .78 to .98 ($M = .91$).

Emotional exhaustion. Daily emotional exhaustion was measured using 2 items of the unipolar rating scale (Totterdell & Holman, 2003). The two items asked the extent to which respondents “felt emotionally drained” and “felt emotionally numb.” Feeling emotionally drained is part of Maslach & Jackson’s (1986) burnout measure. Feeling emotionally numb was included because it is similar to Hochschild’s (1983) concept of emotional estrangement. The measure uses a 5-point Likert scale from 1(*not at all*) to 5 (*extremely*). Cronbach alpha’s across the 14 days ranged from .53 to .96 ($M = .84$).

Work engagement. Daily work engagement was measured by 8 items from the Utrecht Work Engagement Scale (UWES) (Schaufeli & Bakker, 2004). Work engagement consists of 3 subscales: Vigor, Dedication, and Absorption. Dedication and Absorption are both measured by 3 items and Vigor by 2 items. Items were adapted so that daily changes could be measured. An example item is “Today, I was enthusiastic about my job.” The measure used a 5-point Likert scale from 1(*never*) to 5 (*always*). Cronbach alpha’s across the 14 days ranged from .78 to .99 ($M = .92$).

Analytical Strategy

Data were obtained at two levels. Each participant provided data at the general level (between-person level) containing the measure of authentic leadership and at the daily level (within-person level) containing the measures of surface acting, deep acting, automatic regulation, emotional exhaustion, and work engagement. Daily level measures (level 1) were nested within persons on a general level (level 2) since data of individuals was collected for fourteen days.

Given the hierarchical nature of the data set, a multilevel analysis was used, because there were fourteen-day points nested in each participant. This study used R software version 1.3.1093 to perform a multilevel analysis. To test the hypotheses, multiple steps were needed. Firstly, the data were aggregated to obtain summary statistics for each individual. Secondly, the daily level variables (surface acting, deep acting, and automatic regulation) were centered around the group mean and the moderator variable (authentic leadership) was centered around the grand mean. The intraclass correlation coefficient Type I (ICC-1) (Bliese, 2000) is examined for the within-person level variables (independent and dependent variables). This study will report the 1-ICC1, which shows how much variation is not explained by the person and interpret the daily variations. Table 1 shows the % within-person variation.

This study used a hierarchical linear modeling approach, the models are built up to each other with different predictors to identify the best fitting statistical model, the final model is the interaction model. In order to test the hypothesized interaction effects, the variables were entered in five steps. The first model, the intercept-only model (null-model that contains no explanatory variables) was performed for the dependent and also the independent variables, because it provides information about the variance within persons. ANOVA function has been performed to compare if the null model fits significantly better than the GLS model. The L.Ratio for both emotional exhaustion (90.60) and work engagement (94.15) showed a significant $p\text{-value} < 0.001$, therefore it can be concluded that the Null model (the more

complex random intercept model) fits the empirical data significantly better than the GLS model (fixed intercept). The second step involved model 1, in which the variable time was added (model 1a) to account for a fixed slope in the dependent variables work engagement and emotional exhaustion. Additionally, the model with a random slope (model 1b) was tested, which allowed the slope of time to vary across individuals. The two models (Model 1a and Model 1b) were compared by the ANOVA function. The log-likelihood results of both the dependent variables (emotional exhaustion and work engagement) did not show a significant $p > 0.05$, which indicates no significant slope variation. However, the LogLik showed a better value for both variables for the random slope model, therefore Model 1b has been chosen for this analysis. In the third step, model 2, the independent variables (surface acting, deep acting, and automatic regulation) were added. Fourthly, model 3 adds the main effect of the moderating variable authentic leadership and uses time and the independent variables as predictors. Finally, in model 4 the interaction terms, surface acting x authentic leadership, deep acting x authentic leadership, and automatic regulation x authentic leadership were added. The improvement of each model over the previous one was indicated using the differences between the log-likelihood ratios.

Results

Variability of daily-level measures over time

Before the hypotheses are tested, there must be support to perform a multilevel analysis. The relative amount of between- and within-person variance are estimated by the intraclass coefficients. The within-person and between-person variation of the daily measures are estimated by the null model for IV & DV variables (intercept-only model). The within-person variance indicates how variation is explained by the person. How much variation is not explained by the person to know the daily variations is shown by (1-ICC). The results of the within-person variance and daily variations are presented in table 1, 67% of the variance in surface acting can be attributed to within-person variation, 56% for deep acting, and 39% for automatic regulation. Additionally, 56% of the variance in emotional exhaustion and 54% of the variance in work engagement were attributed to within-person variation. These findings present a considerable fluctuation, which supports the use of multilevel analysis. Furthermore, table 1 shows the means, standard deviations, and correlations of all studied variables.

