SUPPRESSING POSITIVE EMOTIONAL DISPLAYS AT WORK:
AN ANALYSIS OF THE INDIVIDUAL AND ORGANIZATIONAL
CONSEQUENCES AMONG NURSES

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SUPPRESSING POSITIVE EMOTIONAL DISPLAYS AT WORK:
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Dissertation

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ABSTRACT

The current study sought to examine a neglected form of emotional labor, suppressing positive emotional displays. Drawing from the work of Gross (2002) on emotional regulation and Fredrickson (2006) on her broaden-and-build theory of positive emotions, I developed a conceptual model linking suppressed positive emotional displays to lower resilience through changes in positive affect. Further, I explored role identification as an important moderator of this relationship. Because nursing is an occupation increasingly burdened with demands to suppress positive emotions, I tied resilience to several organizational and individual outcomes that have lately been problematic for nurses, including burnout, work-family interference, health, and turnover intentions.

Tests of structural regression models indicated support for most hypothesized relationships. Suppressed positive emotional displays had a small, but statistically significant, negative, indirect effect on resilience through positive affect. No support was found for role identification as a moderator, although some main effects on other variables in the model were discovered through subsequent exploratory analyses. Resilience was found to have both direct effects on all three terminal outcomes (work-family interference, general health, and turnover intentions), as well as indirect effects through burnout. Implications, future research directions, and limitations to be addressed in future research are discussed.
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CHAPTER 1

STATEMENT OF THE PROBLEM

*Emotional labor*, the compensated management of emotional displays in the context of the workplace (Callahan & McCollom, 2002; Hochschild, 1983), is a component of many jobs that require employees to interact with others, including customers, coworkers, supervisors, and the public. Researchers have noted that emotional labor is highly important to many organizations and occupations (Glomb, Kammaeyer-Mueller, & Rotundo, 2004; Morris & Feldman, 1996), and therefore increasingly relevant to effective task performance (Diefendorff, Richard, & Croyle, 2006). Many researchers have accordingly focused on how employees successfully manage emotional displays in the context of their jobs (e.g., Grandey, 2000; Morris & Feldman, 1996; Rafaeli & Sutton, 1987; Wharton, 1993).

Suppression is one means of regulating emotional displays that has received a great deal of attention in the literature. *Suppression* is a form of response-focused emotion regulation that involves the inhibition of emotion-expressive behavior while emotionally aroused (Gross & Levenson, 1993; John & Gross, 2007). Although suppression of emotional displays is oftentimes advantageous in social settings as a means to inhibit undesirable displays (Cote, 2005), multiple studies have shown that suppression yields detrimental consequences. For example, research has tied suppressed emotional displays to memory impairment (Gross, 2002; Myers, Brewin, & Power, 1998;...
Richards & Gross, 1999), abated information processing abilities (Beevers & Scott, 2001; Brewin, Dagleish, & Joseph, 1996), lowered well-being (Gross & John, 2003), and disrupted communication and relationship formation (Butler et al., 2003; Richards & Gross, 2000; Waldron & Krone, 1991). Thus, although suppression is a common, adaptive means of regulating emotional displays, most research suggests that it is a flawed strategy given the unfavorable outcomes associated with its use.

Interestingly, most studies examining the effects of suppression have focused on the suppression of negative emotional displays, such as disgust, fear, or anger (Gross, 1998). This is consistent with a focus on occupations that have integrative norms (Wharton & Erickson, 1993) for emotional displays, which require the expression of positive emotions and suppression of negative emotions. Integrative norms are extremely common within customer service occupations that require emotional labor, such as retail sales (e.g., Luong, 2005), which form the basis of the existing service economy (Morris & Feldman, 1996). However, Wharton and Erickson (1993) also noted that many jobs are governed by either differentiating norms for displays, which require the suppression of positive emotion and the expression of negative emotions, or by masking norms for displays, which require the suppression of both positive and negative emotions.

Importantly, these distinctions indicate that suppressing positive emotional displays is common to both differentiating and masking occupations, suggesting that this under-studied display regulation strategy is common to a wide variety of occupations. For example, past research has identified that suppressing positive emotional displays is an important part of emotional labor among many jobs: business negotiators (Barry, 1999); detectives, police officers, bouncers, and security personnel (Mann, 1999; Rafaeli &
Sutton, 1991; Steinross & Kleinman, 1989); debt collectors (Rafaeli & Sutton, 1991; Sutton, 1991); service workers (Kahn, 1993); human resources professionals (Simpson & Lenoir, 2003); judges (Rafaeli & Sutton, 1991); politicians and priests (Mann, 1999); doctors and lawyers (Bolton, 2005, Mann, 1999); call dispatchers (Shuler & Sypher, 2000); and nurses (Lewis, 2005; Mann, 1999; Rafaeli & Sutton, 1987; Smith, 1992; Taylor & Barling, 2004). Thus, many occupations present demands to suppress positive emotions, but the consequences of this strategy are poorly understood.

The effects of suppressing positive emotions are especially important to understand given an emerging awareness of the importance of experiencing positive emotions, such as happiness, serenity, and joy, in daily life (Diener, 2000; Keyes, 2002). The experience of positive emotions has been tied to a variety of advantageous outcomes, such as increased intuition (Bolte, Goschkey, & Kuhl, 2003) and creativity (Isen, Daubman, & Nowicki, 1987). In addition to these transient benefits, an emerging body of work by Fredrickson and her colleagues has identified many enduring effects of positive emotions that fit within their “broaden-and-build” theory of positive emotions (Fredrickson, 1998, 2001, 2003; 2006; Fredrickson & Branigan, 2005; Fredrickson & Losada, 2005; Fredrickson, Tugade, Waugh, & Larkin, 2003; Tugade & Fredrickson, 2004; Tugade, Fredrickson, & Feldman Barrett, 2004). This theory asserts that positive emotions confer indirect, lasting resources that allow individuals to better withstand threats and challenges. Specifically, it contends that feeling and expressing positive emotions contributes to resilience, the ability to recover from negative experiences and adapt to changing demands (Lazarus, 1993). In turn, resilient individuals tend to feel more positive, which generates an upward spiral of well-being as positivity contributes to
resilience, and resilience allows individuals to feel more positive emotions (Fredrickson & Joiner, 2002).

In sum, little emotional labor research has examined the suppression of positive emotions despite evidence that (a) many people are required to do so in the course of their jobs; and (b) denying positive emotions may have important consequences for resilience and other individual and organizational outcomes. The overarching goal of this study is therefore to examine the consequences of suppressing positive emotions, as shown in Figure 1.1. Specifically, I expect that suppressing positive emotions will be associated with lower resilience via a direct and partially-mediated path through positive affect. Resilience, in turn, will relate negatively to turnover intentions and perceptions of work-family interference, and positively to perceptions of general health. I further expect that these effects of resilience will occur both directly and indirectly through mounting perceptions of burnout.

Further, one important boundary condition that I intend to examine is role identification (Ashforth, 2001; Ashforth & Humphrey, 1993, 1995), the extent to which an employee identifies with and adopts the goals, values, beliefs, norms, and interaction

Figure 1.1
Hypothesized Model.
styles that are associated with a work role. Ashforth and Humphrey (1993) suggested that high levels of role identification can protect employees from the negative consequences of emotional labor by making the emotional labor feel authentic and consistent with the self. Accordingly, I will assess the influence of role identification as a moderator of the relationship between suppressing positive emotions and resilience.

This study has the potential to contribute to the emotional labor literature in several respects. First, it focuses on suppressing positive emotional displays, an aspect of emotional labor that has been neglected despite evidence that positive emotional displays may be suppressed for a variety of reasons in many occupational contexts (Diefendorff & Greguras, 2006; Parrott, 1993, 2002). Second, although a number of studies have examined burnout, exhaustion, and related consequences of emotional labor (e.g., Bono & Vey, 2005; Brotheridge and Grandey, 2002; Brotheridge and Lee, 2002, 2003; Erickson & Ritter, 2001; Grandey, 2003), little attention has been given to individual differences, such as resilience, that may be affected by emotional labor. In this study, resilience is conceptualized as an important mediator between emotional labor and subsequent consequences that has the potential to influence research on the emotional labor – burnout relationship. Further, this study will empirically test the influence of role identification as a moderator of the relationship between emotional labor and its consequences, which researchers have previously considered only in a theoretical sense.

Among the occupations that require a suppression of positive emotions, researchers have noted that nurses in particular struggle with managing emotions and avoiding burnout and resilience losses (Aiken et al., 2001; Smith, 1992). Many researchers have noted that nursing is shifting from an occupation that emphasizes caring
to one that emphasizes professionalism and technical competence (e.g., Fielding & Llewelyn, 1987; Jewson, 1976; Phillips, 1996; Strauss, Fagerhaugh, Suczek, & Weiner, 1982; Woodward, 1997). As a consequence, emotional expressivity has become increasingly devalued, resulting in increased demands to suppress positive emotional displays and a shift from integrative to masking display demands. Thus, contemporary nurses are faced with unique, emerging demands to suppress positive emotional displays, and I will therefore study the effects of this behavior among a sample of nurses from a large, archival dataset drawn from a single healthcare organization.

The following chapter builds the rationale for Figure 1.1. I will first review research on the suppression of positive emotions and its prevalence in organizational settings, and tie this practice to undesirable consequences, such as losses in resilience. I will then consider the function of role identification (Ashforth & Humphrey, 1993), a possible boundary condition on this relationship. Lastly, I will discuss how resilience should contribute to long-term consequences. Specifically, I expect that resilience will have a negative relationship with burnout, turnover intentions, and work-family interference, and a positive relationship with general health.
CHAPTER II
REVIEW OF THE LITERATURE

The overall objective of the current study is to develop a model that tests the consequences of suppressing positive emotions among nurses. To this end, I have included several important outcomes that are relevant to the nursing profession, such as resilience, burnout, and turnover intentions. Further, I have included role identification as a potential moderator of the relationship between suppression and resilience.

The following sections present a detailed rationale for each of the relationships shown in Figure 1.1. I begin first by providing an overview of suppression, and in particular the suppression of positive emotional displays. I then turn to Wharton and Erickson’s (1993) taxonomy of emotional labor demands in occupations to clarify the new emotional labor demands that have emerged in the nursing occupation. Next, I link suppression of positive emotional displays to resilience by applying Fredrickson’s (2006) broaden-and-build theory of emotions. Lastly, I tie resilience to subsequent outcomes, including burnout, turnover intentions, work-family interference, and health.

Suppression of Positive Emotions

As noted previously, suppressing positive emotional displays is the aspect of emotional labor of interest in this study. The following section therefore provides an overview of the suppression of positive emotions. I will first review the structure of discrete emotions and identify the specific emotions that will be examined in the current
study. Next, I will present evidence that individuals in a variety of occupations do
suppress positive emotional displays by reviewing some recent exploratory research.

The Structure of Emotions

Broadly defined, *emotions* consist of several components, including an
association with a source (a person, object or event) that elicits the subjective experience
of an affective state and subsequently directs action tendencies (Frijda, 1993; Izard, 1993;
Lord & Kanfer, 2002; Weiss, 2002). In other words, as Scherer (1994) described them,
emotional experiences are an interface between input from the environment and
behavioral output, and our appraisal of external events determines how we will respond
in several different ways. Among these responses are changes in cognition, reports of
subjective internal experiences, changes in physiological indicators like blood pressure,
and facial and body movements that are interpretable by others (Cote, 2005; Ekman,
2003; Frijda, 1993; Levenson, 1994).

Although researchers have proposed a variety of ways to model discrete emotions,
among the more prevalent are affective circumplex models (see Figure 1.2), which
organize emotions around the circumference of a circle based on two underlying
dimensions of emotional experience (Russell, 1980). Two theories of the dimensions of
affect are evident in the literature. The first theory organizes emotions along dimensions
of *hedonic tone* or *valence*, the pleasantness of the felt emotion, and *intensity*, the level of
activation associated with the emotion (Cropanzano, Weiss, Hale, & Reb, 2003; Larsen &

However, this theory of affect is contrary to a second perspective that draws on
research on positive affectivity (PA) and negative affectivity (NA) (Barsade & Gibson,
Carver & Scheier, 1998; Cropanzano et al., 2003; Barrett & Russell, 1998; Gray, 1990; Watson, Clark & Tellegen, 1988). Watson and Tellegen (1985) characterized high PA as a sense of high energy and engagement, and low PA as a sense of depression or weariness. Similarly, they characterized high NA with intense, negative feelings like anger, irritation, or fear, while low NA is associated with tranquility or quiescence. Their PA-NA solution to the underlying dimensions of emotional experience is therefore rotated 45° from the valence-intensity solution described previously.

Despite research indicating that both of these perspectives have theoretical and empirical support (Cropanzano et al., 2003), the PA-NA rotation has received more recent attention, largely because it also fits with electroencephalogram (EEGs) or functional magnetic resonance imaging (fMRI) research regarding asymmetrical activation of the two frontal lobes of the brain (Amodio, Shah, Sigelman, Brazy, & Harmon-Jones, 2004; Canli et al., 2001; Carver, 2001; Carver & Scheier, 1998; Coan & Allen, 2003; Coan & Allen, 2004; Coan, Allen, & Harmon-Jones, 2001; Davidson, 2003; Fox, 1991). This program of research has shown that asymmetrical activation of the left anterior prefrontal cortex (PFC) is associated with PA, and specifically emotions ranging from elation (when successfully approaching a desired state) to sadness (when failing to do so). The right anterior PFC is associated with NA, and emotions ranging from calmness (when successfully avoiding an undesired state) to anxiety (when attempts to avoid the undesired state are failing).

Figure 2.1 shows an affective circumplex with these two perspectives integrated together for comparison. Specific discrete emotions are arrayed around the circumplex; those presented in bold text are the positive emotions that were measured in the current
study. Emotions presented on the left side of the figure possess a negative valence, whereas those presented on the right side of the figure possess a positive valence (calm, excited, happy, proud, and relaxed). Evidence from past research indicates that employees do feel a wide range of emotions at work, such as frustration, anger, joy, and amusement (e.g., Fine, 1988; Martin, Knopoff, & Beckman, 1998; Sutton & Rafaeli, 1988; Van Maanen & Kunda, 1989; Waldron & Krone, 1991), indicating that the variety of emotions measured in the current study is appropriate.

Thus, in the current study, I will examine the effects of suppressing five discrete, positive emotional displays: calmness, excitement, happiness, pride, and relaxation. Below, I present evidence indicating that people in a variety of occupations experience demands to suppress positive emotional displays, such as those associated with this set of emotions, in the workplace.

**Occupational Demands to Suppress Positive Emotional Displays**

Wharton and Erickson (1993) developed a taxonomy of emotional labor demands that provides a useful indication of the scope of occupations that have demands to suppress positive emotional displays. Specifically, this 2x2 taxonomy was created by crossing demands to express vs. suppress positive emotional displays with demands to express vs. suppress negative emotional displays. They then used this taxonomy to categorize occupations into three categories based on emotional labor demands.

As shown in Figure 2.2, occupations with integrative display demands are characterized by requirements to express positive emotional displays and to suppress negative emotional displays. Example occupations within this category include positions such as customer service representatives (Luong, 2002) and flight attendants (Hochschild, 1997).
Figure 2.1.
An Affective Circumplex Model of Discrete Emotions.

Note: Positive emotions measured in the current study’s archival dataset are presented in bold. Figure adapted from Cropanzano et al. (2003), Posner et al. (2005), Russell (1980), and Weiss (2002).
Because integrative occupations are tied so closely to the current service economy (Morris & Feldman, 1996), the types of emotional labor associated with integrative emotions (i.e., expressing positive and suppressing negative) have received a great deal of research attention (Bolton, 2005).

Differentiating occupations are characterized by an opposite pattern of display demands. Specifically, these occupations require the suppression of positive emotional displays and the expression of negative emotional displays. Figure 2.3 depicts this pattern of display demands. The work of Rafaeli and Sutton (e.g., Rafaeli & Sutton, 1987, 1989; Sutton, 1991) has focused on many occupations that fall within this category, including police officers and bill collectors.

The final occupational category identified by Wharton and Erickson (1993) is masking. Masking occupations require both a suppression of positive and negative emotional displays in order to present a neutral façade. This pattern is illustrated in Figure 2.4. As Bolton (2005) noted, masking demands are common to a variety of professional occupations, such as lawyers (Mann, 1999) and doctors (Steinross & Kleinman, 1989).

