

# Administrative Science Quarterly

<http://asq.sagepub.com/>

---

## What's Love Got to Do with It? A Longitudinal Study of the Culture of Companionate Love and Employee and Client Outcomes in a Long-term Care Setting

Sigal G. Barsade and Olivia A. O'Neill

*Administrative Science Quarterly* 2014 59: 551 originally published online 29 May 2014  
DOI: 10.1177/0001839214538636

The online version of this article can be found at:  
<http://asq.sagepub.com/content/59/4/551>

---

Published by:



<http://www.sagepublications.com>

On behalf of:



JOHNSON  
Cornell University

[Johnson at Cornell University](#)

Additional services and information for *Administrative Science Quarterly* can be found at:

**Email Alerts:** <http://asq.sagepub.com/cgi/alerts>

**Subscriptions:** <http://asq.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

>> [Version of Record](#) - Nov 3, 2014

[OnlineFirst Version of Record](#) - Jul 17, 2014

[OnlineFirst Version of Record](#) - May 29, 2014

[What is This?](#)



# What's Love Got to Do with It? A Longitudinal Study of the Culture of Companionate Love and Employee and Client Outcomes in a Long-term Care Setting

Administrative Science Quarterly  
59 (4)551–598  
© The Author(s) 2014  
Reprints and permissions:  
sagepub.com/  
journalsPermissions.nav  
DOI: 10.1177/0001839214538636  
asq.sagepub.com



**Sigal G. Barsade<sup>1</sup> and Olivia A. O'Neill<sup>2</sup>**

## **Abstract**

In this longitudinal study, we build a theory of a culture of companionate love—feelings of affection, compassion, caring, and tenderness for others—at work, examining the culture's influence on outcomes for employees and the clients they serve in a long-term care setting. Using measures derived from outside observers, employees, family members, and cultural artifacts, we find that an emotional culture of companionate love at work positively relates to employees' satisfaction and teamwork and negatively relates to their absenteeism and emotional exhaustion. Employees' trait positive affectivity (trait PA)—one's tendency to have a pleasant emotional engagement with one's environment—moderates the influence of the culture of companionate love, amplifying its positive influence for employees higher in trait PA. We also find a positive association between a culture of companionate love and clients' outcomes, specifically, better patient mood, quality of life, satisfaction, and fewer trips to the emergency room. The study finds some association between a culture of love and families' satisfaction with the long-term care facility. We discuss the implications of a culture of companionate love for both cognitive and emotional theories of organizational culture. We also consider the relevance of a culture of companionate love in other industries and explore its managerial implications for the healthcare industry and beyond.

**Keywords:** affect, companionate love, emotional culture, long-term care industry, hospitals and healthcare, patient outcomes, job satisfaction, absenteeism

<sup>1</sup> Wharton School, University of Pennsylvania

<sup>2</sup> School of Business, George Mason University

"Love" is a word rarely found in the modern management literature, yet for more than half a century, psychologists have studied companionate love—defined as feelings of affection, compassion, caring, and tenderness for others—as a basic emotion fundamental to the human experience (Walster and Walster, 1978; Reis and Aron, 2008). Companionate love is a far less intense emotion than romantic love (Hatfield and Rapson, 1993, 2000); instead of being based on passion, it is based on warmth, connection (Fehr, 1988; Sternberg, 1988), and the "affection we feel for those with whom our lives are deeply intertwined" (Berscheid and Walster, 1978: 177). Unlike self-focused positive emotions (such as pride or joy), which center on independence and self-orientation, companionate love is an other-focused emotion, promoting interdependence and sensitivity toward other people (Markus and Kitayama, 1991; Gonzaga et al., 2001). Evolutionary explanations of companionate love describe it as a way to strengthen social bonds, helping to keep people connected and committed (Reis and Aron, 2008). As in the general definition of emotions, the construct of companionate love can consist of facial expressions, vocal tone, body language, touch, physiological sensations, subjective experience, cognitive appraisal, and behavioral action tendencies (Lasswell and Lasswell, 1976; Kleinginna and Kleinginna, 1981; Hertenstein et al., 2006).

With its focus on others and interdependence, companionate love is a social emotion (Gonzaga et al., 2001), shaped by social context (Watson, 1930), and it is particularly relevant to consider the impact of companionate love in the workplace at a collective level, especially on organizational culture. Doing so offers a more complete view of the organizational culture construct. Although organizational culture research has generated much knowledge in the past 30 years (Frost et al., 1991; Schein, 2010; Ashkanasy, Wilderom, and Peterson, 2011), a critical aspect of culture, its emotional content, what we call "emotional culture," has been neglected. Rather, the literature to date has conceptualized organizational culture almost exclusively from a cognitive perspective, as a set of cognitions shared by members of a social unit (Rousseau, 1990; O'Reilly, Chatman, and Caldwell, 1991). This conceptualization of culture, which we call "cognitive culture," is narrower than the way culture is typically understood in other social sciences. Leading scholars in anthropology (Rosaldo, 1984; Lutz, 1988), sociology (Goffman, 1959; Durkheim, 1965), and psychology (Markus and Kitayama, 1991; Keltner and Haidt, 1999) include explicit references to the emotional nature of culture. As stated by Geertz (1973: 81), "Not only ideas, but emotions too, are cultural artifacts."

Focusing on emotional culture allows us to see crucial elements that are not visible through the study of cognitive culture alone. To date the organizational culture literature has largely neglected emotions. The few instances in which emotions are mentioned typically describe how sharing a strong cognitive culture leads employees to feel good (O'Reilly and Chatman, 1996). In this way, emotions are merely an outcome variable, indistinguishable from employee attitudes such as job satisfaction or organizational commitment. There is no organizational culture theory that incorporates behavioral norms, values, and deep underlying assumptions about the content of the emotions themselves and how these aspects of culture lead to differential outcomes for employees and the organization. This omission is problematic because basic research in the social sciences and affective studies in organizational behavior have shown that emotions spread and influence outcomes differently than cognition does (Izard,

Kagan, and Zajonc, 1988; Robinson, Watkins, and Harmon-Jones, 2013). These differences manifest themselves in how an emotional culture of companionate love will be expressed, how it will be experienced and spread among employees, and how it will influence practical outcomes. To this end, we draw on classic and modern management research to build a theory of an emotional culture of companionate love and to develop hypotheses predicting the influence of such a culture on employees, patients, and patients' families in a long-term care setting.

## THEORY OF AN EMOTIONAL CULTURE OF COMPANIONATE LOVE

Considering the large proportion of our lives we spend with others at work (U.S. Bureau of Labor Statistics, 2011), the influence of companionate love in other varied life domains (Shaver et al., 1987), and the growing field of positive organizational scholarship, which focuses on human connections at work (Rynes et al., 2012), it is reasonable to expect that this basic human emotion will not only exist at work but that it will also influence workplace outcomes. Although the term "companionate love" had not yet been coined, the work of early twentieth-century organizational scholars revealed rich evidence of deep connections between workers involving the feelings of affection, caring, and compassion that comprise companionate love. Hersey's (1932) daily experience sampling study of Pennsylvania Railroad System employees, for example, recorded the importance of caring, affection, compassion, and tenderness, as well as highlighting the negative effects when these emotions were absent, particularly in relationships with foremen. Similarly, Roethlisberger and Dickson's (1939) detailed study of factory life provided crisp observations of companionate love in descriptions of workers' interactions, describing supervisors who showed genuine affection, care, compassion, and tenderness toward their employees. In subsequent decades, however, organizational theorists moved away from the study of a broad range of emotional experiences to an almost exclusive focus on the narrow and mostly cognitive construct of job satisfaction (Brief and Weiss, 2002). Now, given the "affective revolution" in organizational behavior (Barsade, Brief, and Spataro, 2003), which offers a return to a more complete examination of the many emotions people experience at work, we can revive the study of this basic human emotion at work, doing so at the collective, cultural level, and thereby offer a more complete picture of organizational culture.

Like the concept of cognitive organizational culture, a culture of companionate love can be characterized as strong or weak. To picture a strong culture of companionate love, first imagine a pair of coworkers collaborating side by side, each day expressing caring and affection toward one another, safeguarding each other's feelings, showing tenderness and compassion when things don't go well, and supporting each other in work and non-work matters. Then expand this image to an entire network of dyadic and group interactions so that this type of caring, affection, tenderness, and compassion occurs frequently within most of the dyads and groups throughout the entire social unit: a clear picture emerges of a culture of companionate love. Such a culture involves high "crystallization," that is, pervasiveness or consensus among employees in enacting the culture (Jackson, 1966). An example of high crystallization appears in a qualitative study of social workers (Kahn, 1993) in which compassion spreads

through the network of employees in a “flow and reverse flow” of the emotion from employees to one another and to supervisors and back. This crystallization of companionate love can cross organizational levels; for example, an employee at a medical center described the pervasiveness of companionate love throughout the unit: “We are a family. When you walk in the door, you can feel it. Everyone cares for each other regardless of whatever level you are in. We all watch out for each other” ([http://auroramed.dotcms.org/careers/employee\\_voices.htm](http://auroramed.dotcms.org/careers/employee_voices.htm)). Words like “all” and “everyone” in conjunction with affection, caring, and compassion are hallmarks of a high crystallization culture of companionate love.

Another characteristic of a strong culture of companionate love is a high degree of displayed intensity (Jackson, 1966) of emotional expression of affection, caring, compassion, and tenderness. This can be seen in the example of an employee diagnosed with multiple sclerosis who described a work group whose members treated her with tremendous companionate love during her daily struggles with the condition. “My coworkers showed me more love and compassion than I would ever have imagined. Do I wish that I didn’t have MS? Of course. But would I give up the opportunity to witness and receive so much love? No way” (Lilius et al., 2003: 23).

In weak cultures of companionate love, expressions of affection, caring, compassion, or tenderness among employees are minimal or non-existent, showing both low intensity and low crystallization. Employees in cultures low in companionate love show indifference or even callousness toward each other, do not offer or expect the emotions that companionate love comprises when things are going well, and do not allow room to deal with distress in the workplace when things are not going well. In a recent hospital case study, when a nurse with 30 years of tenure told her supervisor that her mother-in-law had died, her supervisor responded not with compassion or even sympathy, but by saying, “I have staff that handles this. I don’t want to deal with it” (Lilius et al., 2008: 209). Contrast this reaction with one from the billing unit of a health services organization in which an employee described her coworkers’ reactions following the death of her mother: “I did not expect any of the compassion and sympathy and the love, the actual love that I got from co-workers” (Lilius et al., 2011: 880).

### Structure of a Culture of Companionate Love

From a structural perspective, it is common to characterize organizational culture at various levels of abstraction (Schein, 1990; Trice and Beyer, 1993; Hall et al., 1997). To date, these structural levels of abstraction have only been used to describe cognitive cultural content, but they nonetheless offer a useful way of thinking about how an emotional culture of companionate love would be structured. At its most topical level—visible to employees and outsiders alike—companionate love is expressed and transmitted primarily through facial expression, body language, vocal tone, and touch (Hatfield and Rapson, 1993; Hatfield et al., 1995; Gonzaga et al., 2001; Hertenstein et al., 2006). For example, a nurse working with HIV/AIDS patients described the importance of touch in communicating caring: “hugs when you enter, hugs when you leave” (Miller, 2007: 234). Because emotions in general are primarily communicated through nonverbal channels (Mehrabian, 1972), a culture of companionate love will be

expressed and transmitted primarily in this way. The ability to detect and recognize nonverbal emotional expressions is an inborn and universal adaptation that forms the basis for social communication (Malatesta and Haviland, 1982) and has been found to be nearly automatic in typical everyday interactions (Tracy and Robins, 2008). One implication of this is a difference in the way emotional culture spreads and operates relative to cognitive culture. Whereas the topical level is often viewed as the most tertiary level in cognitive culture (Schein, 1991), outwardly visible nonverbal expressions of emotion are critical for understanding how the culture of companionate love spreads and operates.

Although nonverbal emotional expressions serve as the primary visible manifestation of a culture of companionate love, such a culture can also reveal itself in other ways. This would include verbal expressions of emotions, such as when employees talk about loving or caring for their coworkers. Another way is through cultural artifacts such as physical space and objects, artwork, and decorations (Bechky, 2003; Rafaeli and Vilnai-Yavetz, 2004), as well as through stories and group rituals, rites, and ceremonies (Trice and Beyer, 1993; Schein, 2010). A good example of companionate love as cultural artifacts can be found in Southwest Airlines, a company with a strong culture of companionate love, which has a well-known heart logo and "LUV" as its ticker symbol on the New York Stock Exchange.

At the next structural level, which is not as easily visible to outsiders of the group, an emotional culture of companionate love can be manifested through values that can be recognized and articulated by employees and that reflect the collective importance placed on expression or suppression of affection, caring, compassion, and tenderness. These values can be either descriptive or prescriptive. Descriptive values show what type of emotional culture is actually being expressed in the organization (Cialdini, Kallgren, and Reno, 1991). Values can also be prescriptive, or aspirational, reflecting espoused values that may or may not match the reality of the emotional culture as it is enacted among employees.

At its deepest structural level—the level that is most difficult to articulate or observe—the emotional culture of companionate love can manifest itself in the form of underlying assumptions about the meaning of expressing or suppressing the feelings of companionate love in the organization. Basic assumptions reflect the often implicit, taken-for-granted nature of this level of culture. The main underlying assumption of a strong culture of companionate love is that showing caring, tenderness, and affection for people at work is a natural part of what being at work means. A related assumption is that showing such emotions makes one a good employee. In contrast, people in a weak culture of companionate love assume that showing caring, compassion, tenderness, and affection is unnecessary and possibly even inappropriate. Such expressions are considered to be a waste (Turnbull, 1972) or a sign of weakness and dependence (Bartolomé, 1972; Solomon, 1998). This could be seen in a leader who wants to focus on "only the facts" and views companionate love as a sentimental emotion that would only cloud rational business thinking (Strati, 2005).

When a strong culture of companionate love meets a weak one, interesting clashes can occur, even within the same organization. For example, a newly acquired division of a large aerospace defense contractor had a strong culture of companionate love, as exemplified by employees of this division routinely greeting each other with a kiss on the cheek. Visiting corporate executives

from the parent company were alarmed to see this gesture, finding it not only inappropriate at work but even a possible invitation to sexual harassment lawsuits. Although the executives initially tried to prohibit such displays of companionate love, ultimately they decided to allow the culture to flourish within the division, simply acknowledging that it was not consistent with the more muted companionate love values expressed in the rest of the organization (first author, personal communication). This incident not only highlights the interplay among the three structural levels of culture (Hatch, 1993), it also highlights the fact that artifacts, values, and basic assumptions reflecting the worth of strong and weak cultures of companionate love can vary among social units within an organization, creating subcultures within the organization (Sackmann, 1992).

### **Mechanisms: Feeling and Enacting the Emotion**

When considering only the structural aspect of organizational culture, the three-level hierarchy of cultural manifestations is relevant to both emotional and cognitive culture. What is unique to emotional culture, however, is that the artifacts, values, and deep underlying assumptions that constitute the culture are composed of the emotions that it comprises. In the case of companionate love, this includes affection, caring, compassion, and tenderness. This distinction forms the basis of a completely different set of mechanisms through which a culture of companionate love will be expressed, will spread among employees, and will subsequently influence outcomes of employees and clients. These mechanisms are based primarily on nonverbal and physiological cues and channels, which differentiate them from the more cerebral mechanisms, like language, through which cognitive culture operates. In essence, a culture of companionate love operates through shared feelings (or shared thoughts about feelings) rather than through shared cognitions (or shared thoughts about cognitions).

More specifically, the culture of companionate love will get translated into action and influence employee and work outcomes through two main mechanisms: "feeling mechanisms," whereby employees actually experience the feeling of companionate love, and "normative enactments," whereby they express companionate love merely to conform to group expectations. Feeling mechanisms can be activated in several ways. First, employees can internally generate the emotions of companionate love (Ashforth and Humphrey, 1993). This can happen in a particular workplace moment, such as the compassion a coworker experiences when hearing from a colleague who is having trouble at work (Fredrickson, 2013). Feeling mechanisms can also get triggered on a more regular basis. For example, an employee at one of the largest global hedge funds, said in an interview, "I can't say enough how much I love the people that I work for and, at this point, you know, it doesn't always feel like work anymore . . . these people love you, and they really mean it" (<http://www.bwater.com/home/our-company/company.aspx>).