Table 1. Means, Standard Deviations, % Within, 1-ICC%, and correlations of study variables

Variable	M	SD	%Within	1-ICC %	Correlations				
					1	2	3	4	5
Level-1 variable									
1. Surface Acting	2.31	1.10	67%	33%					
2. Deep acting	3.29	1.11	56%	44%	0.35**				
3. Automatic regulation	3.60	0.98	39%	61%	-0.62**	-0.05			
4. Emotional exhaustion	2.04	0.84	56%	44%	0.64**	0.06	-0.70**		
5. Work engagement	3.52	1.29	54%	46%	-0.70**	-0.02	0.73**	-0.74**	
Level-2 variable									
6. Authentic leadership	3.66	0.44			0.05	0.02	-0.06	0.18**	-0.05

*p < .05 (two-tailed). ** p < .01 (two-tailed)

Note. Correlations were computed between individuals, using each participant's mean scores for the level-1 variables

As shown, surface acting is positively correlated with emotional exhaustion. As expected, automatic regulation is negatively correlated with emotional exhaustion. Furthermore, surface acting and deep acting are negatively correlated with work engagement and automatic regulation is positively correlated with work engagement. In the following sections, the results of the hierarchical linear modeling are described.

Testing hypotheses

Table 2 shows the model fit information ($\Delta - 2 \times \text{Log}$ and $-2 \times \text{LogLik}$) and estimates for the fixed parameters and the variance components related to emotional exhaustion. For both variables, daily emotional exhaustion and daily work engagement the random intercept, random slope model (Model 1b) was chosen as the fit improved over the fixed slope model. The LogLik showed a better fit for both emotional exhaustion (LogLik = -350.62) and work engagement (LogLik = -246.94) for the random slope model, therefore Model 1b has been chosen for this analysis. Model 1, which included time as a predictor was compared to the null model (intercept-only model). The null model seems to indicate a slightly better fit than Model 1 since the LogLik is less for the null model. The statistical results show the difference between Model 1b and the null model ($\Delta - 2 \times \text{Log} = 1.72$, LogLik = 701.23, df = 6).

In Model 2, the independent variables surface acting, deep acting, and automatic regulations were added to test for differences between individuals in emotional exhaustion. Hypotheses 1 and 4 were tested in Model 2. Table 2 shows that surface acting ($B = 0.17$, $p = 0.07$) and deep acting ($B = -0.09$, $p = 0.19$) have a non-significant effect on emotional exhaustion, not supporting hypothesis 1. Furthermore, automatic regulation was found to have a significant and negative effect on emotional exhaustion ($t = -0.63$, $p < 0.001$), this supports hypothesis 4. Model 2 showed further improvements compared to Model 1 ($\Delta - 2 \times \text{Log} = 0.002$, LogLik = 607.10, df = 9).

In Model 3, the main effect of authentic leadership is added. Authentic leadership is not significantly related to emotional exhaustion ($p\text{-value} = 0.45$). Model 3 showed further improvement over Model 2 ($\Delta - 2 \times \text{Log} = 0.0032$, $\text{LogLik} = 576.71$, $df = 10$).

Model 4 examined the moderating effect in which the interaction term between deep acting, surface acting, automatic regulation, and authentic leadership were added (hypothesis 6 & 7). Hypothesis 6 predicted that authentic leadership moderates the positive relationship between daily surface acting and daily emotional exhaustion. The relationship will be weaker for high levels of authentic leadership compared to low levels of authentic leadership. Table 2 shows that the interaction between surface acting and emotional exhaustion was non-significant ($B = -0.28$, $p = 0.23$), not supporting hypothesis 6. As previously stated, there is no relationship between deep acting and emotional exhaustion hypothesized, therefore also no moderator effect of authentic leadership is expected. Model 4 shows that the interaction between deep acting and emotional exhaustion is non-significant ($B = 0.26$, $p = 0.06$). Hypothesis 7 states that authentic leadership moderates the negative relationship between daily automatic regulation and daily emotional exhaustion. The relationship will be stronger for high levels of authentic leadership compared to low levels of authentic leadership. Table 2 shows that the interaction between automatic regulation and emotional exhaustion is non-significant ($B = 0.05$, $p = 0.75$), hypothesis 7 is not supported. Interactions were plotted at three levels of authentic leadership (high, average, low) and simple slope tests were executed to investigate the nature of the relationship. Figures 2, 3, and 4 show the graphical effect of authentic leadership on emotional labor and emotional exhaustion. Model 4 was found to be slightly better than Model 3 ($\Delta - 2 \times \text{Log} = 0.0029$, $\text{LogLik} = 571.05$ $df = 13$).