An analysis of Figures 2.2 through 2.4 indicates that suppressing positive emotional displays is a component of occupations that fall within both the differentiating and masking categories, suggesting that suppression of positive emotional displays is quite common. Indeed, several studies have shown that many occupations have demands to suppress positive emotional displays. For example, past research has identified the suppression of positive emotional displays among business negotiators (Barry, 1999), detectives and police officers (Rafaeli & Sutton, 1991; Steinross & Kleinman, 1989),
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Figure 2.2.
Pattern of Emotional Display Demands Associated with Integrative Occupations.

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Figure 2.3.
Pattern of Emotional Display Demands Associated with Differentiating Occupations.

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Figure 2.4.
Pattern of Emotional Display Demands Associated with Masking Occupations.
debt collectors (Rafaeli & Sutton, 1991; Sutton, 1991), service workers (Kahn, 1993), human resources professionals (Simpson & Lenoir, 2003), judges (Rafaeli & Sutton, 1991) and nurses (Lewis, 2005; Smith, 1992; Taylor & Barling, 2004). Employees within these occupations face situations in which displays of emotions such as happiness, relaxation, and enthusiasm need to be suppressed for a variety of purposes.

Moreover, some recent initial exploratory research indicates that people outside of these professions also feel compelled to rein in positive emotional displays when interacting with a variety of targets. Diefendorff and Greguras (2006) asked a sample of MBA students to select a display direction that they would use when presented with a combination of discrete emotions (anger, fear, sadness, happiness, surprise, boredom, contempt, disgust) and targets (supervisor, coworkers, subordinates, and customers). Interestingly, the overall most frequent direction selected for the emotion of happiness was deamplification, wherein the feeling is expressed with less intensity than it is actually felt (Matsumoto, Yoo, Hirayama, & Petrova, 2005). Deamplification was chosen most frequently when feeling happy and interacting with three of the four potential targets (supervisors, subordinates, and customers). Thus, Diefendorff and Greguras (2006) found evidence that people in a variety of occupations frequently found a need to at least partially suppress happiness, a positive emotion.

Among the occupations previously discussed, research suggests that nursing is an occupation that has only recently begun to involve suppressing positive emotional displays, resulting in an emergent challenge for nurses to appropriately manage their displays. The following section overviews recent changes in nursing that have contributed to this new emotional labor demand.
Suppression of Positive Emotions among Nurses

Researchers over the last several decades have noted that the nature of healthcare in general has greatly changed. For example, Jewson (1976) argued that bedside, holistic forms of caregiving have been superseded by hospital and laboratory forms of caregiving that focus more on constituent portions of the body, such as failing organs and cancerous cells. Relatedly, Strauss et al. (1982) pointed out that changes in healthcare have occurred due to changes in the types of sicknesses that are prevalent in Western society. Whereas caregivers previously struggled with protracted recovery from diseases such as tuberculosis, for which little could be done other than provide comfort to the sick person, contemporary caregiving is more proactive in screening, testing, and providing targeted treatment for diseases like cancer and cardiovascular disease. James (1992) saw this historical change as a shift from maintaining the sick person (i.e., trying to minimize the likelihood of getting sicker) to a desire to actually diagnose and cure the sick person. Moreover, as Phillips (1996) noted, these changes have occurred in the context of an increasingly technological environment in which advanced training and competencies are necessary to treat patients, and one in which budgetary efficiency is now seen as highly valuable (Jenson & Mooney, 1990).

The sum of these changes, as Phillips (1996) concluded, is that the emotional, nurturing aspect of healthcare has become comparatively devalued relative to technical competence, objectivity, and a more mechanical approach to viewing patients. This latter perspective has been referred to as instrumental caring (Leininger, 1981; Phillips, 1996; Woodward, 1997), in contrast to expressive caring, the aspect of caring that involves emotional displays. Morrison (1992) characterized expressive caring as recognizing and
treating the patient as a person with specific needs, some of which are emotional. To this end, researchers have noted that expressive care involves displaying emotions such as affection and acceptance (Woodward, 1997), as well as sympathy, compassion, and cheerfulness (Blum, 1980).

Importantly, some research indicates that an emphasis on instrumental care over expressive care has been socialized into nursing training. For example, Fielding and Llewelyn (1987) found that nurses who spent the most time interacting with patients were perceived as having the lowest status by their fellow nurses. Similarly, Smith (1991) found that nurses attributed a high degree of prestige to instrumental skills, whereas expressive skills to meet social and emotional needs were seen as outside of the domain of modern nursing. Further, she found that more senior nurses with more discretion over their job performance tended to voluntarily de-emphasize expressive caring. Phillips (1996) even went so far as to question if nursing, as a general occupation, would suffer a status loss, relative to other occupations, if emotional labor were to be formally acknowledged as an important part of the job.

Importantly, most researchers argue that the reduction in expressive caring that has co-occurred with the advent of instrumental caring is a problem for the nursing field, although the scope of this criticism has largely focused on negative outcomes for patients. For example, Benner and Wrubel (1989) stressed that instrumental approaches could be dangerous to patients without expressive care serving as a counterbalance. Similarly, Leininger (1981) argued that instrumental and expressive care were actually conflicting areas of expertise, and that focusing on technical skill could actually stunt the development of expressive abilities.
In sum, the nursing occupation has changed in ways that devalue expressive care, and thus discourage the expression of positive emotional displays. Yet, most researchers believe that this loss of expressive care yields negative consequences for patients. As shown in Figure 1.1, I believe that suppressing positive emotional displays is likely to have negative consequences for nurses as well. Accordingly, I now turn to developing this theoretical model by examining the outcomes for nurses associated with suppressing positive emotional displays.

The Consequences of Suppressing Positive Emotional Displays

The previous section identified that nurses likely feel occupational pressures (Bolton, 2005) to suppress positive emotional displays. However, a wide body of research indicates that both suppression in general, and specifically the suppression of positive emotional displays, can be harmful to one’s ability to cognitively function, experience positive emotions, and handle stressors on the job (e.g., Fredrickson, 2005; Gross, 2002), especially when a long-term perspective is adopted. In particular, Figure 1.1 shows that a proximal outcome of suppressing positive emotions is a negative relationship with resilience.

In its simplest conceptualization, *resilience* involves the capacity to cope with, and bounce back from, negative events (Block & Kremen, 1996; Carver, 1998; Connor & Davidson, 2003; Folkman & Moskowitz, 2000a). More recent conceptualizations of the construct are divided; some authors within the humanistic tradition maintain that resilience involves a capacity to actually develop and grow as a result of overcoming difficulties (Frederickson et al., 2003; Richardson, 2002), and others treat it only as the ability to quickly recover to a baseline level of functioning after difficulties with no net
gain (Carver, 1998; O’Leary & Ickovics, 1995). Consistent with Carver (1998), I will treat resilience consistent with the second definition. This perspective differentiates between resilience and thriving, as shown in Figure 2.5.

As indicated in Figure 1.1, I expect that suppressing positive emotional displays will influence resilience through both a direct and an indirect pathway. Below, I develop the justification for each of these pathways.

Figure 2.5
O’Leary and Ickovics’s (1995) Four Reactions to Adversity.

Note: Adapted from Carver (1998).
Indirect Relationship between Suppression and Resilience

As shown in Figure 1.1, I expect that suppressing positive emotional displays will influence resilience indirectly through changes in positive affect (PA), one’s tendency to experience feeling states consistent with positively valenced emotions, such as cheerfulness and excitement (Barsade & Gibson, 2007; Pugh, 2002). This expectation is based on a body of research by Gross and colleagues (Gross, 1998, 2002; Gross & John, 2002, 2003; Gross & Levenson, 1997), which demonstrates that the effects of suppressing emotions vary depending on the valence of the emotion. Evidence suggests that suppressing negative emotions does not diminish the subjective experience of the feeling. For example, Gross and Levenson (1997) found that participants who suppressed displays of sadness still felt just as sad as they did prior to suppression. Similarly, Harris (2001) found that suppressing embarrassment had no effect on the experience of embarrassment.

However, suppressing positive emotions seems to diminish the experience of the emotions (Duclos & Laird, 2001; Gross, 2002; Gross & Levenson, 1997). For example, research on the facial feedback hypothesis (Soussignan, 2002) shows that holding a facial position that prevents smiling when reading cartoons actually diminishes self-reports of sensations of amusement (McCanne & Anderson, 1987; Strack, Martin, & Stepper, 1988). Gross and Levenson (1997) and Bush, Barr, McHugo, and Lanzetta (1989) found similar results when studying the suppression of amusement. Further, suppressing the display of pride has been shown to diminish the experience of pride (Stepper & Strack, 1993), a different discrete, positive emotion.
Thus, suppressing positive emotions habitually may cause people to feel less positive over time, which might be reflected by a negative relationship with trait reports of PA. Importantly, trait positive affectivity refers to one’s tendency to generally feel positive; it does not refer to the momentary positive emotion that the individual is suppressing. Thus, based on this body of research, I expect that:

Hypothesis 1a: Suppression of positive emotions will be negatively related to trait positive affect.

Figure 1.1 indicates that PA will influence resilience in turn. Indeed, three streams of research indicate that positive affect should be positively related to resilience, and therefore that decreasing levels of positive affect through suppressed positive emotional displays should indirectly yield lower resilience.

First, a substantial stream of research suggests that positive affect may also be an indicator of biologically-based characteristics that facilitate resilience. As noted previously, the left anterior prefrontal cortex (PFC) is associated with PA and approach behaviors, and the right anterior PFC is associated with NA and avoidance behaviors (e.g., Amodio et al., 2004). From this perspective, high trait PA is indicative of a high degree of activation of the left anterior PFC, which suggests that approach behaviors are salient. People with high PA may therefore be more prone to engage in discrepancy reduction (Carver, 1998; Carver & Scheier, 1998; Howard, 2006) when facing a negative setback, which manifests as a resilient recovery of losses, restoring the individual back to a baseline homeostasis (Carver, 1998; Fredrickson, 2006).

Second, a body of research conducted by Folkman and colleagues (Folkman, 1997; Folkman & Moskowitz, 2000a, 2000b, 2004; Folkman, Moskowitz, Ozer, & Park,
1997; Lazarus, Kanner, & Folkman, 1980; Moskowitz, Folkman, Collette, & Vittinghoff, 1996) has shown that positive emotions have several beneficial functions during adverse events. For example, positive emotions can help people in stressful circumstances take a psychological “time out” by meaningfully creating positive disruptions during negative events (e.g., the use of “gallows humor”; Menniger, 1963). Further, PA can help people sustain their coping efforts and restore depleted resources. For example, Bonanno, Moskowitz, Tedlie, Papa, and Folkman (2005) found that bereaved spouses and parents with high PA were seen as better adjusted by close friends after their losses.

Fredrickson and her colleagues (Fredrickson, 1998, 2001, 2004, 2006; Fredrickson & Brannigan, 2005; Fredrickson & Joiner, 2002; Fredrickson & Levenson, 1998; Fredrickson & Losada, 2005; Fredrickson et al., 2003; Tugade & Fredrickson, 2002, 2004) have established the third, and perhaps most compelling link between PA and resilience. Specifically, they have amassed a large number of findings in support of their “broaden-and-build” model of positive emotions. This perspective advocates that positive emotions (a) contribute to resilience by allowing more adaptive and speedy recoveries from negative events, and (b) spiral upwards in a reciprocal sense as PA contributes to resilience, which generates more PA, and so forth. PA therefore contributes over time to increasing resilience, and resilience generates more PA. Fredrickson et al. (2003) clearly demonstrated this effect by relating trait resilience and affect measures given to participants prior to the September 11, 2001 terrorist attacks to measures of depression and psychological resources taken immediately after September 11. Their results showed support for the broaden-and-build perspective by showing that individuals
with higher resilience and PA experienced less depression and recovered more quickly than participants with lower resilience and PA.

Moreover, recent research by Cohn, Fredrickson, Brown, Mikels, & Conway (2007) further suggests a causal link between PA and resilience. In a repeated-measures study conducted over a month, they found that college students who experienced the most positive emotions also reported the greatest increases in trait resilience over the month. Consistent with this finding, Fredrickson and Joiner (2002) and Fredrickson (2006) have argued that positive emotions actually contribute to trait resilience, based largely on literature that demonstrates that positive emotions can similarly enhance attention and cognition.

Thus, the broaden-and-build perspective further provides a great deal of evidence that PA should be positively related to resilience. In sum, based on these three streams of research, I expect that:

Hypothesis 1b: Trait positive affect will be positively related to resilience.

Integrating Hypotheses 1a and 1b forms the indirect effect shown in Figure 1.1 from suppressing positive emotional displays to resilience via PA. Accordingly:

Hypothesis 1c: The relationship between suppression of positive emotional displays and resilience will be partially mediated by trait positive affectivity.

Importantly, as shown in Figure 1.1, I expect that PA will only partially mediate the relationship between suppression of positive emotional displays and resilience; I have also modeled a direct path from suppression to resilience. The following section builds the rationale for this direct path.
Direct Relationship between Suppression and Resilience

The indirect relationship between suppression of positive emotional displays and resilience described above is based on the affective consequences of suppression. However, as Gross (2002) noted, there are also cognitive and social consequences of suppression. These consequences may yield the direct effect between suppression and resilience shown in Figure 1.1. Thus, unlike the indirect relationship introduced in the previous section, the rationale for the direct relationship between suppression and resilience discussed below is not based on expected changes in affect.

Richards and Gross (2000) performed a number of related studies that demonstrated that suppressing emotional displays has negative consequences for cognition. In their first study, they found that participants who were required to suppress emotion-expressive behavior when watching a film clip subsequently (a) performed worse on a test of detail recall, and (b) were less confident in the accuracy of their memories. Their second study expanded on these findings by showing that this effect existed for both verbal and non-verbal information, and that the effect occurred regardless of whether participants suppressed high- or low-activation emotional expressions. These effects were reproduced with survey data in Study 3, in which Richards and Gross (2000) demonstrated that individual differences in propensity to suppress emotional displays were negatively related to both self-reported and objective measures of memory. Similar findings were also reported by Richards and Gross (1999).

Further, as Gross (2002) noted, suppressing emotion-expressive behavior is also likely to have negative social consequences for two reasons. First, suppressing emotional displays removes important nonverbal social signals for interaction partners, which
reduces the extent to which the observing partner understands the needs and intentions of the suppressing partner. Gross and John (2003) suggested that this lowered understanding should contribute to decreased closeness, and, over time, insufficient social networks and support. Second, because suppressing is effortful, individuals who suppress are likely to focus more of their attention inward to manage the suppression process. As a result, suppressors have fewer attentional resources available to interact with, and respond to, the verbal and nonverbal behaviors of their interaction partners. This lowered responsively on the part of the suppressing partner should result in a more stressful encounter for the observing partner.

Gross and John (2003; Study 4) found that individuals who chronically suppress emotional displays do suffer severe social consequences. They found that suppression was positively related to avoidance of attachment, and negatively related to peer-reports of close relationships. Moreover, suppressors rated themselves as having lower social support. Interestingly, Butler et al. (2003) provided some evidence to explain why suppressors have such eroded social relationships, consistent with the points raised by Gross (2002). They matched pairs of unacquainted women, wherein one member of the dyad was a confederate. Participants in the condition in which their confederate partner suppressed emotional displays had greater changes in blood pressure than in any other condition. This study suggests that interacting with a suppressor is physiologically taxing, implying that interaction partners will eventually withdraw from those who do not willingly display emotional expressions.

Taken in sum, these findings suggest that suppressing positive emotional displays should have a direct, negative effect on resilience because suppressing emotional displays
has severe, negative cognitive and social consequences. For example, as noted previously, resilience involves the ability to recover from negative experiences and adapt to changing demands (Lazarus, 1993). Resilience involves a capacity to handle challenges and changing conditions (Connor & Davidson, 2003), which is likely to be diminished by reduced cognitive functioning. Similarly, resilience involves knowing when and how to turn to others for help (Connor & Davidson, 2003), which may not be feasible for individuals who have compromised social relationships because of suppressed emotional displays. Indeed, some evidence for a direct link between suppressed emotional displays and resilience is suggested by Gross and John (2003; Study 5). They found that individual differences in suppressing emotional displays predicted a variety of outcomes related to well-being. Specifically, suppressing emotional displays was positively related to depression, and negatively related to life satisfaction, self-esteem, and optimism. Given some evidence that resilience is closely related to self-esteem and optimism (Stajkovic, 2006), Gross and John’s (2003) findings are supportive of the anticipated, direct link between suppressing positive emotional displays and resilience. Thus, I expect that:

Hypothesis 1d: Suppression of positive emotions will be negatively related to resilience.

In summary, I expect that suppressing positive emotions will sap nurses’ resilience (a) through a direct effect due to the detrimental effects of suppression on well-being (Gross, 2002), and (b) through an indirect effect due to losses in PA. However, consistent with some theoretical research examining the function of identification in emotional labor (Ashforth & Humphrey, 1993, 1995), the effect of suppressing positive
emotions on resilience may be mitigated if nurses strongly identify with their work roles, and therefore the reasons that they must engage in this behavior. The following section presents the theoretical rationale for this moderator, shown in Figure 1.1.

