## THE ROLE OF HOPE AND PRIDE IN

## ORGANIZATIONAL CITIZENSHIP BEHAVIOR AND JOB PERFORMANCE

by

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#### ABSTRACT OF THE THESIS

The Role of Hope and Pride in Organizational Citizenship Behavior and Job Performance by JAMES LYMAN FLOMAN

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The positive psychology movement has swept across several domains of inquiry producing rich insights and applications. The notion of building on individuals' strengths and promoting adaptive social behaviors has recently extended its reach into applied social psychology. One of the most studied topics in this subfield is organizational citizenship behavior (OCB). OCB occurs when an employee goes above and beyond the call of duty to help a coworker, without an extrinsic reward. Given OCB's positive association with individual and organizational performance, there is intense interest in increasing these behaviors. General positive affect, above and beyond job satisfaction, is the most significant and robust predictor of citizenship behavior, and is also a major predictor of job performance. However, in light of mounting evidence on the discreteness of positive emotions – specifically on the emotions of hope and pride – there

is reason to believe that not all positive emotions will equally motivate citizenship behavior or work performance. The present research tested the hypotheses that: (1) a laboratory induction of hope and pride would differentially increase intentions to engage in organizational volunteering (OCBs) compared to each other and to a control condition; and (2) hope and pride would differentially increase task performance (a proxy for job performance) compared to one another and to a control. Results indicate that hope and pride both significantly enhanced OCBs compared to the control condition, and that hope produced greater OCBs than pride. Although the latter difference was not statistically significant, this was likely due to insufficient statistical power. Hope and pride had no influence on performance. The difficulty of the task likely generated a degree of performance anxiety that reduced any positive emotion effects. Multiple regression analyses also revealed that joy was the most significant positive predictor, and pride the most significant negative predictor of OCBs; whereas pride was the most significant positive predictor, and joy the most significant negative predictor of performance. The distinct patterns of findings for hope, pride, and joy illuminated by the present study, support discrete emotion theories of positive emotions and may inform OCBenhancement programs. Research limitations and future directions are considered.

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#### INTRODUCTION

"The workplace is increasingly becoming an environment where survival, let alone success, necessitates higher-than-average performance...a sustainable edge can no longer just be achieved by raising entry barriers, or by trying to fix weaknesses...rather, success can be attained by fostering what is being done right and building on employee strengths" (Luthans & Youseff, 2007, p. 322).

The above statement reflects an important trend emerging in many fields in psychology at present. This trend, often referred to as the positive psychology movement, is effectively shifting the focus of many disciplines in psychology away from mental illness and maladjusted behavior toward constructive psychological capacities and human excellence (Fredrickson, 1998, 2001, Seligman & Csikzentmihalyi 2000; Sheldon & King, 2001). In light of this zeitgeist, psychologists have begun to recognize the value of extending the positive psychology perspective into their subdisciplines (Luthans & Youseff, 2007). One such field that is actively pursuing this new scientific approach is applied social psychology. In a business environment where competition is global and technological innovations have created a world that is 'flat' (Friedman, 2005), opportunities to maximize human resource capabilities through augmenting worker strengths are of intense interest to scholars and are of potentially tremendous value to organizational managers.

Among worker strengths that have been identified in recent years as a particularly significant source of untapped human resource potential is *organizational citizenship behavior*, or going above and beyond the call of duty at work (OCB; Organ, Podsakoff, & MacKenzie, 2005). As a result, OCB is one of the most studied positive psychology constructs to date (Luthans & Youseff, 2007). But, why is OCB perceived as a possible goldmine for organizational scholars and practitioners? Do organizations and/or their

employees receive tangible benefits from extra-role work behavior? Indeed, prior research has found that OCB is positively associated with significant increases in job performance and career advancement on the individual level (Van Scotter, Motowidlo, & Cross, 2000) and with organizational effectiveness and productivity on the institutional level (Podsakoff & MacKenzie, 1994, 1997). OCB, thus, appears to be of considerable worth to entities looking to improve performance and gain a competitive edge in the workplace.

This research on OCB has ignited interest in designing management strategies that tap the potential of this valuable workplace resource. However, before management programs can be developed and optimized to promote OCB, a scientific understanding of the factors that promote OCB is required. This then leads to the questions of interest to the present study: what triggers and enhances organizational citizenship behavior, and how is this similar or different from what drives and augments formal job performance?

## Organizational Citizenship Behavior: Definition, Background, and Significance

What is organizational citizenship behavior? OCB is defined as "behavior that goes beyond task performance and technical proficiency, instead supporting the organizational, social, and psychological context that serves as the critical catalyst for tasks to be accomplished" (Borman, 2004, p. 238). In other words, OCB takes place when a worker engages in behavior that is not explicitly part of his or her job but that is generally beneficial to the organization. For instance, when a seasoned employee teaches a new employee shortcuts on the company's computer system, even though providing training is not a formal part of his job, he is engaging in OCB. Or, when an employee gives up part of her lunch break to help a coworker meet an important deadline, this is also an instance of OCB. The concept of OCB is to be contrasted with *job performance* or

in-role work behavior (Borman & Motowidlo, 1993). Job performance or in-role work behavior consists of behaviors that fall directly in line with the recognized duties comprising a worker's job description. For example, when architects design blueprints for new buildings, a task that is central to the function of their job, they are demonstrating job performance.

Traditionally, OCB has been broken into two dimensions (Organ & Ryan, 1995; Smith, Organ, & Near, 1983): altruism and general compliance (also known as conscientiousness; see Organ, 1988). The altruism dimension is defined as acting in ways to assist other employees with their work, such as taking on another client's file to ease the burden on an overworked coworker (even though there is no formal obligation to do so). The general compliance dimension is typically defined as acting in accordance with organizational rules and policies, and showing commitment to the organization's goals. An example of this might be attending all company events, both those that are required and those that are non-obligatory. Other researchers have suggested that a number of additional components should be included in the OCB construct, such as sportsmanship and civic virtue (see Organ, 1988; Knovosky & Organ, 1996). However, a meta-analysis of 122 OCB studies suggests that more recent multidimensional accounts of OCB are no better at predicting key organizational outcomes associated with OCB (e.g., job satisfaction) than the original two-dimensional model (i.e., altruism and general compliance) developed by Smith et al. (1983; Lepine, Erez, & Johnson, 2002). It is also important to note that it is not entirely clear if OCBs are always "altruistic" or "prosocial" in nature, even among behaviors that fall under the altruism dimension. Given that various, often concealed motivations may drive workers to aid others without reward –

some help out of a genuine concern for a coworker (e.g., "Sarah could really use my assistance"), and some help out of pure self-interest (e.g., "the more I help Sarah the closer I get to a raise") – it must be acknowledged that citizenship behavior significantly overlaps, but is *not* synonymous with altruistic/prosocial behavior.

What is the theoretical importance of organizational citizenship behavior? From 1980-1989 only 10 journal articles examined OCB. From 1990-1999 that figure rose to 181 articles. More recently, from 2000-2005, 243 peer-reviewed scientific articles investigated citizenship behavior (Landy & Conte, 2007). Borman (2004) suggests that this marked increase in OCB research is the result of a number of converging factors that have increased its importance in the modern organization, such as the continuing globalization of the workplace, the mounting need for teamwork and cooperation, and the rise of mergers and acquisitions. Bearing this in mind, Landy and Conte (2007) declare that OCB is and will continue to be a construct of great interest and concern to behavioral scientists, managers, and organizations. Additionally, recent research suggests that citizenship behavior is important in organizational functioning across a number of cultures beyond the United States, such as in Mexico (Tierney, Bauer, & Potter, 2002), China (Hui, Lee, & Rousseau, 2004), Australia (Feather & Rauter, 2004), and Holland (Lievens & Anseel, 2004).

What is the practical significance of OCB? Prior research has identified a positive relationship between OCB and both individual and organizational performance.

Specifically, OCB has been found to contribute to individual career success over multi-year periods (Van Scotter, Motowidlo, & Cross, 2000). That is, even though OCB is by definition non-obligatory work, employees are still rewarded over time as a result of

engaging in such behaviors, which in turn helps to advance their careers. Interestingly, the relationship between citizenship behavior and career success remains even when removing traditional job performance (i.e., task performance) from the analysis. Bearing this in mind, Van Scotter et al. (2000) suggest citizenship behavior may account for a significant portion of the variability in global performance assessments that remain when only task performance is examined. Therefore, combining task performance and citizenship behavior in this view might provide a considerably more accurate measure of overall work performance. Indeed, evidence suggests that, independent of task performance, organizational citizenship behavior may account for up to a third of the variance in job performance ratings by supervisors (Motowidlo & Van Scotter, 1994). On the level of the organization, researchers have found that organizational citizenship is related to the quantity and quality of work-group performance (Podsakoff & MacKenzie, 1994, 1997). More specifically, across a number of studies, Podsakoff and MacKenzie (1997) found that 19% of the variance in performance quantity, 18% of the variability in performance quality, 25% of the variance in fiscal efficiency measures, and 38% of variability in customer satisfaction ratings were attributable to OCB. The distinct practical implication of these findings is that OCB, if effectively leveraged, may provide organizations a significant opportunity to enhance employee and organizational performance, and establish or extend a competitive advantage in a globalized world.

### Job Performance: Definition, Background, and Significance

Job performance is defined as, "The proficiency with which job incumbents perform activities that are formally recognized as part of their job" (Borman & Motowidlo, 1993, p. 73). This type of performance is to be contrasted with OCB because

it consists of behavior that is constrained to the definitional roles, responsibilities, and tasks set forth by an organization for a particular employee. Accordingly, it is also at times referred to as in-role work behavior.