Figure 2 shows that the slope test of surface acting is more positively related to emotional exhaustion when experiencing a low level of authentic leadership ($b = 0.3$) compared to a high level of authentic leadership ($b = 0.10$). The slope test shows deep acting is more negatively

related to emotional exhaustion when experiencing a low level of authentic leadership ($b = -0.22$) versus a high level of authentic leadership ($b = -0.04$). The interaction slope shows automatic regulation is slightly more negatively related to emotional exhaustion when experiencing a low level of authentic leadership ($b = -0.68$) compared to a high-level authentic leadership ($b = -0.64$).

Table 3 shows the model fit information ($\Delta - 2 \times \text{Log}$ and $-2 \times \text{LogLik}$) and estimates for the fixed parameters and the variance components related to work engagement. Model 1 was compared to the null model (intercept-only model) for work engagement. The statistical results show the difference between Model 1b and null model ($\Delta - 2 \times \text{Log} = 3.38$, $\text{LogLik} = 493.89$, $df = 6$).

In Model 2, the independent emotional labor variables were added to test for differences between individuals in work engagement. Hypothesis 2 stated that surface acting will be negatively related to work engagement. Hypothesis 3 stated that deep acting will be positively related to work engagement. Hypothesis 5 stated that automatic regulation will be positively related to work engagement. Table 3, Model 2 showed that surface acting was significantly negatively related to work engagement ($B = -0.19$, $p = 0.002$), supporting hypothesis 2. Deep acting was significantly positively related to work engagement ($B = 0.14$, $p = 0.003$), supporting hypothesis 3. Automatic regulation was significantly positively related to work engagement ($B = 0.37$, $p < 0.001$), supporting hypothesis 5. Model 2 showed further improvements compared to Model 1 ($\Delta - 2 \times \text{Log} = 1.65$, $\text{LogLik} = 389.53$, $df = 9$).

In Model 3, the main effect of authentic leadership is added. Authentic leadership is not significantly related to work engagement ($B = -0.07$, $p\text{-value} = 0.73$). Model 3 showed further improvement over Model 2 ($\Delta - 2 \times \text{Log} = 1.73$, $\text{LogLik} = 379.88$, $df = 10$).

Model 4 investigated the interaction term between deep acting, surface acting, automatic regulation, and authentic leadership (hypothesis 8, 9, 10). Hypothesis 8 predicted

that authentic leadership moderates the negative relationship between daily surface acting and daily work engagement. The relationship will be weaker for high levels of authentic leadership compared to low levels of authentic leadership. Table 2 shows that the interaction between surface acting and work engagement was non-significant ($B = -0.23$, $p = 0.15$), not supporting hypothesis 8. Hypothesis 9 states that authentic leadership moderates the positive relationship between daily deep acting and daily work engagement. The relationship will be stronger for high levels of authentic leadership compared to low levels of authentic leadership. Model 4 shows that the interaction between deep acting and work engagement is non-significant ($B = -0.08$, $p = 0.38$), hypothesis 9 is not supported. Hypothesis 10 indicates that authentic leadership moderates the positive relationship between daily automatic regulation and daily work engagement. The relationship will be stronger for high levels of authentic leadership compared to low levels of authentic leadership. Table 2 shows that the interaction between automatic regulation and work engagement is non-significant ($B = -0.05$, $p = 0.68$), hypothesis 10 is not supported. Again, the interactions were plotted at three levels of authentic leadership ($-1SD$, 0 , $+1SD$) and simple slope tests were executed to investigate the nature of the relationship. Figures 5, 6, and 7 show the graphical effect of authentic leadership on emotional labor and work engagement. Model 4 was found to be slightly better than Model 3 ($\Delta - 2 \times \text{Log} = 0.52$, $\text{LogLik} = 377.24$ $df = 13$).

The interaction plot shows surface acting is more negatively related to work engagement when experiencing a high level of authentic leadership ($b = -0.23$) versus a low level of authentic leadership ($b = -0.06$). The slope tests show deep acting is more positively related to work engagement when experiencing a low level of authentic leadership ($b = 0.17$) versus a high level of authentic leadership ($b = 0.12$). The plot shows automatic regulation is slightly more positively related to work engagement when experiencing a low level of authentic leadership ($b = 0.39$) compared to a high level of authentic leadership ($b = 0.36$).

