

Abstract

PAPPALARDO, GABRIEL. Emotional Labor and Motivation: Applying the Three-Component Model to Display-Rule Commitment. (Under the direction of Dr. Adam Meade.)

This study expands upon our understanding of the antecedents and outcomes of emotional labor by introducing tenets of the Three-Component Model of employee commitment. First, the results of a latent profile analysis on the levels of affective, normative, and continuance commitment to display rules challenge the assertion that the presence of display rules always has a negative effect on workers' perceptions of job autonomy by demonstrating that many workers commit to display rules because they want to rather than have to. Second, the basis from which workers commit (value-congruence, normative obligation, or fear of sanction) differentially predicts the degree to which they engage in behavioral strategies (surface acting, deep acting, and natural emotional displays) regarding their emotional displays at work. Third, the moderating effect of commitment on the relationship between perceptions of display-rule strength and emotional labor is further delineated by treating display-rule commitment as a multidimensional construct. Fourth, evidence continues to mount that deep acting and surface acting do not function according to similar models regarding their determinants and outcomes. Finally, past moderating effects of autonomy between emotional labor strategies and worker well-being outcomes were partially replicated, but hypotheses that affective display-rule commitment would mediate these effects were unsupported.

Emotional Labor and Motivation: Applying the Three-Component Model to Display-Rule
Commitment

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Emotional Labor and Motivation: Applying the Three-Component Model to Display-Rule Commitment

It is hard to imagine a job where a member of an organization has total autonomy in the emotions he or she displays at work. Servers in restaurants are expected to provide “service with a smile” even to the rudest of customers, and an employee may fear repercussions if they express frustration at the incompetence of a supervisor. Organizations socialize their members to be aware of *display rules*, tacit or formal norms dictating how emotions are to be appropriately displayed at work (Bono & Vey, 2005; Grandey, 2000; Hochschild, 2008). Workers may therefore feel the need to suppress or fake emotions in the workplace, motivated by feelings of social obligation to the organization or by feelings of fear that negative consequences may result from display-rule violation (Grandey, 2000; Hochschild, 2008). Dominant theories on *emotional labor*, “the process of regulating both feelings and emotional expressions” (Grandey, 2000, p. 97), contend that regulating the *emotional dissonance* between what they feel and what they must display serves as a source of stress to workers, promoting a syndrome of negative outcomes for health and job attitudes (Abraham, 1999; Bono & Vey, 2005; Zapf, Seifert, Schmutte, Mertini, & Holz, 2001). However, researchers’ claims about the relationships between display rules, emotional labor, and worker outcomes have been met with mixed empirical support (Bono & Vey, 2005; Judge, Woolf, & Hurst, 2009; Kruml & Geddes, 2000), prompting a call for increased investigation into potential moderators (Judge et al., 2009). As the economy continues to become more service-oriented, workers will increasingly be expected to interact with the public, creating conditions in which it will be more likely for them to have to engage in

emotional labor (Grandey & Diamond, 2010). Therefore, it is imperative that we improve our understanding of the causes and effects of emotional labor so we can discover methods of mitigating potential damage to our workforce.

Figure 1 represents the conceptual framework that will guide this study. First I will review traditional theories of emotional labor that place display rules as the primary cause of emotional labor and place increased stress, lower job satisfaction, and increased emotional exhaustion as emotional labor's outcomes (Grandey, 2000; Hochschild, 1983). Next, I address findings that challenged these theories, prompting subsequent research into situational and motivational moderator variables (Bono & Vey, 2005; Judge et al., 2009; Kruml & Geddes, 2000). I highlight two important moderating effects that have been investigated in isolation from one another: the effect of display-rule commitment on the relationship between display rules and emotional labor (Gosserand & Diefendorff, 2005) and the effect of perceived job autonomy in mitigating the detrimental effects of emotional labor on job attitudes and well-being (Grandey, Fisk, & Steiner, 2005; Johnson & Spector, 2007). The present study expands investigations into the role of display-rule commitment by applying tenets of the Three-Component Model of Commitment (Allen & Meyer, 1990; Meyer & Allen, 1991) to explore the affective, normative, and continuance elements of display-rule commitment. I hypothesize that workers possessing different bases for display-rule commitment will select different behavioral strategies for responding to emotional demands at work. Finally, I test the hypothesis that job autonomy's buffer effect against emotional labor's negative outcomes will be mediated by job autonomy's relationship with affective display-rule commitment.

Emotional Labor Theory and Discrepant Findings

Emotional labor theories draw heavily from Hochschild's work on *feeling rules*, which reflect the "social guidelines that direct how we want to try to feel" (2008, p. 124) in certain contexts and are analogous to the *display rules* described in the emotional labor literature. Feeling rules exist in all social situations, for instance, dictating that we feel and display happiness at weddings, sadness at funerals, and gratefulness upon receiving a gift. However, the emotions a person feels may not always match the display rules for the situation, and this discrepancy can create a sense of emotional dissonance that can be distressing. The person may therefore engage in *emotion work* (of which emotional labor is considered a subtype limited to the context of paid employment), to feel, or at least fake a display of, the normatively appropriate emotion (Grandey, 2000; Hochschild, 1983; 2008). For example, if a person is given a truly disappointing birthday present, he may not feel the appropriate level of gratitude dictated by feeling rules. He may therefore attempt to suppress feelings of disappointment and evoke feelings of gratitude, and if he fails, he may at least fake an emotional display of gratitude so as not to hurt the feelings of the person who has given him the gift.

Work settings are no exception with organizations tacitly or formally employing display rules to let workers know which emotional displays are appropriate to display on the job. Because a transgression may invoke the ire of organizational members or customers, possibly incurring damage to job performance (i.e., lost sales), formal sanctions (i.e., disciplinary action, termination) or informal sanctions (i.e., soured relations) as a result (Gosserand & Diefendorff, 2005; Grandey, 2000; Grandey & Diamond, 2010; Hochschild,

1983; 2008), workers are motivated to strive towards the goal of conforming to display rules. Most models of emotional labor identify two strategies that workers employ toward achieving this goal: *surface acting* and *deep acting* (Gosserand & Diefendorff, 2005; Grandey, 2000; Hochschild, 2008). Surface acting “involves engaging in a superficial display of the normative emotion without making any effort to change what one is actually feeling” (Judge et al., 2009, p. 57-58). For example, a customer service representative may suppress her annoyance and fake a smile when dealing with an unpleasant customer. Deep acting, on the other hand, “consists of trying to modify felt emotions in order to bring both behavior and internal experience into alignment with expected displays” (Judge et al., 2009, p. 58). An unenthused sales associate, who is expected to be energetic and excited about his product, may jump up and down or may engage in energetic chants with coworkers in an effort to summon up genuine excitement at the start of a work day. By utilizing these strategies, workers resolve the mismatch between how they feel and what they are supposed to display and avoid the negative outcomes associated with display rule violation (Gosserand & Diefendorff, 2005).

Emotional labor theorists have contended that engaging in emotional labor takes a toll on worker’s job attitudes and well-being (Bono & Vey, 2005; Grandey, 2000; Zapf et al., 2001). The emotional regulation required to resolve discrepancies between felt emotions and displayed emotions physiologically stresses the body (Gross, 1998a) and taxes attentional and cognitive resources (Gross, 1998b; Gross & Levenson, 1997), and workers employed in settings that chronically keep them in states of emotional dissonance suffer a syndrome of negative work outcomes including lower job satisfaction, lower organizational commitment,

higher burnout, higher turnover, and higher reports of physical complaints (Abraham, 1999; Bono & Vey, 2005; Grandey, 2000; Morris & Feldman, 1996; Zapf et al., 2001). This model suggests that emotional labor is an inherently negative experience for workers as they struggle to resolve the differences between what they feel and what they can display (Hochschild, 1983).

While the assertions made above represented the zeitgeist of emotional-labor theories for a time (Grandey, 2000; Hochschild, 1983; Hochschild, 2008), empirical evidence failed to consistently support the proposed relationships between display rules, emotional labor, and its effects on worker attitudes and well-being (Bono & Vey, 2005; Judge et al., 2009; Kruml & Geddes, 2000). These theories generally asserted that “The purpose of surface and deep acting is to alter one’s emotional displays to be consistent with display rules” (Gosserand & Diefendorff, 2005, p. 1257), but the unimpressive indices of association between display-rule perceptions and emotional-labor behaviors observed in Bono and Vey’s meta-analysis prompted the authors to describe the relationship as “modest at best” (2005, p. 227). Furthermore, while a wealth of literature exists that connects high levels of surface acting to lower job satisfaction, higher burnout, and lower job commitment (Bono & Vey, 2005; Grandey, 2000; Judge et al., 2009), this pattern does not consistently hold for deep acting. Bono and Vey’s (2005) meta-analysis found that deep acting had a small, positive relationship with burnout, $r = .13$, $80\% \text{ Credibility Interval} = \{.03, .26\}$, but returned a non-significant relationship between deep acting and job satisfaction. Judge et al. (2009) found that deep acting correlated with neither job satisfaction nor burnout, and Kruml and Geddes (2000) found deep acting to be negatively related to burnout. If both forms of emotional labor

are a response to emotional dissonance between what a worker feels and what display rules demand (Gosserand & Diefendorff, 2005), and management of this dissonance drains physical and psychological resources (Gross, 1998a; Gross, 1998b; Gross & Levenson, 1997), then the inability of researchers to consistently find the same effects on workers for deep acting as they do for surface acting is puzzling. These inconsistencies prompted a call for researchers to investigate potential moderators (Judge et al., 2009), and answers to this call (Gosserand & Diefendorff, 2005; Grandey et al., 2005; Johnson & Spector, 2007) have identified interaction effects that further refined emotional-labor theories as a whole.

Moderating Mechanisms: Display Rule Commitment and Perceived Autonomy

The inconsistency with which researchers were able to demonstrate a robust link between the strength of workers' perceptions of display rules to levels of emotional labor (Bono & Vey, 2005) posed a challenge to emotional-labor models as these hinged on the idea that the primary motivation behind emotional labor is to resolve discrepancies between felt emotions and emotions deemed appropriate by the organization. A possible explanation for these unsupportive findings was that previous research had measured the perceptions about the strength of display-rules without considering whether or not workers were motivated to comply with them. Treating display rules as work goals assigned by the organization to facilitate higher-level performance goals (Diefendorff & Gosserand, 2003), Gosserand and Diefendorff examined the relationship between display-rule perceptions and emotional labor under varying levels of *display-rule commitment*, a form of goal commitment composed of “a person's intention to extend effort toward displaying organizationally desired emotions, persist in displaying these emotions over time, and not abandon the display rules under

difficult conditions” (2005, p. 1257). The results indicate that the relationship between display-rule perceptions and emotional labor is significant for surface acting but not deep acting, and the relationship between display-rule commitment and emotional labor is significant for deep acting but not surface acting. Only the display-rule perception by commitment interaction significantly predicts both forms of emotional labor (Gosserand & Diefendorff, 2005). Taken together, it appears that the presence of display rules alone is insufficient to drive both forms of emotional labor. Particularly in the case of deep acting, the workers’ levels of motivation to follow display rules become a critical factor to consider.

Further evidence revealed that situational work conditions could also play important roles in emotional-labor models by interacting with the relationships between emotional-labor behaviors and subsequent worker outcomes. Researchers have explored emotional labor in workers with varying levels of *perceived job autonomy*, “the degree to which the job provides substantial freedom, independence, and discretion to the employee” (Hackman & Oldham, 1975, p. 162). Autonomy plays an essential role in a number of work-motivation theories, including the Job-Characteristics Model (Hackman & Oldham, 1975), Self-Determination Theory (Deci & Ryan, 2000; Ryan & Deci, 2000), and the Three-Component Model of organizational commitment (Meyer & Herscovitch, 1991; Meyer et al., 2012), and higher perceptions of work autonomy should mitigate the negative effects of emotional labor because “When employees feel a sense of freedom and choice in their work, they are more intrinsically motivated and cope more effectively with the job demands, while when they feel controlled or coerced by others they experience more strain” (Grandey & Diamond, 2010, p. 343). Proponents of this view assert that greater job autonomy frees up cognitive and

physiological resources that aid workers in coping with the stress of emotional labor, ultimately giving workers the ability to effectively protect themselves from damage to their job attitudes and well-being (Grandey & Diamond, 2010; Hochschild, 1983; Hochschild 2008).

Empirical investigations support that autonomy has a moderating effect: meta-analytic findings suggest that perceptions of autonomy are predictive of experiencing emotional dissonance, $r = -.20$, even above perceptions of display rules, $r = .12$ (Bono & Vey, 2005). Additionally, workers who perceive greater autonomy at work experience the negative effects of surface acting and deep acting on job satisfaction and affective well-being to a lesser degree than workers with lower autonomy perceptions. The same buffering effect is seen for emotional exhaustion in the case of surface acting, although autonomy does not significantly interact with its relationship with deep acting (Grandey et al., 2005; Johnson & Spector, 2007). In sum, the evidence points to perceived autonomy as an important factor to include in emotional-labor models.

The Three-Component Model, Display-Rule Commitment, and Merging the Moderators

Existing investigations into moderators of emotional labor's relationships with its antecedents and outcomes have improved our understanding but have also highlighted new areas of inquiry. Additionally, the roles of display-rule commitment and autonomy in emotional-labor models have only been studied in isolation from one another. The present study seeks to use tenets of the Three-Component Model of commitment (Allen & Meyer, 1990; Meyer & Allen, 1991) to further refine our understanding of display-rule commitment

and to test an integrative model that examines the effects of the two moderating forces working in conjunction.

The Three-Component Model specifies that commitment to a target (i.e., an organization, a team, or a goal) is composed of varying levels of *affective commitment*, *normative commitment*, and *continuance commitment*. Higher levels of one or more of any combination of the three reflect a higher propensity for a worker to exert effort on behalf of a target, but the basis underlying each form of commitment is different. Affective commitment stems from a worker's autonomous desire to exert effort, either because he or she personally identifies with the target or perceives the values of the target as congruent with his or her own. This results in the worker feeling he or she *wants to* be committed to the target. Normative commitment stems from workers' perceptions of normative obligations to the target, resulting in the worker feeling he or she *ought to* be committed to a target. Finally, continuance commitment stems from perceptions of costs associated with failing to commit to a target or a lack of alternatives to committing to the target, resulting in the worker feeling he or she *has to* be committed to the target. The varying combinations of these three commitment types form *commitment profiles* that represent distinct motivational mindsets in workers (Allen & Meyer, 1990; Diefendorff & Chandler, 2012; Meyer & Allen, 1991; Meyer, Becker, & Vandenberghe, 2004; Meyer & Herscovitch, 2001; Meyer et al., 2012).

Gosserand and Diefendorff demonstrated that the presence of display rules would not consistently predict that workers would engage in emotional labor unless these workers were committed to the display rules, operationalizing commitment as a unidimensional construct (2005). With the importance of the *presence* of display-rule commitment established, our

understanding of the relationship between perceptions of display rules and emotional labor can be further refined by examining if the *underlying basis* of this commitment has an impact on the interaction. Employing the Three-Component Model framework to the examination of display-rule commitment is important because the presence of affective organizational commitment is related to a number of behaviors and workplace outcomes important to the emotional-labor literature. For instance, workers who exhibit higher levels of affective commitment are more likely to engage in organizational citizenship behaviors and are more likely to report higher levels of job satisfaction, well-being, positive affect, engagement and general health (Markovits, Davis, & van Dick, 2007; Meyer et al., 2012). Given that workers with different motivational mindsets vary significantly on a number constructs related to emotional labor (Abraham, 1999; Bono & Vey, 2005; Grandey, 2000; Morris & Feldman, 1996; Zapf et al., 2001), an examination into how workers with different bases of display-rule commitment differ in their behavioral responses to display rules is merited.