Another way to generate genuine feelings of love among employees in a collective setting is through emotional contagion (Hatfield, Cacioppo, and Rapson, 1993), whereby employees "catch" the emotions of companionate love from other coworkers. Contagion is a largely subconscious process in which people actually feel the emotions they catch from others and view them as their own. This occurs through behavioral and auditory feedback: after mimicking the other person's facial expression, tone, or body language, the individuals' own

facial expressions or actions induce corresponding feelings (Strack, Martin, and Stepper, 1988; Hatfield et al., 1995). Emotional contagion has been found to be a prevalent group phenomenon for both negative and positive emotions (Barsade, 2002), including love (Hatfield, Cacioppo, and Rapson, 1993). Although the initial source of emotions is other people, emotional contagion leads employees to genuinely feel the companionate love they see other employees expressing as part of the culture.

Last, feeling mechanisms could come to be activated by "deep acting," whereby employees consciously try to genuinely feel the emotion they are required to display at work (Hochschild, 1983). Although previous organizational studies on deep and surface acting have focused almost exclusively on interactions between employees and clients or customers (rather than among employees), these forms of emotion regulation have been shown to be relevant in employees' interactions as well (Diefendorff and Richard, 2006; Ozcelik, 2013). For example, imagine an accountant at a client services firm who has a family emergency and requests two weeks off work at the height of tax audit season. Although his coworkers might initially be stressed and upset about the additional workload, employees in a culture of companionate love would engage in deep acting, leading to genuine feelings of compassion and "sympathy rituals" (Goffman, 1983), such as telling him, "Of course, you should go be with your family!" and not bothering him with work questions while he is away. This deep acting could be aided by the same facial, bodily, and vocal feedback discussed above, whereby enacting an emotion in one's own face, vocal tone, or body language then leads one to feel the emotion and to gain the psychological and psychological benefits of that emotion (Kraft and Pressman, 2012).

A culture of companionate love can also influence employees' and clients' outcomes through a secondary mechanism, normative enactment. Unlike the feeling mechanisms in which employees actually feel the emotions they are expressing, normative enactment keeps people conforming to group expectations regardless of how they actually feel (Levy, 1973). The idea is that, in addition to expressing genuine and spontaneous emotions, people also express emotions strategically and intentionally (Parkinson, 2005). In early anthropological studies of group rituals, culturally derived emotions were found to facilitate group cohesion by overpowering individual feelings and synchronizing interpersonal behavior (Durkheim, 1965; Turner, 1967). Goffman (1959), too, argued that maintaining positive social interactions in a group requires cultural scripts for socially acceptable emotions that disregard what actors may truly be feeling. This body of work highlights one category of normative enactment, surface acting, in which employees display emotions they do not feel but are required to express as part of their job (Hochschild, 1983). Surface acting is similar to the broader construct of display rules (Ekman, 1973; Rafaeli and Sutton, 1987), informal norms, or rules that govern the appropriateness of expressing certain emotions in everyday situations. Normative enactment can also include expressing emotions as a form of affective social exchange, or emotional reciprocity (Clark, 1997), such as when a coworker's consolation engenders a sense of obligation or pressure to "repay" him or her at some point in the future. Individuals might also conform to group norms of emotional expression through social influence (Sherif, 1936; Asch, 1955), imitating others' emotions because of a desire to be liked and accepted by the group.



Because of the force of the normative mechanism, employees in a culture of companionate love who would not otherwise be inclined toward feeling and expressing love will begin to engage in such emotional expressions—even if their motive is compliance rather than internalization of the culture (Kelman, 1958). As one health services employee put it, “If you came to work at this place and you weren’t as compassionate a person as others . . . I think it just becomes a part of your norm if it wasn’t before. If you practice it enough, it becomes the norm” (Lilius et al., 2011: 881). In other words, employees do not actually have to feel the emotions for positive individual and group outcomes to occur, but they do need to enact them.

We expect feeling mechanisms and normative enactments to be reciprocally linked in the culture of companionate love through feedback processes, creating an emotion cycle (Hareli and Rafaeli, 2008). Feeling the emotion can lead employees to enact and enforce the norms of a culture of companionate love more vigorously. Similarly, employees who start out expressing companionate love only to conform to the culture’s norms will likely feel the emotion through emotional contagion; for instance, by expressing companionate love because it is expected, employees actually come to feel this emotion, which can elicit a change in the physiology of the brain, leading employees to be more likely to enact the emotion again (Weng et al., 2013). Thus there could be many avenues for reinforcement of the feelings of a culture of companionate love.

Combining the defining characteristics of a strong culture of companionate love with the proposed underlying mechanisms, we define an emotional culture of companionate love as the behavioral norms, artifacts, and underlying values and assumptions reflecting the actual expression or suppression of affection, caring, compassion, and tenderness, and the degree of perceived appropriateness of these emotions, transmitted through feeling and normative mechanisms within a social unit.

### **Influence of a Culture of Companionate Love on Outcomes in Long-term Care**

Perhaps no industry has supported the importance of companionate love for its employees as much as the healthcare industry, which includes organizations providing long-term patient care. Long-term care settings have been described as “a world of emotions” (Ruckdeschel and Van Haitsma, 2004: 45), consisting primarily of the emotions of “caring” (Jacques, 1993; Scott et al., 1995), “affection” (Tetz et al., 2006), and “compassion” (Von Dietze and Org, 2000; Miller, 2007). These other-oriented emotions that are so prevalent in the long-term care context fit squarely within the construct of companionate love (Berscheid and Walster, 1974; Shaver et al., 1987). Among healthcare employees, loving relationships have been described as so essential at work that “they are part of, rather than separate from, work interactions” (Kahn, 1998: 43). Therefore we focus on the long-term care industry in our examination of the influence of companionate love. Through a longitudinal study of units in a long-term care organization, we examine the influence of a culture of companionate love not only on employee outcomes but also on the culture’s cascading effects on patients and their families.

**Effects on employees' attitudes and behavior.** To understand the influence of an emotional culture of companionate love in the healthcare context, we first draw from cultural anthropology, in which many studies have taken a functional-adaptational approach to culture. Researchers have found that culture arises from a specific historical or social context (Turner, 1967; Geertz, 1973) and exists because it is valuable to individual and group functioning and survival (Malinowski, 1944; White, 1949). This view corresponds to the similarly functional and adaptational role of emotions in general (Nesse, 1990), which can be understood, felt, and publicly expressed in a given culture to create desired societal outcomes (Levy, 1973; Rosaldo, 1984; Lutz, 1988). Cultural and evolutionary psychologists also adopt this approach, arguing that the expression of emotions can offer solutions to problems as well as opportunities for the group's success (Keltner and Gross, 1999; Keltner and Haidt, 1999). From a functional perspective, a culture of companionate love would offer individuals an appropriate way to fulfill their responsibility of mutual caring for other group members (Parkinson, Fischer, and Manstead, 2005).

In applying this functional-adaptational view to our setting, we consider what positive outcomes are most likely to arise from a culture of companionate love, drawing on recent research that proposes that employee behaviors can be broadly classified as involving either withdrawal from or engagement with the work context and other employees (Harrison, Newman, and Roth, 2006). Because a strong culture of companionate love is based on interactions with others in the environment, this is a useful way of thinking about the influence of companionate love on employee outcomes in the long-term care setting.

*Employees' withdrawal from work: Decreased emotional exhaustion and absenteeism.* Employees' emotional exhaustion, also known as burnout, is a type of workplace withdrawal that involves feeling depleted and overextended by one's work, most commonly by interpersonal work transactions (Maslach and Jackson, 1981). Employees in the caregiving professions are particularly prone to emotional exhaustion (Cherniss, 1980). Although emotional exhaustion is often discussed as an individual-level phenomenon, entirely dependent on the maintenance or depletion of individual resources (Hobfoll and Shirom, 2001), evidence suggests that caring among employees builds interpersonal resources that can help employees cope with and even reverse the negative effects of emotional exhaustion (Kahn, 1993; Scott et al., 1995).

Although the organizational behavior literature has traditionally viewed almost all emotional normative enactments as leading to negative outcomes (Hochschild, 1983; Van Maanen and Kunda, 1989; Grandey, 2003), recent empirical research indicates that the relationship between workplace outcomes and employees enacting emotions they do not feel is more complex than first thought and that whether employees' outcomes are positive or negative depends on the type of emotion and the characteristics of the people enacting them (e.g., Shuler and Sypher, 2000; Grandey, Fisk, and Steiner, 2005; Hayward and Tuckey, 2011). For example, across several different job types, enacting positive emotions, even if employees did not feel them, was associated with positive employee outcomes (Brotheridge and Grandey, 2002). One longitudinal study showed that employees who amplified the expression of pleasant emotions they did not feel subsequently experienced greater job satisfaction, whereas employees who dampened negative emotions they did feel

experienced decreased job satisfaction (Coté and Morgan, 2002). Given this more updated theorizing and recent findings, we depart from early findings in the emotional labor literature and predict:

**Hypothesis 1:** A stronger culture of companionate love at time 1 will be negatively associated with employees' emotional exhaustion at time 2.

A stronger culture of companionate love could also create physiological effects that reduce employees' absenteeism. Feeling positive emotions has been shown to lead to better immune function (Boyatzis, Smith, and Blaize, 2006), easier physical recovery from work stresses (Heaphy and Dutton, 2008), and less absenteeism due to illness (Hackett, Bycio, and Guion, 1989). Employees in a strong culture of companionate love would also be more likely to enjoy being at work and want to spend time with coworkers. Recent empirical work supports this view, with a growing amount of evidence that an individual's absenteeism is tied to social and normative expectations (Hausknecht, Hiller, and Vance, 2008). The normative mechanism underlying a culture of companionate love would also predict less absenteeism. Because of the norms governing the social exchange of these emotions among employees, employees in a culture of companionate love are more likely to feel responsible for being at work, knowing that their absence will burden their colleagues with more tasks.

**Hypothesis 2:** A stronger culture of companionate love at time 1 will be negatively associated with employees' absenteeism at time 2.

*Culture of companionate love and employee engagement at work: Greater teamwork and satisfaction.* A stronger culture of companionate love could lead to higher levels of teamwork through both genuinely felt emotions and normative enactments. From a biological perspective, feelings of love have been shown to be related to the hormone oxytocin. Recent studies indicate that oxytocin may be a biological driver of greater teamwork and satisfaction, helping in the recognition of facial expressions and trust (van IJzendoorn and Bakermans-Kranenburg, 2012) and facilitating affectionate, intimate, and satisfying bonds between people (Kosfeld et al., 2005) that would facilitate teamwork. In addition, feeling companionate love could elicit an other-centered frame, which would likely lead employees to see themselves as more collectivistic and interdependent (Markus and Kitayama, 1991). Feelings of interdependence and collectivism are associated with greater cooperativeness and team orientation (Chatman and Barsade, 1995). Relatedly, employees may contribute more toward stronger compassion-oriented goals, compared with self-image goals (Canevello and Crocker, 2010), which could then lead to a cycle of greater positive interpersonal responsiveness and thus enhanced teamwork.

Flowing from the normative mechanisms, a stronger culture of companionate love could also lead to better teamwork and satisfaction through the mutual reinforcement that comes from socioemotional reciprocity (Clark, 1997). The rules of social exchange (Lawler, 2001), in this case, around the mutual expression of the components of companionate love, lead employees to reliably expect expressions of affection, caring, compassion, and tenderness from one another. An example of this reciprocity can be seen in a study of "communities of coping" among neo-natal nurses in a special-care baby unit, in

which emotional support among nurses came with a "tacit understanding that the offering of emotional support to colleagues is given on the basis of equal exchange" (Lewis, 2005: 577). Thus we hypothesize:

**Hypothesis 3:** A stronger culture of companionate love at time 1 will be positively associated with the level of teamwork at time 2.

Last, the interdependence that a culture of love fosters can also appeal to basic human needs, such as the need to affiliate with others (McClelland, 1958) and the need to feel attached to a group (Baumeister and Leary, 1995). When these basic needs are satisfied, individuals experience an increase in positive feelings. For example, hospital employees in an environment of greater compassion did actually come to feel greater positive emotions (Lilius et al., 2008). Following the logic of normative enactment, social exchange processes taking place within a strong culture of love could increase employee satisfaction by fostering strong relationship norms, which in turn increase psychological well-being among employees (Repetti, 1987). Coté and Morgan's (2002) findings directly support the idea that the enhancement of pleasant emotions that are not necessarily felt nonetheless lead to greater job satisfaction.

**Hypothesis 4:** A stronger culture of companionate love at time 1 will be positively associated with employee satisfaction at time 2.

**Amplifying effect of trait positive affectivity.** The importance of a cultural fit between the employee's individual values and those of the larger organizational culture has been shown in the literature on cognitive culture (Chatman, 1991; O'Reilly, Chatman, and Caldwell, 1991; Chatman and Barsade, 1995), and we expect a similar process to operate for emotional culture. One important affective individual difference, employee trait positive affectivity, should moderate the main effect of a culture of companionate love. Trait positive affectivity (trait PA) is a person's tendency to have a pleasant emotional engagement with or appraisal of his or her environment (Staw, Bell, and Clausen, 1986; Watson, Clark, and Tellegen, 1988). Individuals high in trait PA are in a good mood more often and, as a result, attend to the positive aspects of their environment in ways that are congruent with that positive mood (see Bower, 1991, for a review). Therefore we expect that employees higher in trait PA will perceive and appreciate the positive emotions enacted in a culture of love more than employees lower in trait PA.<sup>1</sup> Reinforcing this prediction is research showing that people high in trait PA make an effort to maintain a positive state (Fiske and Taylor, 1984) and to engage in "affect repair" when their positive mood is under threat (Isen, 1984).

**Hypothesis 5:** A culture of companionate love will have a stronger influence on the attitudes and behaviors of employees with high trait positive affectivity than on those with low trait positive affectivity.

---

<sup>1</sup> We focus only on trait positive affectivity (trait PA) and not trait negative affectivity (trait NA) because the two constructs have been found to be orthogonal (Watson, Clark, and Tellegen, 1988), especially when assessed over longer time periods (Diener and Emmons, 1984); furthermore, trait PA has been consistently shown to relate to social interaction and activity (Watson et al., 1992), whereas trait NA has not, including in a work team context (Barsade et al., 2000).

**The cascading effect of a culture of love on patients and their families.** Critical to patients' well-being in a long-term healthcare setting is their emotional relationship with the employees who care for them (Ruckdeschel and Van Haitsma, 2004). The healthcare literature describes at least two specific types of patient psychological well-being in the long-term care setting: the moods shown by patients on a daily basis (Lawton, Van Haitsma, and Klapper, 1996) and a multifaceted set of quality-of-life factors (Goodwin and Intrieri, 2006), including patient satisfaction. Displays of affection in caregiving settings have been associated with both patients' pleasant mood (Tetz et al., 2006) and with quality-of-life factors (Cox et al., 1991; McGilton, 2002). Feeling mechanisms, such as emotional contagion, can underlie this effect: when patients see a nurse treating another nurse kindly at the nursing station, for example, or notice a caregiver give a warm hug to a fellow patient, the patients "catch" the employee's affection, leading to more pleasant moods (Hatfield, Cacioppo, and Rapson, 1993; Barsade, 2002). These positive emotions can also elicit a broaden-and-build response (Fredrickson, 1998), expanding patients' physical, intellectual, and social resources and increasing their willingness to engage in a greater variety of activities and play, all of which lead to a higher quality of life. In addition, positive feelings resulting from displays of companionate love can help people cope with negative emotional experiences, leading to greater resilience (Tugade and Fredrickson, 2004) and further enhancing the quality of life. Normative enactment mechanisms such as affective social exchange can also operate, whereby patients enhance their well-being by reciprocating the positive emotions shown toward them (Li, 2003).

**Hypothesis 6:** A strong culture of companionate love at time 1 will be positively associated with patient pleasant mood, quality of life, and satisfaction at time 2.

A culture of companionate love should also have positive effects on patients' physical health. Positive affect has been associated with a plethora of positive health outcomes (Kok et al., 2013; see Lyubomirsky, King, and Diener, 2005, for a review), including in older populations (Ong, 2010). In one study, people who reported feeling loved had lower levels of coronary artery disease (Seeman and Syme, 1987). One manifestation of this phenomenon was found in an fMRI study conducted by Coan, Schaefer, and Davidson (2006), who found that having someone hold the hand of a person anticipating an electric shock had a positive effect on bodily arousal, visceral and musculoskeletal responses, emotional regulation, and stress response in the person's brain, including the affective part of pain processing. This study illustrates how enacting a culture of love—for example, through the artifact of physical touch (with and without actually feeling the companionate love)—can contribute to positive patient health outcomes.