Table 2. Fixed-Effects Estimates (Top) and Variance-Covariance Estimates (Bottom) for Models Predicting Emotional Exhaustion

Parameters	Null Model		Model 1		Model 2		Model 3		Model 4	
Fixed effects										
Intercept	1.20	(0.00)	1.93**	(0.00)	2.01**	(0.00)	2.01**	(0.00)	2.02**	(0.00)
Time			0.03	(0.32)	-0.01	(0.71)	-0.01	(0.51)	-0.01	(0.48)
D_SurfActi					0.17	(0.07)	0.14	(0.14)	0.20	(0.06)
D_DeepActi					-0.09	(0.19)	-0.09	(0.22)	-0.13	(0.07)
D_Autoemo					-0.63**	(0.00)	-0.65**	(0.00)	-0.66**	(0.00)
ALQ_AU							0.26	(0.45)	0.26	(0.45)
D_SurfActi:ALQ_AU									-0.28	(0.23)
D_DeepActi:ALQ_AU									0.26	(0.06)
D_AutoEmo:ALQ_AU									0.05	(0.75)
Random parameters										
Level 2										
Intercept/intercept	0.96		0.77		1.04		1.06		1.06	
Time			0.003		1.36e-06		5.26e-06		8.89e-06	
Level 1										
Intercept/intercept	0.73		0.72		0.44		0.42		0.41	
-2 x log likelihood (df)	698.25	(df=3)	701.23	(df=6)	607.10	(df=9)	576.71	(df=10)	571.05	(df=13)
Δ -2 X Log			1.72	(0.42)	0.002	(0.99)	0.0032	(0.99)	0.0029	(0.99)

Note. Standard errors are in parentheses.

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

Table 3. Fixed-Effects Estimates (Top) and Variance-Covariance Estimates (Bottom) for Models Predicting work engagement

Parameters	Null Model		Model 1		Model 2		Model 3		Model 4	
Fixed effects										
Intercept	3.48**	(0.00)	3.57**	(0.00)	3.49**	(0.00)	3.50**	(0.00)	3.50**	(0.00)
Time			-0.04*	(0.03)	-0.01	(0.56)	-0.01	(0.63)	-0.009	(0.53)
D_SurfActi					-0.19**	(0.002)	-0.19**	(0.003)	-0.15*	(0.03)
D_DeepActi					0.14**	(0.003)	0.14**	(0.004)	0.14**	(0.005)
D_Autoemo					0.37**	(0.00)	0.37**	(0.00)	0.38**	(0.00)
ALQ_AU							-0.07	(0.73)	-0.05	(0.80)
D_SurfActi:ALQ_AU									-0.23	(0.15)
D_DeepActi:ALQ_AU									-0.08	(0.38)
D_AutoEmo:ALQ_AU									-0.05	(0.68)
Random parameters										
Level 2										
Intercept/intercept	0.35		0.26		0.39		0.40		0.39	
Time			0.002		0.001		0.002		9.37e-4	
Level 1										
Intercept/intercept	0.31		0.1		0.17		0.17		0.18	
-2 x log likelihood (df)	493.72	(df=3)	493.89	(df=6)	389.53	(df=9)	379.88	(df=10)	377.24	(df=13)
Δ -2 X Log			3.38	(0.18)	1.65	(0.44)	1.73	(0.42)	0.52	(0.77)

Note. Standard errors are in parentheses.