The Three-Component Model also helps to integrate the propositions of earlier moderation studies due to the strong relationship between perceived autonomy and affective commitment. (Gagné et al., 2010; Meyer et al., 2004; Meyer et al., 2012). Job characteristics are generally regarded as more distal influences of work behavior, with their effects on behavior being mediated by more proximal internal states (Diefendorff & Chandler, 2011). For example, the Job-Characteristics Model suggests that job autonomy affects behavior indirectly through its creation of a *core psychological state* of feeling responsible for work outcomes (Hackman & Oldham, 1975). Commitment similarly reflects a more proximal motivational variable between job characteristics and work behavior (Diefendorff &

Chandler, 2011), and individuals who report higher fulfillment of their autonomy needs are more likely to have higher affective commitment (Meyer et al., 2012). Given autonomy's relationship with affective commitment, (Gagné et al., 2010; Meyer et al., 2004; Meyer et al., 2012), affective commitment's relationships with ratings of worker job attitudes and well-being (Markovits et al., 2007; Meyer et al., 2012), and commitment's more proximal position in affecting work motivation compared to autonomy, (Diefendorff & Chandler, 2011) this study will explore the possibility that the observed buffer effects of perceived autonomy against emotional labor's impacts on job satisfaction and emotional exhaustion (Grandey et al., 2005; Johnson & Spector, 2007) operate indirectly through perceived autonomy's impact on affective commitment.

Exploring Emotional Labor Motivated by Affective Commitment

This study will also explore an alternate theoretical position regarding the relationship between autonomy and display rules. The conservation-of-resources perspective in previously discussed models (Grandey et al., 2005; Hochschild, 1983) presents display rules and perceptions of autonomy as inextricably at odds. Goldberg and Grandey (2007) even operationalized their measure of display autonomy as the absence of display rules. These researchers believe the presence of display rules are perceived by workers as impositions on their autonomy, undermining intrinsic motivation and creating the resource-draining need for emotional regulation (Gross 1998a; Gross, 1998b; Gross & Levenson, 1997). These theories emphasize the social obligations and perceived costs of display-rule violation as the motivating mechanisms behind emotional labor (Hochschild, 1983; Hochschild 2008). Hochschild describes that when a person violates display rules, others may respond with

statements reminding them of their obligations to follow norms for appropriate emotional expression, for instance, “You *shouldn’t feel* so guilty” or “You *don’t have the right* to feel jealous”. Additionally, she writes that others may “chide, tease, cajole, scold, or shun—in a word, sanction us for ‘mis-feeling.’” (2008, p. 124), representing costs associated with display-rule violation. Viewing these propositions through a Three-Component Model lens, display-rule commitment of workers should therefore be dominated by normative and continuance components and lacking a strong affective component. The normative obligations and fear of sanctions serve as bases for normative and continuance commitment respectively, and the destruction of autonomy perceptions due to the presence of display rules undermines the identification that serves as the basis for affective commitment (Gagné et al., 2010; Meyer et al., 2004; Meyer et al., 2012). Under this framework, the worker is always at odds with organizational display rules, conforming to display rules out of obligation or perceived cost rather than personal desire.

However, it is possible that there are alternative motivations for engaging in emotional labor. These theories do not thoroughly explore the possibility that workers may personally identify the organization’s display rules as congruent with their own goals and may therefore not perceive them so unfavorably. Deep acting has been described by some as a “good faith” form of emotional labor, enacted by workers as an act of goodwill on behalf of the organization (Diefendorff, Croyle, & Gosserand, 2005; Grandey, 2000, p. 100; Rafaeli & Sutton, 1987). Additionally, a brief diversion to the organizational citizenship behavior (OCB) literature reveals another example of “good faith” emotional regulation. Workers who engage in *sportsmanship OCBs* “avoid complaining, petty grievances, railing against real or

imagined slights” (Organ, 1988, p. 11) and display a “demonstration of willingness to forbear minor or temporary personal inconveniences and impositions without fuss, appeal, or protest” (Organ & Ryan, 1995, p. 782). From this description, it is evident that workers may engage in surface acting or deep acting to regulate their emotional displays to be consistent with those of a “good sport”. Where these sportsmanship behaviors differ from behaviors normally associated with emotional labor is that sportsmanship behaviors, as organizational-citizenship behaviors, are widely regarded to be *discretionary* behaviors rather than behaviors performed out of obligation or fear of sanction (Organ, M. Podsakoff, & P. Podsakoff, 2011). Workers who engage in sportsmanship are regulating their emotional displays because they *want to* rather than because they *ought to* or *have to*; the behaviors are *autonomous* rather than *controlled*. Consistent with this theory, workers with higher affective commitment are more likely to engage in organizational-citizenship behaviors (Meyer et al., 2012). Given the conceptual similarities between sportsmanship and emotional labor, and the positive associations between autonomy, sportsmanship, and affective commitment (Meyer et al., 2012), it follows that not all display rules are perceived as destructive to autonomy and that “good faith” emotional labor may at times emerge from affective commitment to display rules.

The Present Study: Research Questions and Hypotheses

This study expands investigations into Gosserand and Diefendorff’s (2005) reported display-rule commitment moderation effect by employing the Three-Component Model framework. First, I explore the existence of varying motivational mindsets behind display-rule commitment using latent profile analysis. Consistent with Meyer et al.’s procedure used

to calculate organizational-commitment profiles (2012), I measure each participant's affective display-rule commitment, normative display-rule commitment, and continuance display-rule commitment and then employ latent profile analysis to calculate their display-rule commitment profiles. Past investigations that have employed this strategy to compute organizational-commitment profiles have reliably returned four profiles: Fully committed (High affective, normative, and continuance commitment), AC-NC Dominant (High affective and normative commitment, low continuance commitment), CC Dominant (Low affective and normative commitment, high continuance commitment), and Uncommitted (Low affective, normative, and continuance commitment); however, some studies have detected additional profiles (i.e., Somers, 2010; Stanley, Vandenberg, Vandenberghe, & Bentein, 2009; Meyer et al., 2012). As this is the first application to date of the commitment profile procedure to display-rule commitment, it is currently unknown whether or not similar profiles will emerge. For instance, if it is correct that display rules and autonomy are inherently incompatible (Goldberg & Grandey, 2007, Hochschild, 2008), display-rule commitment profiles with strong affective components may not emerge or may only be exhibited by a small proportion of the population when compared to the proportion that exhibits display-rule commitment profiles without a strong affective component. Therefore, I will explore the following research questions:

Research Question 1a: What latent display-rule commitment profiles will emerge from latent profile analysis of participants' affective display-rule commitment, normative display-rule commitment, and continuance display-rule commitment scores?

Research Question 1b: What proportions of the sample will be classified under each display-rule commitment profile?

Empirical investigations into surface acting's relationships with display rules and worker outcomes have been generally consistent with what would be predicted from emotional-labor theories. Surface acting worsens job attitudes and well-being consistent with the idea that it is a draining and stressful experience (Bono & Vey, 2005; Grandey, 2000; Gosserand & Diefendorff, 2005; Judge et al., 2009). Therefore, it is likely that arguments by Grandey, Hochschild, and others that the motivation for surface acting stems from obligation or fear of costs and that these behaviors occur in low autonomy situations where display rules are perceived as impositions are valid (Grandey & Diamond, 2010; Hochschild, 1983; Hochschild 2008). Deep acting, on the other hand, has not consistently contributed to these negative outcomes as predicted (Bono & Vey, 2005; Judge et al., 2009; Kruml & Geddes, 2000), and its conceptualization as a "good faith" form of emotional labor (Diefendorff et al., 2005; Grandey, 2000, p. 100; Rafaeli & Sutton, 1987) suggests that the motivation underlying it may be more analogous to the motivation to engage in sportsmanship organizational-citizenship behaviors than the motivation to engage in surface acting. This study is largely exploratory in its examination of how these three commitment components interact to affect the relationship between display-rule perceptions and emotional labor, but I also hazard some specific hypotheses:

Research Question 2: How will varying levels of affective display-rule commitment, normative display-rule commitment, and continuance display-rule commitment

interact with the relationship between display-rule perceptions and a) surface acting and b) deep acting?

Hypothesis 1a: The positive relationship between display-rule perceptions and surface acting will be weaker for participants higher in affective display-rule commitment than for participants lower in affective display-rule commitment.

Hypothesis 1b: The positive relationship between display-rule perceptions and surface acting will be stronger for participants higher in normative display-rule commitment than for participants lower in normative display-rule commitment.

Hypothesis 1c: The positive relationship between display-rule perceptions and surface acting will be stronger for participants higher in continuance display-rule commitment than for participants lower in continuance display-rule commitment.

Hypothesis 2a: The positive relationship between display-rule perceptions and deep acting will be weaker for participants higher in affective display-rule commitment than for participants lower in affective display-rule commitment.

Diefendorff et al. (2005) raised a valid point that workers may decide against employing emotional labor at all in response to display rules, instead displaying their naturally felt emotions. Though the role of display-rule commitment in the relationship between display rules and natural emotional displays has not been empirically examined, one can imagine two scenarios where this may be the case: First, a worker who is completely uncommitted to the display-rules will exert no effort to conform to the goal, expressing their natural emotions rather than surface acting or deep acting. On the other hand, if a worker's values are so congruent with the organization's that his or her naturally felt emotions reflect

the organization's desired emotions, he or she may be able to conform to display rules with no additional labor required. Therefore, I hypothesize the following:

Hypothesis 3a: The negative relationship between display-rule perceptions and noncompliant, natural emotional displays will be stronger for participants higher in affective display-rule commitment than for participants lower in affective display-rule commitment.

Hypothesis 3b: The negative relationship between display-rule perceptions and noncompliant, natural emotional displays will be stronger for participants higher in normative display-rule commitment than for participants lower in normative display-rule commitment.

Hypothesis 3c: The negative relationship between display-rule perceptions and noncompliant, natural emotional displays will be stronger for participants higher in continuance display-rule commitment than for participants lower in continuance display-rule commitment.

Hypothesis 4a: The negative relationship between display-rule perceptions and compliant, natural emotional display will be weaker for participants higher in affective display-rule commitment than for participants higher in affective display-rule commitment.

Finally, I explore the possibility that the buffering effect of high perceptions of autonomy against the damaging effects of emotional labor on worker's job attitudes and well-being is indirect via the relationship between perceived autonomy and affective organizational commitment. Given the well-established relationship between perceived

autonomy and affective commitment, (Gagné et al., 2010; Meyer et al., 2004; Meyer et al., 2012), affective commitment's relationships with ratings of worker job satisfaction and emotional exhaustion (Markovits et al., 2007; Meyer et al., 2012), and commitment's more proximal position in affecting work motivation compared to autonomy, (Diefendorff & Chandler, 2011), I hypothesize the following:

Hypothesis 5a: Affective display-rule commitment will significantly mediate the moderating effect of autonomy on the relationship between surface acting and job satisfaction.

Hypothesis 5b: Affective display-rule commitment will significantly mediate the moderating effect of autonomy on the relationship between surface acting and emotional exhaustion.

Hypothesis 5c: Affective display-rule commitment will significantly mediate the moderating effect of autonomy on the relationship between deep acting and job satisfaction.

Hypothesis 5d: Affective display-rule commitment will significantly mediate the moderating effect of autonomy on the relationship between deep acting and emotional exhaustion.

Method

Participants and Procedure

Four hundred fifty-seven participants were recruited using Amazon's Mechanical Turk crowdsourcing tool. An advertisement solicited participants registered in the United States who were employed at least 10 hours a week and are over the age of 18 years old.

Mechanical Turk allows requestors to approve or reject the work of online participants and allows requestors to filter participants by their approval rating. I required respondents to have a 95% approval rating or higher to participate.

I removed one participant from the sample due to missing data and a second for working fewer than the required ten hours per week at a single employer. Finally, in order to improve the normality of frequency distributions for the study variables (Field, 2005), I deleted 23 participants from analysis who scored three standard-deviations above or below the sample mean on any of the study variables. This yielded a final sample of 432 participants, for which demographic data is displayed in Table 1.

Measures

Display-rule perceptions. Display-rule perceptions were measured using slight alterations of Diefendorff et al.'s (2005) four-item Positive Display-Rule Perceptions and three-item Negative Display-Rule Perceptions scales. Example items from each scale include "My workplace expects me to express positive emotions to customers as part of my job" and "I am expected to suppress my bad moods or negative reactions to customers." Participants used a 7-point, Likert scale to indicate the degree to which they agree with each item (1 = Strongly Disagree, 7 = Strongly Agree). These scales have been used separately in some studies (Diefendorff et al., 2005) and have been combined into a single scale in others (Gosserand & Diefendorff, 2005). As I made no differential hypotheses regarding the positivity versus negativity of display rules, this study explored the research questions using the combined scale. Cronbach's alpha was .91 in this sample. Items for all scales used in this study can be viewed in Appendix B.

Emotional Labor. Surface acting and deep acting were assessed using slight alterations of Diefendorff et al.'s (2005) 7-item and 4-item scales respectively. Example items from each scale include "I put on an act in order to deal with customers in an appropriate way" and "I try to actually experience the emotions that I must show to customers." Participants were asked to use a 7-point, Likert scale to indicate the frequency with which they engage in each behavior (1 = Almost Never, 7 = Almost Always). Cronbach's alphas were .93 and .84 for the surface acting and deep acting scales respectively in this sample.

Natural Emotional Displays. Inspired by Diefendorff et al.'s (2005) three-item natural emotional display scale, I created two, 3-item scales for compliant natural emotional displays and noncompliant natural emotional displays. The psychometric properties of these measures were validated in a pilot study detailed in Appendix A. Example items include "There is rarely a conflict between what I really feel and the emotions I'm supposed to show to customers." and "I refuse to fake or suppress my true feelings to customers." Participants will be asked to use a 7-point, Likert scale to indicate the degree to of frequency with which they engage in each behavior (1 = Almost Never, 7 = Almost Always). Cronbach's alphas were .77 and .85 for compliant and noncompliant displays respectively in this sample.

Display-rule Commitment. Inspired by Gosserand and Diefendorff's (2005) display-rule commitment scale, the conceptual definitions of affective commitment, normative commitment and continuance commitment, and the theoretical bases of value congruence, normative obligation, and perceived costs, I created three, 3-item scales to measures affective, normative, and continuance display-rule commitment. The psychometric properties

of these measures were validated in a pilot study detailed in Appendix A. Participants were presented with the stem, “I strive to follow my organization’s rules about displaying appropriate emotions and not displaying inappropriate emotions to customers because...” and were then asked to use a 7-point, Likert scale to indicate the degree to which they agree with each completion of the phrase (1 = Strongly Disagree, 7 = Strongly Agree). Example items from each scale include “I would strive to display these emotion even if the organization didn't expect it of me”, “I feel I owe it to my organization to try to follow their rules”, and “Violating the rules would be too costly.” Cronbach’s alphas were .85, .67, and .72 for affective, normative, and continuance display-rule commitment respectively in this sample.