**Hypothesis 7:** A strong culture of companionate love at time 1 will be positively associated with patient health outcomes at time 2.

The main factor determining a family's satisfaction with a long-term care organization is the family members' perception of how well their patient family member is being treated (Bowers, 1988; Kellett, 1999), including how the individual is being treated emotionally. Both feeling mechanisms and normative

enactments of affection, caring, tenderness, and compassion could explain the influence of a culture of companionate love on family satisfaction. Families and patients cite lack of companionate love in the form of affection and caring as a source of great upset, making them "emotionally aware of being 'not wanted'" (McGilton and Boscart, 2007: 2153). Thus if families see a culture of companionate love expressed by employees, they are likely to be more satisfied with the long-term care facility.

**Hypothesis 8:** A strong culture of companionate love will be positively associated with the patient's family's satisfaction with the long-term care facility.

Figure 1 provides a summary of our theoretical model of an emotional culture of companionate love, including its specific outcomes in a long-term healthcare setting for employees, patients, and their families.

## METHODS

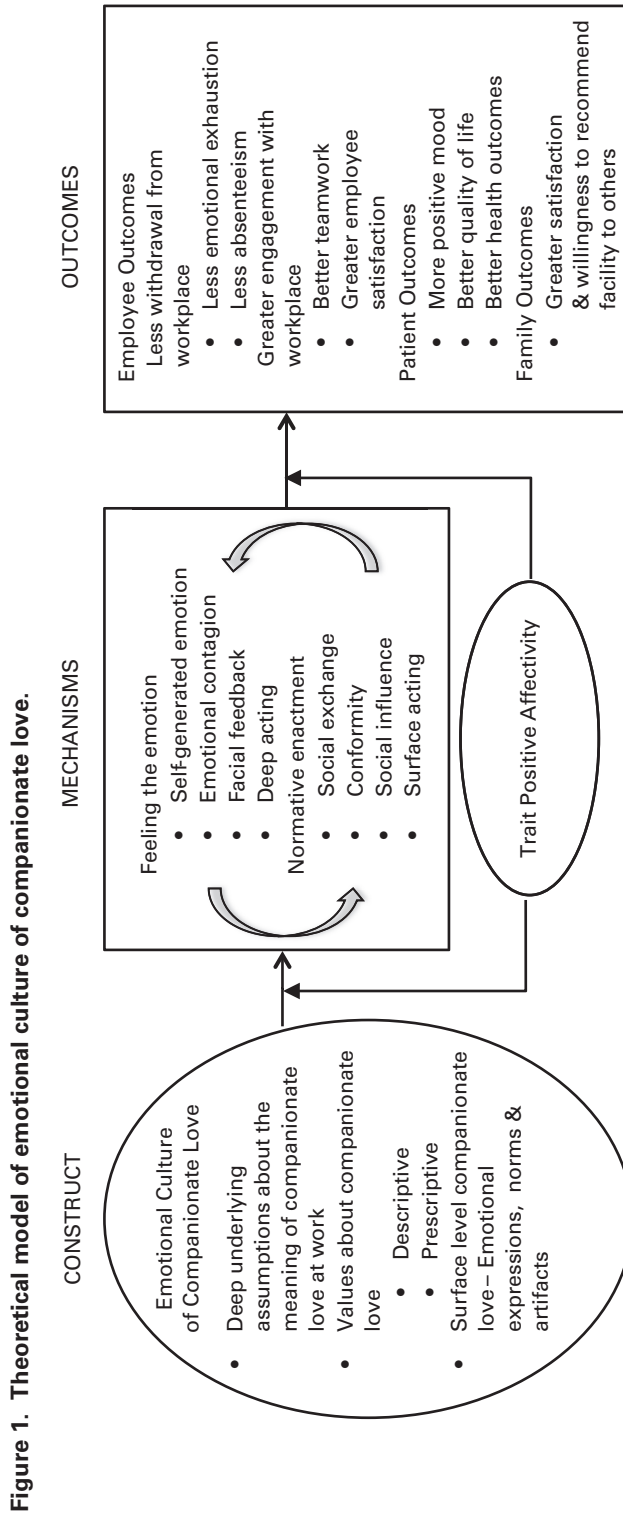
The setting for this study was a large not-for-profit long-term healthcare facility in a major metropolitan city in the Northeastern United States. Using multiple raters and multiple methods, we measured the influence of the culture of companionate love on employee, patient, and family outcomes spanning the attitudinal, emotional, behavioral, and health domains. Because this study used a longitudinal design, we measured all predictor variables at time 1 and all dependent variables at time 2, 16 months later.

### Sample and Data-gathering Procedure

The study sample consisted of 185 employees, 108 patients (called "residents" because they live in the facility), and 42 family members of patients. To be included in the final sample, employees, patients, and families must have taken part in the study at both time 1 and time 2. The data collection took place in thirteen of the organization's units distributed across the facility's three geographic sites. A unit was a separate physical area with its own set of employees and patients; the unit is the level of analysis at which we measured the culture of companionate love. The units were all closely equivalent in terms of types of patients and employees.

**Employees.** At time 1, we invited all employees in the study units to take part in our study. Employees included certified nursing assistants, nurses, social workers, physicians, food service workers, and employees in at least eight other jobs on the unit. Table 1 provides a detailed description of employees' characteristics. The survey, which employees completed during a paid break from their work duties, measured each unit's culture of companionate love and employee engagement (satisfaction and teamwork) and disengagement (emotional exhaustion) in the workplace. In addition, we obtained data on a second measure of disengagement (absenteeism) directly from the organization's archival database.

At time 1, 287 out of 383 employees across the study units chose to participate, a 75 percent response rate. Of those employees who participated at time 1, 37 had left the organization by time 2, leaving 250 employees who could



**Table 1. Descriptive Statistics of Demographic Variables for Employees, Patients, and Patients' Families**

Characteristics	Percentage	Mean	S.D.	Min.	Max.
<i>Employees (N = 185)</i>					
Functional background					
C.N.A.	55.1%				
Nurse	16.8%				
Unit manager	4.0%				
Therapeutic recreation	4.0%				
Housekeeping	4.0%				
Dietician	3.6%				
Social workers	3.3%				
Physicians	2.6%				
Nursing coordinator	2.2%				
RAUM Nurses (specialists in govt. reporting)	1.8%				
Food service worker	1.1%				
Community coordinator	1.1%				
Other	0.4%				
Shift					
Day	57.9%				
Evening	21.6%				
Night	20.5%				
Educational attainment					
Elementary school	0.4%				
Junior high school	2.0%				
High school	28.2%				
Some college	34.7%				
Undergraduate degree	15.5%				
Some post-graduate education	4.9%				
Masters degree	7.8%				
M.D. / Ph.D.	2.4%				
Other	4.1%				
% Female	81.3%				
Tenure with organization (months)		124.8	109.3	1	620
Tenure on unit (months)		64.7	67.5	1	361
<i>Patients (N = 108)</i>					
% Female	64.2%				
Age (years)		83.7	9.8	43.8	104.9
Tenure at the long-term care facility (months)		38.4	35.5	0.8	166.7
Tenure on unit (months)		31.7	31.1	0.8	166.7
Poor health (higher scores indicate poorer health)		4.3	1.9	1.0	9.0
Poor cognitive functioning (0–6 scale, 0 = Intact, 6 = Very Severe Impairment)		2.9	2.0	0.0	6.0
Poor physical functioning (1-16 scale; higher scores = poorer functioning)		8.8	5.4	0.0	16.0
<i>Family members (N = 42)</i>					
Child	68.2%				
Spouse	11.4%				
Other relative	11.4%				
Friend	4.5%				
Sibling	2.3%				
Grandchild	2.2%				

participate in the study; 74 percent of those employees participated at time 2, yielding a final sample of 185 employees. With the exception of certified nursing assistants (CNAs), who were more likely to participate at time 2 than other employees ( $\chi^2 [1, 287] = 3.84, p < .05$ ), there were no differences on key



independent and control variables described below between employees who did and did not participate at time 2. We controlled for CNA status in all employee analyses.

**Patients.** Across the study units, 432 patients were eligible for the study at time 1, and 199 participated, a 46 percent response rate. Of those patients who participated in the study at time 1, 36 died and 26 had either been moved to another unit or were discharged from the facility before time 2. Of the 137 patients who were available to participate in the study at time 2, there was a 79 percent response rate, leading to a final sample of 108 patients. If a patient lacked the cognitive ability to give informed consent (usually because of Alzheimer's disease or other forms of dementia), the patient's primary contact or surrogate was asked to give consent for the patient's participation in the study. Although lower functioning patients were less likely to participate at time 2 ( $\chi^2 [1, 162] = 7.50, p < .01$ ), there were no other differences on independent and control variables between patients who participated at time 2 and those who did not. In all patient analyses, we controlled for patients' level of functioning, as well as level of cognitive impairment and health.

We gathered three types of patient data: individual attitudinal data, CNAs' ratings of patient positive mood, and health outcome data. Using interval scales read aloud to the patients in one-on-one interviews conducted by research assistants, we assessed patients' quality of life and their satisfaction with the long-term care facility. To triangulate our attitudinal findings—and because 79 percent of the patients were not able to communicate verbally due to Alzheimer's, dementia, or other ailments—we also examined patients' quality of life indirectly, by asking each patient's primary CNA to rate the patient's pleasant mood, as described below. Last, to obtain health data for each patient, we used the organization's medical database. Table 1 provides details on patients' characteristics.

**Families of patients.** Families of the 199 patients who took part in the study at time 1 were sent a questionnaire that contained a culture of companionate love scale, as well as questions about their attitudes toward the long-term care facility. Despite multiple mailings and follow-up calls, the response rate was only 39 percent (78 families). There were no significant differences between the health, cognitive abilities, and physical functioning level of the patients whose families participated in the study and those who did not participate. Of the families who participated, 17 had family members who died and nine had family members either transferred to another unit or discharged from the facility prior to time 2. This yielded a possible sample of 52 families of patients who were eligible for participation at time 2, of whom 81 percent responded, leading to a final sample of 42 families. Table 1 shows detailed family characteristics.

### Independent Variables

**Culture of companionate love scale.** To operationalize a culture of companionate love, we constructed a scale derived from Shaver et al.'s (1987)

prototype model of emotions, in which love has three subcategories: affection, romantic love, and longing. The first subcategory, affection, is the term Shaver et al. (1987) and subsequent emotion prototype researchers (e.g., Fehr and Russell, 1991) have used to represent the companionate love construct. From this subcategory, we chose emotion terms that also met the following criteria: they matched the broader literature on companionate love, they would be understood by employees, and they would have face validity in a business setting. Thus the culture of companionate love scale consisted of the following emotions expressed by employees: affection, caring, compassion, and tenderness.<sup>2</sup> Importantly, the scale did not ask the respondent what emotions he or she personally feels or expresses but, rather, had the respondent serve as an observer of the employees around him or her, with a focus on reporting the expressed (not felt) emotions of other employees (asking, "To what degree do the employees on the unit express the following emotions:").

We employed the culture of companionate love scale within the units by asking multiple types of respondents (outside raters, employees, and families) to report on the frequency of expression of companionate love shown by employees at a collective level on a scale of 1 (Never) to 5 (Very Often). This measure is broad enough to include the manifestations of culture at all three levels of abstraction (artifacts, values, and assumptions) and also incorporates the manifestations that are unique to emotional culture (facial expressions, body language, vocal tone, and touch). It is also easily recognizable to outside observers, whose ratings of the units we use as our primary measure of a culture of companionate love, as well as to employees and patients' family members. We used multiple types of respondents to allow for the different perspectives held by various cultural stakeholders. An acceptable level of within-group agreement at the unit level indicates the reliability of this scale. The average  $R_{wg}$  for the employee and family ratings of a culture of companionate love at the unit level was .70, with a range of .45 to .93.

In choosing to measure the frequency with which the emotions of companionate love actually occurred within the unit, we drew on the distinction between descriptive and prescriptive culture. Descriptive culture reflects what is actually occurring in an organization and has been shown to exercise powerful social control (Cialdini, 2007). Prescriptive culture, in contrast, measures aspirational values, or the "should" aspect of culture (Cialdini, Kallgren, and Reno, 1991). We chose to use a descriptive measure of the culture of companionate love because it best reflected the focus of our theorizing, which is based on the actual expression of the emotions of a culture of companionate love. Such expressions are primarily communicated through facial expression, body language, auditory tone, and touch and can also involve the spoken word,

---

<sup>2</sup> We intentionally refrained from using the word "love" in the scale. Given its multiple meanings and possible additional colloquial romantic connotation, we were concerned that the word would be misunderstood. In addition, although Shaver et al. (1987) listed "liking" as one of the words describing companionate love, the construct of companionate love has been found to differ from simply liking another person (Fehr and Russell, 1991). To verify this distinction empirically, we conducted an exploratory factor analysis with a sample of 275 employees working in a different medical setting and found that the item "liking" factored separately from the other items in our scale (additional information is available from the authors). Thus, given the prior literature and our own empirical verification, we did not include "liking" in our culture of companionate love scale.

all of which can be reliably decoded by others (Mehrabian, 1972; Hatfield and Rapson, 2000; Hertenstein et al., 2006).<sup>3</sup>

**Outside raters' observations.** Our primary measure of a culture of companionate love was outside observers' ratings of the culture. We used three trained research assistants to assess a unit's culture of companionate love at multiple points in time during the time 1 data collection. Raters were able to integrate easily and naturally into the unit while they were observing culture, because both employees and patients were accustomed to seeing them in a variety of other research capacities. After spending an average of 27 minutes (s.d. = 18.28) each time they were on a unit, outside raters completed the culture of companionate love scale, responding to the question, "How frequently did employees on this unit express the following emotions?" for the time period observed. The display of emotions included all expressions of companionate love on the part of employees, with a focus on their interactions with other employees, but also incorporating interactions with patients who lived on the unit. Raters averaged 7.98 (s.d. = 4.10) visits to each unit during the time 1 data collection. The mean of the outside raters' ratings of the culture of love across all units was 3.35 (s.d. = .97). The reliability of ratings within units is represented by an intraclass correlation coefficient (ICC) of .73. Because each outside rater was assigned to a different geographic site, we also verified interrater reliability by having all three outside raters rate the same single unit. The result was an ICC of .71 for the three raters.

**Employees' observations.** Employees completed the culture of companionate love scale at the time 1 survey administration by answering the question, "In general, how frequently do other employees in your unit express the following emotions?" with regard to affection, caring, compassion, and tenderness on the 1–5 scale (1 = Never through 5 = Very Often) (mean = 3.97, s.d. = .70, Cronbach alpha = .73).

**Observations from patients' families.** Family members of patients rated the culture of companionate love at time 1 using the same scale as employees, but with a stem that asked the following question: "In general, how frequently do staff in your family member's/friend's unit express the following emotions?" (mean = 3.94, s.d. = .93, Cronbach alpha = .91).

**Employee trait positive affectivity (PA).** We measured employee trait positive affectivity during the survey administration at time 1. Because of the survey's space constraints, we used a shortened version of Watson, Clark, and Tellegen's (1988) Positive and Negative Affect Schedule (PANAS), measuring

---

<sup>3</sup> There is also empirical support for the focus on descriptive culture in this setting. In a pre-test we measured prescriptive culture consisting of "should" statements about the degree to which positive emotions should be discouraged versus encouraged on the unit, in addition to descriptive culture measures we ultimately used in the study (Cialdini, Kallgren, and Reno, 1991). As employees' ratings of prescriptive norms tend to reflect aspirational values (Siehl and Martin, 1990), it was not surprising that the prescriptive ("should") norms for expressing positive emotions had very limited variation (mean = 4.86; s.d. = .18, median and mode equaled 5 on a 5-point scale).

five trait positive affectivity scale items (enthusiastic, interested, alert, determined, and active) that were representative of each of the co-varying items groups in the PANAS (Crawford and Henry, 2004). The mean of this scale at time 1 was 4.10 (s.d. = 0.64, Cronbach alpha = .74) on a scale of 1 (slightly or not at all) to 5 (extremely).

### Employee Outcome Variables

**Employee withdrawal from the workplace.** We measured employee withdrawal from the workplace at time 2 using two variables: *emotional exhaustion* and *absenteeism*. To assess emotional exhaustion, we used the four highest factor-loading items from the emotional exhaustion subscale of the Maslach Burnout Inventory (Maslach and Jackson, 1981). Sample items include "I feel fatigued when I get up in the morning and have to face another day on the job," and "I feel used up at the end of the workday." The mean of employee emotional exhaustion was 2.86 (s.d. = 0.98) on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree) (Cronbach alpha = .82).