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

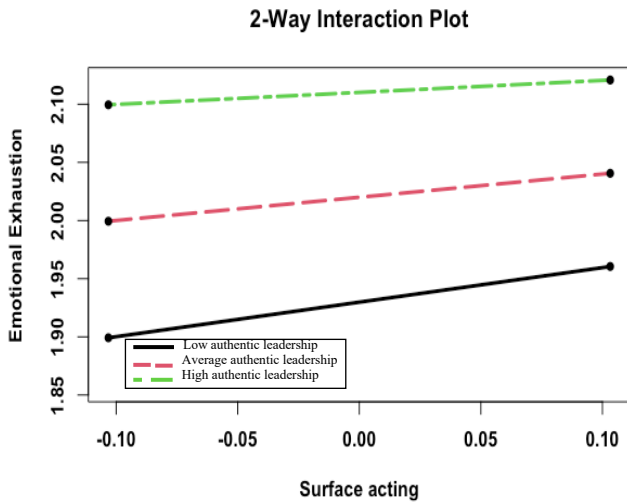


Figure 2. Authentic leadership effect on emotional exhaustion and surface acting

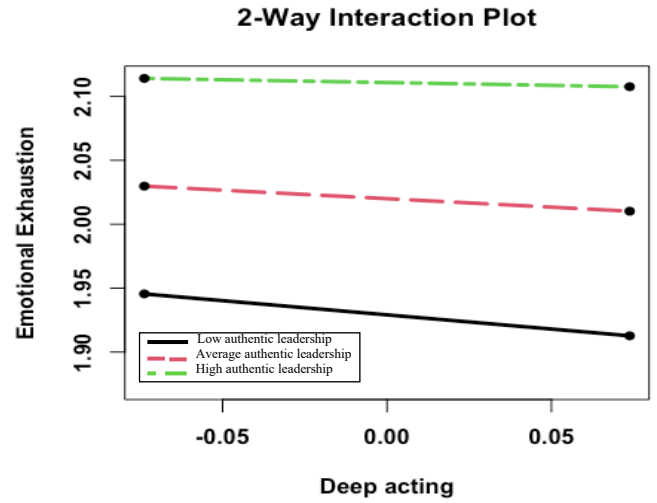


Figure 3. Authentic leadership effect on emotional exhaustion and deep acting

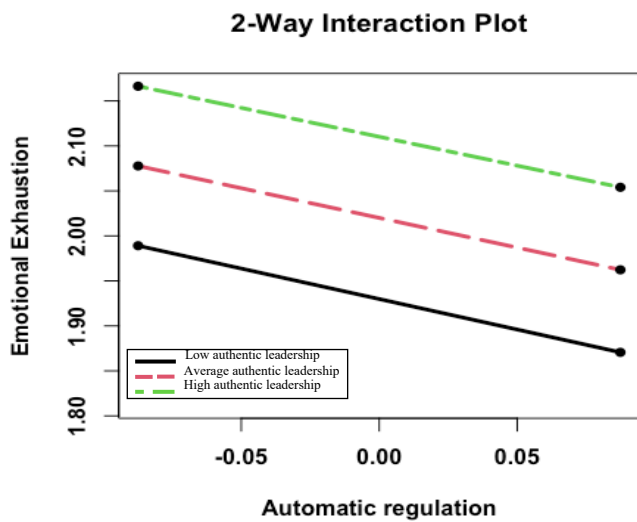


Figure 4. Authentic leadership effect on emotional Exhaustion and automatic regulation

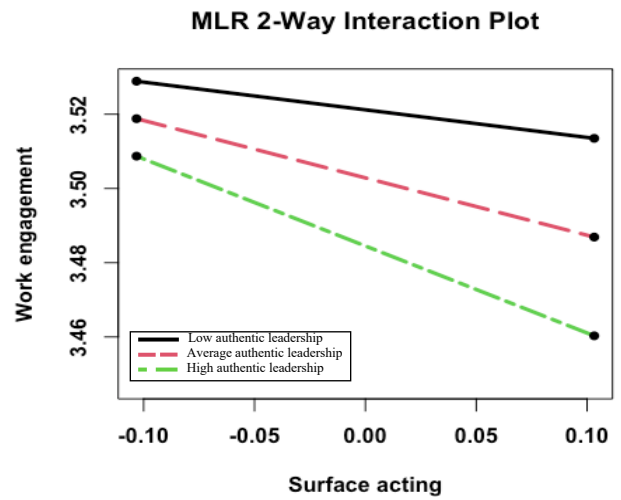


Figure 5. Authentic leadership effect on work engagement and surface acting

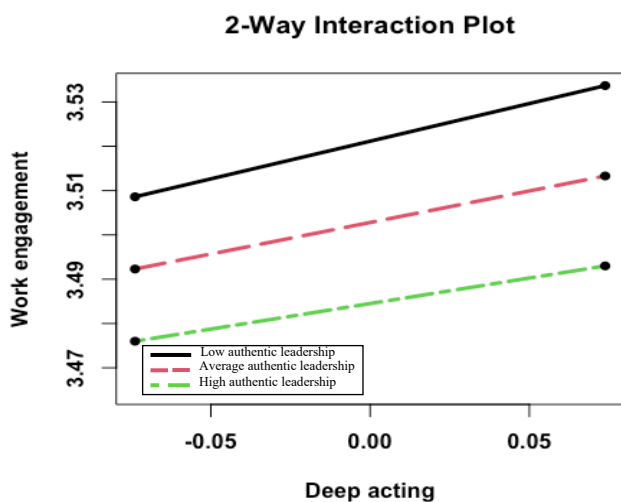


Figure 6. Authentic leadership effect on Work engagement and deep acting

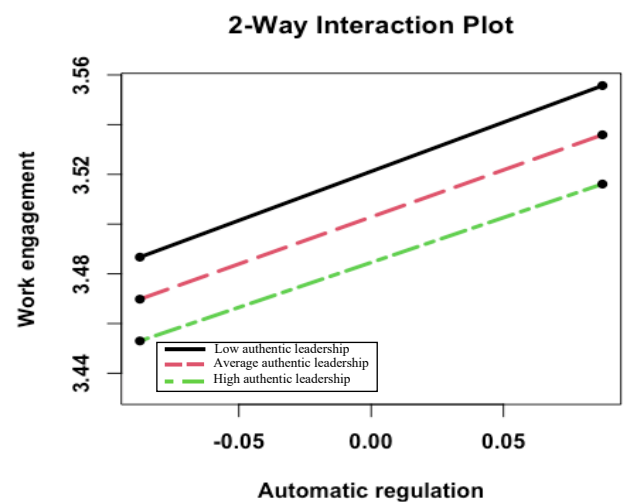


Figure 7. Authentic leadership effect on work engagement and automatic regulation