Job performance is one of the most studied constructs in applied social psychology. The primary reason for its extensive investigation is that job performance often leads to highly sought-after workplace outcomes. For instance, job performance has been positively associated with: *fringe benefits* (Galbraith & Cummings, 1967; O'Brien, 2003), *promotions and pay* (Booth & Frank, 1999; Fairburn & Malcomson, 2001; Medoff & Abraham, 1980; Zenger, 1992), *job satisfaction* (Harter, Schmidt, & Hayes, 2002; Judge, Thoresen, Bono, & Patton, 2001), *career advancement* ( (Van Scotter, Motowidlo, & Cross, 2000), *organizational effectiveness* (Podsakoff & MacKenzie, 1997), and *worker health and happiness* (both inside and outside of the office; Lyubomirsky, King & Diener, 2005; Wright & Cropanzano, 2000). Importantly, this literature suggests that greater individual job performance may provide workers trying to develop a long-term career and live happier lives, as well as managers looking to optimize organizational effectiveness, an exceptional return on investment.

One of the other main reasons job performance has been so thoroughly studied is because of the differences present in individuals' performance levels. For instance, Campbell, Glasser, and Oswald (1996) found that the difference in productivity between high and low performers in jobs of low difficulty ranged from 2:1 to 4:1, and for more challenging jobs was as great as 10:1. The potential impact of this wide variance in worker performance on the effectiveness of an organization can be substantial.

Furthermore, not only are there pronounced differences *across* individual performance

levels, making the hiring and performance measurement process intensely important, but there are also significant performance fluctuations *within* individuals (Doerr, Mitchell, Freed, Schriesheim, & Zhou, 2004). Although this complicates the work of a manager considerably, the variability within individual performance provides opportunities to develop interventions and training programs that aim to maximize employees' performance potential (Youseff & Luthans, 2007). Therefore, research on job performance may be of significant value not only to academic social psychology, but to functioning organizations as well.

### **Overview: Primary Predictors of OCB and Job Performance**

What is it that drives workers to engage in organizationally constructive behavior that is *not* directly rewarded? After decades of research, the most prominent link drawn between OCB and any other construct has been that between OCB and job satisfaction. Research has indicated a significant and consistently positive association between OCB and job satisfaction (Bateman & Organ, 1983; LePine, Erez, & Johnson, 2002; Organ & Ryan, 1995; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). The strength of this relationship has been found to yield correlations as high as r = .3, although there is some variability (Podsakoff et al., 2000). In some studies this relationship was found to be greater than the relationship between OCB and job performance (e.g., Bateman & Organ, 1983; Organ & Ryan, 1995). In general, most of the data from this research come from cross-sectional studies, which do not allow determinations of causality. Therefore, although this association appears robust, it is unclear whether increased OCB predicts greater job satisfaction, or greater job satisfaction predicts increased OCB (and should

perhaps be a target of OCB-enhancement interventions) – or if some third variable accounts for both.

Interestingly, it also should be noted that gender may play a role in the occurrence of OCB. It has been demonstrated that in some contexts women are more likely than men to engage in helpful or prosocial behavior (e.g., Anderson, 1993; Andreoni & Vesterlund, 2001; Belansky & Boggiano, 1994), such as volunteering (Wilson, 2000; Wuthnow, 1995). Furthermore, a few studies have found, incidentally, that female though not male gender is positively associated with citizenship behavior (where female gender is coded as 0 and male gender as 1, and a correlation is run with OCB; see Morris, 1994; Van Dyne & Ang, 1998). This may be the case because different OCB-related expectations have been documented in the workplace, such that both male and female workers expect women to behave more helpfully, without explicit reward, than men (Heilman & Chen, 2005).

What predicts job performance? Prior research has consistently demonstrated that the single most effective predictor of job performance is a person's general intelligence, or general mental ability (r = .50; GMA; Schmidt & Hunter, 2004). More specifically, Schmidt and Hunter (2004) found GMA to be the best indicator of occupational level attained and work performance, both in training and on the job, across all position types (e.g., cook, chemist, lawyer, auto mechanic, etc.). Furthermore, their research indicates that GMA accounts for more of the variance in workplace performance than job-specific abilities, personality traits, and even job experience, regardless of the complexity of the work. Past research has also found the personality trait conscientiousness to be a consistent predictor of job performance (r = .31; Mount & Barrick, 1995). Additionally,

in work settings where cooperation and teamwork are critical to performance, agreeableness and extraversion have been found to be predictors of performance outcomes (e.g., Barrick, Stewart, Neubert, & Mount, 1998). Nevertheless, because GMA and personality have been found to be remarkably stable across the lifespan (Mayer, 2007; Schmidt & Hunter, 2004), neither seems to be a useful target for job performance-enhancement programs.

However, beyond these predictors, positive affect, as a general emotional state, has been found to be positively associated with organizational citizenship behavior (George & Brief, 1992; Ilies, Scott, & Judge, 2006; Williams & Shiaw, 1999), and job performance (George, 1991; George, 1995; Staw & Barsade, 1993; Staw, Sutton, & Pelled, 1994). Importantly, unlike GMA and personality, state positive affect varies significantly within and between individuals over time (e.g., Fredrickson & Losada, 2005; Lyubomirsky et al., 2005). *Thus, state positive affect may be a prime target for evidence-based interventions to increase OCB and improve job performance*. Because the positive affect-OCB and positive affect-performance associations appear so promising for practical application, they are of central importance to the present study. In the next section, literature on these relationships is reviewed.

Review: General Positive Affect and its Associations with OCB and Job Performance

#### General Positive Affect and OCB.

George and Brief (1992) performed the first major literature review on "organizational spontaneity," a construct notably similar to OCB, and its relationship with

positive affect. They asserted that positive affect was likely an "important determinant" of citizenship behavior based on three converging lines of research (p. 324). One of the two major dimensions comprising OCB is *altruism*, and the developers of the OCB construct, Smith et al. (1983), stated that, "much of what we call citizenship behavior has an altruistic character" (p. 654). #8 As mentioned, the degree to which OCBs are always and strictly of an "altruistic" or "prosocial" nature may be somewhat questionable, given that the stakes are high and many vested (potentially selfish) interests exist within organizations (e.g., some workers may engage in OCBs only because they think it will help them gain a promotion). Nevertheless, bearing the avowed "altruistic character" of OCB in mind, as defined by its creators, an overwhelming body of research indicates that positive feelings promote and prolong altruistic behavior both inside and outside of the workplace (Aderman, 1972; George, 1991; Isen, Clark, & Swartz, 1976; Isen & Levin, 1972; Rosenhan, Salovey, & Hargis, 1981). For example, Isen et al. (1976) induced positive affect in participants by giving them free stationary "prior" to the start of the study, and then gave participants a chance to help a confederate having trouble with the telephone. Their results indicated a significant difference between the control group and the positive affect group, such that those in the positive affect condition lent more effort to helping the confederate than the individuals in the control condition. Citing this line of classic social psychology research, George and Brief (1992) posit that because positive affect increases the likelihood that individuals will offer genuine assistance to one

George & Brief (1992) made a distinction between organizational citizenship and organizational spontaneity. However, LePine, Erez, and Johnson (2002) note that this theoretical distinction is no longer supported by current empirical research on OCB. Therefore, any future reference to George & Brief.'s (1992) review will refer to organizational spontaneity as OCB.

another, it may, in effect, boost OCBs, which are actions that are characterized by extending oneself to assist others without expecting an award in return.

In their review, George and Brief (1992) also discuss research that found people experiencing positive affect are more likely to perceive and interpret the behaviors of others in a favorable light than those experiencing negative affect (e.g., Forgas & Bower; 1987; Forgas, Bower, & Krantz, 1984). So, if an employee is in a positive affective state, then that person may be more apt to construe the actions of a coworker as being helpful or considerate, and thus be more likely to engage in helpful or considerate behaviors themselves. This may trigger a positive feedback loop of altruistic activity, increasing OCB between multiple employees in an attempt to sustain pleasant feelings (i.e., affect maintenance; Clark & Isen, 1982). Furthermore, even if individuals are experiencing positive emotions as the result of a stimulus outside of work, people have a tendency to non-consciously misattribute the origin of their emotions to proximal causes and therefore, may perceive people around them (e.g. other employees), or an external force (e.g. their company) as the source of their positive feelings (Schwarz & Clore, 1983, 1988 2003). As a result, positive affect may increase employees' willingness to go beyond the scope of their job duties to assist their coworkers, and/or to act in ways that benefit the organization that employs them.

Lastly, George and Brief (1992) examine literature on the phenomenon of affect-congruency that has found when people are experiencing positive feelings they are more likely to recognize material and retrieve memories that are positively valenced than when they are experiencing negative affect (e.g., Bower, 1981; Isen, 1984, 1987; Isen, Shalker, Clark, & Karp, 1978; Singer & Salovey, 1988). For instance, in a classic study Bower

(1981) used hypnosis to induce happy and sad affect in participants. Then, he tested them on their perceptual and recall abilities by having them remember word lists, information in a personal diary, and childhood experiences. What he found was that with all three content sources, participants perceived more saliently and recollected more readily items that were congruent with their affective state during recall; happy participants recalled significantly more positively valenced memories and sad participants remembered significantly more negatively valenced memories. What this means is that a worker experiencing positive emotions may be more likely to perceive details and recollect memories of positive interactions or likable features of other coworkers. Once this type of priming is set in motion, research suggests it may increase the desire for social engagement and prosocial behavior (Carlson, Charlin, & Miller, 1988; Isen et al., 1978). Therefore, George and Brief (1992) maintain that positive affect may also augment participation in OCB by facilitating the accessibility of positively valenced thought content that makes altruistic behavior more likely.