We obtained absenteeism data from the facility's personnel records. For each employee, we took the sum of unplanned absences, including sick days, emergency holidays, and emergency vacation days for a randomly chosen three-month period during the study. Over the three-month period, mean absenteeism for employees was 3.34 days (s.d. = 3.24); during this period, 85 percent of employees were absent at least once and, of those, the mean number of days absent was 4.24 (s.d. = 3.49).

**Employee engagement with the workplace.** We measured employees' engagement with the workplace during the survey administration at time 2 through employee *teamwork* and *satisfaction*. We measured teamwork through employees' responses to a five-item scale about how effectively employees on their units worked together as a team. Three items came from the Team Functioning Scale ("Staff on this Unit care a lot about it and work together to make it one of the best"; "As a team, this Unit shows signs of falling apart"; and "Sometimes, one of the staff members refuses to help another staff member out"—the last two reverse-coded) (Wageman, 1995). We included two additional items relevant to the construct: "My unit functions as a team," and "I can count on my co-workers for help and cooperation." On a scale ranging from 1 to 5 (1 = Strongly Disagree through 5 = Strongly Agree), the mean of the teamwork scale was 3.84 (s.d. = 0.80, Cronbach alpha = .81).

We measured employee satisfaction with a 10-item scale commonly used in long-term care settings, including this organization.<sup>4</sup> The scale addresses organizational factors that could influence employee satisfaction in a long-term care facility. It consists of items such as "I feel valued as an employee," and "Overall I am satisfied working here," measured on a 1–5 scale (1 = Strongly

<sup>4</sup> The employee, patient, and family satisfaction scales used in this study were those being used internally by the long-term care facility we studied. At the time of the data collection, the organization used these scales to benchmark against a consortia of other not-for-profit long-term care facilities that were part of the Alliance Continuing Care Network of Long Term Care Facilities. That consortia no longer exists, but the scales can be found in Online Appendix A (<http://asq.sagepub.com/supplemental>).

Disagree and 5 = Strongly Agree). The full scale can be found in Online Appendix A. The mean of the employee satisfaction scale at time 2 was 3.82 (s.d. = 0.80, Cronbach alpha = .92).

### Patient Outcome Variables

*Patient pleasant mood.* Researchers have found that moods can be reliably observed in patients of long-term care facilities, even for patients with cognitive impairments such as dementia (Magai et al., 1996). In our study, patients' primary certified nursing assistants (CNAs) from the day shift—the shift in which patients spent the most time awake—rated the patients' pleasant moods at time 2 using the Philadelphia Geriatric Center Positive and Negative Affect Rating Scale (Lawton, Van Haitsma, and Klapper, 1996). We gathered this measure of well-being—developed specifically for a long-term care population—across all patients in the sample, including those who could not be interviewed because they were too frail or had Alzheimer's disease or dementia. Using these ratings also enabled us to obtain a behavioral measure for our dependent measure of patient well-being, which we could use to triangulate with our patient attitude measures. For each patient, the CNA rater answered the following question: "Please rate the extent or duration of each affect over the past two weeks." The 1–5 scale (1 = Never through 5 = Always) consisted of items such as pleasure, contentment, interest, anger, anxiety/fear, and sadness, with the negative emotions reverse-coded. The mean of patient pleasant mood was 3.84 (s.d. = .77), with a Cronbach alpha of .82.

*Patient satisfaction.* We measured overall patient satisfaction at time 2 using a 13-item scale (see Online Appendix A for the full scale). The scale addresses organizational factors that could influence patient satisfaction in a long-term care facility. It consists of items such as "Overall, how satisfied are you with the care you receive from the nursing assistant?" and "Overall, how satisfied are you with your level of participation in the decisions about your care?" as well as a question about overall satisfaction. Patients indicated the degree to which they agreed with each statement on a scale of 1–5 (1 = Strongly Disagree and 5 = Strongly Agree). Mean patient satisfaction was 3.89 (s.d. = 0.67, Cronbach alpha = .88).

*Patient quality of life.* We assessed patients' quality of life at time 2 using a scale specifically designed for the long-term care population, the Quality of Life Scale (Kane et al., 2003). This scale measures the following 11 components of quality of life for patients at long-term care facilities: autonomy, comfort, dignity, functional competence, food enjoyment, individuality, meaningful activity, privacy, relationships, security, and spiritual well-being. Patients indicated the degree to which they agreed with statements measuring each quality of life component on a scale of 1–4 (1 = Never through 4 = Often). To provide an overarching set of measures, we conducted a second-order factor analysis on the 11 components (see Spreitzer, 1996, for this procedure). This analysis indicated that patient quality of life could be characterized by two reliable factors: dignity and relationships. The components of the first factor, dignity, were dignity, autonomy, and individuality. Items included "Does staff here respect your modesty?" "Can you get up in the morning at the time you want?" and "Does

staff here take your preferences seriously?" The mean of this scale was 3.16 (s.d. = 0.63, Cronbach alpha = .85). Components of the second factor, relationships, were relationships and meaningful activity. Items included "Is it easy to make friends at this nursing home?" and "Do you enjoy the organized activities here at the nursing home?" The mean of this scale was 2.65 (s.d. = 0.67, Cronbach alpha = .71).

**Patient health.** There are myriad ways of measuring health outcomes, including cardiovascular, neuroendocrine, and immunologic function (see Seeman et al., 2002, for a review). To decide on the key indicators of patient health at time 2, we consulted with the facility's medical leaders: the chief of medical services, the medical directors from each of the three geographic sites, and the nursing directors for each of the three sites. After determining the appropriate medical measures, we verified that these variables were of management-wide interest by reviewing them with the chief administrators of the facility's three sites and with the senior management of the entire organization. Through this process, we settled on three key patient health indicators: weight gain, emergency room transfers, and pressure ulcers.

Our first indicator, *weight gain*, is an important marker of health because weight loss, a common phenomenon among patients in long-term care facilities, has been linked to a variety of negative outcomes, including infections, falls, and even death (Gambassi et al., 1999). Long-term care facilities therefore strive to have patients gain weight. We gathered weight-gain data from the organization's computerized records system for all three months immediately prior to the patient's last date of data collection. Weight gain is the difference between the final weight and the initial weight, with initial weight taken exactly three months before the final weigh-in. The weight gain measure ranged from -28.1 pounds (28.1 pounds lost) to 13.3 pounds (13.3 pounds gained), with a mean weight gain of -0.10 pounds (s.d. = 5.39).

Our second indicator of health is a reduction in the number of emergency room (ER) transfers. Inappropriate or unnecessary ER transfers are documented as a recurring concern in the long-term care literature because such transfers are disorienting and disruptive to patients and costly for the organization (see Jablonski et al., 2007, for a review). Using hospital transaction records, we obtained the number of transfers to the emergency room for a one-year period during the study. During this period, 29 percent of the patients were transferred to the emergency room at least once; of these, the mean number of transfers was 1.39 (s.d. = .70).

Our final indicator of health is *reduction in the number of pressure ulcers*. Pressure ulcers are an unintentional yet preventable outcome of long-term care. Because such ulcers are avoidable and can affect quality of life and mortality rates (Allman, 1997), their occurrence is often used as an indicator of poor quality of care. We obtained the incidence rate of patient ulcers from the same database used to record patient weight gain. The number of incidents ranged from 0 to 4. While the majority of patients had no ulcers, 14.6 percent of patients had at least one incident of ulcers. Of these, 17 patients had Stage 1 ulcers and 12 patients had Stages 2 through 4 ulcers. The mean number of ulcer incidents was 0.25 (s.d. = .91).

## Outcomes for Patients' Families

*Satisfaction with the facility.* Family satisfaction was assessed at time 2 using a 28-item scale, specifically for the long-term care setting, measuring satisfaction with employees, patient care, hospital facilities, and hospital practices (see Online Appendix A for the full scale). Respondents used a 1–5 scale (1 = Very Dissatisfied through 5 = Very Satisfied) to rate items, including “Please let us know how satisfied you are with the performance of each of the following people your family member/friend interacts with using the scale below” (with the subsequent list including nurses, dieticians, and other facility staff), and “To what extent are you satisfied with the extent to which the physical appearance and hygiene of the patients are maintained?” The mean level of family satisfaction was 4.09 (s.d. = .80, Cronbach alpha = .92).

*Willingness to recommend the facility.* Family members were asked the following question at time 2: “Would you recommend this facility to a friend or other family member?” on a 1–10 scale (1 = Definitely No through 10 = Definitely Yes). The mean of this measure was 8.73 (s.d. = 2.11).

## Control Variables

Several individual and organizational variables not of direct interest to our study could influence outcome variables, particularly in such a rich and dynamic field setting. Therefore we statistically accounted for time 1 control variables before examining the influence of a culture of companionate love on outcomes at time 2. For employee analyses, we controlled for the employee's sex, tenure at the long-term care facility, certified nursing assistant versus other type of employee, trait positive affectivity, and individual social desirability bias. For patient and family analyses, we controlled for three sets of factors commonly used in the gerontology literature to assess health and functioning: overall poor health, level of cognitive functioning (Morris et al., 1994), and overall physical functioning (Huang et al., 2003). We did so because being a geriatric patient in a long-term care setting can lead to complex interactions between psychosocial and health outcomes. At the unit level, we also took into account the influence of geographic site and whether the unit was part of an organizational change initiative. For more details about all the control variables, see Online Appendix B.

## Analysis

Because our data are cross-level, consisting of observations at the individual level nested within hospital facility units, we used multilevel modeling for our analyses (Krull and MacKinnon, 1999). All outcome measures were assessed at the individual level; however, because we assessed emotional culture at both the unit level (level 2) and the individual level (level 1), we used two different types of multilevel models. Our primary independent variable was measured at the level-2 or unit level (that is, culture of companionate love measured by outside observer ratings) and, as such, we ran intercepts-as-outcome models in which the level-2 culture variable influenced the individual-level (level-1) outcomes. For additional models in which all variables (that is, employee ratings of culture of companionate love and employee dependent

variables) were at the individual level (level 1), we included the unit (level 2) as a random effect to control for additional sources of level-2 variance. We employed SAS "PROC MIXED" and "PROC GLIMMIX" (Littell et al., 2002) to examine hypotheses pertaining to normally distributed and non-normally distributed (or count) variables, respectively. The model for each variable produced a fixed coefficient ( $\gamma$ ) while controlling for individual- and unit-level sources of variation. All non-categorical variables were grand-mean-centered (Hofmann and Gavin, 1998). Following Aiken and West (1991), we centered all interaction terms. For each model, we estimated the pseudo  $R^2$  values by calculating the proportional reduction in variance in mean squared prediction error between the null models and the fitted models (Snijders and Bosker, 2011).

## RESULTS

We report intercorrelations among variables used in the analyses for employees in table 2a, for patients in table 2b, and for families of patients in table 2c. To assess the relationships among the multiple measures of the culture of companionate love, we examined intercorrelations among the three sets of culture of companionate love ratings (outside raters, employees, and family members) at the unit level of analysis. The correlations between outside raters and employee ratings and between outside raters and family ratings were .39 ( $p < .10$ ) and  $r = .52$  ( $p < .05$ ), respectively. The correlation between employee and family ratings was not significant at  $r = .05$ .

### Employee Outcomes

To test whether the culture of companionate love was associated with employee outcomes, we first examined the outside raters' observations of the culture of companionate love at time 1 as the independent variable predicting employee outcomes at time 2, 16 months later. As shown in table 3, and supporting hypotheses 1, 2, 3, and 4, a stronger culture of companionate love at time 1 as rated by outside observers was associated with the following outcomes at time 2: lower employee emotional exhaustion, less absenteeism, greater employee teamwork, and higher employee satisfaction.

As shown in table 4, employees' ratings of a culture of companionate love at time 1 did not have the predicted main effect on employee emotional exhaustion at time 2, offering no additional support for hypothesis 1. But employee ratings of a culture of companionate love at time 1 were significantly and negatively related to employee absenteeism at time 2 and were significantly and positively associated with better teamwork and greater employee work satisfaction at time 2, offering additional support for hypotheses 2, 3, and 4.

Hypothesis 5, which predicted that employees high in trait PA would have their attitudinal and behavioral outcomes more strongly influenced by a stronger culture of companionate love than would employees low in trait PA, was largely supported. As reported in table 4, the interaction of trait PA and employee ratings of culture of companionate love was significantly related to employee emotional exhaustion, teamwork, and satisfaction, although not to absenteeism. To further examine the interaction effect, we plotted the culture of companionate love and trait PA to create the interaction term. Figures 2–4 plot the relevant employee outcomes for employees at one standard deviation



**Table 2a. Bivariate Relationships among All Employee Variables\***

Variable	1	2	3	4	5	6	7	8	9	10
1. Male										
2. Tenure (T1)	.17*									
3. Certified nursing assistant	.02	-.01								
4. Trait PA (T1)	.17*	.04	-.13							
5. Social desirability (T1)	.03	.06	.20*	.21**						
6. Culture of companionate love – Employee observations (T1)	.11	.12	-.00	.20*	.07*					
7. Employee teamwork (T2)	.18*	.10	.10	.14	.30***	.27***				
8. Employee satisfaction (T2)	.19*	.04	-.01	.18*	.30***	.25**	.60***			
9. Emotional exhaustion (T2)	-.13	.16*	-.02	-.27***	-.29***	-.07	-.39***	-.53***		
10. Absenteeism (T2)	.05	.09	.29***	-.10	.00	-.08	-.08	-.17*	.03	

\*  $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ; two-tailed tests.

\* These correlations are based on single-level analysis, pooled estimates of variance.  $N = 141-159$ , depending on response rate. T1 = time 1; T2 = time 2 (16 months later).

**Table 2b. Bivariate Relationships among All Patient Variables\***

Variable	1	2	3	4	5	6	7	8	9	10
1. Poor health (T2)										
2. Cognitive impairment (T2)	.17									
3. Poor physical functioning (T2)	.31**	.44***								
4. Pleasant mood – CNA ratings (T2)	.06	-.31**	-.25*							
5. Satisfaction (T2)	-.17	.15	-.34	.02						
6. Quality of life – Dignity (T2)	.25	.12	-.16	.17	.76***					
7. Quality of life – Good relationships (T2)	-.01	-.02	-.06	-.05	.64***	.60***				
8. Weight gain (T2)	-.11	.06	-.08	-.19	.36	.50*	.54**			
9. Fewer trips to emergency room (T2)	.14	.07	.14	-.13	.09	-.05	-.06	.03		
10. Lower incidence of ulcers (T2)	-.04	.14	.21*	.00	.22	.12	.25*	-.03	.11	

\*  $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ; two-tailed tests.

\* These correlations are based on single-level analysis, pooled estimates of variance.  $N = 29-32$  for patient self-report items 5 to 7, and 97–101 for all other items, depending on response rate. T1 = time 1; T2 = time 2 (16 months later).

**Table 2c. Bivariate Relationships among All Patients' Family Member Variables\***

Variable	1	2	3	4	5	6
1. Patient poor health (T2)						
2. Patient cognitive impairment (T2)	.17					
3. Patient poor physical functioning (T2)	.31**	.44***				
4. Culture of companionate love – Family observations (T1)	-.13	-.08	-.23			
5. Family member satisfaction (T2)	.09	-.19	-.09	.39*		
6. Family member would recommend to others (T2)	-.18*	-.06	-.14	.44**	.50**	

\*  $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ; two-tailed tests.

\* These correlations are based on single-level analysis, pooled estimates of variance.  $N$  is 101 for patient items, and  $N = 40-41$  for the family items, depending on response rate. T1 = time 1; T2 = time 2 (16 months later).

**Table 3. Longitudinal Models Predicting Employee Engagement and Withdrawal from Work at Time 2 from Outside Raters' Observations of the Culture of Companionate Love at Time 1\***

Predictor variable	Time 2			
	Emotional Exhaustion (N = 156)	Absenteeism (N = 120)	Teamwork (N = 156)	Satisfaction (N = 137)
Site 1	-.18	-.47*	.00	.02
Site 2	-.32	-.22	.29	.23
Male	-.22	.02	.31*	.24
Tenure	.00	.00	.00	.00
Certified nursing assistant (CNA)	.05	.55**	.08	-.11
Social desirability	-1.78**	-.34	1.39**	1.49**
Trait positive affectivity	-.28*	-.02	.05	.05
Culture of companionate love – Outside raters' observations	-.40*	-.21*	.56*	.51**
Pseudo R <sup>2</sup>	.13	.08	.10	.16

\*  $p < .05$ ; \*\* $p < .01$ ; two-tailed tests (control variables), one-tailed test (culture of companionate love).