Perceived Autonomy. Perceived autonomy was measured using Morgeson, Delaney-Klinger, and Hemingway’s (2005) 3-item adaptation of Hackman and Oldham’s (1980) autonomy facet of the Job Diagnostic Survey. An example item reads, “I can decide on my own how to go about doing my work.” Participants used a 7-point scale the degree to which they agree with each statement (1 = Strongly Disagree, 7 = Strongly Agree). Cronbach’s alpha was .92 for the scale in this sample.

Job satisfaction. Job satisfaction was measured using Judge, Bono, and Locke’s (2000) shortened version of Brayfield and Rothe’s (1951) scale. The scale contains 5 statements reflecting attitudes towards a job, for instance, “I feel fairly satisfied with my present job.” Participants used a 7-point scale the degree to which they agree with each statement (1 = Strongly Disagree, 7 = Strongly Agree). Cronbach’s alpha was .91 for the scale in this sample.

Emotional Exhaustion. Emotional exhaustion was assessed using Wharton's (1993) 6-item Job-Related Emotional Exhaustion Scale. An example item reads, "I feel emotionally drained from my work." Participants used a 7-point scale to indicate the frequency with which they experience feelings consistent with the scale items (1 = Almost Never, 7 = Almost Always). Cronbach's alpha was .91 in this sample.

Sportsmanship organizational-citizenship behaviors. Sportsmanship organizational-citizenship behaviors were assessed using Podsakoff, MacKenzie, Moorman, and Fetter's (1990) 5-item measure. An example item is "I rarely gripe about small inconveniences at work." Participants used a 7-point, Likert scale to indicate the frequency with which they engage in each behavior (1 = Almost Never, 7 = Almost Always). Cronbach's alpha was .83 in this sample.

Analyses

To explore Research Question 1, I employed latent profile analysis (Vermunt & Magidson, 2002). The procedure uses maximum-likelihood estimation to assign participants with similar patterns of affective, normative, and continuance display-rule commitment scores to a latent category, or profile. I replicated the procedure performed by Meyer et al. (2012) following Nylund, Asparouhov, and Muthén's (2007) guidelines. I specified a two-profile model, and then added profiles until non-convergence problems emerged (Lubke & Muthén, 2005). I assessed the fit of each model using the sample-adjusted Bayesian information criterion (SABIC, Sclove, 1987) and bootstrapped likelihood ratio test (BLRT, McLachlan & Peel, 2000). The SABIC is a fit index sensitive to the number of model

parameters, and a significant BLRT determines that adding a new profile significantly improves fit over the current model. The optimal solution is considered to

(a) show the lowest SABIC and BLRT, (b) have a significant BLRT p-value, (c) not contain profiles with a small number of individuals, and (d) show clearly defined profiles, indicated by a high probability that individuals actually belong to the profile to which they were assigned and a low probability of belonging to other profiles (Meyer et al., 2012, p. 8).

Research Question 2 and Hypotheses 1-4 were examined using moderation regression analyses that regressed each behavioral response (surface acting, deep acting, noncompliant natural emotional displays, and compliant natural emotional displays) on display-rule perceptions and each form of display-rule commitment (affective, normative, or continuance). In models where significant main effects were detected, I added the appropriate display-rule perceptions by commitment interaction term. In cases where the addition of this term produced a model that explained a significant amount of additional variance in the outcome variable and where the interaction term was a significant predictor controlling for main effects, I employed simple-slopes analysis (Preacher, Curran, & Bauer, 2006) to decompose the interaction and explore the moderation effect. For each hypothesis to be supported, each predictor must be significantly associated with the outcome variable controlling for other predictors, the addition of an interaction term to the regression model must explain significant variance in the outcome variable above the main effects, the interaction term must be significant, and an examination of the decomposed interaction must support that moderation is occurring in the hypothesized direction.

I explored Hypothesis 5 by first using moderation regression analyses to establishing whether or not autonomy is a significant moderator of the relationship between each emotional labor strategy (surface acting and deep acting) and each worker well-being outcome (job satisfaction and emotional exhaustion). In cases where this moderation effect emerged, I then used mediated moderation (Preacher, Rucker, & Hayes, 2007) path models as detailed in Figures 2-5. Significant modeled path coefficients in each model must be returned to support Hypotheses 5a-5d.

Results

Display-rule Commitment Profiles

Replicating the procedure to identify organizational-commitment profiles detailed in Meyer et al. (2012), following guidelines established in Nylund et al. (2007), latent profile analysis (Vermunt & Magidson, 2002) was conducted to identify display-rule commitment profiles to represent different motivational mindsets behind committing to an organizational display rule. A two-profile latent profile analysis was specified, and then a profile was added until convergence problems arose. The model failed to converge upon the addition of a seventh profile. A six-profile model proved to be optimal, as it returned the lowest SABIC (Sclove, 1987) and BLRT (McLachlan & Peel, 2000) fit indices (See Table 2), assigned participants confidently to their respective profiles (See Table 3), and returned profiles with properties that largely met statistical assumptions of local independence and within-profile variable normality. Mplus (Muthén, L. K., & Muthén, B. O. (1998-2011). Mplus (Muthén, L., & Muthén, B., 1998-2011) syntax used in this procedure is displayed in Appendix C.

Table 4 displays the standardized mean estimates for affective, normative, and continuance display-rule commitment and the proportions of the sample included for each of the six profiles. Figure 6 displays the mean estimates graphically to aid interpretation. Profile 1, comprised of 12.0% of the sample, is characterized by lower than average affective and normative commitment and the highest level of continuance commitment, although this was only .2 standard deviations above the sample mean as a whole. Individuals with this profile appear to only comply with display rules out of threat of sanction or lack of alternatives, and I therefore label this group the “Forced Commitment” group. Profile 2, which is comprised of only 2.5% of the sample, is characterized by lower than average commitment of all kinds, especially affective commitment. These rare individuals feel no sense of commitment to display rules, and so I label the group the “Uncommitted” group. Profile 3, consisting of 24.1% of the sample, display below-average affective and normative commitment and roughly-average continuance commitment. These individuals feel little commitment to follow display rules, and what little commitment they feel stems from perceived costs of failing to comply. I term these individuals the “Minimally Committed” group. Profile 4, comprised of 3.5% of the population, is characterized by above average affective commitment and the lowest levels of normative and continuance commitment in the sample. I label these rare individuals as “Value-Congruent”, as they commit to display-rules purely out of personal agreement with the display-rules and do not see their commitment as sourced from obligation nor threat of sanction. Profile 5, comprised of 40.7% of the sample, is characterized by above-average affective and normative commitment along with average continuance commitment. These individuals identify the sources of their commitment more

as value congruence and social obligation than fear of sanction, and consistent with Meyer et al. (2012), I label these individuals the “AC-NC Dominant” group. Profile 6, comprised of 17.1% of the sample, is characterized by the highest levels of affective and normative commitment as well as slightly above-average continuance commitment. I label this final group, the “Fully Committed” group as these individuals appear to commit primarily out of a sense of value-congruence, but also acknowledge commitment stemming from both social obligation and fear of sanction. For

These results answer Research Question 1 by identifying existing display-rule commitment profiles and the proportions of the sample that were assigned to each display-rule commitment profile. Some interesting patterns emerge from examining these profiles as a whole. First, with the exception of the very small Value-Congruent group, there was comparatively little deviation across profile means in continuance commitment compared to affective and normative commitment. Therefore, it appears that the average worker acknowledges the fear of sanction as a factor affecting their commitment, but they do not tend to identify it as the primary driver. Affective commitment and normative commitment means, on the other hand, were highly variable across profiles, and in the Value-Congruent, AC-NC Dominant, and Fully Committed groups, comprising a combined 61.3% of the sample; affective commitment was the dominant driver of overall display-rule commitment. Taken together, it appears that fear of sanctions is an underlying source of commitment to display rules for workers, but that value-congruence and social obligation serve as powerful sources of commitment for the majority of workers as well.

A second pattern of note is that, again with the exception of the rare Value-Congruent individuals, levels of normative display-rule commitment closely followed behind levels of affective display-rule commitment. This is poorly accounted for in my earlier hypotheses, but in retrospect, the existence of affective commitment without normative commitment may be a rarity. If an individual agrees with the goals of a target (i.e., supervisor or organization), he or she may therefore become more likely to feel a sense of obligation to commit to the target's goals. Therefore, it would make sense that those who experience high affective commitment would also experience normative commitment. This explanation is supported in that Meyer et al. (2012) did not detect a purely AC-Dominant profile, but did detect an AC-NC Dominant profile that comprised 19% of their sample.

Display Rules and Emotional Labor

The next phase of analyses explored whether or not varying types of display-rule commitment (affective, normative, and continuance) differentially predict behavioral responses (surface acting, deep acting, noncompliant natural emotional displays, and compliant natural emotional displays) to emotional demands at work. Bivariate correlations (See Table 5) indicate that display-rule perceptions are moderately and positively correlated with surface acting and deep acting suggesting that workers who perceive stronger display-rules in the workplace are more likely on average to fake emotional displays or work to genuinely change their emotions than workers in settings where display rules are perceived to be weaker. In addition, display-rule perceptions are moderately, negatively related to noncompliant, natural emotional displays, suggesting that workers who perceive stronger display-rule perceptions in the workplace are less likely, on average, to express genuine

inappropriate emotional displays than workers in settings where display-rules are perceived to be weaker. The relationship between compliant, natural emotional displays and display-rule perceptions was non-significant, suggesting the expression of genuine, appropriate emotional displays is unrelated to their perceptions of display-rule strength.

I then conducted a series of multistep regression analyses to determine to what degree different forms of display-rule commitment moderate the relationship between display-rule perceptions and these various behavioral responses to them.

Surface acting. Beginning with surface acting, Table 8 displays the results examining the moderating effect of affective display-rule commitment. Step 1 demonstrates that, controlling for each other, display-rule perceptions are positively associated with surface acting and affective display-rule commitment is negatively associated with surface acting such that participants who perceive displays-rules in the workplace as stronger are more likely to engage in surface acting, and participants who report higher affective commitment are less likely to engage in surface acting. Step 2 of the model introduces the display-rule perceptions by affective commitment interaction term, improving the overall variance in surface acting explained by the model. The regression weight for the interaction term was statistically significant suggesting that the level of affective display-rule commitment reported by the participant significantly moderates the relationship between the perception of display-rules and the amount of surface acting in which a worker engages. Figure 7 displays the decomposition of the interaction and the results of simple-slopes analyses, which revealed that the slopes of the regression line are significant for workers with affective display-rule commitment at one standard deviations above and at one standard

deviation below the mean level of affective display-rule commitment. Together these results suggest that for workers higher in affective display-rule commitment, the positive relationship between the perception of display-rule strength and engagement in surface acting is weaker than for workers lower in affective display-rule commitment. For workers who identify with an organization's display-rules out of sense of value-congruence, the presence of stronger display-rules is less likely to bring out increased levels of faking emotional displays than for workers who do not commit to these rules out of a sense of value congruence, supporting Hypothesis 1a.

The same procedure was conducted to examine the potential moderating effect of normative display-rule commitment. Table 7 and Figure 8 detail that the direction and significance of effects were the same as those described above for affective display-rule commitment, as was the nature of the interaction between normative display-rule commitment and display-rule perceptions in predicting surface acting. This is likely due to the strong, positive correlation between the two forms of commitment (See Table 5). To examine this explanation further, I regressed surface acting on both affective and normative display-rule commitment simultaneously, and the results (displayed in Table 8) demonstrate that normative commitment does not account for a significant amount of variance in surface acting controlling for affective display-rule commitment. Contrary to my Hypothesis 1b, yet consistent with the results of the latent profile analysis, it appears that commitment to display-rules out of a sense of value-congruence rarely occurs in the absence of commitment from a sense of social obligation and vice-versa.

The same procedure was conducted to examine the potential moderating effect of continuance display-rule commitment. Step 1 in Table 9 details that, controlling for each other, both display-rule perceptions and continuance display-rule commitment are significantly and positively related to surface acting. Step 2 introduced the commitment by display-rule perception interaction term; however, this addition did not explain significantly more variance in surface acting above the previous model. Therefore, it appears that while workers who commit to display-rules out of fear of sanction are more likely to fake emotional displays on average, the level of this of commitment does not significantly affect the relationship between the perceived strength of display-rules and the degree to which workers engaging in emotional faking behaviors. While the required main effects required are present, the lack of a significant interaction term suggests that Hypothesis 1c is unsupported.

To complete my investigation into surface-acting, I finally regressed surface acting on affective and continuance display-rule commitment simultaneously. Consistent with the main effects observed in the previous models, Step 1 in Table 10 details that both forms of commitment had significant, unique relationships with surface acting controlling for each other the level of display-rule perception. Workers higher in affective commitment were less likely to report engaging in surface acting, while workers higher in continuance commitment were more likely to report engaging in surface acting. Step 2 introduced the commitment by display-rule perceptions interaction terms to the model, explaining a significant amount of additional variance. Consistent with prior models, the affective commitment by display-rule interaction term was significant, while the continuance commitment by display-rule

interaction term was not, with the affective commitment by display-rule perceptions interaction decomposition being nearly identical to the one depicted earlier in Figure 7.

The sum of these analyses answers Research Question 2a, suggesting that the basis of a worker's commitment to display rules significantly changes the degree to which they engage in surface acting. Workers who commit to display rules out of sense of value congruence or sense of social obligation are less likely on average to fake emotional displays, whereas workers who commit to display rules out of fear of sanctions are more likely to fake emotional displays. In addition, the degree to which workers engage in more faking behaviors in response to stronger perceptions of display rules is lessened when they commit to those display-rules from a sense of value congruence or social obligation, but this relationship is unaffected by the degree to which workers commit to these display rules out of a fear of sanction.

Deep acting. I then repeated this analytic strategy for deep acting. Tables 11-13 detail that controlling for display-rule perceptions, affective display-rule commitment and normative display-rule commitment were both positively associated with deep acting and continuance display-rule commitment was negatively related to deep acting in their respective models. The addition of interaction terms did not significantly increase the amount of variance explained in deep acting for any of the commitment types, failing to support Hypothesis 2a. Workers who perceive stronger display rules are more likely to try to change their felt emotions, regardless of their commitment to display rules. Workers who commit to display rules out of a sense of value congruence or social obligation are more likely to attempt to genuinely change their felt emotions regardless of the perceived strength of these

rules. Workers who commit to these display rules out of a fear of sanction are less likely to attempt to genuinely change their felt emotion regardless of the perceived strength of these rules.

Together, these analyses answer Research Question 2b, demonstrating that the strength of display rules and commitment to display rules affect the amount of deep acting workers engage in separately and that the relationship between commitment and deep acting functions in the opposite direction as the relationship between commitment and surface acting.

Noncompliant, natural emotional displays. I repeated the same series of analyses for non-compliant, natural emotional displays. Table 14-15 detail that levels of neither affective nor normative display-rule commitment were significantly related to the expression of these displays controlling for display-rule perceptions, failing to support Hypotheses 3a and 3b. Table 16 details that controlling for display-rule perceptions, continuance display-rule commitment is significantly and negatively related to the expression of these displays. This suggests that workers who commit to follow display rules out of fear of sanction will be less likely to display genuine emotions that violate those display rules. Step 2 of this model introduced a significant interaction term and explained a significant amount of additional variance in noncompliant, natural emotional displays. Figure 9 displays the decomposed interaction. It appears that the negative relationship between display-rule perceptions and the expression of noncompliant, natural emotional displays is strengthened by the presence of higher continuance commitment, supporting Hypothesis 3c. The presence of strong displays rules reduces the likelihood that workers will express inappropriate emotional displays, and

this is particularly the case when their motivation to comply with these rules stems from a fear of being punished for their violation.