A recent study and literature review on the potential relationship between positive affect and organizational citizenship behavior has found general support for George and Brief's (1992) theory. What Ilies, Scott, and Judge (2006) found was that positive affect not only formed a significant positive association with citizenship behavior (r = .61, p < .01), but that this association was more robust than for personality traits typically associated with OCB (e.g., agreeableness; r = .36, p < .01; Borman, Penner, Allen, & Motowildo, 2001). Interestingly, the positive affect-OCB relationship was also more robust than the job satisfaction-OCB relationship (r = .52, p < .01)! This is particularly notable because since its inception, the greatest effect sizes detected in OCB research

have generally been between OCB and job satisfaction (e.g., Bateman & Organ, 1983; Organ & Ryan, 1995; Smith et al., 1983).

Although Ilies et al.'s (2006) results lay the empirical groundwork for understanding how positive affect relates to OCB, their study has limitations to consider. Because the sample was derived from internet surveying, self-report measures were the only available option for operationalizing positive affect and OCB. This may have produced exaggerated findings due to social desirability bias, as well as participants' difficulties engaging in introspection (e.g., Orne, 1962; Rosenberg, 1969; Tedeschi, Schlenker, & Bonoma, 1971; Weber & Cook, 1972). Ilies et al. (2006) were also unable to determine the causal direction between positive affect and OCB because they used a non-experimental design. Therefore, it is important to note that it remains unknown if positive affect increases OCB, OCB increase positive affect, or something else leads both positive affect and OCB to increase. Additionally, Ilies et al. (2006) measured positive affect with the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegan, 1988). Although the PANAS has been validated and widely cited, scholars have noted that it does not measure low arousing or moderately arousing emotions (see Lambert, Fincham, Stillman, & Dean, 2008). It has also been found to focus significantly more on the activation (high vs. low arousal) than the evaluation (good vs. bad) dimension of emotion. Consequently, the PANAS may be oversensitive to high activity and not sensitive enough to low activity emotions, while failing as well to adequately capture a fundamental element of affect: valence. This distinction is important because Russell and Mehrabian (1977) found activation and evaluation, as well as potency (strong vs. weak) to each be important factors in the accurate measurement of emotion (see also Osgood, 1952, 1969).

In a related study, Williams and Shiaw (1999) asked 139 full-time employees from a range of occupations to respond to a questionnaire measuring state positive affect and two types of OCB (i.e., OCB history, or past OCB behavior, and OCB intentions, or one's willingness to engage in OCB in the future). Their results indicated a significant and positive association between self-reported state positive affect and OCB intentions (r = .20, p > .05), but not OCB history. In addition to supporting an important methodological distinction between measures of past and future OCB, these results further substantiate George and Brief's (1992) theoretical formulations, as well as Ilies et al.'s (2006) findings that positive affect is positively associated with OCB. However, is this a direct relationship, or is it mediated by another factor each variable shares (e.g., job satisfaction, or agreeableness)? Unfortunately, as with Ilies et al. (2006), positive affect was measured rather than manipulated, and without a randomized experimental design a direct causal connection between the constructs cannot be determined. Also, Williams and Shiaw (1999) measured positive affect with the Faces Scale (Kunin, 1955), which was designed to measure job satisfaction, rather than to capture the specific features of positive emotion expressions (Dunham & Herman, 1975; Moorman, 1993). Furthermore, this measure is rarely employed in current research on positive affect because other measures, such as the PANAS, have received considerably more psychometric validation. Lastly, this study utilized a unique sample, i.e., 94% of the participants were of Chinese origin. This sample does not allow for the generalization of these findings to non-Chinese and non-Eastern populations.

In sum, prior research indicates a consistent and direct association between positive affect and OCB. Reasons for this association that have been suggested are that positive affect increases the tendency for individuals to engage in helpful behaviors generally, triggers and magnifies halo effects, and heightens positive perceptions and judgments of others (largely due to affect-congruency). In the next section, research on the association between positive affect and job performance is reviewed.

#### General Positive Affect and Job Performance.

Positive affect may relate to job performance through both direct and indirect channels. One example is that positive affect has been directly linked to increases in creativity and innovative problem solving in workplace settings, including negotiations and cooperative bargaining (Carnevale & Isen, 1986; Isen, 1999; Isen, Johnson, Mertz, & Robinson, 1985). Accordingly, positive affect may be particularly beneficial to performance in work environments where creative thinking, cognitive flexibility, and compromise are of unique importance.

Referring back to the altruism literature, if it is the case that positive feelings increase helping behaviors (e.g., Isen et al., 1976) and such behaviors have been linked to both increased organizational effectiveness (Podsakoff et al., 1997), and individual performance (Smith et al., 1983; Van Scotter et al., 2000), then perhaps positive affect augments job performance by strengthening important interpersonal relationships with coworkers. In support of this notion, Staw, Sutton & Pelled (1994) found employees who displayed positive affect often received greater social support from both coworkers and supervisors, received higher managerial performance ratings, and were awarded more generous pay raises 18 months later than workers who displayed positive affect less

frequently. The researchers concluded that positive affect is related to performance increases because it leads to greater prosociality in the employee, improved interpersonal influence, and magnified halo effects. What is particularly interesting about these findings is that it seems positive affect may improve job performance in ways similar to OCB, that is, by promoting and extending altruistic feedback loops between workers.

Although Staw et al. (1994) operationalized positive affect with four separate measures, i.e., self-report, supervisor ratings, and regular and expert interviewer observations of smiles, laughs, and comedic comments produced by employees, affect was not experimentally manipulated. This limits the scope of their findings. Without a direct manipulation of participants' affective states, it is difficult to determine the causal impact emotion had on performance. Also, the operationalization of affect was designed to measure general positive affect only, not particular positive emotions. This means parsing apart the potentially unique effects of certain positive emotions on job performance, beyond hedonic tone, isnot possible with these findings. However, Staw et al. (1994) make an explicit call for future research to address this issue, stating "it may be important to assess specific emotions that occur at work such as *pride*, joy, *hope* and excitement [emphasis added]" (p. 65).

Heeding their call, the present research focuses on the role of particular positive emotions in both job performance and OCB. Accordingly, the next section reviews discrete emotion theory and preliminary research on distinct positive emotions, with a focus on hope and pride.

#### **Background on Discrete Emotion Theory**

There has been and continues to be considerable debate about whether "discrete emotions" exist, and if so, how many emotions there are and what emotions should make it into the pantheon of human emotions (Barrett, 2006; Barrett et al., 2007; Ekman, 1992a, 1992b; Ekman & Davidson, 1994; Oatley, Keltner, & Jenkins, 2006; Plutchik, 2003; Russell, 2003). Emotions are generally defined (from a functionalist perspective) as modes of operation that align physiological, cognitive, motivational, behavioral, and phenomenological responses in patterns that increase organisms' ability to adapt to challenges and situations in their environment (Nesse, 1990). What is meant by a "discrete emotion" is an operationally distinct affective state that has unique causes and effects from other emotions, although certain elements among discrete emotions may overlap.

In the emotion debate there are generally three primary positions. First, some emotion theorists contend that there are only two major affective states, positive affect and negative affect, and that all other emotions posited to exist, such as anger and pride, are simply linguistic or cultural constructions rather than distinct affective experiences (Barrett, 2006, 2009; Tellegen, Watson, & Clark, 1999). Second, other researchers hold that there are at least four basic emotions: fear, anger, sorrow, and joy/happiness (Nesse & Ellsworth, 2009). Third, another camp of emotion scientists assert there are a number of discrete emotions beyond the basic four, some of which are, as reviewed by Roseman, Swartz, Newman, & Nichols (2010): *contempt* (Ekman, 1992b; Izard, 1991), *shame and guilt* (Izard, 1991), *hope* (Averill, 1991; Roseman et al., 2010; Snyder, 2002), *surprise* (Plutchik, 2003), *interest* (Izard, 1991; Panksepp, 1998), and *pride* (Lewis, 2008;

Mascolo & Fischer, 1995; Roseman et al., 2010; Tracy & Robins, 2004). Nesse and Ellsworth (2009) note the greatest level of agreement that exists among theorists at present is the second view, that is, that there are four basic emotions: fear, anger, sorrow, and joy/happiness. However, they as well as others (Roseman et al., 2010) also point out that there is *not* a consensus whatsoever and the scientific dialogue is still open and energetically ongoing, especially in regard to positive emotions.

#### The Theoretical and Practical Significance of Discrete Positive Emotions

Research examining the potential distinctive characteristics of positive emotions has been limited in comparison to similar work on negative emotions (Fredrickson & Cohn, 2008). Currently, the field is growing quickly but there are still many more questions than there are answers (Fredrickson & Cohn, 2008). Thus, research on the subject may be of theoretical importance to the human emotions literature by providing evidence about whether there are discrete positive emotions, as opposed to just general positive affect, as well as clarifying which positive emotions may be discrete and elucidating their distinguishing characteristics. This research can also been seen as interrelating the area of discrete emotions research with the field of positive psychology. Positive psychology is a burgeoning field that has resulted in fruitful areas of research and is beginning to offer a more balanced understanding of human psychology (Fredrickson, 2003; Seligman, Steen, Park, & Peterson, 2005).

To appreciate the practical importance of studying discrete positive emotions, it is useful to look at a positive emotion that has been explored in some depth and is of particular interest to the present study. *Hope* has been proposed as a distinct positive emotion (Averill, Catlin, & Chon, 1990; Roseman, 1984), and has been noted as a critical

feature of a person's overall motivation and consequent success in achieving many major goals (Snyder, 2002). For example, Snyder et al. (1997) found that hope was linked to higher scores on achievement tests for elementary school-aged children. Snyder et al. (1991) found that "high-hopers," or those with significant self-reported levels of hope, had greater high school grade point averages. Chang (1998) found the same result with college academic achievement. In terms of physical performance, Curry, Snyder, Cook, Ruby, & Rehm (1997) found that Division I track athletes who rated themselves high on a hope measure performed at significantly better than athletes who scored lower on the measure. Remarkably, this finding held even when each runner's athletic ability was accounted for statistically.