Discussion

The goal of this study was to research the daily within-person effects of emotional labor (surface acting, deep acting, and automatic regulation) on emotional exhaustion and work engagement. Furthermore, the research examined the moderating effect of authentic leadership on the relationships between emotional labor and employee well-being. The results showed a positive relationship between deep acting and work engagement, and between automatic regulation and work engagement. A negative relationship was found between automatic regulation and emotional exhaustion, and between surface acting and work engagement. Authentic leadership has not shown a moderating effect on the relationship between any of the emotional labor strategies and emotional exhaustion and work engagement.

The results did not support the expected positive relationship between surface acting and emotional exhaustion, the results showed a non-significant relationship. This outcome is not in line with the majority of previous studies that found a positive relationship between surface acting and emotional exhaustion (Brotheridge & Grandey, 2002; Brotheridge & Lee, 2003). In contrast, Tepeci & Pala (2016) concluded that there was no relation between surface acting and emotional exhaustion. Surface acting is associated with negative emotions, a possible explanation for no relationship is that employees have not experienced negative emotions and therefore not felt emotionally exhausted (Tepeci & Pala, 2016). As expected, the results showed a negative relationship between surface acting and work engagement. Indicating that employees feel less engaged in their work during days they engage in surface acting. This finding corresponds to most studies that investigated the relationship between surface acting and work engagement (Bono & Vey, 2005; Hülshager & Schewe, 2011; Judge et al., 2009).

There was no relationship found for deep acting on emotional exhaustion, which was also confirmed by previous research (Grandey, 2003; Totterdell & Holman, 2003). An explanation for no relationship could be that inner resources were recharged through positive

customer contact (Chou et al., 2012). In this case, it might be that authentic engagement is well-recognized and rewarded, thereby leading to resource gains and decreasing emotional exhaustion. The contradictory relation between lost and gained resources in deep acting might be influenced by moderators such as self-monitoring, and extraversion (Judge et al., 2009; Schreurs et al., 2014). However, these studies did not show a significant relationship between deep acting and emotional exhaustion, there is a chance that an indefinite moderator is responsible that increases resource gains. Furthermore, the predicted positive relationship between deep acting and work engagement was confirmed by the results. This outcome is in line with previous research that found a significant positive relation between deep acting and work engagement (Schreurs et al., 2014). Deep acting withholds negative emotions as inner feelings are aligned with required positive emotions. The employee strives to behave authentically, this increases perceived well-being (Hochschild, 1983)

The predicted negative relationship between automatic regulation and emotional exhaustion was also confirmed by the results. This indicates that employees who engaged in automatic regulation at work feel less emotionally exhausted (Diefendorff et al., 2005). As expected, it can be confirmed that the relationship between automatic regulation and emotional exhaustion is stronger than for deep acting (Chan et al., 2010). Furthermore, as expected the results showed a positive relationship between automatic regulation and work engagement. Indicating that employees engage in automatic regulation is related to increased work engagement. This research finding is confirmed in a few studies that research the relationship between automatic regulation and work engagement (Martínez-Iñigo et al., 2007).

This research is the first attempt to investigate the moderating effect of authentic leadership on emotional labor (specifically on three regulation strategies) and emotional exhaustion, and work engagement. Contrary to expectations, the moderating role of authentic leadership on the

relationships was found to be non-significant. The research showed a negative tendency between authentic leadership and emotional exhaustion and a positive tendency between authentic leadership and work engagement. This is corresponding with previous research showing that authentic leadership is related to greater employee work engagement (Wong et al., 2010), and related to lower levels of burnout and higher job satisfaction (Schaufeli & Bakker, 2004).