Compliant, natural emotional displays. Finally, I repeated these analyses for compliant, natural emotional displays. Table 17 details that, controlling for display-rule perceptions, affective display-rule commitment is positively associated with the expression of compliant, natural emotional displays suggesting that workers who commit to display rules out of sense of value congruence are more likely to display genuine emotions that conform to these display rules. Step 2 introduces a significant interaction term, and the decomposed interaction (displayed in Figure 10) reveals that the negative relationship between display-rule perceptions and compliant, natural emotional displays is weakened to non-significance when affective commitment is high, supporting Hypothesis 4a. This suggests that the presence of stronger display rules do not significantly inhibit the expression of genuine emotional displays that are compliant when workers commit to the rules from a sense of value congruence.

I repeated these analyses for normative display-rule commitment. Table 18 details that, controlling for display-rule perceptions, normative commitment was significantly and positively associated with the expression of compliant, natural emotional displays suggesting that workers who commit to display-rules out of a sense of social obligation are more likely to express these displays. Step 2 introduced the commitment by display-rule presence interaction term, but this addition did not explain a significant amount of additional variance in compliant, natural emotional displays.

Finally, I repeated these analyses for continuance display-rule commitment. Table 19 details that, controlling for display-rule perceptions, continuance commitment was significantly, negatively related to compliant, natural emotional displays, suggesting that workers who commit to display rules out of a fear of sanction are less likely on average to display genuine emotions in response to emotional demands at work. Step 2 introduced the commitment by display-rule presence interaction term, but this addition did not explain a significant amount of additional variance in compliant, natural emotional displays.

Emotional Labor, Job Satisfaction and Emotional Exhaustion

The final phase of analyses explores the relationships of emotional labor strategies with worker outcomes and the potential moderating effects of autonomy and affective display-rule commitment. Bivariate correlations (Table 5) suggest that surface acting is negatively related to job satisfaction and positively related to emotional exhaustion. Deep acting, on the other hand, was positively related to job satisfaction and negatively related to emotional exhaustion. Additionally, surface acting and deep acting are negatively correlated with one another, and deep acting is positively correlated with a measure of sportsmanship organizational-citizenship behavior. These results lend additional support to the idea that deep acting does not appear to have the detrimental effects to worker well-being suggested by emotional labor theories (Grandey, 2000; Zapf et al., 2001), and functions more similarly to sportsmanship organizational-citizenship behaviors than to surface acting.

Moderation regression analyses were conducted to determine whether or not perceived autonomy moderated the relationships between surface acting and job satisfaction and between surface acting and emotional exhaustion. Step 1 of the analysis for job

satisfaction (See Table 20) revealed that, controlling for each other, surface acting is negatively associated with job satisfaction and autonomy is positively associated with job satisfaction. Step 2 added a significant interaction term resulting in a model that accounted for significant portion of additional variance. Figure 11 decomposes the interaction, suggesting that, consistent with earlier findings (Grandey et al., 2005; Johnson & Spector, 2007), higher autonomy decreases the strength of the relationship between surface acting and job satisfaction.

A mediated moderation path analysis shown in Figure 12 was conducted to assess whether or not affective display-rule commitment mediated the moderating effect of autonomy on the relationship between surface acting and job satisfaction. However, the path coefficient representing the regression of affective display-rule commitment on the autonomy by surface acting interaction term was non-significant, failing to support Hypothesis 5a. Mplus (Muthén, L., & Muthén, B., 1998-2011) syntax used in this procedure is displayed in Appendix D.

Step 1 of the analysis for emotional exhaustion (See Table 21) reveals that, controlling for each other, surface acting was positively association with emotional exhaustion and autonomy was negatively associated with emotional exhaustion. However, the addition of the interaction term in Step 2 did not explain a significant portion of additional variance. Therefore, it does not appear that the degree to which a person perceives higher autonomy on the job changes the relationship between how often they fake emotional displays and their emotional exhaustion, rendering the mediated moderation analysis unnecessary in concluding there is no evidence to support Hypothesis 5b.

This analytic strategy was then repeated for deep acting. Table 22 details the results of the analysis regressing job satisfaction on autonomy and deep acting. Controlling for each other, both predictors are positively associated with job satisfaction. However, the addition of the interaction term in Step 2 did not explain a significant portion of additional variance. Table 23 details the results of the analysis regressing emotional exhaustion on autonomy and deep acting. Controlling for each other, autonomy is negatively related to emotional exhaustion, but deep acting is not significantly related. In addition, the introduction of the interaction term in Step 2 did not explain a significant portion of additional variance. As neither analysis demonstrates autonomy as having a significant moderating effect, the mediated moderation analyses are unnecessary in concluding there is no evidence to support Hypothesis 5c and Hypothesis 5d.

Discussion

This study has produced a number of findings that contribute to our understanding of emotional labor. First, the results challenge the assertion that the presence of display rules always has a negative effect on workers by demonstrating that many workers commit to display rules because they want to rather than have to. Second, the basis from which workers commit differentially predicts the degree to which they engage in behavioral strategies regarding their emotional displays at work. Third, the moderating effect of commitment on the relationship between perceptions of display-rule strength and emotional labor (Gosserand & Diefendorff, 2005) is further delineated by treating display-rule commitment as a multidimensional construct. Fourth, evidence continues to mount that deep acting and surface acting do not function according to similar models regarding their determinants and

outcomes. Finally, past moderating effects of autonomy between emotional labor strategies and worker well-being outcomes (Grandey et al., 2005; Johnson & Spector, 2007) were partially replicated, but hypotheses that affective display-rule commitment would mediate these effects were unsupported.

Motivational Bases for Display-Rule Commitment.

Some emotional labor theorists have posited that emotional labor is an inherently negative experience, asserting that the display rules that serve as the causal agent for emotional labor are perceived as impingements on autonomy and that the motivation to comply with these display-rules stems from the guilt of failing to uphold social norms or the fear of sanctions resulting from failing to do so (Grandey et al., 2010; Hochschild, 1983, 2008). The results of the latent profile analysis challenge these assertions. For 61.3% of the sample, a sense of value-congruence with organizational-display rules serves as the strongest motivating force behind their reported commitment. It appears that these individuals agree with the display-rules set by their organization, and therefore, there is an autonomous component to their compliance. These results do not discount the normative nor continuance bases from which display-rule commitment can stem. In fact, the mean level of continuance display-rule commitment varied little between the major profile groups, suggesting that the average worker does acknowledge that their commitment stems partially out of a fear of consequences associated with display-rule violation. However, past investigations have neglected to consider the possibility that workers may comply with display rules because they want to rather than have to, and these results suggest the phenomenon does exist.

Display-rule Commitment Main and Interaction Effects

Having established that varying bases for display-rule commitment exist, this study explored how each type of commitment differentially predicted four behavioral strategies a worker could adopt to address emotional display demands at work: two forms of emotional labor (surface acting and deep acting) and the expression of genuine emotions that either complied or did not comply with organizational display rules. Affective-display rule commitment and normative display-rule commitment were found to function fairly synonymously. Both forms of commitment were associated with lower levels of surface acting and higher levels of deep acting and compliant, natural emotional displays. Normative display-rule commitment did not function as hypothesized, but the results of the latent profile analysis and the high correlation between normative and affective commitment suggest that these two forms of motivation are unlikely to exist absent of each other. Continuance commitment functioned oppositely, with higher levels associated with more surface acting, lower deep acting, and lower compliant natural emotional displays. Workers who commit to display rules more autonomously are more likely to attempt to genuinely display their emotions or to genuinely try and change their emotions on behalf of the organization, whereas workers who commit to display rules out of a sense of fear are more likely to fake emotional displays. Finally, only continuance commitment was associated with noncompliant natural emotional displays such that workers who commit to display rules out of fear are less likely to display inappropriate emotions at work. Together, these results suggest that differing bases for display-rule commitment do not only exist but differentially predict what behavioral strategies workers adopt regarding their emotional displays.

The study also expands upon Gosserand and Diefendorff's (2005) finding that display-rule commitment moderated the relationship between display-rule perceptions and surface acting and between display rule perceptions and deep-acting, although the effect for deep acting was not replicated. Affective display-rule commitment weakens the relationship between display-rule perceptions and surface acting, suggesting that when workers commit to display rules because they want to, they are less likely to choose to fake emotional displays in response to stronger display rules. Examining this effect together with the finding that the relationship between display-rule perceptions and compliant natural emotional displays is weakened to non-significance in the presence of high affective display-rule commitment suggests that workers who comply with display-rules out of a sense of value congruence do not need to change their emotional displays away from what they would naturally display. Therefore, it appears that workers who commit to display rules because they want to are spared the need to engage in emotional regulation.

Surface Acting vs. Deep Acting

While relationships between surface acting, its causes, and its outcomes have supported the narrative that it is a primarily negative experience for the worker (Bono & Vey, 2005; Grandey, 2000; Judge et al., 2009), this narrative has not consistently been empirically supported for deep acting (Bono & Vey, 2005; Judge et al., 2009; Kruml & Geddes, 2000). The results of this study lend additional support to the notion that deep acting does not function according to the same processes as surface acting. While both forms of emotional labor are positively associated with display-rule perceptions such that the presence of stronger display rules is associated with higher levels of both emotional labor strategies, the

degrees to which participants engage in the two forms of emotional labor are negatively associated with one-another. Additionally, surface acting and deep acting are related in opposite directions with regards to outcomes for worker well-being, with surface acting being associated with lower job satisfaction and higher emotional exhaustion and deep acting being associated with higher job satisfaction and lower emotional exhaustion. Furthermore, participants who reported higher levels of autonomy reported engaging in higher levels of deep acting and sportsmanship organizational citizenship behaviors and lower levels of surface acting. Finally, surface acting and deep acting are differentially predicted by varying forms of display-rule commitment. Surface acting is positively associated with commitment stemming from fear of sanctions, consistent with theory. Deep-acting, however, is positively associated with commitment stemming from value-congruence and social obligation, lending additional evidence to the idea that it is a “good faith” form of emotional labor (Diefendorff et al., 2005; Grandey, 2000, p. 100; Rafaeli & Sutton, 1987). Taken together, theories that posit that deep acting is an emotionally draining experience similar to surface acting and that these two emotional labor strategies share common causes (Grandey et al., 2010; Gross, 1998a; Hochschild, 1983) appear unsupported by empirical findings. Results of this study suggest that deep acting should be treated as more similarly to organizational-citizenship behavior than to surface acting.

The Role of Autonomy in Emotional Labor Models.

This study attempted to integrate observed moderating effects of autonomy (Grandey et al., 2005; Johnson & Spector, 2007) and display-rule commitment (Gosserand & Diefendorff, 2005) in emotional labor models by proposing that autonomy’s effect on the

relationships between emotional labor strategies and worker outcomes would be mediated by its relationship with affective display-rule commitment. However, the moderation effect was only replicated in the relationship between surface acting and job satisfaction, and the mediated moderation hypothesis was not supported. These findings suggest that while autonomy may be a more distal predictor of work behavior than commitment (Diefendorff & Chandler, 2011), its effects on the relationship between surface acting and job satisfaction is direct rather than indirect through commitment.

Limitations/Future directions

All data for this study were collected using online self-report measures, leaving results open to mono-method biases. Of particular concern is whether or not the scales measuring affective display-rule commitment and normative display-rule commitment sufficiently differentiated between the two constructs, given the large correlation found. Additionally, the cross-sectional nature of the study limits the degree to which causal direction can be established. This issue is of particular interest because emotional labor models have generally placed job satisfaction and emotional exhaustion as outcomes of behaviors (Bono & Vey, 2005; Grandey, 2000), whereas organizational-citizenship behavior models have placed job satisfaction and emotional exhaustion as predictors of behaviors (Organ, 1988; Dalal, 2005). As I make the assertion that deep acting functions more similarly to sportsmanship organizational-citizenship behavior than to surface acting, a study that could determine the causal direction of the relationship between deep acting and these worker-well-being variables would be of considerable value.

Sample characteristics also raise some additional questions and concerns. Data for this investigation was collected from an entirely North American sample; however, significant differences in display-rules have been detected between samples in different countries. For instance, a Japanese sample reported display rules that were less permissive of expressions of anger, disgust, and contempt compared to the display rules reported by samples from the United States and Canada (Safdar et al., 2009). Therefore, additional research is needed to determine whether or not these findings generalize to populations outside of North America. Furthermore, this sample was not restricted to any particular industry or job type. Findings from this study may be further refined by making comparisons between samples from industries with different levels of emotional labor demands. For instance, comparisons could be made between jobs with high levels of customer interfacing versus low levels of customer interfacing.

A final limitation is that this study is that participants were asked to identify the degree to which organizational display rules required them to exhibit positive emotional expressions or inhibit negative emotional expressions (Diefendorff et al., 2005). This operationalization did not allow for participants to report instances in which there may be display rules for exhibiting negative emotional expressions and inhibiting positive emotional expressions, which may occur in work involving law enforcement, military, debt collection, or negotiation. Therefore, these findings may not generalize to jobs for in which these different emotional labor demands exist.

Recommendations for Practice and Conclusion

The results of this study suggest overall that it is possible for workers to identify with display rules out of a sense of affective commitment, and workers who do this are more likely to engage in less draining behavioral strategies in response to display rules. Therefore, when organizations employ display rules, they should make efforts to gain buy-in from their workforce when possible rather than relying only on reward, punishment, and disciplinary systems focused on achieving compliance. Such efforts should improve the chances that workers will identify the values of the organization embodied in the display rule as congruent with their own, boosting affective commitment (Deci & Ryan, 2000; Diefendorff & Chandler, 2012; Ryan & Deci, 2000; Meyer et al., 2004) and sparing the worker the draining experience of surface acting. As our economy continues to become more service oriented (Grandey & Diamond, 2010), the degree to which workers are required to regulate their emotional displays will only increase. Researchers and practitioners should therefore continue to expand our understanding of this area to help promote worker satisfaction and well-being in the face of these increasing demands.

Table 1.

Sample Demographics

	< H.S.	H.S.	Some college	Assoc/Tech	Bachelors	Grad
Educ. (%)	0.0	9.0	21.3	12.3	41.9	15.5
	Male	Female	Transgender	PNTA		
Sex (%)	44.4	55.1	0.2	0.2		
	Single	Married	Divorced/Separated	Widowed		
Marital						
Status (%)	41.2	47.2	10.2	1.4		
	Mean	SD	Min	Max		
Age	37.32	11.58	19.0	67.0		
Tenure						
(years)	6.10	5.50	0.0*	30.0		
Hrs/Wk	37.47	9.04	10.0	80.0		

Notes: PNTA = Prefer not to answer. *A value of 0 indicates that the participant has been employed less than one year and should not be interpreted as a true 0.

Table 2.

Model fit indices for latent profile analyses

	SABIC	BLRT*
2-Profile	3569.847	-1837.44
3-Profile	3533.871	-1770.45
4-Profile	3516.508	-1746.67
5-Profile	3503.521	-1732.20
6-Profile	3445.498	-1719.92

Note: All BLRT values significant at $p < .001$.

Table 3.

Classification posterior probabilities for the 6-profile model

	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6
Profile 1	0.94	0.00	0.06	0.00	0.00	0.00
Profile 2	0.01	0.99	0.00	0.00	0.00	0.00
Profile 3	0.01	0.00	0.93	0.01	0.06	0.00
Profile 4	0.00	0.00	0.02	0.85	0.13	0.00
Profile 5	0.00	0.00	0.02	0.02	0.93	0.04
Profile 6	0.00	0.00	0.00	0.00	0.03	0.97

Note: Values in bold are the average posterior probabilities associated with the profiles to which individuals were assigned.