\* Unstandardized coefficients are reported.

**Table 4. Longitudinal Models Predicting Employee Engagement and Withdrawal from Work at Time 2 from Employees' Observations of the Culture of the Companionate Love at Time 1\***

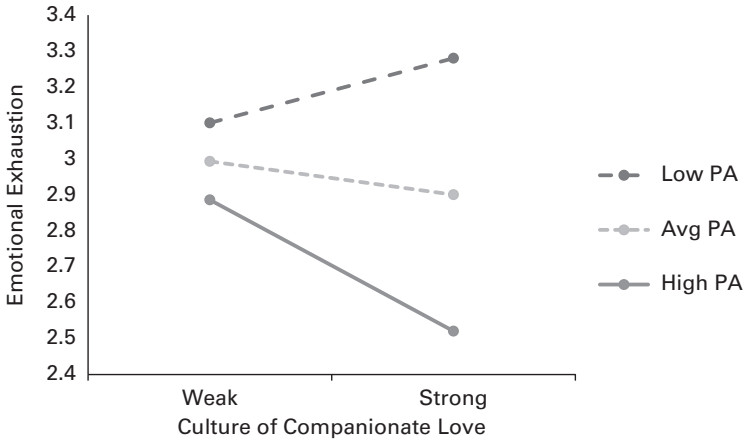
Predictor variable	Time 2			
	Emotional Exhaustion (N = 137)	Absenteeism (N = 120)	Teamwork (N = 137)	Satisfaction (N = 156)
Site 1	-.15	-.66*	.07	.05
Site 2	-.13	-.12	.01	-.02
Male	-.29	.02	.29*	.28*
Tenure	.00	.00	.00	.00
Certified nursing assistant (CNA)	.02	.56**	.08	-.09
Social desirability	-1.70**	-.47	1.37**	1.40**
Trait positive affectivity (PA)	-.37**	.02	.05	-.08
Culture of companionate love – Employees' observations	-.07	-.14*	.29***	.27***
Culture of companionate love × Trait PA	-.30*	.08	.25*	.41***
Pseudo R <sup>2</sup>	.13	.10	.20	.26

\*  $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ; two-tailed tests (control variables), one-tailed test (culture of companionate love).

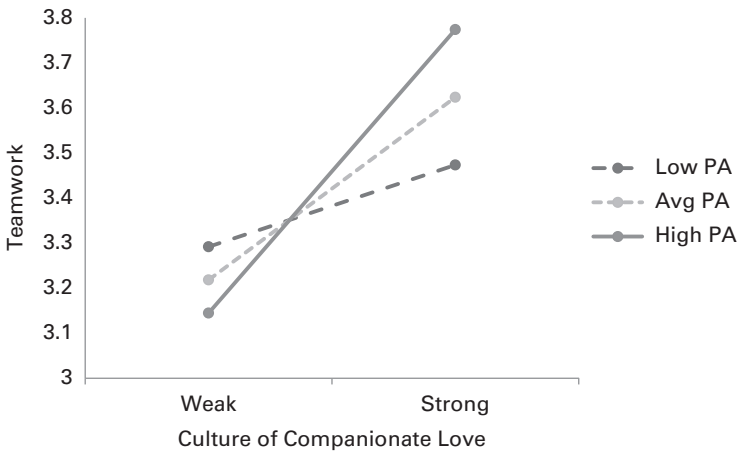
\* Unstandardized coefficients are reported. Trait PA, social desirability, culture of companionate love, and interaction terms are grand-mean centered.

above the mean for trait PA (high trait PA), mean levels of trait PA (average trait PA), and one standard deviation below the mean for trait PA (low trait PA). As shown in figures 2–4, and in support of hypothesis 5, there was a linear relationship between trait PA levels and the degree to which employees were influenced by a culture of companionate love. As predicted, employees with higher trait PA were more strongly influenced by the culture of companionate love than employees lower in trait PA across the variables of teamwork, satisfaction, and emotional exhaustion, but not absenteeism.

**Figure 2. Interaction of a culture of companionate love and trait PA on employees' emotional exhaustion.**



**Figure 3. Interaction of a culture of companionate love and trait PA on employees' teamwork.**

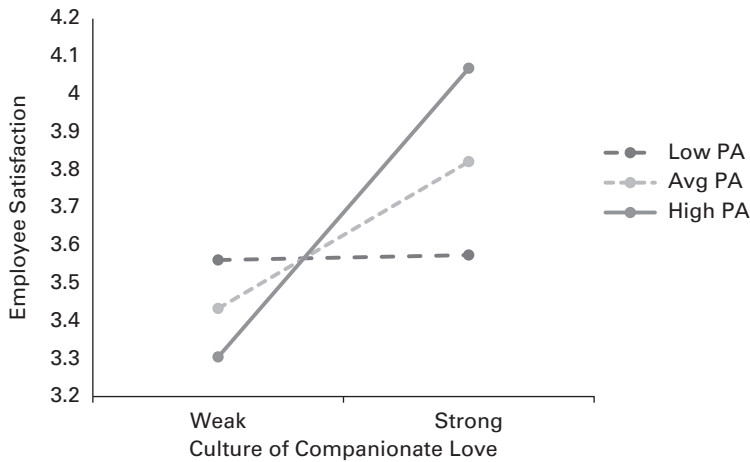


**Patient Outcomes**

Outside observer ratings of the culture of companionate love on the unit at time 1 were also used to test hypothesis 6, the influence of a culture of companionate love on patient mood, quality of life, and satisfaction at time 2. We first examined whether a stronger culture of companionate love would be positively related to patient pleasant mood at time 2, with pleasant mood rated by a patient's primary daytime CNA. As shown in table 5, we found support for this outcome.<sup>5</sup> Hypothesis 6 also predicted that a stronger culture of love would be

<sup>5</sup> To control for possible bias in the patients' primary CNAs' ratings of patients' moods, we included the trait PA and social desirability of patients' primary caretakers (which we also controlled for in all employee analyses) in the multilevel model predicting patient pleasant mood. When controlling for all patient control variables and these CNA control variables simultaneously, the influence of the culture of companionate love on patient mood remained statistically significant.

**Figure 4. Interaction of a culture of companionate love and trait PA on employees' satisfaction.**



**Table 5. Longitudinal Models Predicting Patient Mood at Time 2 from Outside Raters' Observations of the Culture of Companionate Love at Time 1 (N = 109)\***

Predictor variable	Patient pleasant mood (as rated by primary CNAs)
Poor health (time 2)	-.01
Cognitive impairment (time 2)	-.14**
Poor physical functioning (time 2)	-.02
Culture of companionate love – Outside raters' observations (time 1)	.46*
Pseudo R <sup>2</sup>	.15

\*  $p < .05$ ; \*\* $p < .01$ ; two-tailed tests (control variables), one-tailed test (culture of companionate love).

\* Unstandardized coefficients are reported.

positively related to patient satisfaction and quality of life. Using the sample of patients who were able to communicate verbally, we found support for this hypothesis as well. As shown in table 6, there was a positive and significant association between a culture of companionate love at time 1 as measured by outside raters and patient satisfaction, patient quality of life measured in terms of dignity, and relationships at time 2.

We also examined whether a stronger culture of companionate love would relate to positive patient health outcomes. As shown in table 7, hypothesis 7 was only partially supported, with time 1 culture of companionate love measured by outside observer ratings having a significant association with time 2 trips to the emergency room, but no significant relationship to time 2 patient weight gain or lower incidence of ulcers.

### Family Outcomes

Last, we tested whether a stronger culture of companionate love would predict patients' families' outcomes. Because a patient's health and cognitive condition

**Table 6. Longitudinal Models Predicting Patient Satisfaction and Quality of Life at Time 2 from Outside Raters' Observations of the Culture of Companionate Love at Time 1\***

Predictor variable	Patient Satisfaction (N = 32)	Patient Quality of Life (N = 39)	
		Dignity	Good relationships
Poor health (time 2)	-.06	.19	-.28*
Cognitive impairment (time 2)	.33*	.65***	.14
Poor physical functioning (time 2)	-.30*	-.44**	-.05
Culture of companionate love – Outside raters' observations (time 1)	.60**	.75*	.57*
Pseudo R <sup>2</sup>	.35	.33	.16

\*  $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ; two-tailed tests (control variables), one-tailed test (culture of companionate love).  
\* Unstandardized coefficients are reported.

**Table 7. Longitudinal Models Predicting Patient Health Outcomes at Time 2 from Outside Raters' Observations of the Culture of Companionate Love at Time 1\***

Predictor variable	Patient weight gain (N = 114)	Fewer trips to emergency room (N = 114)	Lower incidence of ulcers (N = 111)
Poor health (time 2)	-.21	.25	-.31
Cognitive impairment (time 2)	-.42	.07	-.19
Poor physical functioning (time 2)	.16	-.04	-1.16***
Culture of companionate love – Outside raters' observations (time 1)	.57	1.61*	.20
Pseudo R <sup>2</sup>	.00	.65	.22

\*  $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ; two-tailed tests (control variables), one-tailed test (culture of companionate love).

\* Unstandardized coefficients are reported.

could influence a family's perceptions of the facility, in all our analyses we controlled for time 2 patient poor health, cognitive impairment, and poor physical functioning. As shown in table 8, a stronger time 1 culture of companionate love (as rated by outside raters) was not significantly related to greater family member satisfaction or a greater willingness to recommend the facility to others at time 2. As seen in table 9, however, families' own ratings of the culture of companionate love at time 1 did have a positive and significant association with family member satisfaction and a willingness to recommend the facility to others at time 2, offering partial support for hypothesis 8.

### Exploratory Analyses: Cultural Artifacts of a Culture of Companionate Love

As an exploratory analysis, we measured some indications of the influence of a culture of companionate love seen through cultural artifacts to obtain a broader understanding of the culture of companionate love. Although cultural artifacts are a prototypical manifestation of organizational culture that is visible to both outsiders and insiders alike, it has not been common to measure cultural artifacts in quantitative examinations of culture. We focused here on cultural

**Table 8. Longitudinal Models Predicting Family Attitudes at Time 2 from Outsider Raters' Observations of the Culture of Companionate Love at Time 1 (N = 91)\***

Predictor variable	Family member satisfaction	Family member would recommend to others
Site 1	-.18	-.32
Site 2	.38	.19
Patient poor health (time 2)	.26*	.31**
Patient cognitive impairment (time 2)	-.43**	-.47***
Patient poor physical functioning (time 2)	.17	.11
Culture of companionate love – Outside raters' observations (time 1)	.32	.29
Pseudo R <sup>2</sup>	.07	.08

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ ; two-tailed tests (control variables), one-tailed test (culture of companionate love).

\* Unstandardized coefficients are reported.

**Table 9. Longitudinal Models Predicting Family Attitudinal Variables at Time 2 from Family Observations of the Culture of Companionate Love at Time 1 (N = 47)\***

Predictor variable	Family member satisfaction	Family member would recommend to others
Site 1	.59	.52
Site 2	.52	.46
Patient poor health (time 2)	-.01	.02
Patient cognitive impairment (time 2)	-.39*	-.42*
Patient poor physical functioning (time 2)	.29	.26
Culture of companionate love – Family observations (time 1)	.41***	.49***
Pseudo R <sup>2</sup>	.22	.26

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ ; two-tailed tests (control variables), one-tailed test (culture of companionate love).

\* Unstandardized beta coefficients are reported.

artifacts that, based on our on-site observations and prior research (Langer and Rodin, 1976), were consistent with a culture of companionate love in a long-term care organization. Companionate love for patients, families, and staff in this setting centers around artifacts that create a sense of "homeliness," a concept that reflects warm memories, loving ties with family and friends, and feelings of autonomy (Rigby, Payne, and Froggatt, 2010). Indoor plants (Cohen-Mansfield and Werner, 1998) and personalized patient rooms, such as individually chosen furniture, bedspreads, and knickknacks (Kellehear, Pugh, and Atter, 2009), are common exemplars of this concept in the long-term literature. Artifacts that detract from an "institutionalized" look, such as colorful tablecloths in the dining room (Hotaling, 1990), are another common example of companionate love artifacts in this setting. Thus we chose the following artifacts: plants in the common areas, plants in the patients' rooms, tablecloths in patient dining areas, centerpieces on the tables, and personalized patient

**Table 10. Longitudinal Models Predicting Employee Engagement and Withdrawal at Time 2 from Culture of Companionate Love Artifacts at Time 1\***

Predictor variable	Emotional exhaustion (N = 137)	Absenteeism (N = 120)	Teamwork (N = 156)	Satisfaction (N = 137)
Site 1	-.95*	-1.08*	.91*	.76*
Site 2	-.72*	-.62	.69*	.52
Male	-.30	-.01	.35*	.32*
Tenure	.00	.00	.00	.00
Certified nursing assistant (CNA)	.01	.51**	.11	-.06
Trait positive affectivity (PA)	-.29*	-.04	.05	.06
Social desirability	-1.68**	-.24	1.31**	1.40**
Culture of companionate love – Artifacts (time 1)	-.48***	-.38**	.55***	.44***
Pseudo R <sup>2</sup>	.17	.09	.12	.16

\*  $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ; two-tailed tests (control variables), one-tailed test (culture of companionate love).

\* Unstandardized coefficients are reported.

rooms. We created a scale of the existence of each of these artifacts on the unit. For each unit, the scale was completed by a head nurse and two or three administrators directly related to human resources and culture on the unit (mean number of raters = 3.54, s.d. = .52). We asked employees on both the day and evening shifts to complete the scale. For each item, raters responded to the question, "How often are the following found on the unit?" on a 1–5 scale (1 = Never through 5 = Very often; mean = 3.70, s.d. = .79, Cronbach alpha = .82).

Examination of the intercorrelations between culture of companionate love artifacts and the three other measures of culture of companionate love revealed a high degree of overlap. Specifically, a culture of companionate love as measured through cultural artifacts was correlated  $r = .60$  ( $p < .05$ ) with outside rater observations,  $r = .42$  ( $p < .10$ ) with employee ratings, and  $r = .51$  ( $p < .05$ ) with family member ratings of a culture of companionate love. As shown in table 10, we found significant results for all employee outcomes when culture of companionate love was measured through cultural artifacts. Specifically, the culture of companionate love as manifested through cultural artifacts at time 1 predicted less employee emotional exhaustion and lower absenteeism, better teamwork, and greater employee work satisfaction at time 2, though there were no significant relationships for the culture of companionate love as measured through cultural artifacts on patient or family outcomes at time 2.

## DISCUSSION

We drew on a variety of scholarly perspectives to build a theory of a culture of companionate love and test its importance in a longitudinal study of employees and their clients in a long-term care setting. By demonstrating how a culture of companionate love manifests itself at work, we showed that companionate love, a basic human emotion, does not stop at the organizational door but,

rather, has an important influence on what happens within, for both employees and clients alike. Across multiple measures of the culture of companionate love, we found that a stronger culture of love at time 1 was almost always negatively associated with employee withdrawal and positively associated with employee engagement at time 2. Echoing findings from the culture-fit literature, we found that trait positive affectivity moderated the effect of employees' ratings of a culture of love on employees' outcomes. For employees who were higher rather than lower in trait positive affectivity, a culture of companionate love was associated with a greater reduction in emotional exhaustion (though with no differential influence on absenteeism) and a stronger positive influence on satisfaction and teamwork.

While a limitation of our design is the use of multiple units within only one organization in the long-term care industry, healthcare workers in general display some of the highest levels of employee dissatisfaction (Aiken et al., 2001), with staffing shortages and turnover rates ranging from 48 percent for nurses to as high as 119 percent for certified nursing assistants (Castle, 2006). Because dissatisfaction and turnover lower the quality of patient care (Castle, Engberg, and Men, 2007), our findings on a strong culture of companionate love could be particularly important for studies of employment in this industry.

We also extended our examination of a culture of companionate love to the organization's clients, the patients and their families. Outside observers' ratings of the culture of love at time 1 positively related to more positive patient pleasant mood, greater patient satisfaction, and higher quality of life at time 2. We found a relationship between a culture of companionate love at time 1 and fewer trips to the emergency room, one of the three health outcomes we investigated at time 2. Given the growing literature positing a relationship between positive emotions and physiological outcomes (Heaphy and Dutton, 2008; Ong, 2010), however, the relationship between a culture of companionate love and patient health deserves future research, including the search for moderators and mediators that may better explicate the relationship. Last, we found that families' own ratings of a culture of love at time 1 (although not outside observers' ratings) related to families' satisfaction and their willingness to recommend the facility to others at time 2.