Similarly, according to a review of hope research by Snyder (2002), the impact of hope on a person's physical health shows that those who rated high on hope scales were more likely to engage in physical exercise, be more knowledgeable about health behavior risks, such as cancer, and participate in less risky sexual acts. In the realm of psychological health, persons in psychiatric inpatient care units as well as healthy college undergraduates who reported higher levels of hope, showed more adaptive composite adjustment scores on the Minnesota Multiphasic Personality Inventory (MMPI). Finally, Curry et al. (1997) and Snyder, Cheavens, and Michael (1999) found that hope increases self-predictions of one's own success beyond self-esteem in a variety of future endeavors. Taken together, this literature suggests hope is an emotion that may provide unique benefits to many people in a variety of situations who frequently experience it.

However, this research only uses self-report measures of hope, rather than experimental manipulations. Therefore, it is not entirely clear if people who perform well

and who are well-adjusted are this way because they are hopeful, or if people are hopeful because they perform well in many areas of life and are well-adjusted. Furthermore, there appears to be no research at present on how hope may *differentially influence* performance in various domains (e.g., work, school), or socially adaptive functioning (e.g., altruistic or citizenship behavior), compared to other positive emotions (e.g., pride). Overall, causal conclusions on the specific effects of hope on human behavior are limited.

Another proposed discrete positive emotion, *pride* (Roseman, 1984, Tracy & Robins, 2004), is worthy of study because it may be distinct from other positive emotions in a way that shame and guilt are distinct from other negative emotions; it is a "selfconscious emotion" (Lewis, 2008). A self-conscious emotion is one that is characteristically felt toward the self rather than an object, event, or other person. Because the cognitive appraisals that elicit pride are typically self-attributed, the presence or absence of pride may be more likely to have a significant influence on a person's selfesteem and feelings of self-worth than more object-focused emotions (e.g., hope). Further, attempts at self-improvement may be significantly driven by a desire to experience feelings of pride (Tracy & Robins, 2004). This research indicates that pride may be a distinct emotion that also confers unique benefits to individuals who frequently experience it. However, prior investigations of pride primarily utilize self-report measures, rather than experimental inductions of the emotion. Consequently, it is not well understood, for example, whether higher self-esteem leads to increased feelings of pride, or if heightened levels of pride lead to higher self-esteem. Moreover, there seems to be no research on how pride may differentially influence performance in separate domains (e.g., work, school) or adaptive social behavior (e.g., altruistic action), compared to other

positive emotions (e.g., hope). Is this simply because of a lack of research, or might this be the case because positive emotions, such as hope and pride, are in fact not sufficiently differentiated from one another to be classified as "discrete"?

## Evidence on the Discreteness of Positive Emotions: The Cases of Hope and Pride

Before delving into the evidence suggesting that hope and pride may be discrete positive emotions, it is first important to come to a reasonable, although not exhaustive, definition of each. Hope is defined by Snyder, Irving, and Anderson (1991) as "a positive motivational state that is based on an interactively derived sense of successful (1) agency (goal-directed energy) and (2) pathways (planning to meet goals)" (p. 287). According to Lewis (2008), pride is an "experience of joy over an action, thought, or feeling well done...[where] the focus of pleasure is specific and related to a particular behavior, and the self and object of the feelings are separated" (p. 749).

Roseman et al. (2010) found that of six proposed positive emotions studied (i.e., hope, pride, joy, affection, relief, and surprise), all but surprise were as uniquely differentiated from one another as discrete negative emotions have been found to be (e.g., fear, anger, sadness). The emotion researchers also found that of the distinguished positive emotions, each was largely differentiated by novel phenomenology, behavior (action or action tendencies), and/or goals. Specifically, the thought that was found to be characteristic of hope was a strong sense of optimism about future events. In addition, qualitative data also suggested that the phenomenology of hope may be characterized by feelings of eagerness, as well as feelings of focus (typically towards objects of hope). A subsequent study yielded quantitative evidence for feeling focused and feeling eagerness as both characteristic of the phenomenology of hope (more than other positive emotions;

Roseman, Sobrado, Sulik, & Jose, 2009). In the same study, evidence also indicated that hope was differentiated from the other proposed positive emotions by the action tendency to fantasize, and by the actions of waiting and anticipating.

Pride was found to be distinguished from the other five positive emotions by phenomenology, goals, and an action and action tendency (Roseman et al., 2010). Pride was associated with appraisals of having accomplished something, the tendency to hold one's head up high, and self-assertion, and the goals of exhibiting the self and seeking recognition. This is similar to Lewis' (2008) notion that the experience of pride is localized to a certain action or actions that are the source of prideful feelings. Extending beyond this conceptualization of the emotion, Roseman et al. (2010) found pride to be characterized by thoughts about one's general praise-worthiness as well. Furthermore, Roseman et al. (2010) found that pride's phenomenology was distinct in that participants consistently felt bigger and more powerful when experiencing pride than the other five positive emotions studied. Taken together, these findings support theoretical formulations claiming that the unique function of pride is to signal a level of achievement or status to others through novel expressive components, contributing to fundamental social hierarchy dynamics (Keltner & Haidt, 1999).

Other research has found that pride has an expressive display (e.g., head up, shoulders back, arms raised, and the showing of a slight grin) which distinguishes it from other positive emotions (e.g., joy and excitement) as well as negative emotions (e.g., contempt and boredom; Shiota, Campos, & Keltner, 2003; Tracy & Robbins, 2008).

Additional evidence suggesting pride may be a discrete emotion is that it is consistently recognized by children as young as age four as different from anger, disgust, fear,

happiness, sadness, and surprise (Tracy & Robbins, 2005). This is particularly important because previous researchers have suggested that discrete emotions may really be linguistic or cultural conceptions imposed on what are really just two general affective states, i.e., positive and negative affect (Barrett, 2006, 2009; Russell, 2003). However, at age four, it is less likely that the ability to distinguish pride from other positive emotions is a result of such linguistic or cultural ideations because it can take up to age three until self-attributions begin (Mascolo & Fischer, 1995), and even later in development until complex emotional language surfaces (Bretherton & Beeghly, 1982).

Overall, this research review provides an initial empirical grounding that suggests hope and pride may be discrete positive emotions. However, a number of significant questions remain to be answered. For instance, do differences found in the thoughts, phenomenologies, and goals of positive emotions translate into differential outcomes in actions and action tendencies that have real-world implications (e.g., organizational citizenship behavior and/or job performance)? This is an important research question because a valid test of whether positive emotions are as well differentiated from one another as negative emotions is whether they have unique influences on meaningful social behaviors. The fact that such a foundational question in the discrete emotions and positive psychology literatures remains untested and the answer uncertain, highlights the need for the present research.

Review: Distinct Relations between Hope as well as Pride, and OCB and Job Performance?

This section reviews prior research suggesting that two discrete positive emotions, hope and pride, may exert both a causal and a differential influence on OCB and job performance.

Might Hope and Pride have a Causal Influence on OCB and Job Performance?

Hope and pride are both positive emotions. It may be claimed that they are therefore likely to have a similar relationship to OCB and job performance as general positive affect (e.g. Mayer, Gaschke, Braverman, & Evans, 1992). Prior research indicates that positive affect is positively associated with citizenship behavior (e.g., Ilies, Scott, & Judge, 2006; Williams & Shiaw, 1999) and job performance (e.g., Staw, Sutton, & Pelled, 1994). However, this research is correlational. Is there evidence to suggest that a *causal* relationship might exist between hope as well as pride, and OCB and performance?

Indeed, considerable empirical evidence in which affect is experimentally induced indicates that positive emotions encourage helping and altruistic behaviors (Carlson et al., 1988; Isen et al., 1976; Isen & Levin, 1972; Rosenhan et al., 1981), which are core components of OCB (Smith et al., 1983). Similar effects might therefore be present after inducing the positive emotions of hope and pride, and measuring their effect on citizenship behavior. In regard to job performance, prior research has found that experimentally induced positive affect augments certain skill sets that are valuable to performance in a number of professional settings, such as negotiation and cooperative

bargaining (Carnevale et al., 1986), flexible thinking (Isen & Daubman, 1984), and creative problem solving (Isen et al., 1985; Isen, Daubman & Nowicki, 1987). Taken together, these findings from the affect and cognition literature make plausible the claim that by encouraging altruistic behavior and enhancing certain social-cognitive abilities, hope and pride may both directly *cause* an increase in OCB and job performance.

### Do Hope and Pride Differentially Increase OCB?

Is there reason to believe that hope and pride will enhance OCB at differential levels? There is research that suggests pride may have a significantly greater influence than hope, as well evidence suggesting that hope may have a significantly greater influence than pride on citizenship behavior. A tenable case can be made for both positions.

Beginning with the former perspective, a content analysis of 108 work ethnographies found positive associations between "pride in task completion," and both job satisfaction and OCB (Hodson, 1998, p. 307). Interestingly, taken on its own, pride in task completion was *more* strongly related to OCB than job satisfaction in 10 of out 12 OCBs measured. These findings are consistent with Ilies et al.'s (2006) results indicating the association between OCB and general positive affect are stronger than the association between OCB and job satisfaction. However, Hodson (1998) extended this finding by showing that, in addition to general positive affect, the relationship between pride, a particular positive emotion, and OCB is also more robust than the OCB-satisfaction relationship. This research points to the potential importance of the particular positive emotion pride as a factor in OCB.