Role Identification

Ashforth and Humphrey (1993) emphasized that one of the central problems with emotional labor is that emotional behaviors that yield good service exchanges are oftentimes detrimental for the service provider. However, they also suggested that these effects of emotional labor on well being are moderated by role identification, the degree of the service provider’s internalization of his or her organizational role. This argument is built on social identity theory and self-categorization theory (Haslam, 2001; Hogg & Terry, 2000; Mael & Ashforth, 1992; Tajfel & Turner, 1986; Thompson & Fine, 1999; van Knippenberg, van Knippenberg, Monden, & de Lima, 2002), which state that people can self-identify in social, collective terms, which encourages them to internalize the characteristics of the groups to which they belong (Ashforth, 2001; Lord & Brown, 2004).

As noted previously, one overarching reason for nurses to suppress positive emotional displays is that nurses perceive occupational norms (Bolton, 2005) that encourage this form of emotional labor. Although I have presented evidence suggesting that suppressing positive emotional displays should be detrimental for resilience, this may not be the case for nurses with a high level of role identification. According to Ashforth and Humphrey’s (1993) perspective, individuals who strongly identify with their professional role think of themselves in terms of their group-level functions. They are therefore more likely to feel that behaviors consistent with their role are acceptable and
authentic with their inner selves (Ashforth, 2001). Consequently, individuals with high levels of role identification may not experience the emotional labor inherent in their role as overly taxing or detrimental. For these nurses, suppressing positive emotional displays may not be as disruptive to resilience because they strongly feel that suppression is consistent with the norms of the occupational group with which they identify.

In addition to feeling more authentic about emotional labor, nurses with high levels of role identification may also feel more confident that the emotional labor they are performing is appropriate. Because individuals with high role identification have internalized group norms, they are likely to experience a sense of uncertainty reduction (Hogg & Mullin, 1999; Hogg & Terry, 2000). Group norms can clarify expectations for attitudes, feelings, and behaviors when individuals are unsure how they should think, feel, or act. Accordingly, internalizing these group norms through role identification eliminates ambiguity by providing a clear set of standards to follow. Given that display rule demands are important for in-role performance (Diefendorff et al., 2006), yet unwritten and ambiguous in many organizations (Diefendorff & Richard, 2003), I would expect that those with high role identification would feel more certain about display rules because they can adopt group norms as standards for behavior. Consequently, emotional labor might be less stressful for these individuals because they experience enhanced confidence that their behaviors are consistent with those of the group.

I therefore see two reasons for high role identification to mitigate the negative relationship between suppressing positive emotions and resilience. First, nurses with high role identification have internalized group-level norms about nursing, and they are therefore less likely to feel that suppressing positive emotional displays is discordant
because it is seen as role-consistent. Second, those with strong role identification are less prone to experience doubt or ambiguity about the appropriateness of suppressing positive emotional displays (Ashforth, 2001; Hogg & Terry, 2000). High role identification therefore has the potential to make nurses’ emotional labor feel more appropriate and natural, and it therefore lessens the likelihood that emotional labor will negatively influence resilience. As a result, I expect that high role identification will weaken the negative relationship between suppressing positive emotions and resilience.

Hypothesis 2: Role identification will moderate the relationship between suppression of positive emotions and resilience. Specifically, the relationship between suppression and resilience will be weaker for those with high role identification.

Having established the links between suppressing positive emotional displays and resilience, I now turn to developing the basis for the expected relationships between resilience and the subsequent outcomes in Figure 1.1.

Outcomes of Resilience

Figure 1.1 shows that resilience is expected to have a number of important consequences for the individual and the organization. Specifically, I am focusing on burnout, physical health, work-family interference, and turnover intentions. Researchers have identified all of these outcomes as major challenges facing the global population of nurses. For example, Aiken et al. (2001) examined burnout and turnover intentions among nurses in the U.S., Canada, England, Scotland, and Germany. Across these nations, the percentage of nurses with high levels of burnout ranged from 43.2-15.2%, and the percentage of nurses under 30 planning to quit ranged from 53.7-26.5%. Further,
in a sample of nurses gathered throughout the U.S., Grzywacz, Frone, Brewer, and Kovner (2006) found that 50.4% of nurses reported that they experienced chronic work-family interference (i.e., interference on one or more days per week).

However, as shown in Figure 1.1, I expect that resilience is an important antecedent that influences the extent to which these undesirable outcomes are experienced. These relationships between resilience and subsequent outcomes are discussed individually below.

**Burnout**

Burnout is a condition that is characterized by emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment (Cordes & Dougherty, 1993; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Burnout is thought to arise due to a chronic strain introduced by incongruence between the employee and demands of the job (Maslach, 2003), such as emotional labor demands (Montgomery, Panagopolou, & Benos, 2005; Zapf, 2002; Zohar, 1997), and it is widely considered a significant problem among the population of nurses (Aiken et al., 2001).

Resilience likely has an influence on burnout perceptions. As Carver (1998) noted, resilient people not only recover from adverse events, they also do so at a faster rate than those with low resilience. This implies that resilient individuals are more likely to quickly recover from events that introduce incongruence, and therefore the negative effects of the incongruence are unlikely to linger. In other words, the chronic perception of strain that leads to burnout is unlikely to be felt by individuals who can recover quickly from any challenges that arise.
Further, as noted previously, resilient individuals tend to feel more positive emotions. Fredrickson and colleagues (Fredrickson & Levenson, 1998; Fredrickson, Mancuso, Branigan, & Tugade, 2000) have shown that positive emotional experiences have the capacity to correct the psychosomatic consequences of negative emotions, a phenomenon that they refer to as the “undo hypothesis” (Fredrickson, 2006, pg. 92). For example, Fredrickson et al. (2000) found that the introduction of a low-level contentment intervention negated cardiovascular activation that occurred due to feelings of anxiety. Although Fredrickson (2006) stated that the mechanism for this process is unknown, Tomarken and Keener (1998) have shown that activation of one hemisphere of the prefrontal cortex inhibits the activation of the other. This finding suggests that the undo hypothesis is driven by lateral inhibition; resilient individuals tend to feel more positive and to react more strongly to positive stimuli, which is associated with asymmetrical activation of the left PFC. This activation then inhibits the right PFC, which restores the body from the negative psychosomatic consequences of negative emotions and right PFC activation.

In sum, I expect that resilience will have a negative effect on burnout because resilient individuals (a) recover faster from negative events, and (b) offset the consequences of negative events with positivity.

Hypothesis 3: Resilience will be negatively related to burnout.

Moreover, as shown in Figure 1.1, I expect that resilience will affect all of the terminal outcomes of the model (general health, work-family interference, and turnover intentions) both directly and indirectly through burnout. The sections below briefly present the rationale for these expectations.
Individuals who lack resilience and are unable to recover from adversity are likely to suffer detrimental health symptoms. As shown in Figure 1.3, one potential consequence of a negative event is to succumb to the event or to continue to exist in a much-impaired capacity (Aldwin, 1994; O’Leary & Ickovics, 1995). In contrast, resilient individuals “bounce back” without suffering these consequences. For example, Tugade and colleagues (Tugade & Fredrickson, 2004; Tugade et al., 2004) found that highly resilient individuals exhibited faster cardiovascular recovery from negative emotional arousal. Ong, Bergeman, Bisconti, & Wallace (2006) also found that resilience aided in the recovery from daily stressors. Moreover, Fredrickson et al. (2003) provided evidence that resilience also contributes to psychological health by showing that resilient individuals reported fewer depressive symptoms and greater psychological resources after September 11, 2001.

These findings are important in light of research that clearly demonstrates that chronic experience of stressful, negative events is severely detrimental to health (Sapolsky, 2007), particularly in terms of cardiovascular deterioration. Importantly, research shows that stress-related physical deterioration is influenced by two factors relevant to resilience. First, perceptions of personal control reduce stress responses due to negative effects (Karasek & Theorell, 1990), and Block and Kremen (1996) have demonstrated that resilient individuals feel more control over adverse events. Second, Sapolsky (1992) has shown that the stress response that occurs due to negative events is more extreme based on perceptions of whether conditions are overall improving or worsening. Highly resilient people are more likely to readily handle negative events and
bounce back at a faster rate with less concern about conditions worsening (Carver, 1998). Thus, because resilient individuals perceive more control over the situation and a better chance of improving their conditions, I expect that resilience will have a direct, positive effect on respondents’ quality of health.

Hypothesis 4a: Resilience will be positively related to health.

In addition to this hypothesized direct effect, I also expect to find an indirect effect from resilience to health via burnout. Several studies have found that burnout is positively related to psychosomatic problems (e.g., Hatinen, Kinnunen, Pekkonen, & Aro, 2004; Martinussen & Richardsen, 2006; Melamed, Shirom, Toker, Berliner, & Shapira, 2006; Shirom & Melamed, 2005). Burned out individuals are more exhausted and less confident in their sense of accomplishment, which suggests that they are less able to resist negative events and recover in an optimistic fashion (Carver & Scheier, 2003). I therefore expect that the relationship between resilience and health will therefore be partially mediated by burnout.

Hypothesis 4b: Burnout will be negatively related to health.

Hypothesis 4c: The relationship between resilience and health will be partially mediated by burnout.

Work-Family Interference

The interplay between the domains of work and home has received a great deal of recent research attention (e.g., Allen et al., 2000). Negative spillover from work to home is referred to as work-family conflict, or work-family interference (WFI; Hammer, Cullen, Neal, Sinclair, & Shafiro, 2005). The work of Wharton and Erickson (Wharton, 1993; Wharton & Erickson, 1993, 1995) has suggested that WFI is likely to occur when
emotional labor is required at work, and especially when emotion regulation is also required at home. Similarly, Montgomery and colleagues (Montgomery, Panagopolou, & Benos, 2005; Montgomery et al., 2006) showed that WFI is an outcome of emotional labor. However, this effect might be transmitted through resilience losses. For example, Byron’s (2005) recent meta-analysis of the antecedents of WFI indicated that one of the only individual difference that impacted WFI was coping ability, which is reflected within the concept of resilience. Similarly, among a sample of women, Bernas and Major (2000) found that hardiness contributed to reduced WFI. They characterized hardiness as involving a tendency to retain control over challenges and to frame them positively, much like resilience. Individuals with lowered resilience may therefore be more susceptible to experiencing WFI, implying a direct, negative relationship between these variables.

Hypothesis 5a: Resilience will be negatively related to work-family interference.

The relationship between burnout and WFI is well established (e.g., Montgomery et al., 2005), but the direction of the relationship is somewhat ambiguous. Some researchers, such as Montgomery et al. (2006), have proposed that WFI is an antecedent of burnout. However, Westman, Etzion, and Gortler (2004) conducted a longitudinal analysis to examine the relationship between WFI and burnout among business travelers. They found that WFI at the first measurement did not predict burnout at the second, but that the opposite relationship was supported (i.e., that burnout predicted subsequent WFI). Thus, consistent with their work that indicates that burnout can contribute to WFI, I also expect an indirect effect from resilience to WFI via burnout.

Hypothesis 5b: Burnout will be positively related to work-family interference.
Hypothesis 5c: The relationship between resilience and work-family interference will be partially mediated by burnout.

**Turnover Intentions**

Many studies have indicated that emotional labor is related to withdrawal behaviors (Brotheridge & Lee, 2002; Grandey, 2000; Rubin, Tardino, Daus, & Munz, 2005), and especially to turnover intentions (Abraham, 1999; Cote & Morgan, 2003; Cropanzano et al., 2003; Grandey, Tam, & Brauburger, 2002; Zerbe, 2000). The typical causal explanation in these studies is that emotional labor results in a negative affective reaction, such as lowered job satisfaction (e.g., Cote & Morgan, 2003) or discrete emotions like anger (Grandey et al., 2002). These negative reactions then prompt cognitions about withdrawal.

However, I expect that resilience and burnout are both important intermediary variables in this relationship. Hobfoll’s (1998) conservation of resources theory implies that employees attempt to protect and maintain resources and avoid potential sources of resource costs. Research indicates that emotional labor is a severe threat to personal resources because it demands effortful management of emotions, oftentimes without an accompanying return in rewarding social relationships (Brotheridge & Lee, 2002). As Brotheridge and Lee (2002) demonstrated, emotional labor lowers personal resources, which in turn generates an enhanced sense of burnout. Burnout contributes to a desire to detach, and perhaps withdraw, from the organization. However, burnout should not occur if the employee has other means of generating personal resources. For example, as noted previously, resilient individuals are able to withstand succumbing to negative events, and they may therefore have a greater pool of personal resources to help resist losses.
Thus, consistent with a conservation of resources perspective, I expect that lessened resilience will make withdrawal seem like a more attractive option when faced with continuing emotional labor demands. Moreover, mounting burnout should also contribute to turnover intentions. I therefore expect a negative, direct relationship between resilience and turnover intentions, as well as an indirect effect through burnout.

Hypothesis 6a: Resilience will be negatively related to turnover intentions.

Hypothesis 6b: Burnout will be positively related to turnover intentions.

Hypothesis 6c: The relationship between resilience and turnover intentions will be partially mediated by burnout.

Summary

My theoretical model is shown again in Figure 2.6, which includes the formal hypotheses that I intend to test. Table 2.1 summarizes these hypotheses in full. Briefly, I expect that suppressing positive emotions will negatively influence resilience through a direct pathway and an indirect pathway via lowered positive affect. Resilience will be negatively related to burnout. Resilience will also have a direct, positive effect on health; a direct, negative effect on work-family interference; and a direct, negative effect on turnover intentions. Resilience will also have an indirect effect on all three of these outcomes via burnout.
Figure 2.6.

Hypothesized Model with Hypotheses

Note: H = Hypothesis. Mediation Hypotheses 1d, 4c, 5c, and 6c are not labeled.
Summary of Hypotheses.

Hypothesis 1a: Suppression of positive emotions will be negatively related to trait positive affect.
Hypothesis 1b: Trait positive affect will be positively related to resilience.
Hypothesis 1c: The relationship between suppression of positive emotions and resilience will be partially mediated by trait positive affectivity.
Hypothesis 1d: Suppression of positive emotions will be negatively related to resilience.
Hypothesis 2: Role identification will moderate the relationship between suppression of positive emotions and resilience. Specifically, the relationship between suppression and resilience will be weaker for those with low role identification.
Hypothesis 3: Resilience will be negatively related to burnout.
Hypothesis 4a: Resilience will be positively related to health.
Hypothesis 4b: Burnout will be negatively related to health.
Hypothesis 4c: The relationship between resilience and health will be partially mediated by burnout.
Hypothesis 5a: Resilience will be negatively related to work-family interference.
Hypothesis 5b: Burnout will be positively related to work-family interference.
Hypothesis 5c: The relationship between resilience and work-family interference will be partially mediated by burnout.
Hypothesis 6a: Resilience will be negatively related to turnover intentions.
Hypothesis 6b: Burnout will be positively related to turnover intentions.
Hypothesis 6c: The relationship between resilience and turnover intentions will be partially mediated by burnout.
CHAPTER III

METHOD

Overview and Sample

I used an archival dataset to test the hypotheses shown in Figure 2.6. Researchers from a large Midwestern university collected survey data from nurses employed within two hospitals of the same healthcare organization, also located in the Midwest. All of the respondents were registered nurses (RNs). Data used in this study were gathered in the context of a larger project designed to examine the relationship between emotional labor and burnout among nurses. A grant from the Health Resources and Services Administration (1 D1D HP 00004-010) supported this research project.

The dataset contained 1,158 responses. Approximately 10% of the respondents (n = 116) reported that they were managers without patient care duties; these cases were dropped, reducing the sample size to 1,042. Moreover, of the remaining nurses, approximately 37.4% (n = 390) did not report experiencing the full set of positive emotions, and could therefore not report on suppressing them. These respondents were also removed from the dataset, yielding a final sample size of 652 for the purposes of model and hypothesis testing.

This sample of 652 nurses reported a mean age of 42.12 years. Respondents were 95.9% female and 96.5% Caucasian. Among the remaining 4.5% of non-Caucasian
respondents, 1.8% were African American, 0.3% were Hispanic, 0.9% were Asian-American, and 0.3% identified as Other.

Constructs and Measures

Two of the constructs of interest within the study -- suppressed positive emotions and role identification -- were assessed in the context of scales that measured broader content. In order to identify appropriate measures to assess these constructs, additional factor analyses were required.