There are several reasons that authentic leadership does not influence the relationship between emotional labor and well-being. Firstly, authentic leaders have a positive attitude, which creates a positive atmosphere within the team or organization. Researchers characterize this phenomenon as "emotional contagion" (Avolio & Gardner, 2005). If authentic leaders want to direct their followers into positive emotional states and improve their performance, an environment of emotional resonance must be created for emotional contagion to take effect (Goleman et al., 2002). Authentic leaders share self-awareness, act in accordance with their true self, and value openness, thereby gaining a high level of trust, a positive mood effect, and respect among followers. This leadership process leads followers to adopt the values of leaders (Avolio & Gardner, 2005). This study does not specifically look into the effect of emotional contagion. Employees who experience a low level of emotional contagion may not be able to take full advantage of an authentic leader. Building a relationship of trust takes time and varies from individuals. This might explain why this research could not show a significant moderating relationship of authentic leadership due to a low intensity of emotional contagion.

Research has suggested that a high-quality leader-follower relationship promotes open communication, strong value congruence, and minimal power distance (Ilies, et al., 2005). These outcomes suggest that followers of authentic leaders are more likely to share comparable values and therefore behave more authentically by collaborating with their leader. However, followers engaging in surface acting experience lower levels of authenticity and might

experience a higher level of burn-out, than authentic leaders. In this case, no value congruence has been established. Additionally, value congruence is relevant for building an authentic-leader follower relationship, if this cannot be met, there is no environment created for emotional contagion. Moreover, there might be a situation that followers do not trust an authentic leader. This might be due to a lack of courage, company politics, reputation issues, or communications are not transparent (Ilies et al., 2005). Another reason might be that followers feel accountable for factors that went wrong within the organization because of inauthentic leaders seeking self-glory, at the expense of others, and do not feel accountable for actions of followers (Mansfield, 2012). The described factors might influence the follower trust relationship and have a negative effect on emotional contagion.

Although no significant outcomes were found for authentic leadership, the results will be briefly discussed. Authentic leadership positively influenced the relationship between surface acting and emotional exhaustion. Low authentic leadership had a stronger influence than high authentic leadership. Though not significant, the relationship would support hypothesis 6. A possible reason might be that leaders who express a high level of authentic leadership increase the control over employees, and employees might feel controlled to engage in emotional labor. This might increase irritation and worsen emotional exhaustion. In this study employees experienced a lower level of authentic leadership, felt less controlled, received less pressure to engage in emotional labor, which might mitigate emotional exhaustion, which explains why the effect of low authentic leadership was stronger. Authentic leadership negatively influenced the relationship between deep acting and emotional exhaustion. Low authentic leadership had a stronger influence than high authentic leadership. A possible reason might be that followers felt a high level of value congruence, due to their authenticity, and benefit from a low level of authentic leadership to be their true self. Leaders who show a high level of authentic leadership

might increase their control over employees, increasing irritation, which explains why the effect of low authentic leadership is stronger. Authentic leadership negatively influenced the relationship between automatic regulation and emotional exhaustion. In contrast to the hypothesis 7, low authentic leadership had a stronger influence than high authentic leadership. A possible reason might be that employees who engage in automatic regulation already gain resources for being authentic to interaction partners. They might not feel the need for authentic leadership to engage in emotional labor.

Authentic leadership negatively influenced the relationship between surface acting and work engagement. In contrast to the proposed hypothesis 8, a high level of authentic leadership had a stronger influence than a low level of authentic leadership. The explanation that a low level of authentic leadership had a stronger effect might be that employees feel controlled or monitored by the tendency of authentic leaders to engage in emotional regulation. This could increase the level of irritation and thereby reduce work engagement. Authentic leadership positively influenced the relationship between deep acting and work engagement. A low level of authentic leadership had a stronger effect than a high level of authentic leadership. Employees that gain a high level of resources due to a high level of authentic leadership will experience that lost resources were recharged however, they will feel highly controlled and negatively experience work engagement. When employees experience a low level of authentic leadership, they have more freedom to behave authentically and engage in deep acting without being controlled. Authentic leadership positively influenced the relationship between automatic regulation and work engagement. Again, the perceived low level of authentic leadership showed a stronger effect than a high level of authentic leadership. For the same reason as explained before, a low level of leadership control positively influences employee

well-being. Employees that engage in automatic regulation already gain resources that positively influences well-being.

Limitations & suggestion for further research

There are several limitations to the current research study. First, the data was gathered through self-report measures. Individual's self-reflection of their own emotions or personality traits may not always be accurate. Self-report data is subject to biases, such as desirable responses, which can distort data and may lead to misinterpreted relationships (Type I error) (Nunnally & Bernstein, 1994). However, by centering person means variables, the deviation has become smaller (Scott & Barnes, 2011). In addition, the bias is reduced by using online anonymous questionnaires, and participants were unable to complete daily questionnaires the next day. Future research might examine the relationships again using more objective data by using different types of test material such as observations.