However, this study has a few limitations. Across each ethnography, pride was measured by assigning a value, i.e., 1 (rare), 2 (average), 3 (a great deal), according to how often pride was provided as a central reason by workers for complying with job responsibilities ("task completion"). Primary reasons given for employees finishing their duties may reflect pride in their work. However, because there are various reasons employees may offer for complying with their work responsibilities that relate to, but are distinct from pride (e.g., self-efficacy, self-esteem, achievement motivation), the discriminant validity of this operationalization of pride as a particular emotion state is reduced. Also, due to the restrictive as well as interpretive (qualitative) criteria that Hodson (1998) used to winnow 373 ethnographies into the 86 that were eventually analyzed, selection biases may be present. For instance, many of the work ethnographies listed in the appendix covered factory work, only. This is a specific type of work (e.g., manual labor) with a particular type of worker (e.g., lower SES). As a result, the generalizability of these findings to non-factory work and non-factory worker populations may be limited. Moreover, as the author notes, his ethnographic methodology permits the drawing of solely correlational conclusions. Therefore, an important question remains: does pride in task completion predict OCB, or does OCB predict pride in task completion (or some combination of the two)?

Additional research suggestive of the importance of pride in OCB is that pride is primarily self-evaluative rather than object-focused (Lewis, 2008). As a result, pride is a member of the class of self-conscious emotions which have significant influence over an individual's self-esteem and moral behavior (Tangney, Stuewig, & Mashek, 2007; Tracy & Robins, 2004a; Weiner, 1985). It has been posited, in fact, that one of the major

functions of pride may be to bolster levels of self-esteem (in the eyes of oneself as well as others) which may stimulate adaptive social behavior (e.g., Tracy & Robins, 2004a). In support of this notion, Hart and Matsuba (2007) found pride to be an essential factor in sustained community volunteering, even when controlling for prosocial personality traits, such as agreeableness and generativity. These results suggest that pride encourages people to help others in their community without a direct external reward, which is behavior that overlaps significantly with conceptions of OCB (George & Brief, 1992). However, there is an important caveat to these findings. The authors also found hubris, an undifferentiated or overgeneralized form of pride, to be negatively associated with generativity and other typically prosocial personality characteristics, e.g., agreeableness, and to be positively related to neuroticism (a moderately antisocial personality trait, see Miller & Lynam, 2001; Miller, Lynam, & Leukefeld, 2003). Furthermore, individuals higher on hubris tended to show diminished interest interacting with and assisting others, and attending to their duties, work related and otherwise. Therefore, it too is possible that pride may less effectively enhance OCB (or perhaps even undermine it) compared to other positive emotions (e.g., hope).

Evidence in support of a substantive relationship between hope and OCB is that hope is significantly related to subjective (self-report) and objective (supervisor-rated) measures of organizational commitment, and organizational commitment is positively associated with citizenship behavior (Lepine, Erez, & Johnson, 2002; Organ & Ryan, 1995; Youssef & Luthans, 2007). Interestingly, the association between hope and organizational commitment was stronger than the association between optimism or resilience and organizational commitment (Youssef & Luthans, 2007). Youssef and

Luthan's (2007) findings also indicate that levels of hope are a reliable predictor of job satisfaction, and as reviewed earlier, the job satisfaction-OCB association is robust (see Organ, Podsakoff, & MacKenzie, 2006, for a review; Organ & Ryan, 1995). Taken together, these findings indicate that employees experiencing hope may be more committed to and satisfied with their jobs, which may lead to significant increases in OCB. However, the direct relationship between feelings of hope and OCB is yet to be examined.

## Do Hope and Pride Differentially Increase Job Performance?

Hope may enhance performance more than feelings of pride for a number of reasons. Luthans and Youssef (2005) found that increased state hope was related to higher levels of supervisor-rated performance (r = 0.17, p < 0.01) in a sample of 422 factory workers in China. The authors' research also indicated that merit-based salary levels over a one-year period were positively associated with psychological capital, a superordinate construct comprised of three dimensions (i.e., hope, resiliency, and optimism; r = 0.18, p < 0.01). In another study, Youssef and Luthans (2007) found that hope was a significant predictor of self-reported (r = .22; p < .01) and manager-rated job performance (r = .16, p < .01) in a non-Asian sample. Furthermore, hope was a stronger predictor of supervisor-rated performance than resilience. The researchers propose in their hypotheses that hope, as a component of psychological capital, may be associated with performance because it increases worker motivation and confidence (agency), and promotes building strategies to overcome challenges on the job (pathways). In accordance with this rationale, Luthans and Youssef (2005) state that employees who received higher performance reviews

demonstrated a more positive focus and were better able to weather the trying conditions of factory work in China.

Although this study lays the foundation for research on hope and job performance, the authors used a cross-sectional research design, preventing determinations of causation. Thus, the question remains: does hope lead to increases in job performance and pay, or does higher performance and pay result in increased worker hope (or both)? The authors also note that it was unclear how much pay and performance ratings reflected actual employee performance, rather than social connections between workers and their managers (e.g., Cooper, 1981). This is a limitation of many organizational studies that utilize manager reports of worker performance, rather than measuring performance behaviors and outcomes explicitly. For instance, research indicates that the reliability of manager-rated performance varies significantly based on managers' length of exposure to an employee (Rothstein; 1990), and worker personality traits (e.g., agreeableness and conscientiousness; Frei & McDaniel, 1998). Consequently, Luthans and Youssef (2005) state that, "hard' measures of performance (e.g. units produced) would be ideal for future research" (p. 264).

In addition to evidence that hope is associated with increases in job performance, past research also suggests a substantive relationship between pride and a number of key factors that contribute to job performance. Pride has been found to boost self-esteem, and high self-esteem is a reliable predictor of job performance (e.g., Brown, & Marshall, 2001; Tangney & Fischer, 1995). Pride has also been found to sustain achievement motivation, for example, to persist through a challenging and monotonous task (Williams & DeStano, 2008), controlling for self-esteem and self-efficacy. Because research on the

link between work motivation and persistence indicates a positive relationship with performance outcomes (Judge, Erez; & Bono, 1998; Naff & Crum, 1999; Pritchard, 1995; Viteles, 1953), pride may have an indirect, but significant association with job performance. However, it may be that too much pride impedes job performance. As with OCB, undifferentiated or overgeneralized pride (hubris) has been associated with higher levels of neuroticism (Hart & Matsuba, 2007), which has a *negative* relationship with both achievement motivation (Judge & Ilies, 2002) and job performance (Salgado, 1997; Tett, Jackson, & Rothstein, 1991). It is thus unclear exactly how pride may relate to job performance.

## **Summary: Limitations of Prior Research.**

Current accounts of the relationship between positive emotions, and OCB and job performance are generally limited in three ways. First, research that utilizes a randomized experimental design and provides direct evidence about causation and directionality is missing. Second, no studies to the present researcher's knowledge have examined the influence of different positive emotions, compared to each other and/or a neutral condition, on OCB or job performance. Third, operationalizations of OCB obtaining data more closely linked to actual behavior (e.g., firm commitments to engage in OCB), objective measurements of performance gauging quantifiable behavior (e.g., task performance scores), and manipulations of positive emotions through experimental induction are all conspicuously absent. Therefore, it is the intent of the present study to address these gaps in the literature and advance the state of the field.

### **The Present Study**

## **Research Questions**

There were two main research questions of interest to the present study. First, do feelings of hope and pride significantly increase organizational citizenship behavior and job performance in comparison to neutral feelings (control condition)? Second, do hope and pride differentially enhance organizational citizenship behavior and job performance?

## **Hypotheses**

The first hypothesis was that feelings of pride and hope would *both* significantly increase organizational citizenship behavior and job performance in comparison to neutral feelings (the control condition). This was a directional prediction. The second hypothesis was that hope and pride would enhance organizational citizenship behavior and job performance outcomes at significantly differential levels. However, the direction of this prediction, for either dependent variable, was unclear. That is, no prediction was made as to whether hope or pride would have a greater influence on citizenship behavior or job performance, because either prediction was plausible in light of prior theory and research.

# **Independent and Dependent Variables**

The independent variable was *Manipulated Emotion*, which had three levels: hope, pride, and neutral. The dependent variables were *Organizational Citizenship*Behavior (OCB) and Job Performance. The present research tested the influence of the three emotions induction conditions on the two dependent variables.

#### **Mediating and Moderating Variables**

State and trait levels of hope, pride, and joy were examined as possible mediators and moderators. In regard to mediating effects, it was possible that participants' levels of hope, pride, and joy at the state level would mediate the relationship between the manipulated emotion and its influence on OCB and job performance measures. In terms of moderating effects, it was important to measure for participants' trait feelings of hope, pride, and joy because they might have either heightened or diminished the strength of the emotion manipulations. Trait hope, pride, and joy might also have influenced OCB and job performance, independent of the manipulation or state emotions. For instance, individuals who had a greater capacity to feel hope on any given day might have worked harder, whether or not they felt hope during the experiment.

Obtaining a *job profile* or measure of work experience for each participant was also important because unlike many applied psychology studies, the present researcher did not have access to a homogeneous work sample. Many of the participants came from a variety of different job backgrounds that may have accounted for significant variation in OCB and job performance scores observed in the lab.

#### **METHOD**

## Design

A randomized experimental between-subjects design was used. Participants were randomly assigned to three different conditions. The only difference between the three conditions was the type of emotion manipulation administered. In the first condition, participants were given an emotion induction of *hope*. In the second condition, a *pride* emotion induction was be administered. In the third condition, participants received a *neutral* emotion induction (control). There was also a non-experimental portion of the study in which check-<sup>2</sup>, state, and trait hope, pride, and joy were correlated with and regressed onto OCB and job performance.