Suppression of Positive Emotions

Data on the overall suppression of emotions was collected using a Likert scale adapted by Erickson and Ritter (2001), shown in Appendix A. This scale asked respondents to indicate the extent to which they tried to hide or control a series of discrete emotions: afraid, angry, anxious, ashamed, calm, excited, frustrated, guilty, happy, helpless, irritated, proud, relaxed, sad, and surprised. Initial factor analyses performed by Erickson and Ritter revealed a three-factor structure to this scale, composed of positive, negative, and high activation emotions. However, too few respondents reported suppressing the full range of 15 emotions; to be eligible to respond to all of the items, a respondent would have needed to first feel all 15 of these emotions in the previous week, which was evidently uncommon (n = 50). Table 3.1 presents descriptive statistics for the experience and suppression of these emotions.

Thus, using previous research on the affective circumplex to guide my item selection (e.g., Posner et al., 2005), I conducted a confirmatory factor analysis (CFA; Thompson, 2004) only on the five suppression items that would be organized on the
Table 3.1

Descriptive Statistics for the Experience of Emotions and Suppression of Associated Emotional Displays

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Experience Emotion</th>
<th>Suppress Display</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Afraid</td>
<td>0.66</td>
<td>1.29</td>
</tr>
<tr>
<td>Angry</td>
<td>2.21</td>
<td>2.01</td>
</tr>
<tr>
<td>Anxious</td>
<td>2.02</td>
<td>1.88</td>
</tr>
<tr>
<td>Ashamed</td>
<td>0.30</td>
<td>0.95</td>
</tr>
<tr>
<td>Calm</td>
<td>4.44</td>
<td>1.58</td>
</tr>
<tr>
<td>Excited</td>
<td>2.50</td>
<td>1.91</td>
</tr>
<tr>
<td>Frustrated</td>
<td>3.63</td>
<td>2.09</td>
</tr>
<tr>
<td>Guilty</td>
<td>0.60</td>
<td>1.28</td>
</tr>
<tr>
<td>Happy</td>
<td>4.06</td>
<td>1.72</td>
</tr>
<tr>
<td>Helpless</td>
<td>1.35</td>
<td>1.87</td>
</tr>
<tr>
<td>Irritated</td>
<td>3.06</td>
<td>2.10</td>
</tr>
<tr>
<td>Proud</td>
<td>3.71</td>
<td>1.97</td>
</tr>
<tr>
<td>Relaxed</td>
<td>3.37</td>
<td>1.84</td>
</tr>
<tr>
<td>Sad</td>
<td>1.45</td>
<td>1.85</td>
</tr>
<tr>
<td>Surprised</td>
<td>1.08</td>
<td>1.54</td>
</tr>
</tbody>
</table>
positive valence side of the affective circumplex: calm, excited, happy, proud, and relaxed (n = 652). I chose a principal axes extraction because it is the technique best suited for detecting the structure of latent variables (Bryant & Yarnold, 1995; Fabrigar, Wegener, MacCallum, & Strahan, 1999; Thompson, 2004). An oblique rotation was selected because I expected correlations between items tapping emotions structured on a circumplex model (Cropanzano et al., 2003), and accordingly also between the latent dimensions that they formed (Ford, MacCallum, & Tait, 1986; Fabrigar et al., 1999).

The initial factor pattern matrix is presented in Table 3.2. Consistent with my expectations, the use of subjective criteria, such as the Kaiser criterion (Kaiser, 1960) and an analysis of the scree plot (Kachigan, 1991), suggested that the five suppressed positive emotions loaded on a single factor, which was confirmed by Velicer’s (1976) minimum average partial (MAP) method. This technique calculates the average of squared partial correlations after each factor is extracted, and research indicates that it is substantially more accurate than both the Kaiser criterion and Scree analysis at correctly determining factor structure (e.g., Velicer, Eaton, & Fava, 2000). Accordingly, the 5-item suppression of positive emotions scale that I will utilize consists of suppressing calmness, excitement, happiness, pride, and relaxation (α = .76).
Table 3.2

CFA Pattern Coefficients for Suppressed Emotion Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor #1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calm</td>
<td>.633</td>
</tr>
<tr>
<td>Excited</td>
<td>.553</td>
</tr>
<tr>
<td>Happy</td>
<td>.732</td>
</tr>
<tr>
<td>Proud</td>
<td>.568</td>
</tr>
<tr>
<td>Relaxed</td>
<td>.759</td>
</tr>
</tbody>
</table>

Eigenvalues 2.690
Percentage of variance explained 53.80%

*Note:* N = 652. Primary factor coefficients in bold.

*Role Identification*

Role identification was measured through two parallel measures developed for this study, which were based on ideas presented by Higgins (1997) and Morris and Feldman (1996). Participants responded to a list of professional standards relevant to how they present themselves at work (Appendix A), anchored by opposing trait adjectives, and asked to indicate on each continuum “how nurses should be at work.” This first measure therefore represents the nurses’ sense of the standards for the nurse they *ought* to be (Higgins, 1997). The second measure presented the same list of standards on the same continuum, but asked the respondents to indicate “how you see yourself at work.” Thus, the second measure captured the nurses’ sense of their *actual* selves (Higgins, 1997).

Role identification was conceptualized as the absolute value of the discrepancy between the ought and actual ratings on each item. In other words, I think that nurses who see themselves as very consistent with the standards for the nurse they ought to be have largely internalized these role standards. In contrast, nurses with a high degree of discrepancy between the ought and actual standards have not internalized their roles. I
expect that those who have a low discrepancy (i.e., identify themselves as consistent with the professional standards for nurses) would find in-role suppression of positive emotions to be less discordant.

Because these are new scales, factor analysis was conducted on both the actual (Table 3.3) and ought (Table 3.4) measures to examine the underlying factor structure of the measures. Table 3.3 shows the results of an EFA on the actual standards measure. I interpreted a two factor structure, and these two factors were positively related ($r = .382$). The first factor is concerned with “empathy,” and it is characterized by high identification with standards for altruism, calmness, caring, empathy, flexibility, and responsibility. In contrast, the second factor involves “capability,” and it is characterized with high identification with competence, knowledge, and confidence.

Table 3.4 shows the results of a CFA on the ought standards measure. I conducted a CFA to derive a two-factor solution that would hopefully conform to the factor loadings previously found for the actual standards measure. The solution was quite similar in most respects, although “autonomous” failed to load on either factor, and “moral” switched from loading on the empathy factor in the actual standards analysis to loading on the capability factor in the ought standards analysis. Again, both factors were positively related ($r = .556$).

Given that (a) the two factor analyses yielded substantively very similar underlying dimensions, and (b) that there is adequate theoretical evidence to suggest that both of these dimensions are important parts of nurses’ identities (Woodward, 1997), I will represent role identification by the discrepancy between these overall scales rather than looking at specific sub-dimensions. Thus, for the purposes of hypothesis testing, role
identification will be represented in the analyses as a single-item indicator formed by the mean discrepancy between ratings of ought and actual standards. However, I will also conduct exploratory analyses to examine the role of the competence and empathy factors separately in order to better explore the contribution of each aspect of nurses’ identity.

Table 3.3

EFA Pattern Coefficients for Actual Nurse Standards

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor #1 (Empathy)</th>
<th>Factor #2 (Capability)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomous</td>
<td>-.043</td>
<td>.310</td>
</tr>
<tr>
<td>Moral</td>
<td>.343</td>
<td>.180</td>
</tr>
<tr>
<td>Competent</td>
<td>.040</td>
<td>.678</td>
</tr>
<tr>
<td>Knowledgable</td>
<td>.032</td>
<td>.542</td>
</tr>
<tr>
<td>Confident</td>
<td>.090</td>
<td>.784</td>
</tr>
<tr>
<td>Altruistic</td>
<td>.625</td>
<td>-.116</td>
</tr>
<tr>
<td>Calm</td>
<td>.390</td>
<td>.249</td>
</tr>
<tr>
<td>Caring</td>
<td>.867</td>
<td>-.157</td>
</tr>
<tr>
<td>Empathetic</td>
<td>.849</td>
<td>-.120</td>
</tr>
<tr>
<td>Flexible</td>
<td>.500</td>
<td>.143</td>
</tr>
<tr>
<td>Organized</td>
<td>.447</td>
<td>.207</td>
</tr>
<tr>
<td>Responsible</td>
<td>.652</td>
<td>.082</td>
</tr>
</tbody>
</table>

| Eigenvalues    | 4.18                | 1.69                  |
| Percentage of variance explained | 34.83% | 14.08% |

Note: N = 652. Primary factor coefficients in bold.
Table 3.4

CFA Pattern Coefficients for Ought Nurse Standards

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor #1 (Empathy)</th>
<th>Factor #2 (Capability)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competent</td>
<td>-.014</td>
<td>.442</td>
</tr>
<tr>
<td>Knowledgeable</td>
<td>-.004</td>
<td>.617</td>
</tr>
<tr>
<td>Moral</td>
<td>.162</td>
<td>.431</td>
</tr>
<tr>
<td>Confident</td>
<td>.197</td>
<td>.528</td>
</tr>
<tr>
<td>Autonomous</td>
<td>.028</td>
<td>.240</td>
</tr>
<tr>
<td>Calm</td>
<td>.562</td>
<td>.087</td>
</tr>
<tr>
<td>Altruistic</td>
<td>.524</td>
<td>.031</td>
</tr>
<tr>
<td>Caring</td>
<td>.816</td>
<td>-.131</td>
</tr>
<tr>
<td>Organized</td>
<td>.581</td>
<td>-.021</td>
</tr>
<tr>
<td>Flexible</td>
<td>.552</td>
<td>.028</td>
</tr>
<tr>
<td>Responsible</td>
<td>.524</td>
<td>.092</td>
</tr>
<tr>
<td>Empathetic</td>
<td>.676</td>
<td>.013</td>
</tr>
</tbody>
</table>

Eigenvalues

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competent</td>
</tr>
<tr>
<td>Knowledgeable</td>
</tr>
<tr>
<td>Moral</td>
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<tr>
<td>Confident</td>
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<tr>
<td>Autonomous</td>
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<tr>
<td>Calm</td>
</tr>
<tr>
<td>Altruistic</td>
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<tr>
<td>Caring</td>
</tr>
<tr>
<td>Organized</td>
</tr>
<tr>
<td>Flexible</td>
</tr>
<tr>
<td>Responsible</td>
</tr>
<tr>
<td>Empathetic</td>
</tr>
</tbody>
</table>

Percentage of variance explained

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage of variance explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eigenvalues</td>
<td>4.03</td>
</tr>
<tr>
<td></td>
<td>1.26</td>
</tr>
<tr>
<td></td>
<td>33.61%</td>
</tr>
<tr>
<td></td>
<td>10.71%</td>
</tr>
</tbody>
</table>

Note: N = 652. Primary factor coefficients in bold.

Measures of Other Constructs

The study measured the remaining constructs (positive affect, burnout, personal health, work-family strain, and turnover intentions) more directly, largely with existing, validated scales. Reliability information for each of these scales is provided below.

Resilience. Resilience was measured with Connor and Davidson’s (2001) Resilience Scale (CD-RISC; Appendix A). This 25-item scale (α = .93) measures five dimensions of resilience: tenacity; tolerance of adversity and faith in oneself; secure, positive acceptance of change; locus of control; and spiritual faith.

Positive affect. PA was measured with Watson et al.’s (1988) 10-item measure of affectivity (α = .90), shown in Appendix A. Sample adjectives presented in this measure
include “interested” and “active.” Respondents were asked to indicate to what extent they generally felt each adjective, and to rate their experience on a 5-point scale ranging from “Very slightly or not at all” to “Extremely.”

**Burnout.** Burnout was measured using Erickson and Ritter’s (2001) 7-item scale, presented in Appendix A. A sample item from this scale reads, “I feel used up at the end of the workday.” Responses were measured on a 7-point Likert scale ranging from “Never” to “Almost Every Day.” This scale demonstrated good reliability in the current study (α = .92).

**Strain-based, Work-to-Family Interference.** WFI was measured with an expanded version of Carlson, Kacmar, and Williams’s (2000) “strain-based work interference with family” subscale. This 7-item measure is presented in Appendix A. Responses were collected on a 5-point scale ranging from “Never” to “Always.” A sample item from the scale reads, “When I get home from work, I am often too frazzled to participate in activities with families or friends.” The reliability of this scale in the current study was quite good (α = .91).

**Turnover intentions.** Turnover intentions were measured with a 3-item scale developed for this study. This scale is presented in Appendix A. A sample item reads, “I intend to leave this organization within the next year.” Responses were collected on a 4-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree,” and the scale demonstrated adequate reliability in this study (α = .79).

**General Health.** Health quality was measured with a single-item scale asking respondents to indicate, in general, how they would rate their health. Responses were recorded on a 5-point scale ranging from “Poor” to “Excellent.”
Statistical Analysis Strategy

All formal hypotheses were tested using the structural equation modeling software MPlus, version 3.12 (Muthen & Muten, 2004). I tested a structural regression model with maximum likelihood estimation (Kline, 2005) to estimate the relationships among the latent variables and test all of the proposed hypotheses. I also tested the interaction of suppressing positive emotions and role identification in an SEM framework by using numerical integration (Muthn & Muthen, 2004). Model fit was evaluated using Hu and Bentler’s (1999) fit criteria, which recommend the following cutoff values when assessing model fit: SRMR of .08 or below, CFI greater than .95, and root RMSEA less than .06. I evaluated specific hypotheses by examining relevant path coefficients.

Moreover, I controlled for two demographic covariates when testing each relationship: age and hospital division. Division may be important because, as noted previously, nursing is an occupation in flux, with an emphasis shifting from caring to professionalism and technological competence (Phillips, 1996; Woodward, 1997). However, expressive care may not be as devalued for some types of nursing positions that still involve long-term care, such as hospice, home health, or maternity. Although instrumental care is certainly increasing in importance for these divisions of nursing as well, expressive care may have retained more value among these nurses because expressive caring is traditionally a more important aspect of these positions (e.g., James, 1992; Lewis, 2005).

The healthcare organization broadly categorized employees into several divisions: Medical/Surgical, OR/Recovery, Critical Care, Maternity, and Other. Of these divisions, the medical/surgical group is the division with the most severely negative outcomes.
Thus, division was dichotomized in my analyses to distinguish between nurses in the medical/surgical group versus other divisions.

Because all of the constructs in this study are derived from self-reports, I also assessed the potential impact of common method bias on these relationships. I used Williams, Cote, & Buckley’s (1989) method of using confirmatory factor analysis to assess the degree of improvement in model fit that occur when an uncorrelated method factor is added to a CFA of the self-report scales. This technique also allowed me to estimate the percentage of variances in responses that are attributable to traits, method, and error (Gosserand, 2003).
CHAPTER IV

RESULTS

This chapter begins with a test of the hypothesized model, followed by several modified models to improve fit based on reconceptualizing the suppressed positive emotional displays construct. I then turn to a series of exploratory analyses designed to (a) examine role identification in more detail, and (b) test the effects of suppressing negative emotional displays in conjunction with suppressing positive emotional displays.

Tests of Models

Descriptive Statistics and Tests of the Measurement Model

Table 4.1 presents the means, standard deviations, and inter-correlations of the observed study variables. Internal consistency reliabilities are reported on the diagonal. All of the constructs demonstrated adequate reliability (Tabachnik & Fidell, 2001), with alpha coefficients ranging from .76-.93. For conceptual clarity, gender was coded “1” for women and “0” for men. Race was coded “1” for Caucasian and “0” for all other races. Division was coded “1” for those in the Medical/Surgical group and “0” for those in other divisions.

In addition to the two demographic covariates that I intend to control in my model tests (age and division), Table 4.1 also includes race and gender. I did not control for race and gender in the models that follow due to the fact that men and non-Caucasian participants formed such a small percentage of the sample, but several relationships are
noteworthy. First, men engaged in more suppression of positive emotional displays than women \((r = -.12, p < .01)\). Second, Caucasian participants reported that they were in better health than participants from other races. Both of these findings suggest that diversity may be an important consideration when interpreting the results that follow, a point that I later revisit as a limitation of this study.

I began my analyses by testing a measurement model (Kline, 2005) in which items were specified to load on their latent constructs, and all latent constructs and observed variables were allowed to freely intercorrelate. Four constructs in the measurement model were represented by single-item indicators: general health, role identification, age, and division. I created latent variables for these constructs by employing a technique developed by Anderson and Gerbing (1988). This approach involves estimating the reliability of the scales and using this estimated reliability to calculate the item and error loadings. I tested the model with a set of different reliabilities \((\alpha = .70, .80, \text{ and } .90)\) and found no appreciable differences in the relationships between variables, so I proceeded with the following analyses assuming that the reliability of all four of these single-item scales would be .90.