Our finding that a culture of love is associated with more pleasant patient mood is particularly significant for patient care, because depressive symptoms are common among patients in long-term care facilities, with estimates ranging from approximately 15 percent for major depression to as high as 45 percent for both major and minor depression (see Teresi et al., 2001, for a review). The healthcare industry also offers an intriguing setting in which to compare the influence of organizations focused on cultivating a culture of companionate love as a way to gain better employee and patient outcomes, as compared with an approach based mainly on increasing resources and staffing as a way to attain better outcomes.

In general, the robustness of our findings speaks to the pervasiveness and intensity of a culture of companionate love for employees and their clients, but some results that were not significant warrant further consideration. For example, the lack of significant effects for outside observers' ratings of culture on family attitudes could be due to the comparatively small number of families who participated or the fact that families have a more limited vantage point



from which to observe the emotional culture of units in a long-term care facility. In addition, in our exploratory analyses, cultural artifacts showed a strong relationship to employees' outcomes but were not associated with patients' or families' outcomes. These puzzling findings raise intriguing questions, still largely unexplored in the organizational culture literature, about the relationships among different manifestations of culture (Hatch, 1993). Although three of the four sets of culture of companionate love ratings were significantly correlated with one another, the magnitude of the associations among raters varied, with employees' ratings of culture being least significantly correlated with the other three measures. Some organizational culture scholars suggest that different subgroups have different vantage points on culture, which may or may not be in agreement, particularly in medical settings (Meyerson, 1994). It may also be, as some theorists have suggested (Trice and Beyer, 1993; Hall et al., 1997; Schein, 2010), that different levels of culture have varying degrees of influence on cultural constituencies, all of whom observe different components of culture.

It is also reasonable to question how the sex composition of our sample influenced our findings. The majority of our respondents were female, as is typical for care-related professions, including long-term care (Stone, 2000). This sex composition might have influenced our results through either feeling or normative mechanisms, particularly given previous research showing that there are differences between men and women in emotional expression, regulation, and susceptibility to emotional contagion (see McRae et al., 2008, for example). Yet there is evidence that men and women hold a similar conception of companionate love (Fehr and Broughton, 2001). Empirically, we conducted additional statistical analyses and found only one instance of a moderating influence of sex, and no direct influence of employee sex on either employee or client outcomes. Therefore although we should be aware of the implications of gender in organizational research, there is support that our results are generalizable to both sexes.

### Theoretical Contributions

Our study revives the largely dormant investigation of companionate love at work. Although social scientists have made promising qualitative inquiries, quantitative examinations of the construct of love at work by contemporary organizational theorists have been largely absent. Even in psychology, the field in which companionate love has been studied most closely, scholars have been limited in the domains in which they examined this construct and have called for more research in other contexts (Reis and Aron, 2008). By focusing on the influence of companionate love on workplace outcomes, our study fills research gaps in both organizational behavior and psychology. Our findings challenge contemporary assumptions about companionate love in the workplace, specifically the assumption that workplace relationships cannot be deep enough to be defined by "love" or that love is not important for organizational outcomes. Not only did we find that employees' experiences in a culture of companionate love significantly relate to their level of workplace engagement and withdrawal, but we also discovered that the consequences of a culture of love ripple out to patients, this organization's clients, and even to clients' families.

In examining the culture of companionate love in organizations, we also contribute to the positive organizational scholarship literature, particularly the burgeoning study of compassion organizing (Kahn, 1993; Kanov et al., 2004; Dutton et al., 2006). While the compassion organizing research touches on a broad set of constructs (e.g., Rynes et al., 2012), differentiating it from the purely affective approach we adopted in the present study, it remains one of the only areas in organizational behavior research that has explicitly focused on the importance of deep and compassionate relationships among employees. By drawing on compassion research in our theorizing about the broader construct of a culture of companionate love, we have also made unique contributions to this domain of research. From a theoretical perspective, the construct of a culture of companionate love offers a broader lens that highlights the myriad aspects in which employees can have deep and meaningful relationships at work. This explicitly cultural-level approach to companionate love is an important and novel lens on organizational compassion and compassion organizing research. Our research also adds a useful quantitative component to this area, which to date has focused almost exclusively on theoretical articles and qualitative case studies.

Our work also contributes to the literature on organizational culture. By showing the existence and relevance of companionate love as a collective, cultural construct, our study contributes to a research area that is critical to organizational life but has been in need of reinvigoration. After the "culture wars" of the 1990s (Denison, 1996), there have been few new perspectives or paradigms offered in organizational culture research. By studying the construct of a culture of companionate love specifically, and the idea of emotional culture more generally, we introduce a novel and more complete approach to understanding organizational culture and its consequences, establishing a baseline for future research. Our theorizing departs from and expands on traditional cognitive organizational culture research in two major ways. First, our focus is on the cultural manifestations of deep underlying assumptions, values, norms, and artifacts based exclusively on the emotional content of culture. By providing a rich portrait of what emotional culture crystallization and intensity look like through the lens of companionate love, we extend early work on the concept of culture strength by sociologists (Jackson, 1966) to the domain of emotional culture. The dimensional approach to conceptualizing culture was a critical advance for cognitive research on culture in the 1990s (e.g., O'Reilly, Chatman, and Caldwell, 1991) that can also shape future research on emotional culture. For instance, increasing our ability to examine the dimensions of emotional culture precisely can enhance our ability to separate out the various possible emotional culture constructs. Second, a major difference between cognitive and emotional culture is that emotional culture is enacted and transmitted mainly through nonverbal and physiological channels. One implication of this insight is that emotional culture will spread among employees via both feeling mechanisms and normative enactments. As the concept of feeling mechanisms is new to the culture literature, future studies of emotional culture will need to focus on the human experience of emotions and the ways in which they are uniquely transmitted through facial expression, body language, vocal tone, and touch as the core defining feature of the emotional culture construct. Thus emotional culture offers a new perspective on the

organizational culture construct and a generative new area of inquiry in this domain.

### Cultures of Companionate Love in Other Industries

A natural question arising from our study of companionate love in the long-term care industry is whether the implications of these findings are also relevant for managers in other industries. Although the long-term care industry illuminates the relationship between a culture of companionate love and outcomes of employees and clients, there is evidence of such a culture in other business organizations, although it may not have been characterized as such. For example, a broad manifestation of a culture of companionate love can be seen at Barry-Wehmler, a \$1.5 billion global equipment and engineering consulting company. After losing 40 percent of its orders, the CEO decided that rather than laying off some employees, every employee in the company would take a four-week furlough. The CEO, Bob Chapman (2013), described employees' responses:

The reaction was extraordinary. Some team members offered to take double furloughs, stepping up to "take the time" for their co-workers who could not afford the loss of pay. . . . Our decision to use furloughs to save jobs made our associates proud and profoundly touched by the realization that they worked for a company that truly cared about them. . . . they embraced the furlough program because it meant saving someone else's job.

Organizational leaders across industries are recognizing the value of fostering companionate love as a collective, cultural phenomenon within groups of employees and in the organization as a whole. In addition to the well-known example of Southwest Airlines, other companies include Whole Foods Market, which has a set of management principles that begin with "Love" (Hamel and Breen, 2007: 69–82), and PepsiCo, which lists "caring" as its first guiding principle (<http://www.pepsico.com/Company/PepsiCo-Values-and-Philosophy.html>). Zappos also explicitly focuses on caring as part of its values: "We are more than a team though . . . we are a family. We watch out for each other, care for each other and go above and beyond for each other" (<http://about.zappos.com/our-unique-culture/zappos-core-values/build-positive-team-and-family-spirit>). Given that successfully interacting with others is critical to success at work, our findings provide evidence that a culture of companionate love is important in a broad range of business organizations.

To approach the question of generalizability more systematically, however, we conducted an illustrative examination of the culture of companionate love among 3,201 employees spanning seven different industries (biopharmaceutical, engineering, financial services, higher education, real estate, travel, and utilities). Using the same employee culture of companionate love scale we used in this study, we found that employees' ratings of the culture of companionate love were significantly positively correlated with one-item measures of job satisfaction ( $r = .23, p < .001$ ), commitment to the organization ( $r = .21, p < .001$ ), and accountability for work performance ( $r = .07, p < .01$ ). Interestingly, this sample also showed that although there were significant differences in the culture of companionate love between industries ( $F = 25.4, p < .001$ ), industry

differences did not fully account for the strength of the culture of love. Rather, the strength of the culture of love differed significantly even within a single industry. For example, there were significant differences in the culture of companionate love within a subsample of 332 employees in four different firms in the financial services industry ( $F = 5.39, p < .001$ ), with means ranging from 2.71 to 3.35 (mean = 3.06, s.d. = .68), as high as observer ratings of a culture of companionate love that we found in the long-term care industry. Although this cross-sectional sample is not a definitive test, it does suggest that the level of an organization's culture of companionate love is related to employee engagement across a variety of organizations and industries. In addition, this exploratory sample allowed us to return to the issue of gender and companionate love. We did not observe any significant differences between men and women in ratings of culture of companionate love. Moreover, although men comprised 78 percent of this larger, cross-industry sample (nearly the same as the percentage of women in our long-term care setting), we still found a relationship between a culture of companionate love and employee attitudes.

### Relevance of Emotional Culture to Other Emotions

Through our focus on a theory of an emotional culture of companionate love, we hope to spark more research into other types of emotional culture. Just as a culture of companionate love played an important role in a long-term care setting, it seems likely that cultures defined by other discrete emotions can be functional in other types of organizations. For example, whereas the other-centered emotion of companionate love proved beneficial in a caregiving setting, it may be that more ego-focused emotions, such as enthusiasm and pride (Kitayama, Markus, and Kurokawa, 2000), would be more adaptive in work that focuses more on individual achievement, such as sales or investment banking. It is also important to note that the same emotional culture might lead to very differing outcomes depending on other organizational factors. For example, whereas a culture of fear could promote safety-oriented behaviors among employees in one type of organization, such as a governmental security agency or fire fighters, the same culture of fear would likely have devastating consequences for organizations that thrive on the free flow of ideas, such as design and engineering organizations like IDEO. Also, emotions generally classified as negative can have constructive effects. Intel, for example, with its ritual of "constructive confrontation," fostered aspects of a culture of anger and found it helpful in improving employee performance (Jackson, 1998).

In long-term care or other healthcare settings, it would be interesting to examine whether a culture of companionate love relates to other types of emotional cultures, such as a culture of sadness. Given that death and dying are inherent to work in a long-term care setting, emotions such as sadness and grief could be an acceptable and expected part of the culture in a way that is not acceptable in other types of organizations. Across industries, the possible relationship between a culture of companionate love and a culture of anger is also intriguing. While one could intuitively posit that these two types of emotional cultures would be inversely correlated, they may also be positively correlated because anger, too, often emerges in the context of interpersonal relationships (Gibson and Callister, 2010). For example, employees in a strong culture of companionate love are very focused on their relationships with each

other, which could extend to acceptance of the expression of anger when relationships are threatened or group norms are violated. The closeness that the culture of love brings may also create a psychologically safe environment for employees bonding together through anger over unpleasant work conditions. To answer these questions, it is helpful to know whether discrete emotional culture dimensions are indeed separable constructs. As a preliminary test of this, we asked the 3,201-employee cross-industry sample described above to complete culture of joy, anger, fear, and envy scales for their work units, in addition to the culture of companionate love scale. We found that these additional emotional culture scales were statistically differentiable from one another. Please see Online Appendix C for these scale items, reliabilities, and analyses.

Investigating additional moderators of emotional culture is another promising avenue of research. Just as trait positive affectivity enhanced the effects of the culture of companionate love in our study, other individual differences, such as emotional intelligence (Mayer, Salovey, and Caruso, 2000), emotional regulation style (Gross and John, 2003), propensity toward emotional contagion (Doherty, 1997), other-oriented versus self-image interpersonal goals (Canevello and Crocker, 2010), or Big-5 personality traits (Barrick and Mount, 1991) could also moderate emotional culture's effects, depending on the type of emotional culture. Last, although the structure of our model and the two main mechanisms through which we predict that it will influence outcomes are generalizable to other emotional cultures, the particulars will likely vary by emotional culture. Therefore middle-range theory (Merton, 1968) will be necessary to explain how and what types of outcomes will result from each particular type of emotional culture.

An emotional culture that is built around particular discrete emotions that are adaptive for the group in most contexts may not always lead to positive outcomes or be suitable in all situations. For example, in a culture of companionate love, it is possible that employees who are too affectionate, caring, compassionate, and tender with one another might be more likely to ignore unethical behavior by their coworkers because they do not want to jeopardize their coworkers' jobs. One theory of bureaucracy even holds that bureaucracies' "formalistic impersonality" stems from the belief that compassion undermines fairness (du Gay, 2008: 350).

### **The Relationship between Emotional Culture and Cognitive Culture**

Although we have predominately focused on the factors that differentiate emotional culture and cognitive culture, an interesting question for future research is what type of relationships might exist between the two constructs. One possibility is that the various configurations of cognitive and emotional cultures are orthogonal to one another. Consider, for instance, the cultural contrast that emerges from two organizations, both of which subscribe to a results-oriented cognitive culture but that have distinct emotional cultures stemming from their differentiated strategic orientation and the distinct personalities of their organizational leaders. The contrast between Southwest Airlines and American Airlines is one such example. While both organizations subscribe to an outcome-oriented cognitive culture (O'Reilly, Chatman, and Caldwell, 1991), there is a clear contrast between the emotional cultures of each company.

Whereas employees at Southwest Airlines are encouraged to express authentic emotions, particularly love (Blanchard and Barrett, 2011), American Airlines has been called the "stainless steel" airline, a term that reflects the emotional restraint required of its employees (Lorsch, Loveman, and Horn, 1990). It may be, however, that emotional and cognitive cultures can complement each other, leading to mutually reinforcing outcomes. For example, given the relationship between positive affectivity and creativity (Amabile et al., 2005), a culture of innovation is likely to get much more of a boost if there is also a culture of joy in place to bolster it. Nevertheless, it is important for future research to investigate the relationship between the two and the ways in which that relationship will collectively influence those outcomes, including an understanding of the interactions within and between them.

By focusing on affection, caring, compassion, and tenderness in the workplace, we contribute to an understanding of the culture of companionate love, and emotional culture more generally, and highlight its importance for organizational theorists. Classic inductive studies in management recorded the importance of companionate love for employees and their supervisors, yet the importance of companionate love in modern organizational behavior theory has been systematically overlooked and the theoretical pathways linking emotions and organizational culture were not illuminated. We did so here through a longitudinal study of the culture of companionate love in the long-term care industry. Our research confirms that employees can, indeed, experience companionate love at work and reveals that a culture of companionate love relates to important outcomes for employees and clients. In response to Tina Turner's famously haunting lyrics, love, actually, has very much to do with it.

### Acknowledgments

Authorship is alphabetical; both authors contributed equally to the manuscript. Many thanks to Charles O'Reilly, Nancy Rothbard, and Barry Staw for their deeply insightful comments, and to research assistants Alina Ispas, Katie Imielska, Shira LeDeaux, Daniel Milner, Karishma Sabhnani, Dayna Shi, Julia Sodbinow, and Chia Tsay for their help. We are grateful to Audrey Weiner, Orah Burack, and Michael Lubetkin of JLC for their unwavering support of this project. We thank the Wharton Center for Leadership and Change and the Wharton Center for Human Resources for their generous financial support of this study.

### REFERENCES

- Aiken, L. H., S. P. Clarke, D. M. Sloane, J. A. Sochalski, R. Busse, H. Clarke, P. Giovannetti, J. Hunt, A. M. Rafferty, and J. Shamian  
2001 "Nurses' reports on hospital care in five countries." *Health Affairs*, 20: 43–53.
- Aiken, L. H., and S. G. West  
1991 *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA: Sage.
- Allman, R. M.  
1997 "Pressure ulcer prevalence, incidence, risk factors, and impacts." *Clinics in Geriatric Medicine*, 13: 421–436.
- Amabile, T. M., S. G. Barsade, J. S. Mueller, and B. M. Staw  
2005 "Affect and creativity at work." *Administrative Science Quarterly*, 50: 367–403.
- Asch, S.  
1955 "Opinions and social pressure." *Scientific American*, 193: 31–35.

**Ashforth, B. E., and R. H. Humphrey**

1993 "Emotion labor in service roles: The influence of identity." *Academy of Management Review*, 18: 88–115.