# **Participants and Procedure**

The sample for this study was taken from the Rutgers University-Camden Psychology student pool. This was a convenience sample, and may not be a representative sample of the U.S. adult population. The subject pool was primarily comprised of Introduction to Psychology and Psychology of Human Sexuality students fulfilling a course requirement or gaining extra credit points toward a psychology class grade. A raffle for a chance to win \$100 was also used as an additional benefit for participation in the study.

The procedure had 10 steps (see Table 1 for a summary). In the first step of the experiment, participants took part in a relived emotion task that, depending on the condition, was intended to induce either hope, pride, or neutral feelings. This involved picking a moment from an experience when they felt the target emotion intensely,

The "check" prefix before an emotion measure refers to questionnaire items created as a manipulation check.

listening to an audio track to facilitate the recall process, and writing down the highlights of their emotion event. In steps two and three, participants completed two OCB measures (i.e., OCB intentions and OCB history, respectively). Fourth, participants were given the emotion manipulation a second time (i.e., they listened to the same audio track, and wrote down the highlights of their memory, again, to maintain the induced emotion over the hour-long study). Fifth, participants filled out a five-item manipulation check that asked them about their current feeling state. Sixth, participants completed a job performance task (i.e., anagram solutions test). Seventh, each participant filled out a state measure of hope, pride, and joy (containing items combined from different emotion scales; all participants completed the items in the same sequence as determined at random to minimize order effects). Eighth, each participant filled out a trait measure of hope, pride, and joy (containing items combined from different emotion scales; all participants completed the items in the same sequence as determined at random to minimize order effects). Ninth, all participants completed a job profile and demographic questionnaire that contained ten job-specific questions, and questions about their gender, age, race, grade point average, and school time status. Finally, in the tenth step, participants were debriefed and thanked for their time.

## **Manipulations and Measures**

## **Independent Variable.**

*Emotion Induction*. Before participants completed either OCB measure or the anagram solutions test, they took part in a relived emotion task designed to induce either *hope*, *pride*, or *neutral* feelings, depending on their randomly assigned condition (see Appendix A for full details). Below is the language used in the manipulation:

**Table 1**Summary of Experimental Procedure

Procedure Step Number	Procedure Description
1	Emotion Induction: Hope / Pride / Neutral (audio track & writing)
2	OCB Intentions measure (questionnaire)
3	OCB History measure (questionnaire)
4	Emotion Induction: Hope / Pride / Neutral (audio track & writing)
5	Manipulation Check (questionnaire)
6	Job Performance Task (anagram solutions test)
7	State Hope and Pride measure (questionnaire)
8	Trait Hope and Pride measure (questionnaire)
9	Job Profile and Demographic measure (questionnaire)
10	Debriefing (handed out debriefing sheet & asked subjects questions)

## [read on paper]

Think of an experience at some point in your life that caused you to feel <u>intense</u> <u>pride/ intense hope/ completely neutral</u>. The experience you choose should be one in which there was a moment when you felt intense pride/ intense hope/ completely neutral and were not aware of feeling any other emotions at the same time.

## [audio played in headphones]

"Now, close your eyes, relax, and make yourself comfortable. Focus your attention on the instructions you are about to hear. Now as vividly as you can, imagine the situation that made you feel [intense hope/ intense pride/ completely neutral], but very little of any other emotion. Picture the events happening to you. See all the details of the situation. Picture in your 'mind's eye' the surroundings as clearly as possible. See the people or objects; hear the sounds; experience the event happening to you. Think the thoughts you actually thought in this situation. Feel the same feelings you felt. Let yourself react as if you were actually there."

#### [read and write on paper]

In the space below, please jot down the highlights of **what made you feel intense hope/ intense pride/ completely neutral**, and **what feeling intense hope/ intense pride/ completely neutral was like** at that moment in time (in as much detail as you can remember).

This emotion induction technique has been referred to as the relived emotion task, autobiographical recollections method (Goodwin & Williams, 1982), or as self-generated imagery (Salovey & Rodin, 1985; Singer & Salovey, 1988). Brewer, Doughtie, and Lubin (1980) found this method to be more effective than Velten's (1968) mood inducing selfstatements. In regard to inducing particular positive emotions, pride has been effectively manipulated utilizing a similar technique in Tracy and Robins (2007; i.e., "think about a time when you felt very proud of yourself...describe the events that led up to your feeling this way in as much detail as you can remember," p. 524). Moreover, prior research has found inducing emotions in the laboratory by asking participants to recall an emotional experience to be reliable and valid (Salovey & Singer, 1989; Wright & Mischel, 1982), even altering physiologically measurable affective activity (Ekman, Levenson, & Friesen, 1983; Levenson, 1992). The induction of neutral feelings has also been accomplished successfully in previous experimental studies (e.g., Fredrickson, 2005; Salovey & Birnbaum, 1989). The reason for including a neutral condition is to assess the influence of hope and pride individually and independently compared to a control group (which is, relatively speaking, not affectively valenced).

#### **Mediating and Moderating Variables.**

State and trait hope, pride, and joy items were organized into one state emotion measure, and one trait emotion measure, respectively. The items, derived from different emotion scales, were combined into one measure to minimize potential order effects that might have resulted from administering the questionnaires separately. In the next two

paragraphs, an explanation of the sources and scales used to measure the state and trait emotions, as well as evidence regarding their psychometric strengths is offered.<sup>3</sup>

State levels of pride were measured with 12 items (see Appendix F for the complete scale). Ten items were selected from a 14-item scale of pride (e.g., "I feel confident," and "I feel like I have self-worth;" Tracy & Robins, 2007). Tracy and Robins (2007) derived these items from a number of sources, including analyses of the semantic meaning of pride-related terms, self-reports of actual pride experiences, and expressive characteristics found to be distinctive identifiers of pride (Tracy & Robins, 2005, 2007, 2008). Four items were removed (leaving ten original items) because they may measure a distinct facet of pride, hubristic pride, which is not the particular focus of the present research. However, three hubristic pride items were left in for the sake of comparability (i.e., "I feel egotistical," "I feel conceited," and "I feel smug"). The last two pride items were added by the present researcher to offer a more a direct measurement of pride (e.g., "I feel superior to others" and "I feel proud"). Participants rated each of the 12 items from 1 (completely false) to 8 (completely true) in terms of how "I feel right now (at this very moment)." This response scale was taken from the state hope questionnaire (Snyder et al., 1996), because the scale was determined to offer a greater range of variability in response values than the original scale designed by Tracy and Robins (2007), which ranged from 1 (not at all) to 5 (extremely). Trait levels of pride were measured by the same 12 items from the state pride scale, except each participant was asked to rate each item in terms of how "I feel in general (most of the time)" (see Appendix G for the complete measure).

As will be mentioned in the <u>FR</u>esults section, the full scale measures were administered to participants, but single item face-valid measures of each emotion were also retained to be analyzed separately, in ease they would beas they might be found to be less discriminating than the single-item measures of joy, hope, authentic pride, and hubristic pride.

The ten items for the state and trait pride measure taken from Tracy and Robins (2007) were found to be highly reliable, valid, parsimonious, and to show theoretically coherent relations with a number of other major psychological constructs (e.g., Big Five factors of personality). The two items added by the present researcher were found to be consistent with the previously validated pride items. The item-total correlation for "I feel superior to others" is r = .62 and r = .54 (state and trait items, respectively), and the item-total correlation for "I feel proud" is r = .86 and r = .79 (state and trait items, respectively).

State levels of hope were also measured with 12 self-report items (see Appendix F for the complete hope scale). The state hope items were drawn from three sources. Eight items were taken from the State Hope Questionnaire developed by Snyder et al. (1996; e.g., "I can think of many ways to reach my current goals" and "I energetically pursue my goals"). These items were chosen because they showed concurrent and discriminant validity, have been found to be internally consistent and demonstrate responsiveness to real life events related to hope (e.g., the prospect of getting a good job), as supported by both causal and correlational data (Snyder et al., 1996). Three items in the present state hope scale were selected from the Herth Hope Index (HHI; Herth, 1992; e.g., "I feel my life has value and worth at present" and "I believe that each day has potential"). These items were chosen because they offer a measurement of a broader, existential hope, rather than the agency and pathways-focused hope present in Snyder et al. (1996). Psychometric validation of the HHI found a Cronbach alpha coefficient of .97 and a test-retest reliability (2 weeks) of .91 (Herth, 1992). Additionally, the concurrent criterion-related validity of the Herth Hope Scale (original version) was r = 0.92, of the Existential Well-Being Scale was r = 0.84, and of the Nowotny Hope Scale was r = 0.92 (Herth, 1992).

The last item was generated by the present researcher (i.e., "I feel hopeful"). This item was added because it offers a direct, face-valid measurement of a person's feelings of hope (rather than tapping into this construct through items about, for example, agency or pathways thinking). Each item was rated, using the same scale as the state and trait pride measures, from 1 (*completely false*) to 8 (*completely true*), indicating the extent to which they feel this way "right now (at this very moment)."

Trait levels of hope were operationalized with the same 12 self-report items that came from the state hope scale, except the eight Snyder et al. (1996) items were replaced with ones by Snyder and Harris et al. (1991; e.g., "In general, I energetically pursue my goals" and "I generally can think of many ways to reach my goals"; (see Appendix F for the complete measure). This was done because the language in Snyder et al.'s (1991) scale is designed specifically to measure *trait* hope. Data produced from this scale indicates test-retest reliability, internal consistency and supports the major two-factor design (i.e., agency and pathways) of the measure (Babayak, Snyder, Yoshinobu, 1993). Additionally, the trait hope scale demonstrated convergent, discriminant, and construct validity, and was even predictive of goal-related behaviors and coping techniques beyond that accounted for by other self-report operationalizations (Snyder et al., 1991). Participants rated each item from 1 (*completely false*) to 8 (*completely true*) indicating the extent to which they feel this way "in general (most of the time)."