Further, due to the length of the resilience scale (25 items), I chose to parcel these indicators (Hall, Snell, & Faust, 1999). Parceling is most appropriate in circumstances where indicators share a common, secondary source of variance that is theoretically coherent and identifiable. Accordingly, I used the established factor structure of the CD-RISC scale to form five parcels that served as indicators of the resilience latent construct.
### Table 4.1

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>51</td>
<td>0.76</td>
<td>0.79</td>
<td>0.38</td>
<td>3.93</td>
<td>3.81</td>
<td>2.62</td>
<td>1.97</td>
<td>0.96</td>
<td>42.13</td>
<td>0.96</td>
<td>3.21</td>
<td>1.70</td>
</tr>
<tr>
<td>SD</td>
<td>0.87</td>
<td>0.56</td>
<td>0.53</td>
<td>0.44</td>
<td>0.44</td>
<td>0.38</td>
<td>0.38</td>
<td>0.28</td>
<td>0.19</td>
<td>9.57</td>
<td>0.18</td>
<td>2.04</td>
<td>0.51</td>
</tr>
</tbody>
</table>

#### Note:
Decimals have been omitted from correlations for clarity. Supp. Pos. = suppression of positive emotional displays; PA = positive affect; Role Id. = role identification; WFI = work-family interference; TOI = turnover intentions; NA = Negative Affect. Reliabilities are shown on the diagonal. N = 652 for all correlations. *

* *p < .05, ** * *p < .01
Consistent with Connor and Davidson (2003), eight items formed the first parcel, which represents personal competence and tenacity. Seven items formed the second parcel, which corresponds to tolerance of negative events and trust in oneself. The third parcel was composed of five items, which represent a positive acceptance of change. The fourth parcel was created from three items reflecting a perceived sense of control, and the final parcel was created from two items that relate to spiritual faith.

The a priori measurement model overall had a good fit to the data ($\chi^2 (699, n = 652) = 1859.71, p < .001; \text{CFI} = .91; \text{RMSEA} = .05; \text{SRMR} = .05$). However, I subsequently ran the measurement model again after freeing two pairs of items to covary on the basis of modification indices and a rational examination of the items in question ($\chi^2 (697, n = 652) = 1647.98, p < .001; \text{CFI} = .93; \text{RMSEA} = .05; \text{SRMR} = .05$). Specifically, I allowed a covariance for burnout indicators #1 and #2 due to their similar item content ("drained" and "used up"), and another between WFI indicators #4 and #5 because both referenced negative emotions felt at home due to workplace demands ("irritable" and "tense/anxious"). These modifications resulted in significantly better fit for the measurement model ($\Delta \chi^2 (2, n = 652) = 211.78, p < .001$). Figure 4.1 shows the measurement model with these two freed item covariances; for conceptual clarity, the covariances between the latent variables are not shown in this figure, but are instead reported in Table 4.2. Further, the fit indices for the measurement model and all subsequent models are summarized in Table 4.3.
Figure 4.1
Measurement Model ($\chi^2_{(697, n = 652)} = 1647.98, p < .001$; CFI = .93; RMSEA = .05; SRMR = .05)

Note: Latent variable covariances omitted for clarity.
Table 4.2

Standardized Latent Variable Covariances in the Measurement Model (Figure 4.1)

<table>
<thead>
<tr>
<th>Construct</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Suppress Positive Affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Positive Affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Resilience</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Role Identification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Burnout</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. WFI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>8. Turnover Intentions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>9. Division</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ** $p < .01$; * $p < .05$
Table 4.3
Summary of Fit Indices for Models

<table>
<thead>
<tr>
<th>Model</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement model</td>
<td>1647.98**</td>
<td>697</td>
<td>.93</td>
<td>.05</td>
<td>.05</td>
</tr>
<tr>
<td>Hypothesized structural model</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Modified structural model #1</td>
<td>1625.66**</td>
<td>677</td>
<td>.93</td>
<td>.05</td>
<td>.06</td>
</tr>
<tr>
<td>Modified structural model #2</td>
<td>1571.03**</td>
<td>604</td>
<td>.93</td>
<td>.05</td>
<td>.06</td>
</tr>
</tbody>
</table>

Note: Fit statistics and indices are not available for the hypothesized structural model due to the limitations of numerical integration. ** \( p < .01 \); \( ^\dagger \) \( p = .06 \)

Test of the Hypothesized Structural Model

In order to test the hypothesized structural model, including the role identification moderator on the relationship between suppressed positive emotional displays and resilience, I employed numerical integration (Muthén & Muthén, 2004) using Mplus v.3.12 (Muthén and Muthén, 1998-2005). Numerical integration is necessary to model interactions with latent variables within Mplus (Muthén & Muthén, 2004).

Although this technique is advantageous for its ability to test the moderator in the context of the full model, numerical integration has several limitations. Specifically, it cannot generate standardized path coefficients, compute indirect effects, or calculate the chi-square fit statistic or other familiar fit indices (e.g., CFI, RMSEA, SRMR). A test of the moderator using this approach indicated that the unstandardized path coefficient for the moderator was not significant (\( b = 0.07, \ p = .51 \)), indicating no support for
Hypothesis 2. Moreover, a test of the interaction using regression in SPSS confirmed that the moderation of role identification was not significant (β = .05, ns). Accordingly, I modified the model by removing role identification so that I could acquire fit indices and better evaluate the remainder of the relationships. However, I will re-examine role identification in greater detail below through exploratory analyses. Specifically, I will conduct further moderation analyses to examine the different factors of role identification and I will assess any potential main effects of role identification.

Test of Modified Structural Model 1

Modified structural model #1 is presented in Figure 4.2. This model differs from the previous hypothesized structural model only in that the role identification moderator (Hypothesis 2) has been removed from the analysis. For conceptual clarity, the control variables (age and hospital division) are not modeled in Figure 4.2; Table 4.4 shows their path coefficients on all exogenous and endogenous constructs.

Overall, modified structural model #1 had an acceptable fit to the data ($\chi^2_{(677, N=652)} = 1625.66, p < .001; \text{CFI} = .93; \text{RMSEA} = .05; \text{SRMR} = .06$). However, Hypothesis 1a, which stated that suppression of positive emotional displays would be negatively related to trait PA, received marginal support (β = -.09, p = .06). Further, the indirect pathway from suppression of positive emotional displays to PA to resilience expected in Hypothesis 1c was only marginally supported (β = -.05, p = .07). However, the remainder of the hypotheses was supported, as shown in Figure 4.2.
Figure 4.2
Modified structural model #1

\( \chi^2 \) (677) = 1625.66, \( p < .001 \); CFI = .93; RMSEA = .05; SRMR = .06.

** \( p < .01 \); * \( p < .05 \)
Table 4.4

Standardized Path Coefficients for Control Variables on Exogenous and Endogenous Variables in Modified Model #1

<table>
<thead>
<tr>
<th>Model Construct</th>
<th>Age</th>
<th>Hospital Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppressed Positive Displays</td>
<td>.04</td>
<td>-.04</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>.05</td>
<td>-.07</td>
</tr>
<tr>
<td>Resilience</td>
<td>.06*</td>
<td>.03</td>
</tr>
<tr>
<td>Burnout</td>
<td>-.02</td>
<td>.16**</td>
</tr>
<tr>
<td>Health</td>
<td>-.13**</td>
<td>-.09*</td>
</tr>
<tr>
<td>Turnover Intentions</td>
<td>-.13**</td>
<td>-.04</td>
</tr>
<tr>
<td>Work-Family Interference</td>
<td>.14**</td>
<td>.01</td>
</tr>
</tbody>
</table>

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

Thus, despite the overall support for Modified Model 1, the lack of findings concerning suppressed positive emotional displays was disappointing. Accordingly, I reanalyzed the suppressed positive emotional displays construct in more detail to develop Modified Model 2.

Test of Modified Structural Model 2

Table 4.5 shows a correlation matrix including the five suppressed positive emotional displays, trait positive affect, and resilience. I previously argued that nursing has become a professional occupation with masking norms for emotional displays. Masking norms involve displaying neutrality; that is, the point of masking is to avoid showing high activation positive and negative emotions. Consistent with this idea, it seemed possible that the range of suppressed positive emotions included in the previous tests of the model was too broad. Specifically, relaxation and calmness are both low activation emotions, which are far more consistent with the appearance of neutrality.
prescribed by masking norms than the other, higher activation emotions included in the measure (pride, happiness, and excitement). Analysis of Table 4.5 indicates that suppressed displays of calmness are unrelated to PA, and that suppressed displays of relaxation are only marginally related. Therefore, the relationships between the suppressed positive emotional displays construct and PA and resilience might be strengthened by removing these indicator. Accordingly, in modified structural model #2, I re-tested these relationships with only three indicators (suppressed happiness, excitement, and pride) of the suppressed positive emotional displays construct.

Table 4.5
Correlations between Specific Suppressed Positive Emotional Displays, Positive Affect, and Resilience

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Supp. Calm</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Supp. Excited</td>
<td>.41**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Supp. Happy</td>
<td>.48**</td>
<td>.41**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Supp. Proud</td>
<td>.30**</td>
<td>.30**</td>
<td>.42**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Supp. Relaxed</td>
<td>.48**</td>
<td>.38**</td>
<td>.54**</td>
<td>.49**</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. PA</td>
<td>.00</td>
<td>-.07†</td>
<td>-.06</td>
<td>-.10**</td>
<td>-.06†</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>7. Resilience</td>
<td>-.04</td>
<td>-.08*</td>
<td>-.08*</td>
<td>-.03</td>
<td>-.07†</td>
<td>.63**</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: Supp. = Suppressed; PA = Positive Affect. ** p < .01; * p < .05; † p < .10
Figure 4.3
Modified structural model #2
$\chi^2 (604) = 1498.19, p < .001; CFI = .94; RMSEA = .04; SRMR = .04.$
** $p < .01; * p < .05$
Modified structural model #2 had a slightly larger sample size (n = 685) because more respondents could be included who suppressed only the three remaining positive emotions compared to the five that I assessed previously. This model displayed a good fit to the data ($\chi^2_{(604, N = 685)} = 1571.03, p < .001; \text{CFI} = .93; \text{RMSEA} = .05; \text{SRMR} = .06$). Further, all of the retained hypotheses received support in modified structural model #2, as indicated in Figure 4.3.

Hypotheses 1a-1d concerned the relationships between suppressed positive emotional displays, positive affect (PA), and resilience. Hypothesis 1a, which stated that suppression of positive emotional displays would be negatively related to trait PA, was supported ($\beta = -.12, p < .05$). Hypothesis 1b was also supported; trait PA had a strong, positive effect on resilience ($\beta = .74, p < .01$). The indirect effect of suppressed positive emotional displays to resilience through positive affect that I expected in Hypothesis 1c was also supported ($a\beta = -.09, p < .05$). Lastly, Hypothesis 1d, which stated that suppression of positive emotional displays would be directly related to resilience, was supported ($\beta = -.10, p < .01$). As noted previously, Hypothesis 2, concerning the moderation of role identification, was not included in this model.

Full support was also found for all of the hypotheses linking resilience to subsequent outcomes. Hypothesis 3 predicted that resilience would be negatively related to burnout, which was fully supported ($\beta = -.29, p < .01$). Hypotheses 4a-4c concerned the links between resilience, burnout, and health. In support of 4a and 4b, resilience was positively related to health ($\beta = .27, p < .01$), and burnout was negatively related to health ($\beta = -.16, p < .01$). Hypothesis 4c was supported with a significant indirect effect from resilience to burnout to health ($\beta = .05, p < .01$). Similarly, Hypotheses 5a-5c linked
resilience and burnout to work-family interference (WFI). Resilience was found to be negatively related to WFI ($\beta = -.19, p < .01$), and burnout was found to be positively related to WFI ($\beta = .64, p < .01$), consistent with Hypotheses 5a and 5b, respectively. Resilience was also found to have an indirect effect on WFI through burnout, consistent with Hypothesis 5c ($\beta = -.18, p < .01$). Hypotheses 6a-6c involved the relationships between resilience, burnout, and turnover intentions. Resilience was negatively related to turnover intentions ($\beta = -.09, p < .05$), in support of Hypothesis 6a, and burnout was positively related to turnover intentions ($\beta = .30, p < .01$), consistent with Hypothesis 6b. Lastly, Hypothesis 6c was supported with a significant indirect effect from resilience to turnover intentions via burnout ($\beta = -.09, p < .01$).

Summary

Consistent with expectations, the final model (modified structural model #2) demonstrated good fit to the data, with all but the single dropped hypothesis receiving full support. Specifically, the unsupported path was the interaction of suppressed positive emotional displays with role identification on resilience (Hypothesis 2). The remainder of the model fit consistent with expectations, providing evidence that ties emotional labor to important outcomes for nurses through positive affect and resilience.

Below, I report the results of a set of exploratory analyses designed to expand upon the findings of this study. Specifically, I will examine the role identification construct in greater detail to attempt to find some support for this variable in the current model, and I will explore the role of suppressed negative emotions in addition to suppressed positive emotions.
Exploratory Analyses

Additional exploratory analyses were conducted with two main objectives: to further explore the function of role identification in the model, and to integrate suppressed negative emotional displays into the model. Analyses pertinent to each objective are presented below.

Role Identification Exploratory Analyses

I conducted four sets of analyses to better explore the role identification construct in relation to my other variables. Specifically, (a) I examined the role identification variable as I previously computed it as a moderator of the mediated relationship between suppressed positive emotional displays and resilience; (b) I tested the moderated relationships using specific components of role identification indicated by factor analysis; and (c) I tested several main effects of role identification.

Moderated mediation. Consistent with Ashforth and Humphrey’s (1993) perspective that role identification should moderate the direct relationship between emotional labor and negative outcomes, I originally tested the role identification moderator on the negative relationship between suppressed positive emotional displays and resilience. However, it also seemed consistent with their theory that role identification could moderate the indirect, mediated relationship of suppressed positive emotional displays to resilience via PA.

In the context of moderated mediation, the moderator can act on the relationship between the independent variable and the mediator, as well as on the relationship between the mediator and the dependent variable (Muller, Judd, & Yzerbyt, 2005). Thus, I used the numerical integration analysis described above in the test of the Hypothesized
model to test these two exploratory relationships. No support was found for moderated mediation; the interaction of suppressed positive emotional displays and role identification had no effect on PA (b = -.02, ns), and the interaction of PA and role identification had no effect on resilience (b = .07, ns).

Components of role identification. On the basis of the factor analyses of the ought and actual nurse qualities presented in Chapter 3, I also tested the moderating role of specific components of role identification. Common to both factor analyses was a factor that seemed to represent capability, and another that represented empathy. I drew upon the items that loaded consistently on these factors across both scales to compute “role identification – capability” as the mean discrepancy of four items: competence, knowledgeable, moral, and confident. Similarly, “role identification – empathy” was the mean discrepancy of five items: caring, organized, flexible, responsible, and empathetic. I tested the moderating role of both of these components of role identification on the direct relationship and both links in the mediated relationship, yielding a total of six analyses. No support was found for either component as a moderator of any of the three links.

Main effects of role identification. Lastly, I again removed role identification as a moderator and tested for main effects of aggregate role identification on other constructs in the final model (modified structural model #2). Table 4.6 shows the effects of role identification on all other constructs in modified structural model #2. Results indicate that role identification has several significant and noteworthy main effects. Specifically, role identification has a negative effect on PA (β = -.27, p < .01) and a positive effect on
burnout (β = .20, p < .01). Further, it had a positive effect on suppressed positive emotional displays (β = .22, p < .01). Thus, although role identification did not influence the emotional labor process as expected, it does seem to have important consequences for the experience and display of positive emotions, as well as for the feeling of burnout.

Summary. To summarize the exploratory analyses conducted on role identification, the construct, either as a unidimensional construct or as specific components, does not moderate either the direct or indirect, mediated link between suppressing positive emotional displays and resilience. However, role identification does seem to have important main effects on suppressed positive emotional displays, positive affect, and burnout.
Next, I introduce a set of exploratory analyses designed to assess the role of suppressed negative emotional displays in the model. Although the final model shown in Figure 4.3 indicates that suppressed positive emotional displays are indirectly and negatively related to resilience, this finding would be more compelling if it could be demonstrated in conjunction with suppressed negative emotional displays. Accordingly, I engaged in a series of analyses to test if suppressed positive emotional displays retain a significant effect when suppressed negative emotional displays are included in the model.