Table 4.

LPA sample proportions and standardized mean values for six-profile solution

	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6
<i>N</i> (% Sample)	52 (12.0%)	11 (2.5%)	104 (24.1%)	15 (3.5%)	176 (40.7%)	74 (17.1%)
ADRC	-1.59	-3.02	-0.54	0.29	0.37	1.25
NDRC	-0.85	-1.13	-0.36	-1.76	0.35	0.79
ADRC	0.20	-0.04	0.04	-1.02	-0.01	0.08

Notes: ADRC = affective display-rule commitment, NDRC = normative display-rule commitment,

CDRC = continuance display-rule commitment.

Table 5.

Descriptive statistics and bivariate correlations for study variables

		<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
ADRC	1	5.55	1.03	1.00												
NDRC	2	5.14	1.09	0.51	1.00											
CDRC	3	4.20	1.42	-0.05	0.19	1.00										
SA	4	4.10	1.34	-0.22	-0.10	0.37	1.00									
DA	5	4.71	1.19	0.51	0.49	0.07	-0.10	1.00								
Sport	6	5.22	0.94	0.45	0.39	0.04	-0.16	0.32	1.00							
CNED	7	4.88	1.29	0.58	0.38	-0.29	-0.62	0.47	0.39	1.00						
NNED	8	3.17	1.23	-0.15	-0.14	-0.33	-0.31	-0.01	-0.15	0.19	1.00					

Notes: Bolded values are significant at $p < .05$. ADRC = Affective display-rule commitment, NDRC = normative display-rule commitment, CDRC = continuance display-rule commitment. SA = surface acting, DA = deep acting, Sport = Sportsmanship, CNED = compliant, natural emotional displays, NNED = noncompliant natural emotional displays.

Table 5 continued.

Descriptive statistics and bivariate correlations for study variables

		<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
Autonomy	9	4.89	1.44	0.41	0.25	-0.33	-0.25	0.23	0.22	0.47	0.14	1.00				
DRP	10	5.26	1.20	0.31	0.35	0.42	0.26	0.27	0.25	0.01	-0.36	-0.09	1.00			
JS	11	4.79	1.47	0.49	0.40	-0.34	-0.53	0.33	0.35	0.69	0.13	0.57	-0.03	1.00		
EE	12	3.52	1.49	-0.35	-0.30	0.35	0.54	-0.18	-0.32	-0.58	-0.06	-0.43	0.10	-0.81	1.00	
Quit	13	3.46	1.63	-0.37	-0.38	0.31	0.48	-0.24	-0.27	-0.56	-0.08	-0.52	0.05	-0.82	0.74	1.00

Notes: Bolded values are significant at $p < .05$. DRP = display-rule perceptions, JS = job satisfaction, EE = emotional exhaustion,

Quit = intention to quit.

Table 6.

Regression Analysis for Surface Acting on Display-rule Perceptions and Affective Display-Rule Commitment

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	<i>R</i> ² Δ
Step 1	42.67	(2, 429)				0.00	0.17
Intercept			4.11	0.06		0.00	
DRP			0.41	0.05	0.37	0.00	
ADRC			-0.43	0.06	-0.33	0.00	
Step 2	33.4	(3, 428)				0.00	0.02
Intercept			4.17	0.06		0.00	
DRP			0.39	0.05	0.35	0.00	
ADRC			-0.45	0.06	-0.35	0.00	
DRP X ADRC			-0.15	0.04	-0.16	0.00	

Notes: DV = surface acting. DRP = display-rule perceptions. ADRC = affective display-rule commitment. Bolded *R*² Δ values are significant at $p < .05$.

Table 7.

Regression Analysis for Surface Acting on Display-rule Perceptions and Normative Display-Rule Commitment

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	<i>R</i> ² Δ
Step 1	26.80	(2, 429)				0.00	0.11
Intercept			4.11	0.06		0.00	
DRP			0.38	0.05	0.34	0.00	
NDRC			-0.27	0.06	-0.22	0.00	
Step 2	19.80	(3, 428)				0.00	0.01
Intercept			4.15	0.06		0.00	
DRP			0.35	0.06	0.31	0.00	
NDRC			-0.26	0.06	-0.22	0.00	
DRP X NDRC			-0.10	0.04	-0.11	0.02	

Notes: DV = surface acting. DRP = display-rule perceptions. NDRC = normative display-rule commitment. Bolded *R*² Δ values are significant at *p* < .05.

Table 8.

Regression Analysis for Surface Acting on Display-rule Perceptions, Affective Display-rule Commitment and Normative Display-rule Commitment

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	$R^2 \Delta$
Step 1	29.47	(3, 431)					
Intercept			4.11	0.06		0.00	0.17
DRP			0.43	0.05	0.38	0.00	
ADRC			-0.38	0.07	-0.29	0.00	
NDRC			-0.11	0.06	-0.09	0.10	

Notes: DV = noncompliant, natural emotional displays. DRP = display-rule perceptions. ADRC = affective display-rule commitment. NDRC = normative display-rule commitment. Bolded $R^2 \Delta$ values are significant at $p < .05$.

Table 9.

Regression Analysis for Surface Acting on Display-rule Perceptions and Continuance Display-Rule Commitment

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	<i>R</i> ² Δ
Step 1	38.59	(2, 429)				0.00	0.15
Intercept			4.10	0.06		0.00	
DRP			0.14	0.06	0.13	0.01	
CDRC			0.30	0.05	0.32	0.00	

Notes: DV = surface acting. DRP = display-rule perceptions. CDRC = continuance display-rule commitment. Bolded *R*² Δ

values are significant at $p < .05$.

Table 10.

Regression Analysis for Surface Acting on Display-rule Perceptions, Affective Display-rule Commitment, and Continuance Display-Rule Commitment

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	$R^2 \Delta$
Step 1	40.01	(3, 428)				0.00	0.22
Intercept			4.11	0.06		0.00	
DRP			0.27	0.06	0.24	0.00	
ADRC			-0.36	0.06	-0.28	0.00	
CDRC			0.25	0.05	0.26	0.00	
Step 2	26.81	(5, 426)				0.00	0.02
Intercept			4.14	0.06		0.00	
DRP			0.26	0.06	0.24	0.00	
ADRC			-0.38	0.06	-0.30	0.00	
CDRC			0.23	0.05	0.24	0.00	
DRP X ADRC			-0.14	0.04	-0.14	0.00	
DRP X CDRC			0.02	0.03	0.03	0.45	

Notes: DV = surface acting. DRP = display-rule perceptions. ADRC = affective display-rule commitment. CDRC = continuance display-rule commitment. Bolded $R^2 \Delta$ values are significant at $p < .05$.

Table 11.

Regression Analysis for Deep Acting on Display-rule Perceptions and Affective Display-Rule Commitment

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	<i>R</i> ² Δ
Step 1	79.32	(2, 429)				0.00	0.27
Intercept			4.71	0.05		0.00	
DRP			0.12	0.04	0.12	0.01	
ADRC			0.54	0.05	0.47	0.00	

Notes: DV = deep acting. DRP = display-rule perceptions. ADRC = affective display-rule commitment. Bolded *R*² Δ values are significant at $p < .05$.

Table 12.

Regression Analysis for Deep Acting on Display-rule Perceptions and Normative Display-Rule Commitment

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	<i>R</i> ² Δ
Step 1	70.95	(2, 429)				0.00	0.25
Intercept			4.71	0.05		0.00	
DRP			0.11	0.04	0.11	0.01	
NDRC			0.49	0.05	0.45	0.00	

Notes: DV = deep acting. DRP = display-rule perceptions. NDRC = normative display-rule commitment. Bolded *R*² Δ values are significant at $p < .05$.

Table 13.

Regression Analysis for Deep Acting on Display-rule Perceptions and Continuance Display-Rule Commitment

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	<i>R</i> ² Δ
Step 1	16.84	(2, 429)				0.00	0.07
Intercept			4.71	0.06		0.00	
DRP			0.28	0.05	0.29	0.00	
CDRC			-0.04	0.04	-0.05	0.31	

Notes: DV = deep acting. DRP = display-rule perceptions. CDRC = continuance display-rule commitment. Bolded *R*² Δ values are significant at $p < .05$.

Table 14.

Regression Analysis for Noncompliant, Natural Emotional Displays on Display-rule Perceptions and Affective Display-Rule Commitment

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	<i>R</i> ² Δ
Step 1	32.27	(2, 429)				0.00	0.13
Intercept			3.17	0.06		0.00	
DRP			-0.36	0.05	-0.35	0.00	
ADRC			-0.05	0.06	-0.04	0.37	

Notes: DV = noncompliant, natural emotional displays. DRP = display-rule perceptions. ADRC = affective display-rule commitment. Bolded *R*² Δ values are significant at $p < .05$.

Table 15.

Regression Analysis for Noncompliant, Natural Emotional Displays on Display-rule Perceptions and Normative Display-Rule Commitment

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	<i>R</i> ² Δ
Step 1	31.84	(2, 429)				0.00	0.13
Intercept			3.17	0.06		0.00	
DRP			-0.37	0.05	-0.36	0.00	
NDRC			-0.01	0.05	-0.01	0.81	

Notes: DV = noncompliant, natural emotional displays. DRP = display-rule perceptions. NDRC = normative display-rule commitment. Bolded *R*² Δ values are significant at $p < .05$.

Table 16.

Regression Analysis for Noncompliant, Natural Emotional Displays on Display-rule Perceptions and Continuance Display-Rule Commitment

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	$R^2 \Delta$
Step 1	43.05	(2, 429)				0.00	0.17
Intercept			3.17	0.05		0.00	
DRP			-0.28	0.05	-0.27	0.00	
CDRC			-0.19	0.04	-0.22	0.00	
Step 2	30.34	(3, 428)				0.00	0.01
Intercept			3.22	0.06		0.00	
DRP			-0.30	0.05	-0.29	0.00	
CRC			-0.17	0.04	-0.19	0.00	
DRP X CDRC			-0.06	0.03	-0.09	0.04	

Notes: DV = noncompliant, natural emotional displays. DRP = display-rule perceptions. CDRC = continuance display-rule commitment. Bolded $R^2 \Delta$ values are significant at $p < .05$.

Table 17.

*Regression Analysis for Compliant, Natural Emotional Displays on Display-rule Perceptions and Affective Display-Rule**Commitment*

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	$R^2 \Delta$
Step 1	121.95	(2, 429)				0.00	0.36
Intercept			4.88	0.05		0.00	
DRP			-0.20	0.04	-0.19	0.00	
ADRC			0.80	0.05	0.63	0.00	
Step 2	87.80	(3, 428)				0.00	0.02
Intercept			4.83	0.05		0.00	
DRP			-0.19	0.04	-0.17	0.00	
ADRC			0.82	0.05	0.65	0.00	
DRP X ADRC			0.13	0.04	0.14	0.00	

Notes: DV = compliant, natural emotional displays. DRP = display-rule perceptions. ADRC = affective display-rule

commitment. Bolded $R^2 \Delta$ values are significant at $p < .05$.

Table 18.

*Regression Analysis for Compliant, Natural Emotional Displays on Display-rule Perceptions and Normative Display-Rule**Commitment*

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	<i>R</i> ² Δ
Step 1	40.7	(2, 429)				0.00	0.16
	6						
Intercept			4.88	0.06		0.00	
DRP			-0.15	0.05	-0.14	0.00	
NDRC			0.50	0.06	0.43	0.00	

Notes: DV = compliant, natural emotional displays. DRP = display-rule perceptions. NDRC = normative display-rule

commitment. Bolded *R*² Δ values are significant at $p < .05$.

Table 19.

Regression Analysis for Compliant, Natural Emotional Displays on Display-rule Perceptions and Continuance Display-Rule

Commitment

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	$R^2 \Delta$
Step 1	26.09	(2, 429)				0.00	0.11
Intercept			4.88	0.06		0.00	
DRP			0.18	0.05	0.16	0.00	
CDRC			-0.33	0.05	-0.36	0.00	

Notes: DV = compliant, natural emotional displays. DRP = display-rule perceptions. CDRC = continuance display-rule

commitment. Bolded $R^2 \Delta$ values are significant at $p < .05$.

Table 20

Regression Analysis for Job Satisfaction on Surface Acting and Autonomy

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	<i>R</i> ² Δ
Step 1	202.76	(2, 429)				0.00	0.49
Intercept			4.79	0.05		0.00	
SA			-0.45	0.04	-0.41	0.00	
Auto			0.48	0.04	0.47	0.00	
Step 2	140.31	(3, 428)				0.00	0.01
Intercept			4.82	0.05		0.00	
SA			-0.44	0.04	-0.40	0.00	
Auto			0.47	0.04	0.46	0.00	
SA X Auto			0.06	0.02	0.10	0.00	

Notes: DV = job satisfaction. SA = surface acting. Auto = autonomy. Bolded *R*² Δ values are significant at $p < .05$.

Table 21.

Regression Analysis for Emotional Exhaustion on Surface Acting and Autonomy

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	<i>R</i> ² Δ
Step 1	133.85	(2, 429)				0.00	0.38
Intercept			3.52	0.06		0.00	
SA			0.52	0.04	0.46	0.00	
Auto			-0.32	0.04	-0.31	0.00	

Notes: DV = emotional exhaustion. SA = surface acting. Auto = autonomy. Bolded *R*² Δ values are significant at $p < .05$.

Table 22.

Regression Analysis for Job Satisfaction on Deep Acting and Autonomy

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	<i>R</i> ² Δ
Step 1	124.75	(2, 429)				0.00	0.38
Intercept			4.79	0.06		0.00	
DA			0.26	0.05	0.21	0.00	
Auto			0.54	0.04	0.53	0.00	

Notes: DV = job satisfaction. DA = deep acting. Auto = autonomy. Bolded *R*² Δ values are significant at *p* < .05.

Table 23.

Regression Analysis for Emotional Exhaustion on Deep Acting and Autonomy

	<i>F</i>	(df1, df2)	<i>B</i>	(SE)	β	<i>p</i>	<i>R</i> ² Δ
Step 1	50.29	(2, 429)				0.00	0.19
Intercept			3.52	0.07		0.00	
DA			-0.10	0.06	-0.08	0.07	
Auto			-0.42	0.05	-0.41	0.00	

Notes: DV = emotional exhaustion. DA = deep acting. Auto = autonomy. Bolded *R*² Δ values are significant at $p < .05$.