State and trait joy were measured using one item ("I feel joyful" or "I generally feel joyful," respectively), using the same state and trait response scales as hope and pride. This item was created by the present researcher because it offers a direct, face-valid measurement of a person's feelings of joy. Measuring joy was important because joy

highly correlates with other positive emotions and is often considered to be highly related to the archetypical positive emotion, i.e., happiness (Fredrickson, 2001). Moreover, happiness or joy is the particular emotion state most likely to have been operationalized in prior research on positive emotions and helping behavior. Therefore, to control for the potential moderating/meditating effects of joy/happiness on the dependent variables, independent of hope and pride, these items were added to the state and trait emotion scales (as the last item in scale, so as not to interfere with the measurement of hope and pride in any way).

The *job profile* for each participant was measured with 10 items: (1) position title, (2) position description, (3) duration at job, (4) whether or not they work for Rutgers, (5) work schedule status, (6) average hours worked per week, (7) pay type, (8) work perceptions: long-term career or temporary job, (9) self-reported job performance over the past 12 months, and (10) college grade point average (GPA) and score on the Verbal/Critical Reasoning section of the Scholastic Aptitude Test (SAT; as a correlate of task performance; see Appendix H for the complete measure). Many of the items for this measure were taken from the short version of the Minnesota Satisfaction Questionnaire designed to gauge job satisfaction (Weiss, Davis, England, & Lofquist, 1967), which has been used extensively in organizational psychology research and business consulting for decades (Lande & Conte, 2007). Lastly, *demographic information* was measured using common items utilized in countless psychological science experiments (e.g., age, gender, race, etc.).

### **Dependent Variables.**

Organizational Citizenship Behavior. OCB was operationalized via three methods. The first method was an intentions measure that asked participants about their actual level of commitment to assist other Rutgers students (as a proxy for coworkers) and Rutgers University the institution (as a proxy for organizations or companies). The 12-item *OCB Intentions* measure gauged the number of hours, emails, phone calls, and tours for which participants were willing to offer assistance (e.g., "How many hours will you read to a blind Rutgers student?" and "How many hours will you spend working on brochures to promote Rutgers?"; see Appendix B for the complete measure). As far as participants knew, their commitment to engage in these OCBs was real and they would be expected to fulfill their committed time. Scores ranged from 0-6 per item (e.g., hours, tours), providing a graded scale of OCB intentions from 0 (low) to 72 (high). This type of OCB intentions measure has been used reliably and validly in a number of studies to operationalize altruism or helping behaviors (which greatly overlap with OCB; see Smith et al. 1983) in a laboratory setting (Carlson et al., 1988; Donnerstein et al., 1975; Kazdin & Bryan, 1971; Weyant, 1978). In addition, Williams and Shiaw (1999) specifically utilized an "OCB intentions" measure to operationalize the extent to which employees were likely to engage in particular acts of OCB. In support of this measurement technique, the authors found the OCB intentions measure was significantly and positively correlated with a validated measure of previously committed OCB (r = .57), which is the standard method of measuring OCB (Organ, Podsakoff, & MacKenzie, 2006).

The second OCB measure, *OCB History*, was used to determine a baseline of past OCB to compare to OCB intentions. It is a self-report questionnaire developed by Lee and

Allen (2002). There are 16 items in total (e.g., "Give up time to help others who have work or nonwork problems" and "Attend functions that are not required but that help the organizational image"; see Appendix C for the complete measure). It has been successfully used in a number of organizational psychology studies (e.g., Avey, Wernsingy & Luthans, 2008; Côté & Miners, 2006; Piccolo & Colquitt, 2005; Saks, 2006). Participants rated themselves on each item on a 7-point scale from 1 (*never*) to 7 (*always*). Total scores ranged from 16 (*low*) to 112 (*high*). The measure is comprised of: (1) organizational citizenship behavior directed toward individuals (OCBIs) and (2) organizational citizenship behavior directed toward organizations (OCBOs). Because a meta-analytic assessment of OCB dimensions determined that the OCBI and OCBO distinction had no distinguishable effect on any of the major predictors of OCB (e.g. job satisfaction, organizational commitment; LePine, Erez, & Johnson, 2002), the scale was treated as a unidimensional measure of OCB.

The third and last measure of OCB is *OCB past-7-days*. This scale was measured with three items taken from the OCB history measure (e.g., "Given up time to help others who have work or nonwork problems" and "Assisted others with their work duties"). These three items were selected because they were thought by the present researcher to be the most representative of the OCB history measure. Although this scale is similar to the OCB history measure because it measures previously committed OCBs, and does so with the same items, distinctly, it asks participants to indicate how many hours (from 0 to 6, or more) they have engaged in OCBs *over the seven days* prior to participating in the study. Past research has found that self-reporting distant memories is less valid and reliable that more recent memories due to the increased influence of various biases, such as social

desirability, memory decay, and affect-congruency (Stone et al., 2000). Therefore, this scale was added in an attempt to assess these threats to validity that are present in the OCB history measure, and control for them statistically.

Job Performance. For the experimental portion of the study, job performance was operationalized via task performance (as a proxy measure). The task used was an anagram solutions test. Anagram tests have been used in a variety of studies to measure more plastic cognitive-based constructs, such as: metacognitive awareness during learning (Kumar, Harizuka, & Koga, 1999), effects of age or personality on changes in cognition (Java, 1992; Witte & Freund, 1995), memory (Cansino, Ruiz, & Lopez-Alonso, 1999; Rajaram & Roediger, 1993), and expertise (Novick & Sherman, 2001, 2003). More specifically, anagram solutions tests have been utilized effectively as a cognitive task to measure job performance by proxy in a number of organizational psychology studies, with anagram performance being an independent (e.g., Aiello & Svec, 1993; Davidson & Henderson, 2000; Geen, 1985; Jussim, Yen, & Aiello, 1995) and a dependent variable (e.g., Brockner & Guare, 1983; Erez & Judge, 2001,;Organ, 1977). In this research, anagrams have been effectively used an a dependent measure of task performance, task persistence, goal-setting, and performance motivation.

The anagram test in the present study was administered via a paper-and-pencil method, and was taken from prior organizational research examining the effects of rudeness on task performance (Porath & Erez, 2007, 2009) and of positive affect on task persistence (Erez & Isen, 2002). These studies found the anagrams to be moderately difficult, allowing for detectable variability in performance. There were 20 anagram puzzles in all, each with only one possible solution (e.g., "bnrow" is reordered to spell

"brown" and "snilaoi" is reordered to spell "liaison"; see Appendix E for the complete anagram test). Participants began with a practice trial in which they had 5 minutes to reorder the letters to spell a valid word (no plurals or foreign words were allowed) for 10 anagram puzzles. For the official trial, each participant had 10 minutes to solve 10 anagrams. As is common in previous research, the number of anagrams solved correctly was used as the performance metric (e.g., Porath & Erez, 2007, 2009). Therefore, possible scores ranged from *low* (0) to *high* (10).

For the non-experimental portion of the study, job performance was measured by participants' self-reported levels of performance. That is, the instructions were for participants to report the last review their manger gave them at their job over the past 12 months. If participants had not received a performance review in the past 12 months, they were instructed to rate themselves in terms of how they *think* their manager would have rated them for their performance during that period (whether or not they would agree with it). The rating scale for this single-item measure ranged from 0 (*fails to meet performance expectations*) to 100 (*far exceeds performance expectations*). This measure was developed by the present researcher.

#### RESULTS AND DISCUSSION

#### **Confirmation of Random Assignment**

A total of 75 subjects participated in the present study. Twenty-five individuals were randomly assigned to each of three emotion manipulation conditions: neutral, hope, or pride. The mean age of the participants was 22.76, 21.73, and 21.17 years old in the neutral, hope, and pride conditions, respectively. An ANOVA revealed no significant difference in age across the conditions. There were 13, 9, and 16 males, and 12, 10, 11 females in the neutral, hope, and pride emotion conditions, respectively (four subjects did not report their gender). A chi-square analysis of gender across the three manipulated emotion conditions yielded a non-significant result. In total, participants' racial/ethnic makeup was as follows: 36 Caucasian, 17 African-American, 9 Asian, 6 Hispanic/Latino, 3 other (e.g., Caribbean), and 4 no response. A chi-square test of race/ethnicity across the three manipulation conditions was not significant.

Basic employment demographics were also taken from the present sample.

Despite results from a Rutgers-Camden Career Center survey (2006) that found approximately 90 percent of undergraduate students work, at least part time, 11 participants indicated that they had never worked before. Consequently, these subjects did not provide work demographics data. The following statistics are for the 64 participants who did fill in this information. The mean time participants' were employed at their current job/most recently held job was 22.64, 18.22, 21.19 months in the neutral, hope, and pride emotion conditions, respectively. The average number of hours participants worked per week was 27.68, 25.52, and 25.84 in the neutral, hope, and pride conditions, respectively. Two separate one-way ANOVAs indicated no significant differences across

conditions for time at job or hours worked per week. The number of participants compensated by the different payment structures, of the 57 that provided a response to this item, is as follows: 35 hourly, 10 salary, 4 commission, 5 multiple payment types (e.g., hourly and commission), 3 other (e.g., monthly payment). See Table 2 for data on the total number of participants' per job type by emotion condition. Lastly, when asked if they perceived their current position of employment as a "long-term career" or a "temporary job," just 12 participants indicated the former, whereas 45 participants indicated the latter (18 subjects did not fill out this item). A chi-square analysis of participants' job perceptions across the three manipulated emotion conditions was conducted, and found not to be significant. For mostly freshman college students, who are studying at a university to improve their job prospects, this response was expected. Thus, with regard to the demographic and job characteristics tested, random assignment was successful: there were no significant differences between conditions.