**Ashkanasy, N. M., C. P. M. Wilderom, and M. F. Peterson (eds.)**

2011 *The Handbook of Organizational Culture and Climate*, 2d ed. Thousand Oaks, CA: Sage.

**Barrick, M. R., and M. K. Mount**

1991 "The Big Five personality dimensions and job performance: A meta-analysis." *Personnel Psychology*, 44: 1–26.

**Barsade, S. G.**

2002 "The ripple effect: Emotional contagion and its influence on group behavior." *Administrative Science Quarterly*, 47: 644–675.

**Barsade, S. G., A. P. Brief, and S. E. Spataro**

2003 "The affective revolution in organizational behavior: The emergence of a paradigm." In J. Greenberg (ed.), *Organizational Behavior: The State of the Science*, 2d ed.: 3–52. Mahwah, NJ, and London: Lawrence Erlbaum.

**Barsade, S. G., A. J. Ward, J. D. F. Turner, and J. A. Sonnenfeld**

2000 "To your heart's content: A model of affective diversity in top management teams." *Administrative Science Quarterly*, 45: 802–836.

**Bartolomé, F.**

1972 "Executives as human beings." *Harvard Business Review*, 50 (6): 62–69.

**Baumeister, R. F., and M. R. Leary**

1995 "The need to belong: Desire for interpersonal attachments as a fundamental human motivation." *Psychological Bulletin*, 117: 497–529.

**Bechky, B. A.**

2003 "Object lessons: Workplace artifacts as representations of occupational jurisdiction." *American Journal of Sociology*, 109: 720–752.

**Berscheid, E., and E. Walster**

1974 "A little bit about love." In T. L. Huston (ed.), *Foundations of Interpersonal Attraction*: 355–381. New York: Academic Press.

**Berscheid, E., and E. Walster**

1978 *Interpersonal Attraction*, 2d ed. Reading, MA: Addison Wesley.

**Blanchard, K., and C. Barrett**

2011 *Lead with LUV*. Upper Saddle River, NJ: FT Press.

**Bower, G. H.**

1991 "Mood congruity of social judgments." In J. P. Forgas (ed.), *Emotion and Social Judgments*: 31–53. New York: Pergamon Press.

**Bowers, B. J.**

1988 "Family perceptions of care in a nursing home." *Gerontologist*, 28: 361–368.

**Boyatzis, R. E., M. L. Smith, and N. Blaize**

2006 "Developing sustainable leaders through coaching and compassion." *Academy of Management Learning and Education*, 5: 8–24.

**Brief, A. P., and H. M. Weiss**

2002 "Organizational behavior: Affect in the workplace." *Annual Review of Psychology*, 53: 279–307.

**Brotheridge, C. M., and A. A. Grandey**

2002 "Emotional labor and burnout: Comparing two perspectives of 'people work.'" *Journal of Vocational Behavior*, 60: 17–39.

**Canevello, A., and J. Crocker**

2010 "Creating good relationships: Responsiveness, relationship quality, and interpersonal goals." *Journal of Personality and Social Psychology*, 99: 78–106.

**Castle, N. G.**

2006 "Measuring staff turnover in nursing homes." *Gerontologist*, 46: 210–219.

- Castle, N. G., J. Engberg, and A. Men**  
2007 "Nursing home staff turnover: Impact on nursing home compare quality measures." *Gerontologist*, 47: 650–661.
- Chapman, B.**  
2013 "How a family shared a burden." April 24, <http://www.trulyhumanleadership.com/?p=645>.
- Chatman, J. A.**  
1991 "Matching people and organizations: Selection and socialization in public accounting firms." *Administrative Science Quarterly*, 36: 459–484.
- Chatman, J. A., and S. G. Barsade**  
1995 "Personality, organizational culture, and cooperation: Evidence from a business simulation." *Administrative Science Quarterly*, 40: 423–443.
- Cherniss, C.**  
1980 *Professional Burnout in Human Service Organizations*. New York: Praeger.
- Cialdini, R. B.**  
2007 "Descriptive social norms as underappreciated sources of social control." *Psychometrika*, 72: 263–268.
- Cialdini, R. B., C. A. Kallgren, and R. R. Reno**  
1991 "A focus theory of normative conduct: A theoretical refinement and reevaluation of the role of norms in human behavior." In M. Zanna (ed.), *Advances in Experimental Social Psychology*, 24: 201–234. New York: Academic Press.
- Clark, C.**  
1997 *Misery and Company: Sympathy in Everyday Life*. Chicago: University of Chicago Press.
- Coan, J. A., H. S. Schaefer, and R. J. Davidson**  
2006 "Lending a hand: Social regulation of the neural response to threat." *Psychological Science*, 17: 1032–1039.
- Cohen-Mansfield, J., and P. Werner**  
1998 "The effects of an enhanced environment on nursing home residents who pace." *Gerontologist*, 38: 199–208.
- Coté, S., and L. M. Morgan**  
2002 "A longitudinal analysis of the association between emotion regulation, job satisfaction and intentions to quit." *Journal of Organizational Behavior*, 23: 947–962.
- Cox, C. L., L. Kaeser, C. A. Montgomery, and L. H. Marion**  
1991 "Quality of life nursing care. An experimental trial in long term care." *Journal of Gerontologic Nursing*, 17: 6–11.
- Crawford, J. R., and J. D. Henry**  
2004 "The Positive and Negative Affect Schedule (PANAS): Construct validity, measurement properties and normative data in a large non-clinical sample." *British Journal of Clinical Psychology*, 43: 245–265.
- Denison, D. R.**  
1996 "What is the difference between organizational culture and organizational climate? A native's point of view on a decade of paradigm wars." *Academy of Management Review*, 21: 619–654.
- Diefendorff, J. M., and E. M. Richard**  
2006 "Are emotional display rules formal job requirements? Examination of employee and supervisor perceptions." *Journal of Occupational and Organizational Psychology*, 79: 273–298.
- Diener, E., and R. A. Emmons**  
1984 "The independence of positive and negative affect." *Journal of Personality and Social Psychology*, 47: 1105–1117.
- Doherty, R. W.**  
1997 "The Emotional Contagion Scale: A measure of individual differences." *Journal of Nonverbal Behavior*, 21: 131–154.



**du Gay, P.**

2008 "Without affection or enthusiasm: Problems of involvement and attachment in 'responsive' public management." *Organization*, 15: 335–353.

**Durkheim, E.**

1965 *The Elementary Forms of the Religious Life*. J. W. Swain, trans. (Originally published in 1912.) New York: Free Press.

**Dutton, J. E., M. C. Worline, P. J. Frost, and J. Lilius**

2006 "Explaining compassion organizing." *Administrative Science Quarterly*, 51: 59–96.

**Ekman, P.**

1973 *Darwin and Facial Expression: A Century of Research in Review*. New York: Academic Press.

**Fehr, B.**

1988 "Prototype analysis of the concepts of love and commitment." *Journal of Personality and Social Psychology*, 55: 557–579.

**Fehr, B., and R. Broughton**

2001 "Gender and personality differences in conceptions of love: An interpersonal theory analysis." *Personal Relationships*, 8: 115–136.

**Fehr, B., and J. A. Russell**

1991 "The concept of love viewed from a prototype perspective." *Journal of Personality and Social Psychology*, 60: 425–438.

**Fiske, S. T., and S. E. Taylor**

1984 *Social Cognition*. Reading, MA: Addison-Wesley.

**Fredrickson, B. L.**

1998 "What good are positive emotions?" *Review of General Psychology*, 2: 300–319.

**Fredrickson, B. L.**

2013 *Love 2.0: How Our Supreme Emotion Affects Everything We Feel, Think, Do, and Become*. New York: Hudson Street Press.

**Frost, P., L. F. Moore, M. R. Louis, C. C. Lundberg, and J. Martin (eds.)**

1991 *Reframing Organizational Culture*. Newbury Park, CA: Sage.

**Gambassi, G., F. Landi, K. L. Lapane, A. Sgadari, V. Mor, and R. Bernabei**

1999 "Predictors of mortality in patients with Alzheimer's disease living in nursing homes." *Journal of Neurological Neurosurgery Psychiatry*, 67: 59–65.

**Geertz, C.**

1973 *The Interpretation of Cultures*. New York: Basic Books.

**Gibson, D. E., and R. R. Callister**

2010 "Anger in organizations: Review and integration." *Journal of Management*, 36: 66–93.

**Goffman, E.**

1959 *The Presentation of Self in Everyday Life*. New York: Doubleday.

**Goffman, E.**

1983 "The interaction order: American Sociological Association, 1982 presidential address." *American Sociological Review*, 48: 1–17.

**Gonzaga, G. C., D. Keltner, E. A. Londahl, and M. D. Smith**

2001 "Love and the commitment problem in romantic relations and friendship." *Journal of Personality and Social Psychology*, 81: 247–262.

**Goodwin, P. E., and R. C. Intrieri**

2006 "The influence of changing emotional goals on the psychological well-being of nursing home residents." In L. Hyer and R. C. Intrieri (eds.), *Geropsychological Interventions in Long-term Care*: 185–206. New York: Springer.

**Grandey, A. A.**

2003 "When 'the show must go on': Surface acting and deep acting as determinants

of emotional exhaustion and peer-rated service delivery." *Academy of Management Journal*, 17: 419–436.

**Grandey, A. A., G. M. Fisk, and D. D. Steiner**

2005 "Must service with a smile be stressful? The moderating role of personal control for American and French employees." *Journal of Applied Psychology*, 90: 893–904.

**Gross, J. J., and O. P. John**

2003 "Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being." *Journal of Personality and Social Psychology*, 85: 348–362.

**Hackett, R. D., P. Bycio, and R. M. Guion**

1989 "Absenteeism among hospital nurses: An idiographic-longitudinal analysis." *Academy of Management Journal*, 32: 424–453.

**Hall, S., P. Hamilton, H. Lidchi, S. Nixon, and C. Gledhill**

1997 "The work of representation." In S. Hall (ed.), *Representation: Cultural Representations and Signifying Practices*, 2: 13–74. London: Sage.

**Hamel, G., and B. Breen**

2007 *The Future of Management*. Boston: Harvard Business School Publishing.

**Hareli, S., and A. Rafaeli**

2008 "Emotion cycles: On the social influence of emotion in organizations." In A. P. Brief and B. M. Staw (eds.), *Research in Organizational Behavior*, 28: 35–59. New York: Elsevier/JAI.

**Harrison, D. A., D. A. Newman, and P. L. Roth**

2006 "How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences." *Academy of Management Journal*, 49: 305–325.

**Hatch, M. J.**

1993 "The dynamics of organizational culture." *Academy of Management Review*, 18: 657–693.

**Hatfield, E., J. T. Cacioppo, and R. L. Rapson**

1993 "Emotional contagion." *Current Directions in Psychological Science*, 2: 96–99.

**Hatfield, E., C. K. Hsee, J. Costello, M. S. Weisman, and C. Denney**

1995 "The impact of vocal feedback on emotional experience and expression." *Journal of Social Behavior and Personality*, 10: 293–312.

**Hatfield, E., and R. Rapson**

1993 *Love, Sex, and Intimacy: Their Psychology, Biology, and History*. New York: HarperCollins.

**Hatfield, E., and R. Rapson**

2000 "Love and attachment processes." *Handbook of Emotions*: 595–654. New York: Guilford Press.

**Hausknecht, J. P., N. J. Hiller, and R. J. Vance**

2008 "Work-unit absenteeism: Effects of satisfaction, commitment, and labor market conditions, and time." *Academy of Management Journal*, 51: 1223–1245.

**Hayward, R. M., and M. R. Tuckey**

2011 "Emotions in uniform: How nurses regulate emotion at work via emotional boundaries." *Human Relations*, 64: 1501–1523.

**Heaphy, E. D., and J. E. Dutton**

2008 "Positive social interactions and the human body at work: Linking organizations and physiology." *Academy of Management Review*, 33: 137–162.

**Hersey, R. B.**

1932 *Workers' Emotions in Shop and Home: A Study of Individual Workers from the Psychological and Physiological Standpoint*. Philadelphia: University of Pennsylvania Press.

- Hertenstein, M. J., D. Keltner, B. App, A. Bulleit, and R. Jaskolka**  
2006 "Touch communicates distinct emotions." *Emotion*, 6: 528–533.
- Hobfoll, S. E., and A. Shirom**  
2001 "Conservation of resources theory: Applications to stress and management in the workplace." In R. T. Golembiewski (ed.), *Handbook of Organizational Behavior*, 2d ed.: 57–80. New York: Marcel Dekker.
- Hochschild, A. R.**  
1983 *The Managed Heart: Commercialization of Human Feeling*. Berkeley, CA: University of California Press.
- Hofmann, D. A., and M. B. Gavin**  
1998 "Centering decisions in hierarchical linear models: Implications for research in organizations." *Journal of Management*, 24: 623–641.
- Hotaling, D. L.**  
1990 "Adapting the mealtime environment: Setting the stage for eating." *Dysphagia*, 5: 77–83.
- Huang, J., R. Neufeld, A. Likourezos, B. Breuer, A. Khaski, E. Milano, and L. Libow**  
2003 "Sociodemographic and health characteristics of older Chinese on admission to a nursing home: A cross-racial/ethnic study." *Journal of the American Geriatrics Society*, 51: 404–409.
- Isen, A. M.**  
1984 "Toward understanding the role of affect in cognition." In R. S. Wyer and T. K. Srull (eds.), *Handbook of Social Cognition*: 179–236. Mahwah, NJ: Lawrence Erlbaum.
- Izard, C. E., J. Kagan, and R. B. Zajonc**  
1988 *Emotions, Cognition, and Behavior*. Cambridge: Cambridge University Press.
- Jablonski, R. A., S. W. Utz, R. Steeves, and D. P. Gray**  
2007 "Decision about transfer from nursing home to emergency department." *Journal of Nursing Scholarship*, 39: 266–272.
- Jackson, J.**  
1966 "A conceptual and measurement model for norms and roles." *Pacific Sociological Review*, 9: 35–47.
- Jackson, T.**  
1998 *Inside Intel: Andy Grove and the Rise of the World's Most Powerful Chip Company*. New York: Plume.
- Jacques, R.**  
1993 "Untheorized dimensions of caring work: Caring as a structural practice and caring as a way of seeing." *Nursing Administrative Quarterly*, 17: 1–10.
- Kahn, W. A.**  
1993 "Caring for the caregivers: Patterns of organizational caregiving." *Administrative Science Quarterly*, 38: 539–563.
- Kahn, W. A.**  
1998 "Relational systems at work." In B. M. Staw and L. L. Cummings (eds.), *Research in Organizational Behavior*: 39–76. New York: Elsevier/JAI.
- Kane, R. A., K. C. Kling, B. Berhadsky, R. L. Kane, K. Giles, H. B. Degenholtz, J. Liu, and L. J. Cutler**  
2003 "Quality of life measures for nursing home residents." *Journal of Gerontology*, 58a: 240–248.
- Kanov, J. M., S. Maitlis, M. C. Worline, J. E. Dutton, P. J. Frost, and J. M. Lilius**  
2004 "Compassion in organizational life." *American Behavioral Scientist*, 47: 808–827.
- Kellehear, A., E. Pugh, and L. Atter**  
2009 "Home away from home? A case study of bedside objects in a hospice." *International Journal of Palliative Nursing*, 15 (3): 148–152.

**Kellett, U. M.**

1999 "Searching for new possibilities to care: A qualitative analysis of family caring involvement in nursing homes." *Nursing Inquiry*, 6: 9–16.

**Kelman, H.**

1958 "Communing and relating." *American Journal of Psychoanalysis*, 18: 77–98.

**Keltner, D., and J. J. Gross**

1999 "Functional accounts of emotions." *Cognition and Emotion*, 13: 467–480.

**Keltner, D., and J. Haidt**

1999 "Social functions of emotions at four levels of analysis." *Cognition and Emotion*, 13: 505–521.

**Kitayama, S., H. R. Markus, and M. Kurokawa**

2000 "Culture, emotion, and well-being: Good feelings in Japan and the United States." *Cognition and Emotion*, 14: 93–124.

**Kleinginna, P. R., Jr., and A. Kleinginna**

1981 "A categorized list of emotion definitions, with suggestions for a consensual definition." *Motivation and Emotion*, 5: 345–379.

**Kok, B. E., K. S. Coffey, M. A. Cohn, L. I. Catalino, T. Vacharkulksemsuk, S. B. Algoe, M. Brantley, and B. L. Fredrickson**

2013 "How positive emotions build physical health: Perceived positive social connections account for the upward spiral between positive emotions and vagal tone." *Psychological Science*, 24: 1123–1132.