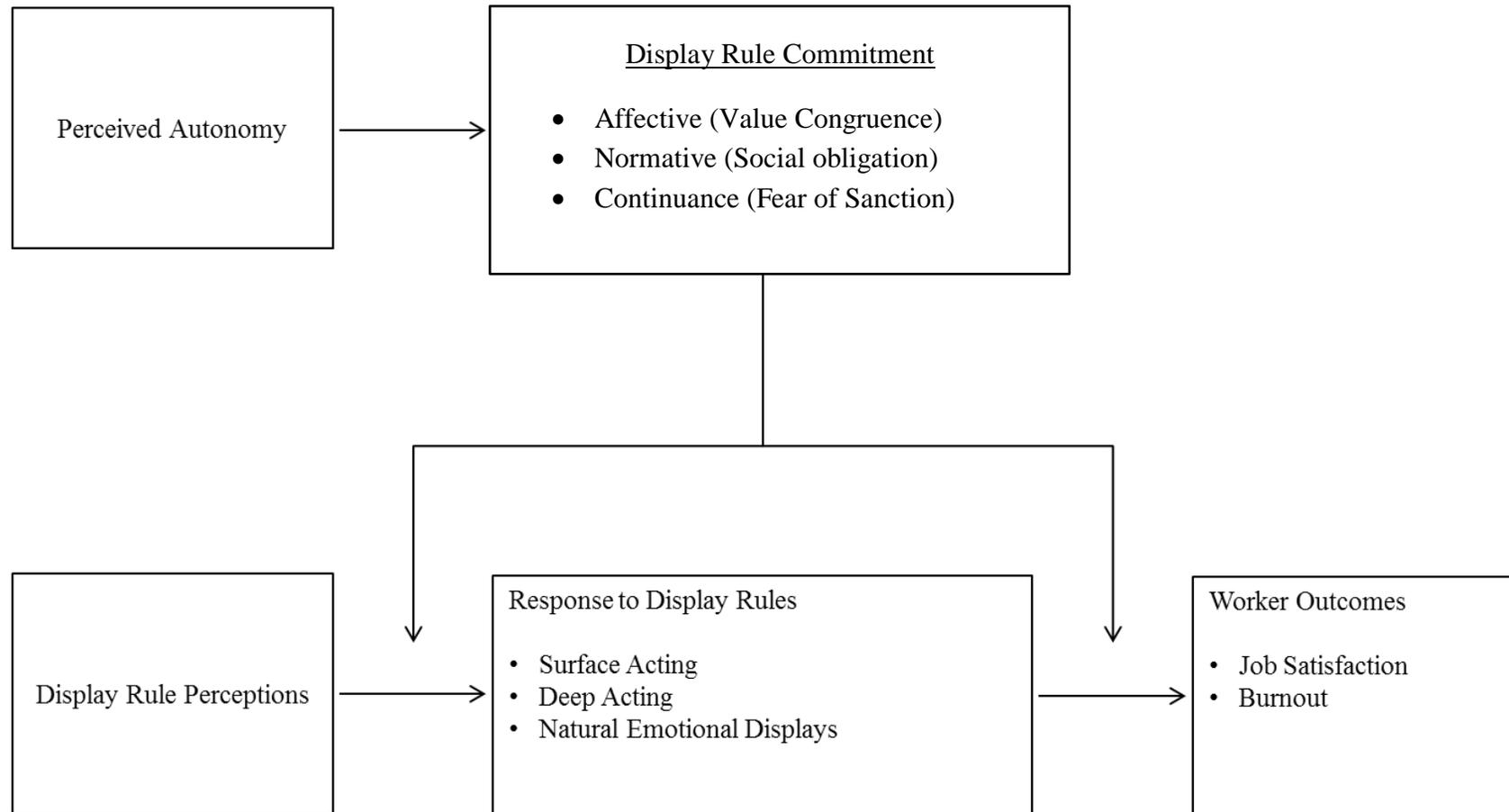


Figure 1. Conceptual Framework.

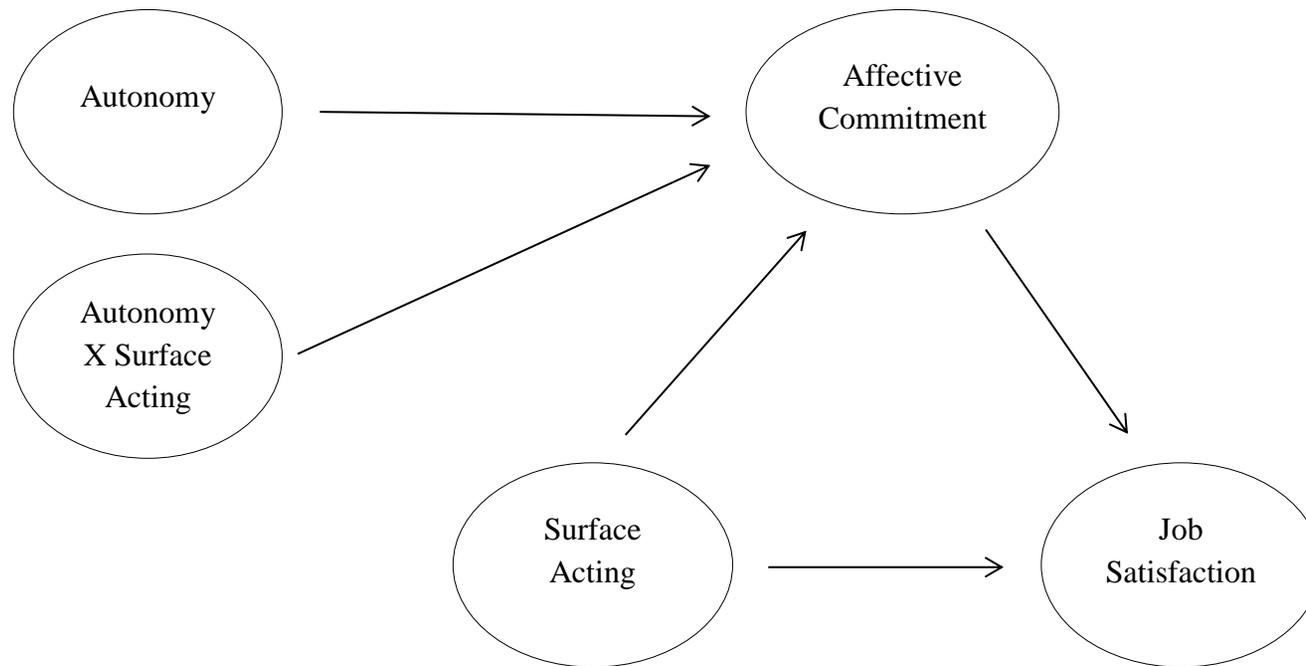


Figure 2. Mediated moderation analysis for Hypothesis 5a.

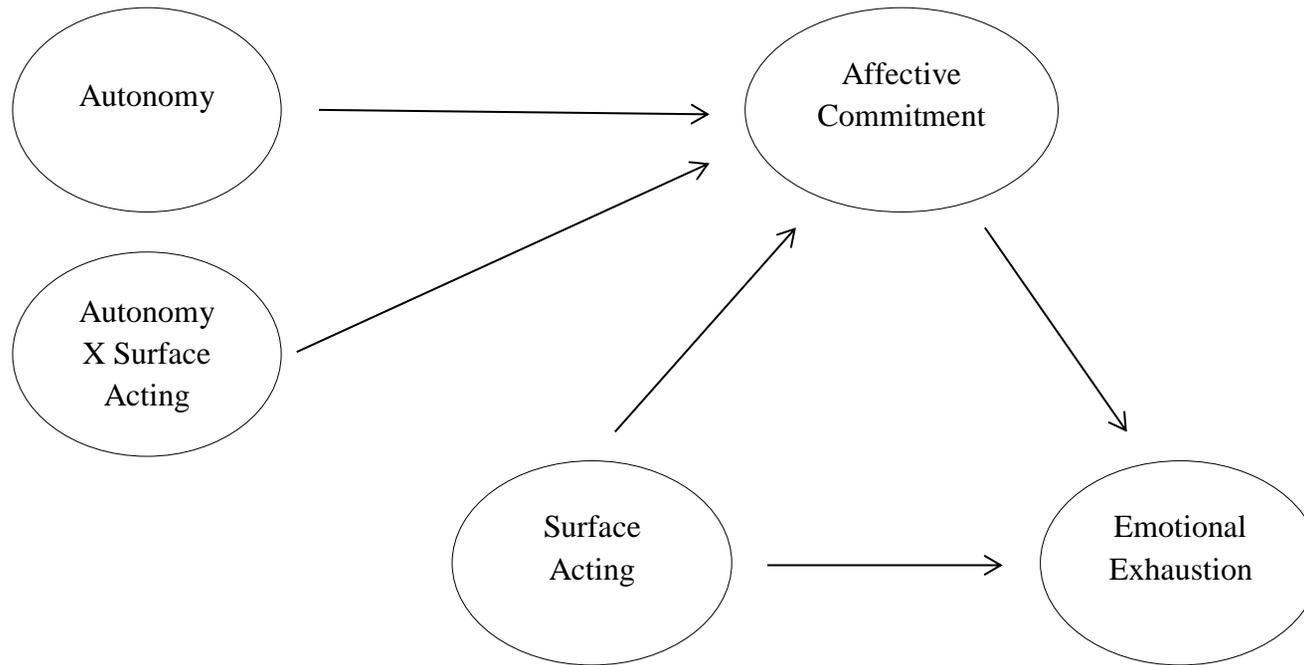


Figure 3. Mediated moderation analysis for Hypothesis 5b.

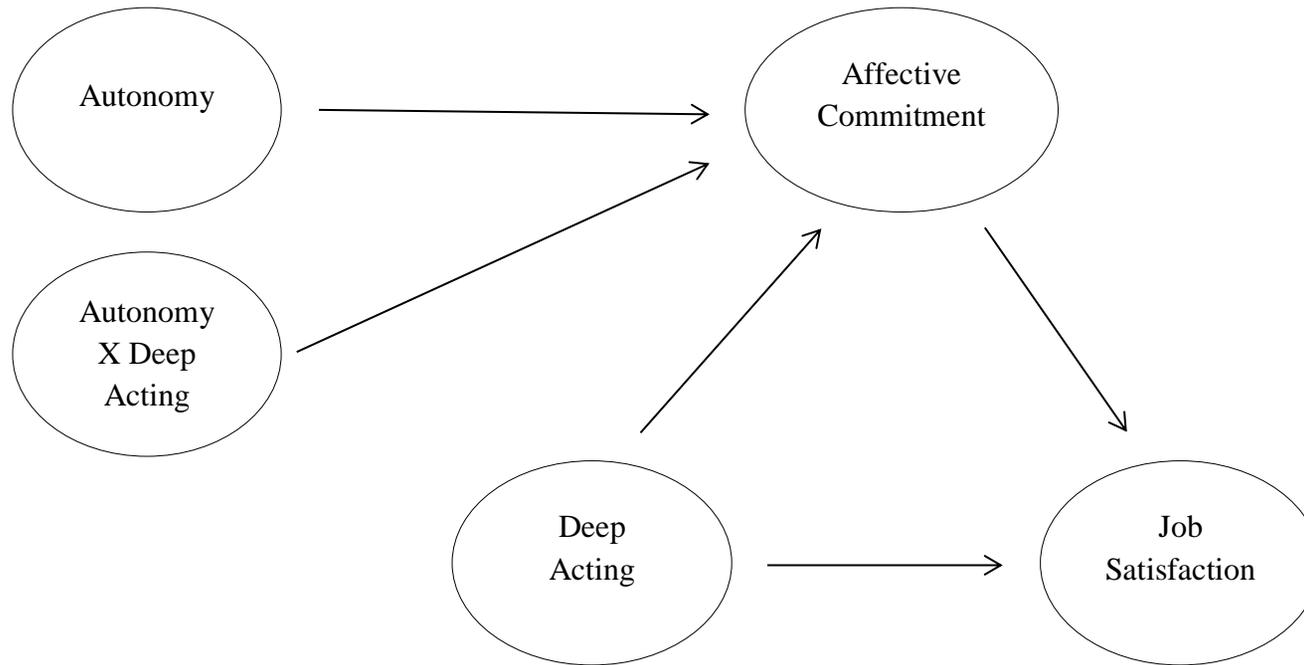


Figure 4. Mediated moderation analysis for Hypothesis 5c.

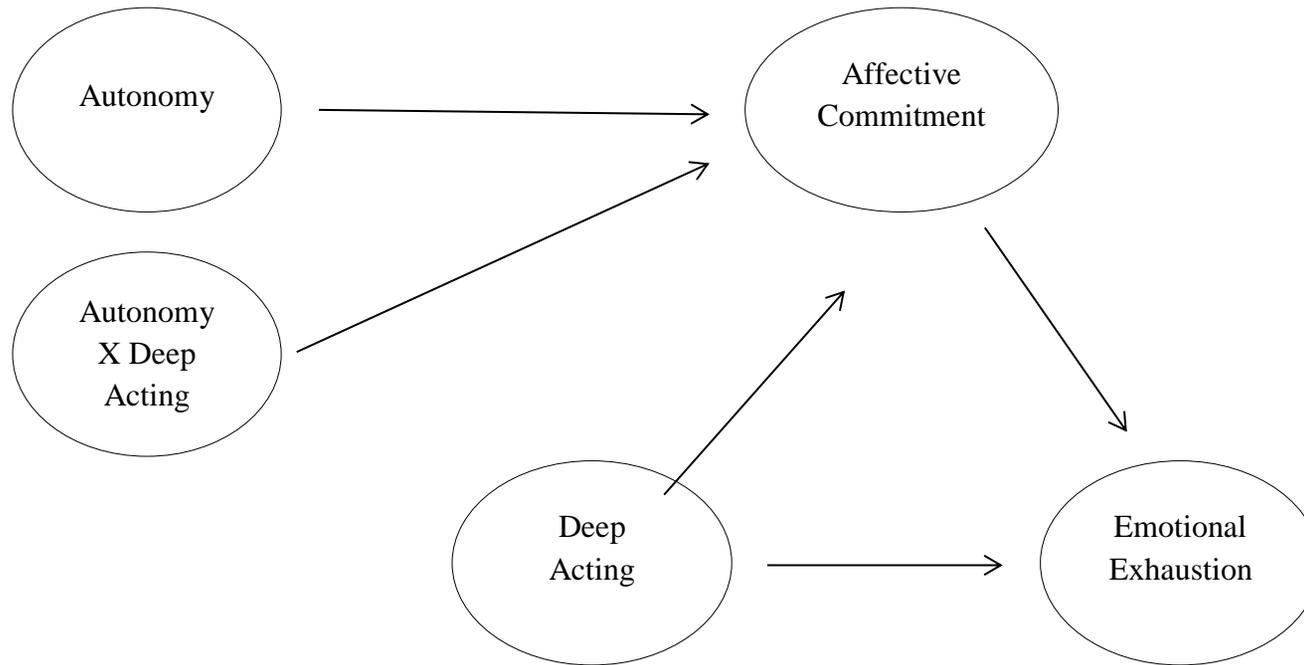


Figure 5. Mediated moderation analysis for Hypothesis 5d.