*Exploratory Analyses of Suppressed Negative Emotional Displays*

As noted in Chapter 3, I reduced the sample size for this study to 652 nurses after removing those who did not suppress the five positive emotional displays of interest in this study. Additionally, as shown in Appendix A, participants provided ratings for a larger group of suppressed negative emotional displays: afraid, angry, anxious, ashamed, frustrated, guilty, helpless, irritated, and sad. Thus, there were in theory a number of negative emotions that I could draw upon to test the effects of suppressed negative emotional displays.

However, because the instructions for the scale provided in Appendix A asked about suppression over a short time span (the past two weeks), most of these negative emotional displays were suppressed too infrequently by respondents in the sample to be included in a structural regression model. For example, few respondents felt afraid, ashamed, anxious, guilty, helpless, or sad within the period indicated by the directions to the question, which would be a prerequisite to suppressing the display associated with the emotion. The only negative emotional displays that were suppressed with sufficient frequency to be included were a cluster of anger-related displays: anger, frustration, and
irritation. Accordingly, these three emotional displays served as indicators of suppressed negative emotional displays for the purpose of these exploratory tests (N = 500).

First, I tested a model that included only suppressed negative emotional displays (anger, frustration, and irritation). This model is shown in Figure 4.4 (χ² (604, N = 500) = 1265.94, p < .001; CFI = .93; RMSEA = .05; SRMR = .06). As shown in this figure, suppressed negative emotional displays had no effect on positive affect, but a significant effect on resilience (β = -.10, p < .05). Thus, there is some evidence that suppressed negative emotional displays influence resilience differently than suppressed positive emotional displays, which also affect resilience indirectly through trait positive affect.

Next, I tested a model in which both suppressed negative emotional displays and suppressed positive emotional displays were exogenous latent variables. Figure 4.5 shows this model (χ² (711, N = 500) = 1450.58, p < .001; CFI = .93; RMSEA = .05; SRMR = .06). Unfortunately, few new noteworthy effects were found in this model. Suppressing positive emotional displays was unrelated to positive affect and only marginally related to resilience. Suppressing negative emotional displays retained its significant, negative effect on resilience (β = -.09, p < .05), but it was unrelated to positive affect. The lack of findings for either suppression construct in this model is probably attributable to the covariance between them; due to the common use of suppression, these constructs had a covariance of .21 (p < .01).

On the basis of this covariance and the lack of findings for suppressing either valence of emotion when examined in the same model, I tested a third exploratory model wherein all of the suppressed emotional displays (relaxed, excited, happy, proud, angry, irritated, and frustrated) served as indicators of a “general suppression of emotional
displays” construct. The unstandardized loadings for all seven suppressed emotions were fixed to be equivalent to prevent the latent variable from overwhelmingly reflecting either valence rather than suppression in general. This model is shown in Figure 4.6 ($\chi^2_{(719, N = 500)} = 1945.82, p < .001; \text{CFI} = .87; \text{RMSEA} = .06; \text{SRMR} = .07$). Interestingly, the general suppression of emotional displays factor did not have a significant effect on either PA or resilience, suggesting that some of the effects observed previously are due specifically to suppressing emotional displays of a particular valence.
Figure 4.4
Exploratory Model 1 (Suppressed Negative Displays Only)
χ² (604) = 1265.94, p < .001; CFI = .93; RMSEA = .05; SRMR = .06.
Figure 4.5
Exploratory Model 2 (Suppress Positive & Negative Displays)
$\chi^2 (711) = 1450.58, p < .001; \text{CFI} = .92; \text{RMSEA} = .05; \text{SRMR} = .06.$
Figure 4.6
Exploratory Model 3 (Suppress General)
$\chi^2 (719) = 1945.82, p < .001; \text{CFI} = .87; \text{RMSEA} = .06; \text{SRMR} = .07.$
CHAPTER V
DISCUSSION

Suppressing positive emotional displays is a common aspect of many jobs that fall within Wharton and Erickson’s (1993) differentiating and masking categories, yet it is a form of emotional labor that has received little research attention. Suppressing positive emotional displays is particularly relevant for the nursing field, which has experienced a gradual shift in values that have resulted in a devaluing of expressive care relative to instrumental care (Phillips, 1996). However, less expressive care may be detrimental to both patients (Woodward, 1997) and to nurses themselves.

Consistent with an emerging body of research by James Gross and colleagues (e.g., Gross, 2002; Gross & John, 2003; Gross & Levenson, 1997), this study took the perspective that suppressing positive emotional displays would be negatively related to positive affect. On the basis of Fredrickson’s (2003, 2006) broaden-and-build theory of positive emotions, I further expected that the suppression of positive emotions would have direct and indirect effects on resilience. The broaden-and-build perspective further suggests that resilience should influence a wide variety of personal outcomes, including many that are salient in the nursing field, such as burnout, turnover intentions, general health, and work-family interference (Aiken et al., 2001).
This study contributes to the emotional labor literature in several respects. First, this study demonstrated that suppressing positive emotional displays has consequences for affective experiences, which in turn influence many important outcomes through the broaden-and-build mechanism. Second, it suggests many avenues for future research by linking emotional labor to the emerging literatures on resilience and positivity (e.g., Diener, 2000; Fredrickson, 2006). Further, this study provides support for the broaden-and-build perspective by linking resilience to important dependent variables that have not been previously examined, such as work-family interference and turnover intentions.

The sections below expand upon the findings and implications of this study. Below, I review the results of my hypothesis tests and discuss their relevance to emotional labor research. I then turn to a discussion of many potential avenues for future research, such as the antecedents of suppressed positive emotional displays. Next, I consider several practical implications for these findings. Lastly, I review several key limitations to this study that should be acknowledged when considering my findings.

**Discussion of Results**

As a result of the changes made in modified structural model #2, most of the hypotheses posed in this study received support. For interpretive clarity, I have divided my discussion of these results into clusters of related hypotheses.

*Suppression of Positive Emotional Displays and Resilience*

Hypotheses 1a-1d concerned the relationships between suppressing positive emotional displays, positive affect (PA), and resilience. These links were based on combining emotional regulation research conducted by Gross and colleagues (e.g., Gross,
2002; Gross & Levenson, 1997) with work on the broaden-and-build perspective of positive emotions espoused by Fredrickson and colleagues (e.g., Fredrickson, 2006).

Gross (2002) noted that suppressing emotional displays yields asymmetrical results depending on the valence of the suppressed emotion. Specifically, suppressing positive emotional displays, such as amusement, results in a decrease in the experience of the corresponding emotion. This effect does not occur when individuals suppress negative emotional displays; research indicates that the underlying emotional experience is not diminished as a result of the suppression. On the basis of this finding, Hypothesis 1a predicted that suppressing positive emotional displays would relate negatively to PA. This hypothesis was supported, indicating that respondents who reported higher levels of suppressing four positive emotional displays (happiness, excitement, pride, and relaxation) also generally reported lower levels of PA.

Hypothesis 1b predicted a positive link between trait PA and resilience. The broaden-and-build perspective suggests that positive emotions enhance human functionality in a variety of ways, including broadened attentional deployment, increased creativity, and deeper reserves of personal resources. This last benefit of positive emotions has led Fredrickson (2003, 2006) to argue that positivity is capable of building trait resilience over time. Some support for this idea was found by Fredrickson et al. (2003), who demonstrated that trait PA was longitudinally related to resilience before and after the September 11, 2001 terrorist attacks. Moreover, Cohn et al. (2007) have recently replicated this longitudinal finding among college students in a non-crisis context. Consistent with their work, I found support for Hypothesis 1b, indicating that individuals with higher levels of PA also reported higher levels of trait resilience.
Hypothesis 1c linked Hypotheses 1a and 1b to predict an indirect effect from suppressed positive emotional displays to resilience via PA. Support for this hypothesis was found with a significant indirect effect. Further, Hypothesis 1d predicted a direct, negative effect from suppressing positive emotional displays to resilience. I proposed this hypothesis on the basis of a wide variety of literature that indicates that suppressing emotional displays is disruptive to cognitive and social functioning (e.g., Butler et al., 2003; Gross, 2002). I reasoned that the inhibited cognition and diminished social support associated with suppressing emotional displays should reduce personal resources to the extent that trait resilience would be lowered as suppression increased. However, this hypothesis was not supported; although the path coefficient trended in the expected direction, it did not attain statistical significance.

It is noteworthy that I found little support for these hypotheses prior to altering the a priori suppressed positive emotional displays construct by removing suppressed calmness and relaxation as indicators. This finding implies that the consequences of suppressing displays low activation, positive emotions are discrepant from the other emotions examined in this study. I address this issue at length below as a matter of concern for future research to address.

The support found for Hypotheses 1a-1c after removing suppressed displays of calmness is important because it represents the first link between emotional labor research and the broaden-and-build perspective of positive emotions. Many authors have noted that psychological research tends to overlook positive emotions relative to negative emotions (e.g., Diener, 2000; Parrott, 2002), and this trend is present in the emotional labor literature as well. Based largely on the importance of integrative occupations to the
service economy (Morris & Feldman, 1996), emotional labor research has overwhelmingly focused on expressing positive emotional displays and suppressing negative emotional displays. Support for Hypotheses 1a-1c is therefore meaningful because it demonstrates important consequences for suppressing positive emotional displays, a form of emotional labor common to a wide variety of differentiating and masking occupations (Wharton & Erickson, 1993). Moreover, these findings are consistent with the well-established broaden-and-build perspective, which explicates the mechanism through which suppressing positive emotional displays is disruptive.

Interestingly, my exploratory analyses with suppressed negative emotions show some parallels with Gross’s (2002) work on suppressing emotional displays. Gross and Levenson (1997) found that suppressing positive emotional displays led to changes in the corresponding emotional experiences, but that suppressing negative emotional displays did not influence emotional experiences. Similarly, I found that suppressed positive emotional displays influenced resilience only through PA, but that suppressed negative emotional displays had no effect on PA. In contrast, they had a marginally significant direct effect on resilience. Although further research is needed to better understand these processes, it does seem that suppressed positive emotional displays operate on subsequent outcomes through different mechanisms than suppressed negative emotional displays. Importantly, this study is the first to reproduce the relationship between suppressed positive emotional displays and affective experience in an organizational sample.

I also found support for Hypothesis 1d, which predicted a direct relationship between suppressed positive emotional displays and resilience. The literature suggests some interesting implications for this relationship. First, as noted previously, Richards
and Gross (2000) demonstrated compellingly negative cognitive consequences for
suppressing emotional displays, and Gross and John (2003) showed similarly negative
social consequences for suppression. There may therefore be several important social and
cognitive mediator variables between suppressed positive emotional displays and
resilience, such as cognitive distraction or perceived social support, that were not
measured in this study. Thus, additional research should examine this relationship more
closely, with particular attention paid to intermediary constructs that could develop the
mechanisms that contribute to the direct relationship between suppressing positive
displays and resilience.

A final point to note relevant to Hypotheses 1a-1d is the modest relationship
between suppressed positive emotional displays and positive affect. Although I did find a
significant indirect pathway from suppressed positive emotional displays to resilience via
positive affect, suppressed positive emotional displays only predicted about 1.2% of the
variance in positive affect. However, the difference in bandwidth (Ones & Viswesvaran,
1996) between these constructs may partially explain why this relationship had a small
magnitude. Narrow bandwidth constructs are precisely defined (Murphy, 1993) whereas
broad bandwidth constructs are global and generalized. For example, suppressing positive
emotional displays is a very specific type of emotional labor, consistent with a narrow-
bandwidth construct. Positive affect is broad-bandwidth construct because it is
considerably more global, and influenced by a wide variety of both biological and
environmental processes. Ones and Viswesvaran (1996) demonstrated that narrow-
bandwidth personality variables, due to their specificity, were poorer predictors of broad-
bandwidth performance criteria relative to similarly broad-bandwidth personality
variables. Applied to the current study, their findings suggest that the modest relationship between suppressed positive emotional displays and positive affect is consistent with what one might expect from predicting a global criterion with a very specific predictor.

Another potential reason for this modest relationship may involve uncontrolled differences in affective style (Davidson, 2000, 2003) between respondents. *Affective style* encompasses the full range of individual differences that influence emotional experiences and reactivity. Affective style arises from stable, physiological differences in neural activation, and it reflects trait-level differences in approach and avoidance tendencies as well as positive and negative affectivity. Applied to the present study, some nurses may have had a greater trait disposition to feel positive, and they may therefore have been more resistant to the negative effect of suppressing positive emotional displays.

*Moderating Effect of Role Identification*

Hypothesis 2 concerned the moderation of role identification on the relationship between suppressed positive emotional displays and resilience. Ashforth and Humphrey (1993) expected that the negative consequences of emotional labor would be lessened for employees who strongly identified with their job roles. They proposed that role identification increases the extent to which employees see emotional labor as authentic and consistent with the true self. Further, individuals with high role identification can infer more about appropriate behavior from the group norms that they espouse, which reduces perceived role ambiguity. Despite the theoretical rationale outlined by Ashforth and Humphrey (1993), I found no support for Hypothesis 2.

It is likely that the measurement of role identification in this study contributed to the lack of support for Hypothesis 2. I constructed several alternative measures of role
identification based on the discrepancy between ought and self-perceived nurse characteristics, but more direct, self-report measures of the construct have been developed. For example, Kreiner and Ashforth (2004) developed several scales to measure different types of identification and disidentification with an organization, and these scales could be used to address identification with a role or occupation with only slight modifications. Kanungo (1982) also developed a measure of role identification, although several of its items may conceptually overlap with commitment, which Ashforth (2001) cautioned is a related, but distinct construct.

I did find several main effects of role identification through exploratory analyses despite finding no support for the interaction. Specifically, role identification had statistically significant main effects on suppressed positive emotional displays, positive affect and burnout. The relationship with positive affect in particular is interesting, and to some degree consistent with existing theory. For example, Bauer, Morrison, and Callister (1998) suggested that PA should correlate with measures of role integration and involvement because employees with high PA are more likely to attract mentoring, coworker interaction, and opportunities to get involved at work due to their pleasantness. In turn, this increased involvement in the job should enhance positive, work-related feelings.

**Effects of Resilience**

Hypotheses 3 through 6c concerned the outcomes associated with resilience, all of which received full support. Specifically, Hypothesis 3 predicted that resilience would be negatively related to burnout. Hypotheses 4a–4c concerned the links between resilience, burnout, and general health, demonstrating that resilience and burnout are both related to
general health, and that burnout partially mediates the relationship between resilience and health. Similarly, Hypotheses 5a-5c demonstrated a similar pattern of relationships between resilience, burnout, and work-family interference, and Hypotheses 6a-6c established this pattern between resilience, burnout, and turnover intentions.

Although burnout and resilience have been linked to some of these outcomes in previous research, the findings of this study are important for several reasons. First, the findings regarding burnout, work-family interference, and turnover intentions represent an important extension of the broaden-and-build theory of positive emotions (Fredrickson, 2006). Fredrickson and colleagues’ existing research on this theory has focused on outcomes such as broadened thought-action repertoires (Fredrickson & Branigan, 2005), recovery from negative emotions and short-term cardiovascular strain (Frederickson et al., 2000), resilience (Fredrickson et al., 2003), and broad-minded coping (Fredrickson & Joiner, 2002). In contrast, this study demonstrated that the broaden-and-build perspective has implications for more distal constructs beyond resilience.

Moreover, little research has applied the broaden-and-build perspective to organizational outcomes. Wright (2003) pointed out that this theory has a great deal of potential usefulness for organizational studies, but to date, most research on the broaden-and-build perspective has focused on social cognitive constructs. However, consistent with Wright’s (2003) arguments, some emerging empirical research indicates that broaden-and-build theory is important for organizations as well. For example, Wright, Cropanzano, and Bonnett (2007) recently applied the broaden-and-build theory to the relationship between job satisfaction and job performance, arguing that the expanded
cognitive and behavioral repertoires associated with feeling satisfied at work can contribute to performance. The current study represents another important organizational application of Fredrickson’s (2006) theory by demonstrating that feeling positive contributes to resilience, which in turn is negatively related to burnout, work-family interference, and turnover intentions.

The findings of this study are important to nursing in particular. Many researchers have established that nurses struggle with work-family interference, burnout, turnover intentions, and general health issues (e.g., Aiken et al., 2001), yet this study is the first to apply the broaden-and-build perspective as a mechanism to partially explain how these negative outcomes arise. The importance of this perspective for explaining these important outcomes is reflected in the magnitude of the relationships between these constructs. As shown in Figure 4.3, resilience explains about 8% of the variance in burnout, and resilience and burnout in conjunction explain 14% of the variance in general health, 13% of the variance in turnover intentions, and 52% of the variance in work-family interference. These findings have a great deal of practical significance for healthcare organizations, suggesting that resilience is an important quality that needs to be fostered among nurses.