The second limitation is that the study made use of repeated cross-sectional design for fourteen days, rather than a longitudinal design. The independent and dependent variables were measured at the same point in time instead of different points in time on the same day. In addition, there might be a reciprocal relationship between emotional labor and work engagement than stated in the hypotheses. For example, when feeling a low level of work engagement employees may engage in surface acting and when feeling a high level of work engagement, they may engage in deep acting. Grandey (2003) found a significant negative relationship between work engagement and surface acting, just as Hülshager & Schewe (2011). These studies used similar theories and reasoning but did not measure the moderating effect of authentic leadership (Grandey, 2003; Hülshager & Schewe, 2011). Nonetheless, future research may also look specifically into the authentic-leader-follower relationship and how this develops in a longitudinal study.

Third, this study cannot exclude selection bias and generalization across all service industries. Participants could only participate in the study after receiving the questionnaire link. All participants were reached by email and selected from personal networks. Although the sample was intended to be heterogeneous, because diverse employees working in different industries were approached, a large part of the sample size consisted of employees working in the automotive and hotel industry. Future research should therefore balance diverse industry representatives to generalize the results.

Fourth, the majority of the questionnaire was filled out by Dutch service representatives. However, emotional labor is affected by cultural values (Grandey, 2000), which influence behavior through self-interest or imposed factors such as rewards. For example, research showed that in the United States people are more affected by job display than in France, where organizational culture is less institutionalized (Grandey et al., 2013). Future research could therefore take into account multiple cultures to generate diverse results.

Fifth, a major limitation of this study is the low sample size in the daily questionnaires. Literature suggests a minimum sample size of 30 at the individual level to avoid biased results (Scherbaum & Ferreter, 2009). Unfortunately, this study design suffers from low compliance by the participants due to the high number of daily questionnaires requested. Certainly not all 14 days have a sample size lower than 30, however the further in the 2nd week, the less compliance. Therefore, future studies could repeat this study design in larger groups with less frequent responses and prove whether authentic leadership influences emotional labor.

Finally, this research has proposed a positive mood and emotional contagion as important factors by which authentic leaders influence followers. It might be possible that emotional contagion acts as a moderator between authentic leadership and follower's emotional labor. Therefore, future studies might look into the effect of the emotional contagion scale as a moderator.

Practical implications

Emotions in organizations must be managed to ensure employee's well-being and gain positive organizational outcomes. This study revealed that surface acting is harmful to employees, because of its negative effects on emotional exhaustion and work engagement. This may damage organizations as it can lead to negative work-related outcomes, for example, organizational stress, high turnover, reduced performance, or high absenteeism. In contrast, the study found a positive effect between automatic regulation and work engagement, and deep acting and work engagement. This has beneficial outcomes for both employees and organizations and employees. Work engagement leads to motivated employees and a high level of well-being. Additionally, work engagement predicts organizational success, and financial performance (Bates, 2004). The results propose that employees engaged in deep acting lead to more beneficial outcomes than engagement in surface acting. This means that organizations in the service industry by means of authentic leaders could discourage employees to engage in surface acting and encourage them to engage in deep acting.

Organizations could educate employees through training to act deeply in interaction with the partner's demands and try to understand them. Training could educate employees on how to view the interaction with the partner's demands as challenges rather than threats (Schneider, 2004). Moreover, training could focus on the development of competencies and skills to enable engagement in deep acting. Emotional labor is very dynamic and general training could be offered to any service employee dealing with an interaction partner.

According to the findings, perceived authentic leadership is positively related to employee work engagement. Therefore, this study underlines the need for organizations to train managers to become authentic leaders. In the long-term, organizations need to allow leaders the opportunity to be transparent, unbiased, self-aware, and moral. Furthermore, authentic leaders should focus on the cognitive appraisal process to understand surface acting employees

and provide support to cope with a challenging situation, which will also reduce resource loss. Authentic leaders should provide psychological and social support as this decreases the risk of employee emotional exhaustion and stimulate employee work engagement.

Conclusion

This study is corresponding with previous within-person studies on emotional labor and found that surface acting was significantly negatively related to work engagement, but non-significantly related to emotional exhaustion. No significant relationship between deep acting and emotional exhaustion was found, however deep acting was significantly positively related to work engagement. Automatic regulation was significantly negatively related to emotional exhaustion and significantly positively related to work engagement. This study could not demonstrate a significant moderating effect of authentic leadership on the relationship between follower emotional labor and well-being.

In the future, the need for effective leaders and engaged employees will increase, in a world that demands more simplicity and authenticity. Therefore, the need to understand the connections between emotional expressions, authentic leadership, and well-being outcomes will not diminish and future research should build on this research to provide a broader and deeper understanding of all the playing forces.

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