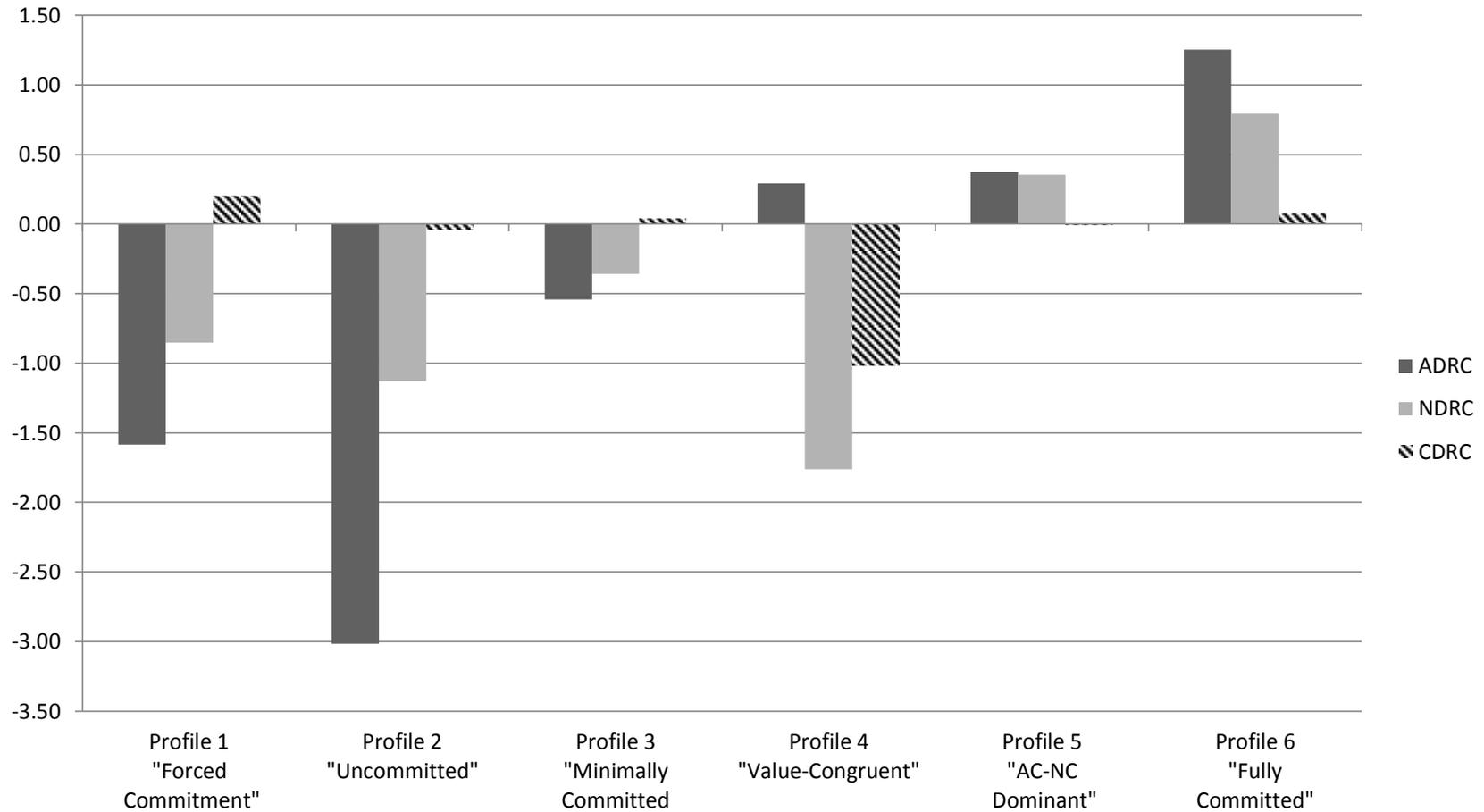


Figure 6. Display-rule commitment profiles (DRCs). ADRC = affective display-rule commitment. NDRC = normative display-rule commitment. CDRC = continuance display-rule commitment.

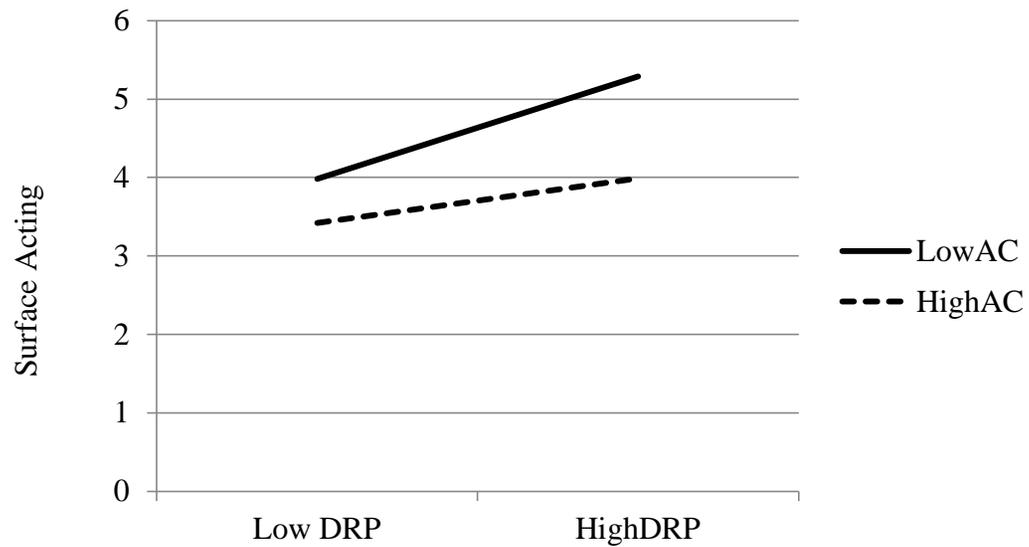


Figure 7. Interaction of Display-rule Perceptions (DRP) and Affective Display-rule Commitment (AC) on Surface Acting.

Simple slope for Low AC = 0.54 (.06), $t = 8.4757$, $p < .001$. Simple slope for High AC = 0.23 (.07), $t = 3.19$, $p = .002$.

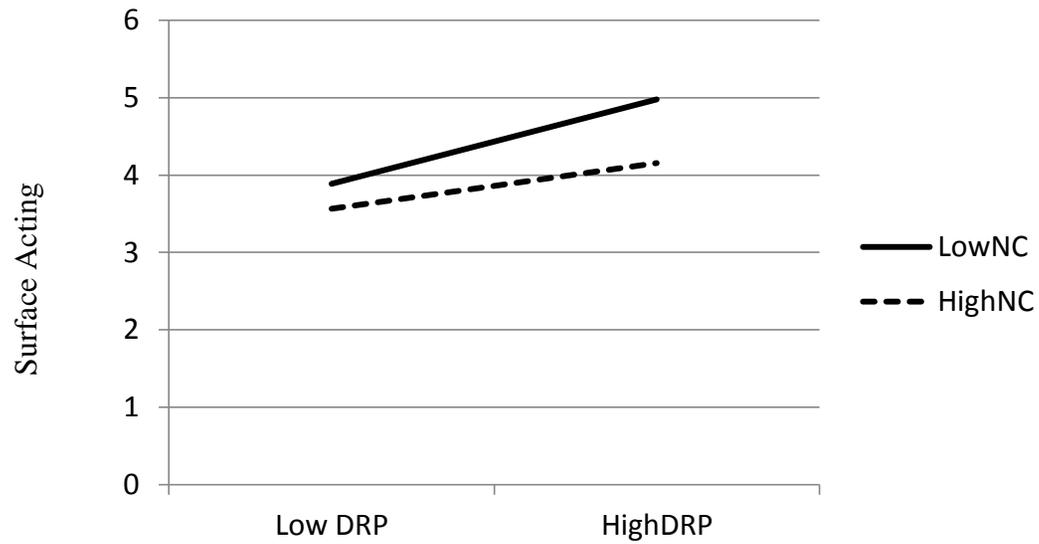


Figure 8. Interaction of Display-rule Perceptions (DRP) and Normative Display-rule Commitment (NC) on Surface Acting.

Simple slope for Low NC = 0.46 (.06), $t = 7.13$, $p < .001$. Simple slope for High NC = .25 (.08), $t = 3.12$, $p = .002$.

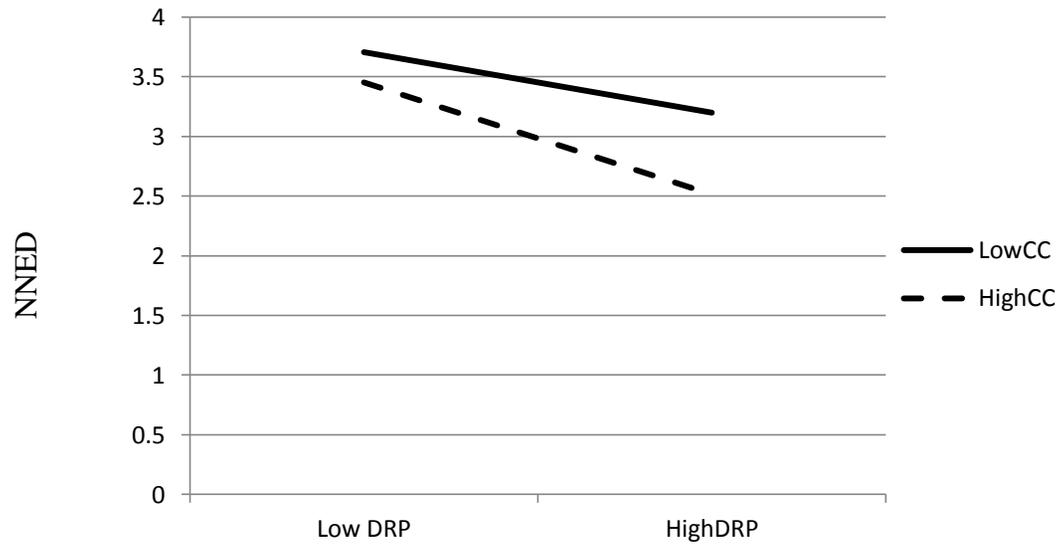


Figure 9. Interaction of Display-rule Perceptions (DRP) and Continuance Display-rule Commitment (CC) on Noncompliant, natural emotional displays. Simple slope for Low CC = -0.21 (.06), $t = 3.59$, $p < .001$. Simple slope for High CC = -0.39 (.08), $t = 5.26$, $p < .001$.

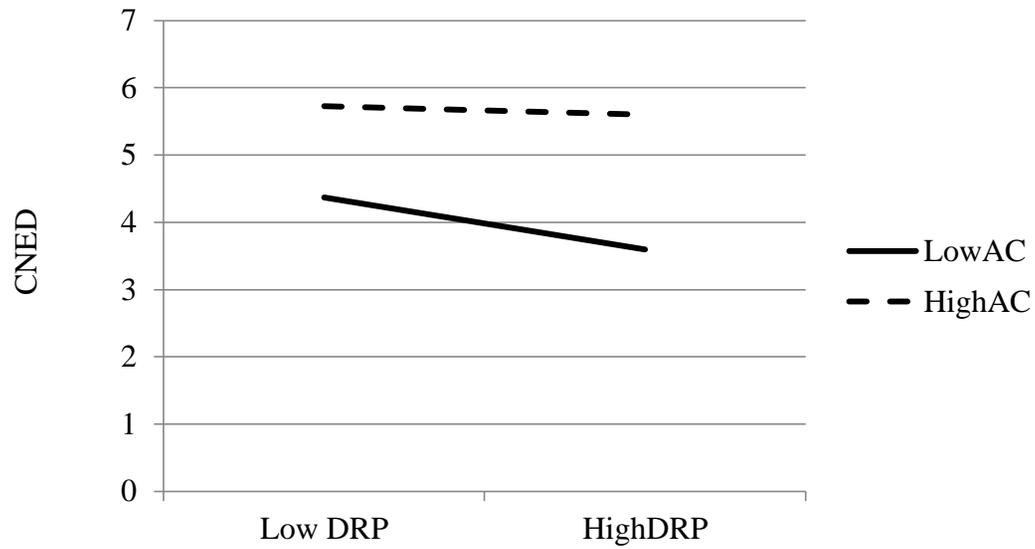


Figure 10. Interaction of Display-rule Perceptions (DRP) and Affective Display-rule Commitment (AC) on Compliant, natural emotional displays (CNED). Simple slope for Low AC = -0.32 (.05), $t = 5.91$, $p < .001$. Simple slope for High AC = -0.05 (.06), $t = -0.84$, $p = .40$.

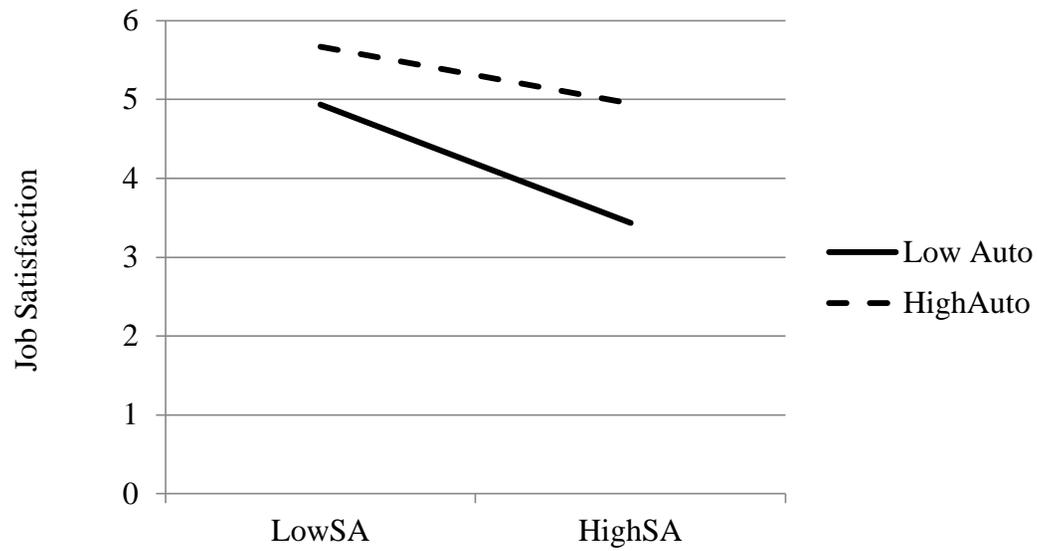


Figure 11. Interaction of Surface Acting (SA) and Autonomy (Auto) on Job Satisfaction. Simple slope for Low Auto = -0.53(.05), $t = -11.23$, $p < .001$. Simple slope for High Auto = -0.34 (.05), $t = -6.40$, $p < .001$.