**Kosfeld, M., M. Heinrichs, P. J. Zak, U. Fischbacher, and E. Fehr**

2005 "Oxytocin increases trust in humans." *Nature*, 435: 673–676.

**Kraft, T. L., and S. D. Pressman**

2012 "Grin and bear it: The influence of manipulated facial expression on the stress response." *Psychological Science*, 23: 1372–1378.

**Krull, J. L., and D. P. MacKinnon**

1999 "Multilevel mediation modeling in group-based intervention studies." *Evaluation Review*, 23: 418–444.

**Langer, E., and J. Rodin**

1976 "The effect of choice and enhanced personal responsibility for the aged: A field experiment in an institutional setting." *Journal of Personality and Social Psychology*, 34: 191–198.

**Lasswell, T. E., and M. E. Lasswell**

1976 "I love you but I'm not in love with you." *Journal of Marriage and Family Counseling*, 2: 211–224.

**Lawler, E. J.**

2001 "An affect theory of social exchange." *American Journal of Sociology*, 107: 321–352.

**Lawton, M. P., K. Van Haitsma, and J. Klapper**

1996 "Observed affect in nursing home residents with Alzheimer's disease." *Journal of Gerontology; Psychological Sciences*, 51B: 3–14.

**Levy, R. I.**

1973 *Tahitians: Mind and Experience in the Society Islands*. Chicago: University of Chicago Press.

**Lewis, P.**

2005 "Suppression or expression: An exploration of emotion management in a special care baby unit." *Work, Employment and Society*, 19: 565–581.

**Li, S.**

2003 "'Symbiotic niceness': Constructing a therapeutic relationship in psychosocial palliative care." *Social Science and Medicine*, 58: 2571–2583.

**Lilius, J. M., M. C. Worline, J. E. Dutton, J. M. Kanov, P. J. Frost, and S. Maitlis**

2003 "What good is compassion at work?" Unpublished manuscript, University of Michigan.

- Lilius, J. M., M. C. Worline, J. E. Dutton, J. M. Kanov, and S. Maitlis**  
2011 "Understanding compassion capability." *Human Relations*, 64: 873–899.
- Lilius, J. M., M. C. Worline, S. Maitlis, J. Kanov, J. E. Dutton, and P. Frost**  
2008 "The contours and consequences of compassion at work." *Journal of Organizational Behavior*, 29: 193–218.
- Littell, R. C., G. A. Milliken, W. W. Stroup, and R. D. Wolfinger**  
2002 *SAS System for Mixed Models*. Cary, NC: SAS Institute.
- Lorsch, J. W., G. W. Loveman, and J. Horn**  
1990 "American Airlines." HBS Case No. 491–044. Boston: Harvard Business School Publishing.
- Lutz, C.**  
1988 *Unnatural Emotions: Everyday Sentiments on a Micronesian Atoll and Their Challenge to Western Theory*. Chicago: University of Chicago Press.
- Lyubomirsky, S., L. King, and E. Diener**  
2005 "The benefits of frequent positive affect. Does happiness lead to success?" *Psychological Bulletin*, 131: 803–855.
- Magai, C., C. Cohen, D. Gombert, C. Malatesta, and C. Culver**  
1996 "Emotional expression during mid-to-late-stage dementia." *International Psychogeriatrics*, 8: 383–395.
- Malatesta, C. Z., and J. M. Haviland**  
1982 "Learning display rules: The socialization of emotion expression in infancy." *Child Development*, 53: 991–1003.
- Malinowski, B.**  
1944 *A Scientific Theory of Culture, and Other Essays*. Chapel Hill, NC: University of North Carolina Press.
- Markus, S., and S. Kitayama**  
1991 "Culture and the self: Implications for cognition, emotion, and motivation." *Psychological Review*, 98: 224–253.
- Maslach, C., and S. E. Jackson**  
1981 "The measurement of experienced burnout." *Journal of Occupational Behaviour*, 2: 99–113.
- Mayer J. D., P. Salovey, and D. R. Caruso**  
2000 "Models of emotional intelligence." In R. J. Sternberg (ed.), *Handbook of Intelligence*: 396–420. Cambridge: Cambridge University Press.
- McClelland, D. C.**  
1958 "Methods of measuring human motivation." In J. W. Atkinson (ed.), *Motives in Fantasy, Action, and Society*: 7–42. Princeton, NJ: Van Nostrand.
- McGilton, K. S.**  
2002 "Enhancing relationships between care providers and residents in long-term care: Designing a model of care." *Journal of Gerontological Nursing*, 28: 13–21.
- McGilton, K. S., and V. M. Boscart**  
2007 "Close care provider–resident relationships in long-term care environments." *Journal of Clinical Nursing*, 16: 2149–2157.
- McRae, K., K. N. Ochsner, I. B. Mauss, J. J. D. Gabrieli, and J. J. Gross**  
2008 "Gender differences in emotion regulation: An fMRI study of cognitive reappraisal." *Group Processes and Intergroup Relations*, 11: 143–162.
- Mehrabian, A.**  
1972 *Nonverbal Communication*. Chicago: Aldine-Atherton.
- Merton, R. K.**  
1968 *Social Theory and Social Structure*. New York: Free Press.
- Meyerson, D. E.**  
1994 "Interpretations of stress in institutions: The cultural production of ambiguity and burnout." *Administrative Science Quarterly*, 39: 628–653.

- Miller, K. I.**  
2007 "Compassionate communication in the workplace: Exploring processes of noticing, connecting, and responding." *Journal of Applied Communication Research*, 35: 223–245.
- Morris, J. N., B. E. Fries, D. R. Mehr, C. Hawes, C. Phillips, V. Mor, and L. A. Lipsitz**  
1994 "MDS Cognitive Performance Scale." *Journal of Gerontology*, 49: M174–M182.
- Nesse, R. M.**  
1990 "Evolutionary explanations of emotions." *Human Nature*, 1: 261–289.
- Ong, A. D.**  
2010 "Pathways linking positive emotion and health in later life." *Current Directions in Psychological Science*, 19: 358–362.
- O'Reilly, C. A., and J. A. Chatman**  
1996 "Culture as social control: Corporations, cults, and commitment." In B. M. Staw and L. L. Cummings (eds.), *Research in Organizational Behavior*, 18: 157–200. Greenwich, CT: JAI Press.
- O'Reilly, C. A., J. A. Chatman, and D. F. Caldwell**  
1991 "People and organizational culture: A profile comparison approach to assessing person-organization fit." *Academy of Management Journal*, 34: 487–516.
- Ozcelik, H.**  
2013 "An empirical analysis of surface acting in intra-organizational relationships." *Journal of Organizational Behavior*, 34: 291–309.
- Parkinson, B.**  
"Facial movements express emotions or communicate motives?" *Personality and Social Psychology Review*, 9: 278–311.
- Parkinson, B., A. H. Fischer, and A. S. Manstead**  
2005 *Emotion in Social Relations*. New York: Psychology Press.
- Rafaeli, A., and R. I. Sutton**  
1987 "Expression of emotion as part of the work role." *Academy of Management Review*, 12: 23–37.
- Rafaeli, A., and I. Vilnai-Yavetz**  
2004 "Emotion as a connection of physical artifacts and organizations." *Organization Science*, 15: 671–686.
- Reis, H. R., and A. Aron**  
2008 "Love: What is it, why does it matter, and how does it operate?" *Perspectives on Psychological Science*, 3: 80–86.
- Repetti, R. K.**  
1987 "Individual and common components of the social environment at work and psychological well-being." *Journal of Personality and Social Psychology*, 52: 710–720.
- Rigby, J., S. Payne, and K. Froggatt**  
2010 "What evidence is there about the specific environmental needs of older people who are near the end of life and are cared for in hospices or similar institutions? A literature review." *Palliative Medicine*, 24: 268–285.
- Robinson, M. D., E. R. Watkins, and E. Harmon-Jones**  
2013 *Handbook of Cognition and Emotion*. New York: Guilford Press.
- Roethlisberger, F. J., and W. J. Dickson**  
1939 *Management and the Worker*. Cambridge, MA: Harvard University Press.
- Rosaldo, M. Z.**  
1984 "Toward an anthropology of self and feeling." In R. A. Shweder and R. A. LeVine (eds.), *Culture Theory: Essays on Mind, Self, and Emotion*: 137–157. Cambridge: Cambridge University Press.
- Rousseau, D. M.**  
1990 "Assessing organizational culture: The case for multiple methods." In B. Schneider (ed.), *Organizational Climate and Culture*: 153–192. San Francisco: Jossey-Bass.

- Ruckdeschel, K., and K. Van Haitsma**  
2004 "A workshop for nursing home staff: Recognizing and responding to their own and residents' emotions." *Gerontology and Geriatrics Education*, 24: 39–51.
- Rynes, S. L., J. M. Bartunek, J. E. Dutton, and J. D. Margolis**  
2012 "Care and compassion through an organizational lens: Opening up new possibilities." *Academy of Management Review*, 37: 503–523.
- Sackmann, S. A.**  
1992 "Culture and subcultures: An analysis of organizational knowledge." *Administrative Science Quarterly*, 37: 140–161.
- Schein, E. H.**  
1990 "Organizational culture." *American Psychologist*, 45: 109–119.
- Schein, E. H.**  
1991 "What is culture?" In P. J. Frost (ed.), *Reframing Organizational Culture*: 243–253. Newbury Park, CA: Sage.
- Schein, E. H.**  
2010 *Organizational Culture and Leadership*, 4th ed. San Francisco: Jossey-Bass.
- Scott, R. A., L. H. Aiken, D. Mechanic, and J. Moravcsik**  
1995 "Organizational aspects of caring." *Milbank Quarterly*, 73: 77–95.
- Seeman, T. E., B. H. Singer, C. D. Ryff, G. D. Love, and L. Levy-Storms**  
2002 "Social relationships, gender, and allostatic load across two age cohorts." *Psychosomatic Medicine*, 64: 395–406.
- Seeman, T. E., and S. L. Syme**  
1987 "Social networks and coronary artery disease: A comparison of the structure and function of social relations as predictors of disease." *Psychosomatic Medicine*, 49: 341–354.
- Shaver, P. R., J. Schwartz, D. Kirson, and C. O'Connor**  
1987 "Emotion knowledge: Further exploration of a prototype approach." *Journal of Personal Social Psychology*, 52: 1061–1086.
- Sherif, M.**  
1936 *The Psychology of Social Norms*. Oxford: Harper.
- Shuler, S., and B. D. Sypher**  
2000 "Seeking emotional labor: When managing the heart enhances the work experience." *Management Communication Quarterly*, 14: 50–89.
- Siehl, C., and J. Martin**  
1990 "Organizational culture: A key to financial performance?" In B. Schneider (ed.), *Organizational Climate and Culture*: 241–281. San Francisco: Jossey-Bass.
- Snijders, T. A., and R. J. Bosker**  
2011 *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling*. Thousand Oaks, CA: Sage.
- Solomon, R. C.**  
1998 "The moral psychology of business: Care and compassion in the corporation." *Business Ethics Quarterly*, 8: 515–533.
- Spreitzer, G. M.**  
1996 "Social structural characteristics of psychological empowerment." *Academy of Management Journal*, 39: 483–504.
- Staw, B. M., N. E. Bell, and J. A. Clausen**  
1986 "The dispositional approach to job attitudes: A lifetime longitudinal test." *Administrative Science Quarterly*, 31: 56–77.
- Sternberg, R. J.**  
1988 "Triangulating love." In R. J. Sternberg and M. L. Barnes (eds.), *The Psychology of Love*: 119–138. New Haven, CT: Yale University Press.
- Stone, R. I.**  
2000 "Long-term care for the disabled elderly: Current policy, emerging trends and implications for the 21st century." *Milbank Quarterly*, 78: electronic report.

**Strack, F., L. L. Martin, and S. Stepper**

1988 "Inhibiting and facilitating conditions of the human smile: A nonobtrusive test of the facial feedback hypothesis." *Journal of Personality and Social Psychology*, 54: 768–777.

**Strati, A.**

2005 "Organizational artifacts and the aesthetic approach." In A. Rafaeli and M. G. Pratt (eds.), *Artifacts and Organizations: Beyond Mere Symbolism*: 23–41. Mahwah, NJ: Erlbaum.

**Teresi, J. A., R. Abrams, D. Holmes, M. Ramirez, and J. P. Emicke**

2001 "Prevalence of depression and depression recognition in nursing homes." *Social Psychiatry and Psychiatric Epidemiology*, 36: 613–620.

**Tetz, K. B., P. G. Archbold, B. J. Stewart, D. Messecar, M. C. Hornbrook, and S. A. Lucas**

2006 "How frail elders evaluate their caregiver's enactment: A scale to measure affection, skill, and attentiveness." *Journal of Family Nursing*, 12: 251–275.

**Tracy, J. L., and R. W. Robins**

2008 "The automaticity of emotion recognition." *Emotion*, 8: 81–95.

**Trice, H. M., and J. M. Beyer**

1993 *The Cultures of Work Organizations*. Englewood Cliffs, NJ: Prentice Hall.

**Tugade, M. M., and B. L. Fredrickson**

2004 "Resilient individuals use positive emotions to bounce back from negative emotional experiences." *Journal of Personality and Social Psychology*, 86: 320–333.

**Turnbull, C.**

1972 *The Mountain People*. New York: Simon and Schuster.

**Turner, V. W.**

1967 *The Forest of Symbols: Aspects of Ndembu Ritual*. Ithaca, NY: Cornell University Press.

**U.S. Bureau of Labor Statistics**

2011 *American Time Use Survey*. Washington, DC: U.S. Bureau of Labor Statistics.

**van IJzendoorn, M. H., and M. J. Bakermans-Kranenburg**

2012 "A sniff of trust: Meta-analysis of the effects of intranasal oxytocin administration on face recognition, trust to in-group, and trust to out-group." *Psychoneuroendocrinology*, 37: 438–443.

**Van Maanen, J., and G. Kunda**

1989 "Real feelings: Emotional expression and organizational culture." In B. M. Staw and L. L. Cummings (eds.), *Research in Organizational Behavior*, 11: 43–102. Greenwich, CT: JAI Press.

**Von Dietze, E., and A. Org**

2000 "Compassionate care: A moral dimension of nursing." *Nursing Inquiry*, 7: 166–174.

**Wageman, R.**

1995 "Interdependence and group effectiveness." *Administrative Science Quarterly*, 40: 145–181.

**Walster, E., and G. W. Walster**

1978 *A New Look at Love*. Reading, MA: Addison-Wesley.

**Watson, D., L. A. Clark, C. W. McIntyre, and S. Hamaker**

1992 "Affect, personality, and social activity." *Journal of Personality and Social Psychology*, 43: 1011–1025.

**Watson, D., L. A. Clark, and A. Tellegen**

1988 "Development and validation of brief measures of positive and negative affect: The PANAS scales." *Journal of Personality and Social Psychology*, 54: 1063–1070.

**Watson, J. B.**

1930 *Behaviorism*, rev. ed. Chicago: University of Chicago Press.



Weng, H. Y., A. S. Fox, A. J. Shackman, D. E. Stodola, J. Z. K. Caldwell, M. C. Olson, G. M. Rogers, and R. J. Davidson

2013 "Affect, personality, and social activity." *Psychological Science*, 43: 1011–1025.

White, L. A.

1949 *The Science of Culture: A Study of Man and Civilization*. Oxford: Farrar, Straus.

### Authors' Biographies

**Sigal G. Barsade** is the Joseph Frank Bernstein Professor of Management at the Wharton School, University of Pennsylvania, 2000 Steinberg-Dietrich Hall, Philadelphia, PA 19104 (e-mail: Barsade@wharton.upenn.edu). Her research primarily focuses on workplace affect, including emotional contagion, affective diversity, and the influence of affect on decision making and work performance. Her recent research is focused on emotional culture, loneliness at work, and affective interventions. She received her Ph.D. in organizational behavior and industrial relations from the Haas School of Business, University of California, Berkeley.

**Olivia (Mandy) A. O'Neill** is an assistant professor of management at the George Mason University School of Business, 4400 University Drive MS 5F5, Fairfax, VA 22030 (e-mail: ooneill@gmu.edu). Her research examines how conceptualizing organizational culture as a function of emotions and gender enhances our understanding of the link between organizational culture and employee outcomes relating to well-being, career success, health, interpersonal relations, decision making, and performance. She received her Ph.D. in organizational behavior from the Stanford Graduate School of Business.