Because this study integrated many aspects of emotional labor that have received little empirical research attention (e.g., suppressed positive emotional displays and role identification), my findings generated many questions that need to be addressed in future research. These are developed in detail below.
Future Research Directions

The findings of this study suggest many directions for future research. In the following sections, I consider several interesting questions that researchers should addressed in later studies.

Antecedents of Suppressed Positive Emotional Displays

Given the observation that nurses attribute low status and value to expressing positive emotional displays (Phillips, 1996; Smith, 1991; Woodward, 1997), future research should focus on more specifically identifying the antecedents that contribute to suppressing these displays. To this end, Table 5.1 presents a set of potential motives that could encourage nurses to suppress positive emotional displays. I have focused only on rational motives that are likely to be widely shared, rather than idiosyncratic motives, which are typically unique to specific belief systems (Parrott, 1993, 2002). Each is explored in greater detail below.

*Conforming to professional or social norms.* I have noted previously that contemporary nurses perceive that expressive care has lower significance than instrumental care. Vocational requirements for emotional labor are traditionally thought to be guided by *emotional display rules*, expectations set by organizations that clarify their employees’ understanding of the emotions that are appropriate to display in given job situations (Diefendorff & Richard, 2003; Diefendorff et al., 2006; Ekman & Friesen, 1975; Gosserand & Diefendorff, 2005; Grandey, 2000; Hochschild, 1983; Rafaeli & Sutton, 1987). Research indicates that emotional display rules tend to be implicitly understood and are infrequently codified formally (Diefendorff & Richard, 2003).
Table 5.1

Theoretical Motives for Suppressing Positive Emotional Displays

<table>
<thead>
<tr>
<th>Inter-Individual Motives</th>
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<tbody>
<tr>
<td>1. To adapt behavior to conform to a generalized professional or social norm</td>
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<tr>
<td>2. To promote pragmatic, expedient service</td>
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<tr>
<td>3. To be considerate or respectful of others in specific contexts</td>
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<table>
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<tr>
<th>Intra-Individual Motives</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. To avoid distraction and improve motivated concentration</td>
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<tr>
<td>5. To protect oneself from anticipated, future negative emotions</td>
</tr>
</tbody>
</table>

Display rules can be perceived at the level of an occupation as well (Bolton, 2005). For example, past studies have noted that detached neutrality (Smith & Kleinman, 1989) is a norm that is perceived throughout the nursing field, including increasingly among nurses. This norm dictates that medical professionals are discouraged from showing excessive concern or other emotions that could disrupt the clinical process or the relationship between patient and caregiver. Specifically, medical caregivers are expected to remain objective and to maintain a professional distance out of a concern that closeness with a patient could interfere with the caregiver’s ability to act in the patient’s best interests. Importantly, this is an implicit display rule; emotion management is expected to be learned on the job, and these standards for emotional displays are rarely codified in medical curricula (Hochschild, 1983; Smith, 1991; Smith & Kleinman, 1989). Thus, one potential reason that nurses may suppress positive emotional displays is because they perceive an occupational display rule suggesting that they are expected to
suppress these displays in the interest of developing professionalism and instrumental care. Future research should therefore examine display rules, such as those specifically associated with detached neutrality, as important antecedents of suppressed positive emotional displays.

Promoting pragmatic, expedient service. Recent work by Aiken and colleagues (Aiken et al., 2001; Aiken, Clarke, Sloane, Sochalski, & Silber, 2002) has emphasized that nurses are increasingly overburdened with work and patient loads due to healthcare staff shortages. An important consequence of this burden is that nurses are realistically less able to provide lengthy, individualized attention to each patient (Aiken et al., 2001). Although genuine, positive emotional displays are an important part of providing good service (Grandey, Fisk, & Steiner, 2005; Schneider & Bowen, 1992), research indicates that on-the-job busyness discourages the expression of positive emotions as a means of expediency in service occupations (Rafaeli & Sutton, 1990; Sutton & Rafaeli, 1988). As Rafaeli and Sutton (1989) noted, busy situations alter social and organizational norms for interactions; in these situations, good service is best provided by minimizing pleasantries in the interest of expediency. Nurses who perceive that they are overburdened with patients may react similarly and suppress positive emotional displays to help manage their workload and meet the needs of all of their patients. Therefore, variables such as patient load, supervisory load, patient acuity, and staff support are likely antecedents to nurses’ suppression of positive emotional displays that should be examined in future research.

Consideration of specific others. Diefendorff and Richard (in press) distinguished between two levels of emotional display rules. The majority of the literature has focused
on what they term *prescriptive display rules*, which refer to broad organizational expectations for emotional expressions, such as the norm of detached neutrality. In contrast, far less research has focused on what they label *contextual display rules*, the more specific display rules formed by combining discrete emotions with specific display directions. Specific contextual display rules are adopted based on what Rafaeli and Sutton (1989) called transaction-defining cues. Transaction-defining cues can include elements such as characteristics of the situation and characteristics of the target with which one is interacting, and they refine the way that employees interpret emotional display rules.

One important transaction-defining cue identified in past research is the status of the interaction target (Diefendorff & Richard, in press; Rafaeli & Sutton, 1989). For example, nurses commonly interact with physicians, who are typically of a higher status than nurses within hospitals. Several qualitative studies have found that nurses react to interactions with physicians by suppressing positive emotions (Rowe & Sherlock, 2005; Taylor & Barling, 2004), typically to present an appearance of seriousness and vigilance. Thus, suppressing positive emotions may occur when nurses find themselves interacting with specific targets that possess important transaction-defining cues. Future research should focus on identifying the transaction-defining cues that are antecedents of suppressed positive emotional displays, which likely include high status.

_Avoiding distraction and improving concentration._ Positive emotional displays may also be managed in the interest of controlling internal states. For example, positive emotions can be disruptive to focused, vigilant thought in a variety of ways. Multiple studies have shown that positive emotions encourage broad thinking, including a widened
scope of attention and increased thought-action repertoires (Derryberry & Tucker, 1994; Fredrickson, 1998; Fredrickson & Branigan, 2005; Isen, 1993; Kahn & Isen, 1993). While these are generally considered desirable qualities, as Schwartz and Bless (1991) noted, this phenomenon occurs because positive affective states suggest that the current environment is safe and non-threatening, which encourages people to engage in exploration, take risks, and use simple, generalized heuristics in information processing.

Nurses may not be best served by this mode of thinking, which detracts from their ability to remain patient-focused and identify problems early. Indeed, negative emotions can elicit a focus on details and strategic vigilance that may be more beneficial in some healthcare settings (Brief & Weiss, 2002; Davis & Whalen, 2001; Derryberry & Reed, 1998; Forster, Higgins, & Bianco, 2003). Suppressed positive emotional displays may therefore be triggered by situations in which nurses need to maintain concentration and engage in detailed, systematic thinking instead of using broad heuristics (Schwartz & Bless, 1991).

Protection from negative emotions. Nurses may also choose to suppress positive emotional displays out of a concern that showing positive emotions can ultimately lead to feeling negative emotions, like disappointment or grief (Smith, 1992). Several researchers have noted that positive emotional interactions with patients or their families can lead to attachments that can be hard to manage when patients leave the hospital or pass away (James, 1992; Lewis, 2005; Rowe & Sherlock, 2005; Smith, 1992). For example, Lewis (2005) studied emotion management among a sample of nurses in a special care baby ward. She noted that the nurses consciously strove to remain professional and emotionally detached from both the infants and their parents so that this
involvement did not influence the care process or the nurses’ own emotions. A qualitative response from a nurse asked about expressing emotions clearly captures this notion:

“…you have to keep the parents and nurse being separate, you can’t become too much like their pal because it’s very easy to become that…the parents are there constantly and they start to look on you as a friend…. you’ve got to make sure you don’t get so involved that it affects the way that you deal with them.” (Lewis, 2005, pp. 570)

In this case, expressing positive emotions was seen as undesirable because it encouraged the parents to become too dependent on a relationship with the caregivers. Moreover, a growing relationship between the nurse and the parents could also make it difficult for the nurse to remain objective when making difficult healthcare decisions. Similarly, James (1992) studied emotional labor among nurses working in an end-of-life hospice. She noted that some of the nurses in her sample avoided talking to the patients because they worried about suffering the emotional consequences of patients’ future deaths. These nurses suppressed positive emotional displays out of an awareness that any attachment that developed with the patient as a result would only intensify later feelings of grief when the patient inevitably died. This practice is comparable to one identified by Kahn (1993), who found that caregivers often managed their growing awareness of negative feelings by emotionally removing themselves from patients and clients to help avoid impending despair, disappointment, or exhaustion. Thus, if nurses are aware that expressing positive emotions now may contribute to feeling worse in the future, evidence suggests that this awareness might function as an antecedent to suppressing positive emotional displays to help avoid this result.
In addition to testing antecedents such as these, future research also needs to explore the content of suppressed emotional displays. Below, I turn to several research questions regarding the construct itself.

The Content of Suppression

Two key issues regarding the nature of suppressing positive emotional displays seem important for future research to address. First, future research needs to continue to disentangle the effects of general suppression from suppressing specifically positive and/or negative emotional displays. In other words, we need more research indicating that suppressing the displays of emotions yields different effects than simply engaging in any form of cognitive or emotional suppression. Second, additional research is needed to explore the consequences of suppressing different discrete emotional displays. In particular, the notion of managing the appearance of low activation emotions, such as calmness, serenity, and drowsiness, needs to be explored in greater detail. These issues are discussed in greater detail below.

General suppression. A key question that needs to be addressed in future research involves the consequences of suppressing emotional displays versus engaging in suppression in general. For example, research indicates that people can suppress feelings (John & Gross, 2004) and thoughts (Wenzlaff & Wegner, 2000), and that there are negative consequences for engaging in suppression regardless of the cognitive, emotional, or behavioral event that one is suppressing. Future research needs to better disentangle the differences between suppressing an emotional display (and more specifically, a positive versus a negative emotional display) from engaging in any form of suppression.
Interestingly, the exploratory analyses conducted above provided some basic evidence that there are differences between suppressing a positive emotional display and suppressing a negative emotional display. Suppressed positive emotional displays influenced resilience both directly and indirectly through a negative relationship with positive affect. In contrast, suppressed negative emotional displays only had a significant, direct relationship with resilience. Although additional research is needed to confirm these exploratory findings, these results do seem consistent with Gross (2002). Suppressing positive emotional displays does reduce the positive emotional experience, yielding an indirect pathway of influencing resilience. In contrast, suppressing negative emotional displays operates on resilience without impacting emotional experience.

*Discrete suppressed emotions.* Further, future research needs to examine the consequences of suppressing different discrete emotions. This study ultimately included three positive emotional displays: happiness, pride, and excitement. In addition, Gross and colleagues (e.g., Gross, 1998; Gross & Levenson, 1997) have focused primarily on amusement. However, Figure 2.1 shows many other positive emotions that have not received research attention. The consequences of suppressing these emotional displays should be studied in future projects.

One potentially interesting research stream could focus on identifying if the valence or activation level of an emotion influences the consequences of suppressing its corresponding display. For example, there might be more effort associated with suppressing a high activation, positive emotional display, like excitement, relative to a low activation, positive emotional display, like relaxation. This added effort could have consequences for cognition and social functioning consistent with the findings of...
Richards and Gross (2000) and Butler et al. (2003). On the other hand, it may be more debilitating to positive affect to suppress displays with a stronger positive valence, such as happiness or pleasure, relative to those with a weaker positive valence, such as sleepiness or serenity.

As noted above, I removed suppressed displays of calmness and relaxation from the analyses in the modified models that I tested. Although this decision was made on a post hoc basis, it prompts a related research question about the conceptual meaning of suppressing a low activation, positive emotional display. An examination of Figure 2.1 indicates that emotions that fall within this quadrant include feelings such as calmness, relaxation, sleepiness, contentment, and serenity.

The underlying question about regulating these displays seems to be whether respondents perceive that these emotions actually have a recognizable, discrete emotional display that they must work to manage. For example, is there a distinctive facial display associated with feeling calm? If so, under what conditions would employees need to regulate this display? At a more fundamental level, do respondents perceive that calmness is a discrete emotion, or do they perceive that calmness reflects an absence of emotion? If respondents do not register calmness as a discrete emotion, then questions regarding managing displays of calmness may be conceptually meaningless.

Cacioppo, Gardner, and Berntson’s (1999) notion of the “positivity offset” provides some evidence that low activation, positive emotions may represent more of an absence of emotion rather than a noticeable emotion that needs to be regulated. The positivity offset refers to the tendency of individuals to generate slightly positive affective output in the absence of affective input. In other words, low activation, positive
emotions are the baseline for emotional experience that people tend to feel when nothing emotionally stimulating is present in the environment.

If Cacioppo et al. (1999) are correct and calmness represents a baseline of no emotional reactivity, then it seems likely that occupational distinctions will play a large part in whether or not displays of calmness need to be regulated. For example, someone in a masking occupation (e.g., a judge) strives to suppress both positive and negative emotional displays. Displaying calmness, which indicates no emotional reaction according to Cacioppo et al. (1999), is therefore the point of emotional labor for a judge, and s/he would not need to regulate the display of calmness. This situation is similar to what Diefendorff, Croyle, and Gosserand (2005) referred to as having naturally felt emotions, workplace feelings and corresponding displays that match those prescribed by the organization or occupation, thus making emotional labor unnecessary.

In contrast, someone in an integrative occupation (e.g., a sales associate) strives to express positive and suppress negative emotional displays. A sales associate typically needs to express more highly-activated positive emotions than calmness, so s/he might regulate displays of calmness in the interest of expressing a different positive emotion, such as enthusiasm. This situation is similar to Ekman and Friesen’s (1975) notion of simulation, generating an emotional display when one is not feeling any underlying emotion.

Given that nursing is shifting from an integrative to a masking occupation, some nurses may not feel a need to suppress calmness (consistent with masking), whereas others might feel that calmness should be suppressed in lieu of a more intense positive emotion (consistent with integration). This difference may partially reflect why
suppressed calmness and relaxation functioned differently from any of the other three suppressed positive emotions in this study. Overall, the sum of these questions suggests that additional research needs to examine low activation, positive emotional displays, and that employees in different emotional labor occupations may react to these emotional displays in ways that are not predicted by Wharton and Erickson’s (1993) model.

The relationships between emotional labor and resilience also need to be re-examined in future research. Some potential concerns and new questions are introduced in the next section.

Resilience

As Stajkovic (2006) noted, resilience shares a great deal of conceptual overlap with several other constructs, such as subjective well-being, hope, self-efficacy, optimism, and coping ability. He suggested that resilience, hope, self-efficacy, and optimism serve as indicators of a higher-order “core confidence” construct, yet conceded that alternative configurations that place any of these four indicators as a second-order construct seem equally valid. The content of the resilience construct and its relationships (or redundancies) with other constructs is a topic that needs to be explored in much greater detail in future research.

In the present study, I focused on Connor and Davidson’s broad operationalization of resilience because it seemed most consistent with Fredrickson’s (2006) theory. However, it is worth noting that multiple conceptualizations of resilience exist in the literature (Block & Kremen, 1996; Connor & Davidson, 2003; Carver, 1998). For example, Block and Kremen (1996) approach resilience from the perspective of adaptive cognitive control mechanisms, considering “ego-resilient” individuals to be
those who are positively engaged with the environment, open to new experiences, and able to modulate cognitive control based on situational demands. In contrast, authors such as Fredrickson et al. (2003) and Richards (2002) see resilience as involving a capacity to persist through adversity, learn from adverse events, and develop new psychological and emotional resources as a result. Accordingly, the relationships between emotional labor, positive affect, and resilience may vary considerably depending on the conceptualization of resilience that is examined. Future research should therefore replicate some of the findings of the current study using different approaches to the resilience construct.

A final important direction for future research involves re-examining the relationships tested in this study with respondents from different occupations. As noted below, emotional labor for nurses may not be reflective of other occupations, even those that fall within the same categories set by Wharton and Erickson (1993).

Replication of Findings with Non-Nursing Samples

Although nurses engage in forms of emotional labor that are common to many other jobs, the circumstances of their occupation suggest that future researchers need to replicate the findings of this study with other occupational samples. First, nursing is a strongly gendered occupation (James, 1992; Wharton & Erickson, 1993) that has been dominated by feminine gender norms. Traditional feminine gender norms stress that women, as wives and mothers, tend to adopt integrative emotional display norms that encourage the expression of positive emotional displays and the suppression of negative emotional displays. Although many differentiating and masking occupations (all of which involve some degree of suppressing positive emotional displays) are gendered occupations, future research should examine if the consequences of suppressing positive
emotional displays are as severe among employees in gender-neutral or traditionally masculine jobs. For example, call center employees must suppress positive emotions (Shuler & Shyler, 2000), and this position does not seem to have such strong gender connotations.