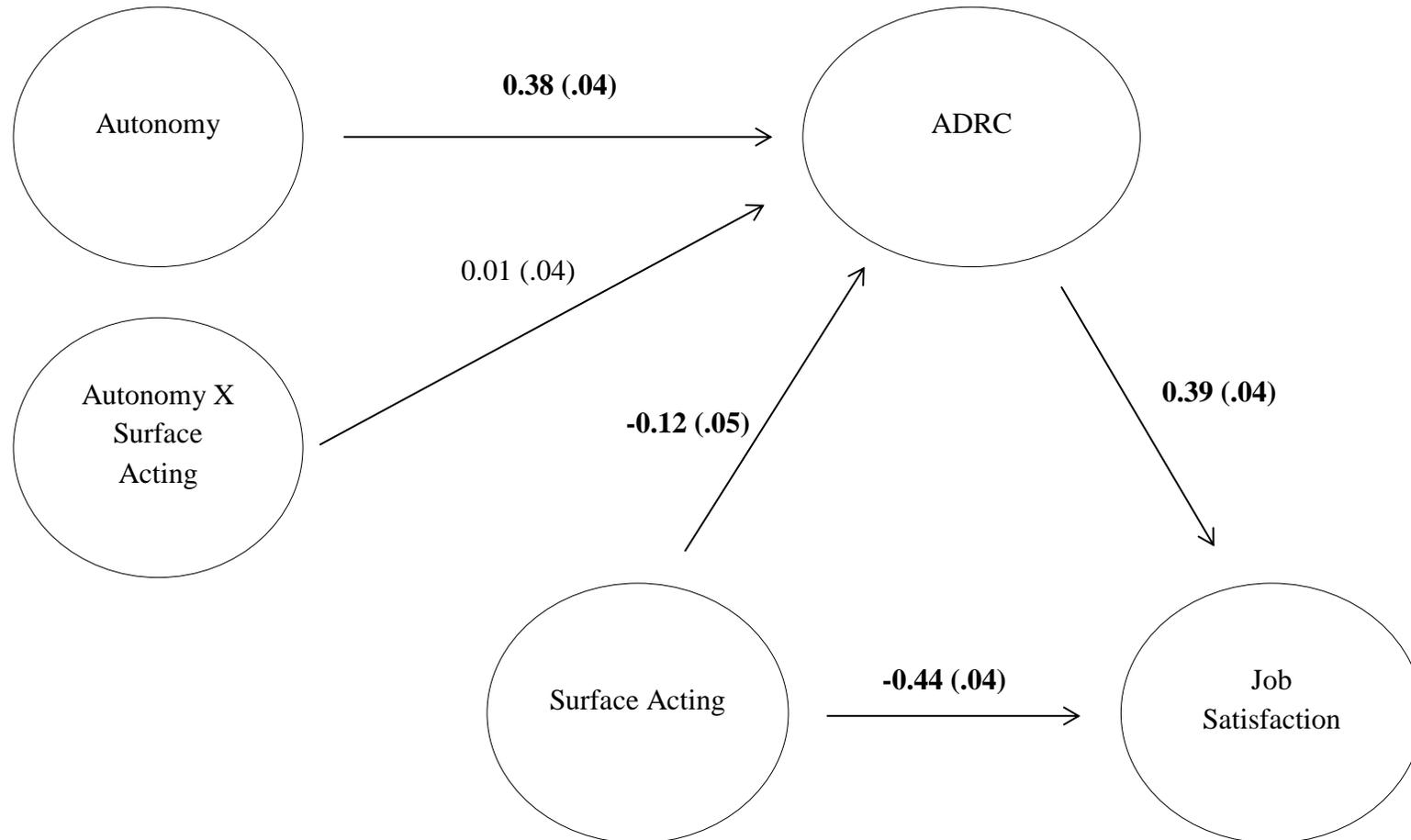


Figure 12. Mediated moderation results for Hypothesis 5a. ADRC = affective display-rule commitment. Bolded values significant at $p < .05$.

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APPENDICES

Appendix A

Scale Creation and Validation Pilot Study.

Self-report measures were needed to assess several constructs relevant to this study that did not currently exist in the literature. Therefore, I conducted a pilot study to create and assess the psychometric properties of scales for affective, normative, and display-rule commitment as well as for noncompliant, natural emotional displays and for compliant, natural emotional displays.

Measures

Display-rule commitment. Inspired by Gosserand and Diefendorff's (2005) display-rule commitment scale and the conceptual definitions of affective commitment, normative commitment, and continuance commitment as well as their theoretical bases of value congruence, normative obligation, and perceived costs respectively, I created three, 4-item scales to measure affective, normative, and display-rule commitment (See Appendix B). Participants were presented with the stem, "I strive to follow my organization's rules about displaying appropriate emotions and not display inappropriate emotions to customers because..." and were then asked to use a 7-point, Likert scale to indicate the degree to which they agree with each item which completes the phrase (1 = Strongly Disagree, 7 = Strongly Agree). Example items from each scale include "I would strive to display these emotion even if the organization didn't expect it of me", "I feel I owe it to my organization to try to follow their rules", and "Violating the rules would be too costly."

Natural emotional displays. Inspired by Diefendorff et al.'s (2005) three-item natural emotional display scale, I created two, 3-item scales for compliant, natural emotional

displays and noncompliant, natural emotional displays (see Appendix B). Example items include “There is rarely a conflict between what I really feel and the emotions I’m supposed to show to customers.” and “I refuse to fake or suppress my true feelings to customers.”

Participants will be asked to use a 7-point, Likert scale to indicate the degree to of frequency with which they engage in each behavior (1 = Almost Never, 7 = Almost Always).

Participants and Procedure

I gathered 104 participants using Amazon’s Mechanical Turk crowdsourcing tool. An advertisement solicited participants registered in the United States who were employed at least 10 hours a week and are over the age of 18 years old. Mechanical Turk allows requestors to approve or reject the work of online participants and allows requestors to filter participants by their approval rating. I required respondents to have a 95% approval rating or higher to participate.

The advertisement linked all participants to an informed consent form. Participants who elected to continue were linked to a survey battery containing the measures. I embedded the survey battery with two attention check items and rejected any submissions from participants who failed these items. Participants who successfully completed the survey were compensated \$0.50 for their participation.

Analyses

I ran a 5-factor confirmatory factor analysis constraining each of the created scales’ items to only load on their respective scale factor to determine whether or not each scale was sufficiently unidimensional. I then examined Cronbach’s alpha to determine the scales’ levels of internal consistency.

Results

Fit indices indicated rather poor fit for the model (See Table 1, Hu & Bentler, 1999). An examination of the factor loadings revealed the one item on CDRC scale, “It is required in order to do well in this job.”, failed to load properly on the CDRC factor, $\lambda(\text{SE})=0.43(.09)$, $p < .001$, and modification indices suggested that restrictions of parameters allowing this item to load on other factors were inhibiting model fit. Therefore, a second model excluding this item from analysis was specified.

The fit indices for this new model (See Table 1) suggest that overall model fit improved but was still poor following this respecification. However, all factor loadings ranged from .52 to .91, suggesting items were loading exceptionally well on their respective factors (See Table 2). Therefore, I proceeded to run reliability analyses, treating each scale as sufficiently unidimensional.

The Cronbach’s alpha for the 4-item ADRC scale was 0.86, but the deletion of the item “It personally makes me happy to do so”, would improve this indicator to 0.89. A comparison of this item to the other three (See Appendix B) reveals that, while this item emphasizes positive emotion, the others emphasize value congruence. Therefore, this item was eliminated, leaving a 3-item ADRC scale with a Cronbach’s alpha of 0.89.

The Cronbach’s alpha for the 4-item NDRC scale was 0.75, but the deletion of the item “I feel I ought to, whether I want to or not”, would improve this indicator to 0.79. A comparison of this item to the other three (See Appendix B) reveals that, while the other items emphasize an obligation to a boss, coworkers, or organization, this item lacks a specific

external target for commitment. Therefore, this item was eliminated, leaving a 3-item NDRC scale with a Cronbach's alpha of 0.79.

The Cronbach's alpha for the 4-item CDRC scale was .81, but the item, "It is required in order to do well in this job", was deleted due to a poor factor loading as described earlier.

This leaves a 3-item CDRC scale with a Cronbach's alpha of 0.86.

Finally, the Cronbach's alphas for the 3-item noncompliant natural-emotional display and compliant natural-emotional display scales were 0.80 and 0.83 respectively.

Table 1.

Fit indices for pilot 5 factor CFA to assess unidimensionality of self-report measures.

Construct	χ^2 (df)	CFI	TLI	RMSEA	RMSEA 95% CI	SRMR
Model 1	314.88(125)*	.82	.78	.12	{.10, .14}	.12
Model 2	246.42(109)*	.86	.82	.11	{.09, .13}	.10

Notes: $N = 104$. * $p < .001$. Model 2 is identical to Model 1 except that one item from the continuance display-rule commitment scale is not included.

Table 2.

Factor loadings (standard errors) for self-report items on relevant factors

	ADRC	NDRC	CDRC	CNED	NNED
Item 01	0.64 (.07)	0.67 (.06)	0.85 (.04)	0.67 (.06)	0.88 (.06)
Item 02	0.73 (.05)	0.74 (.05)	0.85 (.04)	0.81 (.04)	0.62 (.07)
Item 03	0.91 (.02)	0.52 (.08)	0.74 (.05)	0.91 (.04)	0.79 (.06)
Item 04	0.88 (.02)	0.79 (.05)			

Notes: All factor loadings significant at $p < .001$. ADRC = Affective display-rule commitment, NDRC = Normative display-rule commitment, CRDC = continuance display-rule commitment, CNED = compliant natural emotional displays, NNED = non-compliant natural emotional displays.

Appendix B

Study Scale Items.

Display-Rule Perceptions. Slight alteration of Diefendorff, Croyle and Gosserand (2005).

These scales were combined into a single Display-rule perceptions measure.

Positive display-rule perceptions

1. Part of my job is to make the customer feel good.
2. My workplace expects me to express positive emotions to customers as part of my job.
3. This organization would say that part of the product to customers is friendly, cheerful service.
4. My organization expects me to try to act excited and enthusiastic in my interactions with customers.

Negative display-rule perceptions

1. I am expected to suppress my bad moods or negative reactions to customers.
2. This organization expects me to try to pretend that I am not upset or distressed.
3. I am expected to try to pretend I am not angry or feeling contempt while on the job.

Emotional Labor. Slight alteration of Diefendorff, Croyle and Gosserand (2005)

Surface Acting

1. I put on an act in order to deal with customers in an appropriate way.
2. I fake a good mood when interacting with customers.
3. I put on a “show” or “performance” when interacting with customers.
4. I just pretend to have the emotions I need to display for my job.

5. I put on a “mask” in order to display the emotions I need for the job.
6. I show feelings to customers that are different from what I feel inside.
7. I fake the emotions I show when dealing with customers.

Deep Acting

1. I try to actually experience the emotions that I must show to customers.
2. I make an effort to actually feel the emotions that I need to display toward others.
3. I work hard to feel the emotions that I need to show to customers.
4. I work at developing the feelings inside of me that I need to show to customers.

Natural Emotional Displays. Inspired by Diefendorff, Croyle, and Gosserand (2005)

Compliant

1. There is rarely a conflict between what I really feel and the emotions I’m supposed to show to customers.
2. The emotions I display to customers are both genuine and appropriate.
3. The emotions I’m supposed to show at work just come naturally to me.

Noncompliant

1. I show customers my true emotions, even when I’m not supposed to.
2. I refuse to fake or suppress my true feelings to customers.
3. I show my true feelings at work, even if they might offend someone.

Display-Rule Commitment. Inspired by Gosserand and Diefendorff (2005).

Regarding the emotions your organizations desires you express and suppress, how much would you say you agree with the following statements on average?

I strive to display appropriate emotions and not display inappropriate emotions to customers because...

Affective Display-Rule Commitment

1. It personally makes me happy to do so. (Not included in final scale).
2. I would strive to do this even if the organization didn't expect it of me.
3. I personally see value in doing so.
4. I agree with my organization that it is a good thing to do.

Normative Display-Rule Commitment

1. I do not want to let my boss or coworkers down.
2. I feel I owe it to my organization to try to follow their rules.
3. I feel I ought to, whether I want to or not. (Not included in final scale)
4. It is expected of me by people with whom I work.

Continuance Display-Rule Commitment

1. I would be fired or punished if I did not.
2. I don't have a choice.
3. Violating the rules would be too costly to me.
4. It is required in order to do well in this job. (Not included in final scale)

Perceived Autonomy. Morgeson, Delaney-Klinger, and Hemingway (2005)

1. I have significant autonomy in determining in how I do my job.
2. I can decide on my own how to go about doing my work.
3. I have considerable opportunity for independence and freedom in how I do my job.

Job satisfaction. Judge, Bono, and Locke (2000).

1. I feel fairly satisfied with my present job.
2. Most days I am enthusiastic about my work.
3. Each day at work seems like it will never end.
4. I find real enjoyment in my work.
5. I consider my job to be rather unpleasant.

Emotional Exhaustion. Wharton (1993)

1. I feel emotionally drained at work.
2. I feel used up at the end of the work day.
3. I dread getting up in the morning and have to face another day on the job.
4. I feel burned out from my work.
5. I feel frustrated by my job.
6. I feel I'm working too hard at my job.

Sportsmanship Organizational Citizenship Behaviors. Podsakoff et al. (1990)

1. I'm a good sport when things do not go as planned at work.
2. I rarely gripe about small inconveniences at work.
3. I display a positive attitude at work, even when things go wrong.
4. I don't complain about little things around my coworkers.
5. When I get frustrated at work, I try not to let it show.

Appendix C

Mplus (Muthén, L., & Muthén, B., 1998-2011) Syntax for Latent Profile Analyses

TITLE: 2 class LPA restricted

DATA: FILE IS "C:\Users\Gabe\Dropbox\Research\Stat Programs\M Plus\LPA.csv";

VARIABLE:

NAMES ARE ID ADRC CDRC NDRC;

USEVARIABLES ARE ADRC CDRC NDRC;

CLASSES = c (2);

ANALYSIS:

TYPE = MIXTURE;

STARTS 200 20;

OUTPUT:

SAMPSTAT RESIDUAL TECH11 TECH14

TITLE: 3 class LPA restricted
DATA: FILE IS "C:\Users\Gabe\Dropbox\Research\Stat Programs\M Plus\LPA.csv";
VARIABLE:

NAMES ARE ID ADRC CDRC NDRC;

USEVARIABLES ARE ADRC CDRC NDRC;
CLASSES = c (3);

ANALYSIS:
TYPE = MIXTURE;
STARTS 200 20;

OUTPUT:
SAMPSTAT RESIDUAL TECH11 TECH14;

TITLE: 4 class LPA restricted

DATA: FILE IS "C:\Users\Gabe\Dropbox\Research\Stat Programs\M Plus\LPA.csv";

VARIABLE:

NAMES ARE ID ADRC CDRC NDRC;

USEVARIABLES ARE ADRC CDRC NDRC;

CLASSES = c (4);

ANALYSIS:

TYPE = MIXTURE;

STARTS 200 20;

OUTPUT:

SAMPSTAT RESIDUAL TECH11 TECH14;

TITLE: 5 class LPA restricted
DATA: FILE IS "C:\Users\Gabe Pappalardo\Dropbox\Research\Stat Programs\M
Plus\LPA.csv";
VARIABLE:

NAMES ARE ID ADRC CDRC NDRC;

USEVARIABLES ARE ADRC CDRC NDRC;
 CLASSES = c (5);
ANALYSIS:
 TYPE = MIXTURE;
 STARTS 200 20;

OUTPUT:
 SAMPSTAT RESIDUAL TECH11 TECH14;

TITLE: 6 class LPA restricted
DATA: FILE IS "C:\Users\Gabe Pappalardo\Dropbox\Research\Stat Programs\M
Plus\LPA.csv";
VARIABLE:

NAMES ARE ID ADRC CDRC NDRC;

USEVARIABLES ARE ADRC CDRC NDRC;
 CLASSES = c (6);
ANALYSIS:
 TYPE = MIXTURE;
 STARTS 200 20;

OUTPUT:
 SAMPSTAT RESIDUAL TECH11 TECH14;

Appendix D

Mplus (Muthén, L., & Muthén, B., 1998-2011) Syntax for Mediated Moderation Path Analysis

Title:

Path analysis of model 1;

Data:

File = "C:\Users\Gabriel Pappalardo\Dropbox\Research\
Stat Programs\M Plus\Centered.csv";

Variable:

```

names = ID   Pay   Autom ADRCm3   CDRCm3   CNEDm
Dam  EEm  JSm  NDRCm3   NNEDm   PDRPm   DRPm Quitm
SAm  Sportmintercept   DRCP cenAC cenCC
cenAuto   cenCNED   cenDA cenEE cenJS cenNC
cenNNED   cenDRP   cenQuit   cenSA cenSport   acXdrp
ncXdrpccXdrpacXsa acXda autoXsa   autoXda   drpXacXcc
acXncXdrp;

```

usevariables = JSm cenAuto cenSA autoXsa cenAC;

Analysis:

Estimator = ML;

Model:

JSm ON cenAC cenSA;
cenAC ON cenSA cenAuto autoXsa;

Model indirect:

JSm IND cenAuto;

Output:

stdyx mod(0);