Another reason to replicate these findings on a different occupational sample is the changing nature of nursing that I have previously described (e.g., Phillips, 1996). Shifts in display demands and ambiguity about the set of caring skills that is most valuable may be exacerbating the consequences of suppressing positive emotional displays among nurses. These findings should be replicated in an occupation that has not undergone such radical changes in the way that employees are expected to interact with the public.

Although there are clearly many more questions prompted by the results of this study that require future research, the existing findings do have some interesting implications for emotional labor among nurses. These applications are introduced in the following section.

Implications for Practice

My findings potentially have important implications for practice, both for nurses in particular and for other emotional labor occupations. Below, I discuss the importance of formally training and evaluating emotional labor, rewarding expressive care, and taking into consideration the strains introduced by emotional labor demands.

Teaching Expressive Care

Several researchers have noted that expressive care is generally not a part of medical curricula, both for doctors (Smith & Kleinman, 1989) and for nurses (Smith,
1991). Rather, medical professionals are expected to figure out the emotional labor rules for their occupations on their own. For example, Smith and Kleinman (1989) cited examples of medical students who felt they would be chastised if they asked their instructors about how to handle emotional concerns. However, this study suggests that taking an undirected approach to emotional labor is dangerous; my findings indirectly linked emotional labor to a variety of important, negative outcomes for the individual nurse and for the organization, suggesting some degree of assistance and direction is warranted.

Thus, one straightforward implication of this study is that expressive care should be a formal part of medical training. As Diefendorff and Richard (2003) noted, emotional display rules in organizations and occupations are generally ambiguous. This ambiguity potentially allows nurses to interpret demands to suppress positive emotional displays, seemingly much to the detriment of themselves and their patients. Training should highlight the differences between instrumental and expressive care, and discuss the positive and negative consequences associated with emotional expressivity. For example, if nursing trainees could be shown that expressive care yields better outcomes both for themselves and for their patients, their perceptions of expressive care would likely improve. Therefore, training could possibly diminish some of the negative stigma associated with expressive care through open and frank discussions of how expressive care contributes to nursing effectiveness.

*Reinforcing Expressive Care*

Related to the implications for training, the results of this study suggest that healthcare organizations should reward and reinforce expressive care to encourage the
expression of positive emotional displays. Nursing researchers have long held that expressive care is important for providing good care to patients (e.g., James, 1992), but many nurses seem to perceive expressive care as unimportant or even irrelevant to modern nursing (Fielding & Llewelyn, 1987; Phillips, 1996; Smith, 1991). This study further demonstrated that suppressing emotions is also detrimental to the nurses themselves. Thus, it is likely in the best interest of healthcare organizations to encourage positive emotional expressivity. However, the established stigma against expressive care reported in the literature suggests that healthcare organizations will need to provide incentives for nurses to start valuing expressive care again.

Interestingly, Diefendorff et al. (2006) showed that both service employees and their supervisors perceived emotional labor to be an in-role aspect of their job performance. Specifically, they were the first to demonstrate that employees in emotional labor jobs can perceive emotional labor as a central, compensated aspect of their jobs. This finding suggests that integrating expressive care into performance appraisals for nurses might be a reasonable approach to encouraging and rewarding emotional expressivity. Providing regular developmental feedback (London, 2003) on expressive care could further serve as a regular reminder of the importance of this form of emotional labor.

Building and Maintaining Resilience

The results of this study strongly suggest that resilience is an important quality for protecting nurses from a variety of detrimental outcomes that have historically been problems for the nursing field. Aiken et al. (2001) found that perceptions of burnout, work-family interference, poor health, and turnover intentions were widespread among
North American and European nursing samples, which suggests that any means to avoid these outcomes would be of considerable value to healthcare organizations.

Consistent with the broaden-and-build literature (e.g., Fredrickson et al., 2003; Fredrickson, 2006), this study found that cultivating positive emotions was a critical antecedent to respondents’ ratings of their resilience. An emerging stream of longitudinal research within this literature indicates that changes in positive affect are positively related to changes in resilience over time (Cohn et al., 2007; Fredrickson & Joiner, 2002). Thus, an important practical suggestion of these findings is that healthcare organizations should attempt to increase nurses’ levels of positive emotions. Wright et al.’s (2007) application of the broaden-and-build perspective to job satisfaction suggests that mechanisms that yield greater job satisfaction may be instrumental in increasing positive emotional experiences. For example, enhancing job characteristics, such as task significance, autonomy, and skill variety, can greatly increase employees’ perceptions of job satisfaction (Frye, 1996; Hackman & Oldham, 1976). Although research has not yet demonstrated that job satisfaction contributes to resilience in the same way that positive affect contributes to resilience, Wright et al.’s (2007) findings suggest that this could be a potentially important relationship for healthcare organizations.

However, future research that compensates for some of the weaknesses of this study is necessary to confirm my results before organizational interventions such as these are warranted. I present several important limitations of my findings in the following section.
Limitations

Despite the interesting findings and implications of this study, there are several limitations to note. First, although my sample had high variability in age, it was not representative of the general population in terms of gender and race. Respondents were approximately 95% female and 97% Caucasian. This low variability certainly limits the extent to which the findings can be generalized to other employees in emotional labor settings, particularly given research that indicates that gender and race, even within a culture, influence emotional expressivity (Matsumoto, 1993; Rafaeli & Sutton, 1989). Additional research is needed to confirm these findings on more representative samples.

A second important limitation is that the data I employed for hypothesis testing are cross-sectional. Some of the theoretical processes underlying the model, such as the broaden-and-build perspective (Fredrickson, 2006), unfold in a longitudinal fashion as changes in affect yield changes in resilience. Although there is ample longitudinal research to support the existence of these processes (e.g., Cohn et al., 2007), I cannot demonstrate that these longitudinal effects occur in the current study (Cervone, 2005). Further longitudinal research is needed to confirm some of the relationships that I found in this study. One potentially fruitful means of doing so could employ experience sampling methodologies (Beal & Weiss, 2003).

Another significant limitation of this study is that several key scales were self-developed or extensively modified due to the archival nature of the data. Specifically, the suppression of positive emotional displays scale was modified to include only a select group of emotions and the role identification scale was constructed for the purposes of this study. Accordingly, I tested some of the key relationships that I found between
emotional labor and broaden-and-build constructs with new and unvalidated scales. Future research is needed to replicate these relationships using different, established measures of the constructs.

As noted previously, a final limitation to note is the modest relationship between suppressed positive emotional displays and positive affect. Specifically, suppressed positive emotional displays only predicted about 1.2% of the variance in positive affect. Thus, the results of this study pertaining to suppressed positive emotional displays need to be interpreted carefully and reproduced with other samples. Importantly, although the magnitude of this path coefficient is small, this study is the first to demonstrate that suppressed positive emotional displays predict a statistically significant percentage of the variance in positive affect, and indirectly, in resilience.

Conclusion

The objective of this study was to examine the consequences of suppressing positive emotional displays in the workplace. To this end, I integrated the literature on positive emotional display suppression (e.g., Gross, 2002) with work on the broaden-and-build perspective of positive emotions (e.g., Fredrickson, 2006) to develop and test a model explicating the consequences of suppressing positive emotional displays among nurses.

In general, I found support for the majority of the expected relationships. Suppressing emotional displays negatively influenced positive affect, which in turn was positively related to resilience, yielding an indirect, negative relationship between suppressed positive emotional displays and resilience. Resilience, in turn, was predictive
of a variety of important criteria for nurses, such as burnout, health, turnover intentions, and work-family interference.

Less support was found for role identification, which was expected to moderate the direct link between suppressed positive emotional displays and resilience. Although subsequent exploratory analyses suggested some intriguing main effects for role identification on burnout and positive affect, no support was found for the buffering role of role identification on detrimental emotional labor outcomes proposed by Ashforth and Humphrey (1993).

However, my many supported findings are meaningful in several respects. First, this study represents the first integration of emotional labor with broaden-and-build theory, suggesting many future avenues for research. Second, it reaffirms the importance of studying the forms of emotional labor performed by those employed in differentiating and masking occupations. These occupations have received considerably less research attention than integrative occupations, which has resulted in a deficiency of research on suppressing positive emotional displays. Further, my results represent an important extension of existing research supportive of the broaden-and-build theory. Whereas most existing research has focused on resilience and changes in physiological indices as outcomes of positivity, this study linked the broaden-and-build mechanism to important organizational criteria, including burnout, work-family interference, and turnover intentions. In summary, this study extends emotional labor research in a variety of new directions by introducing new theoretical ties and demonstrating the importance of studying neglected forms of emotional labor in the workplace.
Emotional labor is the compensated management of emotional displays in the context of the workplace (Hochschild, 1983). Consistent with Wharton and Erickson’s (1993) distinction between integrative, differentiating, and masking occupations, emotional labor is common among a great many jobs. However, the emerging service economy noted by Morris and Feldman (1996) has resulted in a relative neglect of emotional labor research among individuals employed in differentiating and masking occupations, which do not provide typical forms of customer service.

An important common element to the emotional labor performed by those in both differentiating and masking occupations is suppressing positive emotional displays. Despite the prevalence of this type of emotional labor, it has received very little research attention. This lack of research has particularly important implications for the nursing field, which has undergone a shift from emphasizing expressive care to emphasizing instrumental care (Leininger, 1981; Phillips, 1996; Woodward, 1997). This shift in care parallels a shift in emotional labor expectations from those most consistent with a caring, integrative occupation to those most consistent with a professional, masking occupation. Thus, the current study examined the suppression of positive emotional displays among nurses, consistent with new occupational demands that discourage expressive care.
I expected suppressed positive emotional displays to impact organizational criteria of importance to nursing through two interrelated theoretical mechanisms. First, consistent with laboratory research summarized by Gross (2002), I expected that suppressing positive emotional displays would negatively relate to reports of positive affect. Second, based on the capacity for positive emotional experience to develop trait characteristics, as noted by Fredrickson’s (2006) broaden-and-build theory, I expected positive affect to relate positively to resilience. Consistent with Gross and John (2003), I also saw evidence for a direct link between suppressed positive emotional displays and resilience, which I expected to be moderated by role identification (Ashforth & Humphrey, 1993). I further hypothesized that resilience would have direct effects on general health, work-family interference, and turnover intentions, along with indirect effects on these criteria via burnout.

My results were largely consistent with the proposed model, save for one unsupported hypothesis. Specifically, I did not find that suppressed positive emotional displays interacted with role identification to influence resilience. However, support for the remaining variables shows that suppressed positive emotional displays does have a small, but meaningful direct and indirect effect on resilience, and that resilience is an important antecedent of the terminal outcomes.

These results are important for a variety of reasons. From a theoretical perspective, they advance the emotional labor literature by emphasizing the value of examining suppressed positive emotional displays. Similarly, this study suggests that further emotional labor research on employees in differentiating and masking occupations is necessary and important. My results also advance the literature on the broaden-and-
build theory by demonstrating new links with organizational criteria. From an applied perspective, this study also suggests several directions for practice, including training emotional labor techniques and reinforcing expressed positive emotional displays.

In sum, this study represents an important integration of emotional labor and broaden-and-build research to examine a variety of organizational criteria that are problematic among the nursing population (Aiken et al., 2001). The results show that suppressing positive emotional displays has important consequences for nurses in light of the ongoing changes to the nursing occupation, and they suggest a variety of intriguing directions for future research.
REFERENCES


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### Suppression of Emotions Scale (Erickson & Ritter, 2001)

**Instructions:** Considering each of the emotions you experienced last week, to what extent did you try to HIDE OR CONTROL each of these feelings so that no one would know you were feeling this way?

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Did Not Experience this Emotion</th>
<th>Didn’t Try to Hide it at All</th>
<th>Tried Very Hard to Hide It</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afraid</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Angry</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Anxious</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Ashamed</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Calm(^a)</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Excited(^a)</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Frustrated</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Guilty</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Happy(^a)</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Helpless</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Irritated</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Proud(^a)</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Relaxed(^a)</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Sad</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Surprised</td>
<td>X</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)Item was included in final suppression of positive emotions scale
CD-RISC (Conner & Davidson, 2003)

Instructions: Please indicate how much you agree with the following statements as they apply to you over the past month. If a particular situation has not occurred recently, answer according to how you think you would have felt.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all true</th>
<th>Rarely true</th>
<th>Sometimes true</th>
<th>Often true</th>
<th>Nearly always true</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to adapt when changes occur.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I have at least one close and secure relationship which helps me when I am stressed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>When there are no clear solutions to my problems, sometimes fate or God can help.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I can deal with whatever comes my way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Past successes give me confidence in dealing with new challenges and difficulties.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I try to see the humorous side of things when I am faced with problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Having to cope with stress can make me stronger.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I tend to bounce back after illness, injury, or other hardships.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Good or bad, I believe that most things happen for a reason.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I give my best effort, no matter what the outcome may be.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I believe I can achieve my goals, even if there are obstacles.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Even when things look hopeless, I don’t give up.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>During times of stress/crisis, I know where to turn for help.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Under pressure, I stay focused and think clearly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Statement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>I prefer to take the lead in solving problems, rather than letting others make all the decisions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>I am not discouraged by failure.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>I think of myself as a strong person when dealing with life’s challenges and difficulties.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I can make unpopular or difficult decisions that affect other people, if it is necessary.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am able to handle unpleasant or painful feelings like sadness, fear, and anger.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>In dealing with life’s problems, sometimes you have to act on a hunch, without knowing why.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I have a strong sense of purpose in life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I feel in control of my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I like challenges.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I work to obtain my goals, no matter what roadblocks I encounter along the way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I take pride in my achievements.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Role Identification Scale (self-developed)

Ought Standards Instructions: Nurses are held to many professional standards. Some of these standards concern how nurses are to present themselves to others while at work. For each of the words below, please fill in the circle along the continuum that most accurately reflects HOW NURSES SHOULD BE AT WORK.

Actual Standards Instructions: Now, consider how YOU PERSONALLY are as a nurse. For each of the words below, please fill in the circle along the continuum that most accurately reflects how you see YOURSELF as a nurse.

<table>
<thead>
<tr>
<th>Altruistic</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Selfish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calm</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Agitated</td>
</tr>
<tr>
<td>Caring</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Uncaring</td>
</tr>
<tr>
<td>Dependent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Autonomous</td>
</tr>
<tr>
<td>Empathetic</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Unfeeling</td>
</tr>
<tr>
<td>Flexible</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Inflexible</td>
</tr>
<tr>
<td>Immoral</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Moral</td>
</tr>
<tr>
<td>Ined</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Competent</td>
</tr>
<tr>
<td>Organized</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Unorganized</td>
</tr>
<tr>
<td>Responsible</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Irresponsible</td>
</tr>
<tr>
<td>Unknowledgeable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Knowledgeable</td>
</tr>
<tr>
<td>Unsure</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Confident</td>
</tr>
</tbody>
</table>

Positive Affect Scale (Watson et al., 1988)

Instructions: Read each item and then fill in the appropriate circle next to the word. Indicate to what extent you generally feel this way, that is, how you feel on average. Use the following scale to record your answers.

<table>
<thead>
<tr>
<th></th>
<th>Very slightly or not at all</th>
<th>A little</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interested</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Strong</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Determined</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Active</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Alert</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Enthusiastic</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Inspired</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Attentive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Excited</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Proud</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Burnout Scale (Erickson & Ritter, 2001)

Instructions: For each of the following statements, fill in the circle that indicates how often you have felt this way while you are at work.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>&lt; once per month</th>
<th>About once a month</th>
<th>A few times a month</th>
<th>About once a week</th>
<th>A few times a week</th>
<th>Almost every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel emotionally drained from my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel used up at the end of the workday.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I dread getting up in the morning and having to face another day on the job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My work really puts a lot of strain on me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel burned out from my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My work puts too much stress on me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel I’m working too hard on my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
# Turnover Intentions Scale (Self-developed)

Instructions: To what extent do you agree with the following statements about your job?

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I intend to leave this organization within the next year.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I intend to remain with this organization for a long time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I would leave my job if a position were available in another organization</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Strain-based Work Interference with Family Scale (Carlson et al., 2000)

Instructions: To what extent do each of the following statements reflect your own personal experiences?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I get home from work, I am often too frazzled to participate in activities with family or friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am often so emotionally drained when I get home from work that it prevents me from contributing to my family in ways I would like.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Due to all the pressures at work, when I come home I am too stressed to do the things I enjoy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The stress from my job often makes me irritable when I get home.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Tension and anxiety from my work creep into my home life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The demands of my job make it difficult for me to maintain the kind of relationships at home that I would like.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>