Table 2

Total Number of Participants per Job Type by Emotion Manipulation Condition

	Administrative	Management	Production	Professional	Sales	Service
Neutral $(n = 22)$	2	0	0	3	5	12
Hope ( <i>n</i> = 19)	3	1	1	5	4	5
Pride ( <i>n</i> = 16)	2	1	1	1	2	9
Total $(n = 57)$	7	2	2	9	11	26

## **Emotion Manipulation Check**

To test if the induction was effective at eliciting the target emotions for each of the three manipulation conditions (i.e., hope, pride, neutral), a one-way ANOVA was run for responses to the check-emotion and state emotion questionnaires across the three conditions (N = 75), as well as independent samples t-tests between each of the three condition pairs (i.e., neutral-hope, neutral-pride, and hope-pride conditions). Participants reported their current emotion states in response to the same items for the check-emotion and state emotion questionnaires (the former was taken directly before, and the latter was taken directly after the anagrams solutions task; see Table 1 in the Methods section). These items were, "I feel joyful," "I feel hopeful," and "I feel proud." As was stated in the Method section, the rating scale ranged from 1 (completely false) to 8 (completely true), with higher scores indicating greater feeling of an emotion. These single-item measures were used for hope and pride in place of the complete hope and pride scales outlined in the Method section because upon examination it seemed that many of the full-scale items, in addition to capturing the features of the particular affective states of hope and pride, also detected a number of additional, related constructs (e.g., hope may have been tapping optimism and goal-setting tendencies, and pride may have been tapping self-efficacy and self-esteem). <sup>4</sup> This was determined by calculating two sets of bivariate correlations between the check and state emotions: one for the single-item emotion measures and one for the full emotion scales. The results revealed that the correlations among the emotions (i.e., joy, hope, and pride) were lower for the single-item measures than for the complete

Only a single-item measure of joy was administered to participants and thus this was not an issue for the joy measure.

scales (see Table 9 for the single-item emotion measure correlations). This suggests that the full scales captured general positive affect, as well as joy, hope, or pride, whereas the single-item measures only captured the particular positive emotions. Because the single-item scales appear to offer greater discriminant validity than the complete scales, only the results of analyses using the single-item measures are reported in this paper.

Check-emotion means were converted into standard scores to make them comparable across emotion measures. To test for significant differences in each of the check-emotions across the three emotion manipulation conditions, separate one-way ANOVAs were calculated. ANOVA tests reveal that check-joy and check-hope are significantly different across the three emotion conditions, F(2,72) = 4.49, p = .015, and F(2,72) = 3.27, p = .044, respectively. However, the result for check-pride is only marginally significant F(2,72) = 2.69, p = .075. Together, these results indicate that the levels of check-joy and check-hope, but not check-pride, present in the three emotion conditions were significantly different (see Table 3).

However, these calculations do not reveal if the manipulation differentially induced the check-emotions in the two positive emotion conditions compared the neutral condition, as is suggested by the means in Table 3. Therefore, tests were run to determine if the manipulation was effective at inducing positive emotions (i.e., joy, hope, and pride) in the hope and pride conditions together, significantly more than in the neutral condition. To accomplish this, three a priori contrast analyses were performed (see Rosenthal & Rosnow, 1985). The first contrast test combined check-joy scores in the hope and pride conditions (contrast weights = +1 for the hope condition and +1 for the pride condition),

**Table 3**Check-Emotion Means in Standard Scores (with Standard Errors) by Manipulation Condition

	Check-Joy	Check-Hope	Check-Pride
Neutral	47	40	33
Condition	a	a	a
(n=25)	(.21)	(.25)	(.24)
Hope	.23	.23	.03
Condition	b	b	b
(n=25)	(.17)	(.19)	(.19)
Pride Condition (n=25)	.23	.17	.30
	b	b	b,c
	(.19)	(.12)	(.14)

*Note:* The letter subscripts denote significant differences between means. Within a column, means with the same subscript letter are *not* significantly different from one another (p < .05).

and compared them to check-joy scores in the neutral condition (contrast weight = -2). Results indicate that check-joy is significantly greater in the hope and pride conditions than in the neutral condition, t(72) = 2.99, p = .004. The second contrast test combined check-hope scores in the hope and pride conditions (contrast weights = +1 for the hope condition and +1 for the pride condition), and compared them to check-hope scores in the neutral condition (contrast weight = -2). Results indicate that check-hope is significantly elevated in the hope and pride conditions in comparison to the neutral condition, t(72) = 2.55, p = .013. The third contrast test combined check-pride scores in the hope and pride conditions (contrast weights = +1 for the hope condition and +1 for the pride condition) and compared them to check-pride scores in the neutral condition (contrast weight = -2). Results indicate that check-pride is also significantly higher in the hope and pride

conditions than in the neutral condition, t(72) = 2.06, p = .043. These tests confirm the effectiveness of the emotion manipulation at inducing positive emotions (i.e., joy, hope and pride) at significantly higher levels in the positive emotion conditions than in the neutral condition.

If the manipulation was effective at inducing positive emotions in the positive emotion conditions, but not in the neutral condition, then was it also effective at differentially inducing hope mostly in the hope condition, and pride mostly in the pride condition? As seen in Table 3, there are relatively high levels of check-hope present in the pride condition (M = .17), whereas the levels of check-pride in the hope condition, comparatively, are not as elevated (M = .03). This suggests the manipulation may not have been successful in this regard. Yet, Table 3 also indicates that check-hope was rated the highest in the hope condition and check-pride in the pride condition. To determine if these mean comparisons are significantly different, a series of independent samples t-tests were run between check-hope and check-pride in the hope versus pride conditions. The results are not significant for check-hope or check-pride, t(48) = 0.25 and t(48) = -1.14, ns, respectively. However, two more tests of the differences between check-hope and check-pride in the hope versus the hope conditions were run. The first is an a prior linear contrast that combined check-hope scores in the neutral and pride conditions (contrast weights = -1 for the neutral condition and -1 for the pride condition) and compared them to check-hope scores in the hope condition (contrast weight = +2). These results are not significant, t(72) = 1.47, ns. The second is an a prior linear contrast that combined checkpride scores in the hope and neutral conditions (contrast weights = -1 for the hope condition and -1 for the neutral condition) and compared them to check-pride scores in

the pride condition (contrast weight = +2). These results indicate that check-pride is significantly higher in the pride condition than in the hope and neutral conditions together, t(72) = 2.15, p = .035. This sets of analyses indicate that the manipulation did not successfully discriminate between the induction of hope and pride in the hope and pride conditions; however, check-pride was significantly higher in the pride condition than in either of the other two emotion conditions, suggesting that the manipulation was partially successful at differentially inducing pride. Lastly, as shown in Table 3, the check-joy means are notably and equally high in the hope and pride conditions (i.e., M = .23 for both conditions), indicating that the manipulation was also ineffective at inducing feelings of hope or pride, independent of joy.

The longer-term effectiveness of the emotion manipulation was also tested with state emotion measure (the state emotion scale was administered after the anagrams task was completed, which was approximately 20 minutes after the check-emotion measure). The results of a one-way ANOVA indicate that neither state joy, state hope, nor state authentic pride are significantly different across the three emotion conditions, F(2, 73) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 73) = 0.07, and F(2, 74) = 0.26, F(2, 74)

However, to test for the possibility that the state emotion means are significantly greater in the hope and pride conditions combined, compared to the state emotion means in the neutral condition, a series of a prior linear contrasts were performed. The first test combined state joy

**Table 4**State Emotion Means in Standard Scores (with Standard Errors) by Manipulation Condition

	State Joy	State Hope	State Authentic Pride
Neutral Condition (n=25)	04 (.23)	02 (.22)	.10 (.23)
Hope Condition (n=25)	08 (.19)	.06 (.18)	11 (.19)
Pride Condition (n=25)	.12 (.18)	04 (.2)	.01 (.18)

scores in the hope and pride conditions (contrast weights = +1 for the hope condition and +1 for the pride condition), and compared them to state joy scores in the neutral condition (contrast weight = -2). One-tailed results indicate that state joy is marginally greater in the hope and pride conditions than in the neutral condition, t(72) = 1.42, p = .079. The second test combined state hope scores in the hope and pride conditions (contrast weights= +1 for the hope condition and +1 for the pride condition), and compared them to state hope scores in the neutral condition (contrast weight = -2). Directional results indicate that state hope is also marginally elevated in the hope and pride conditions in comparison to the neutral condition, t(72) = 1.40, p = .084. The third test combined state authentic pride scores in the hope and pride conditions (contrast weights = +1 for the hope condition and +1 for the pride condition) and compared them to the state authentic pride scores in the neutral condition (contrast weight = -2). One-tailed results indicate that state authentic pride is not significantly higher in the hope and pride conditions than in the neutral condition, t(72) = 0.51, ns. This is consistent with the results for check-pride in the manipulation check analysis. In short, these results suggest that the effectiveness of the

emotion manipulation at inducing positive emotions more in the two positive emotion conditions (i.e., hope and pride conditions) than in the neutral condition decayed over the 20 minute period between when the check and state emotion measures were administered. This means that the manipulation was generally ineffective over the longer-term, as has been indicated in prior research (e.g., Isen, Clark, & Schwartz, 1976).

Lastly, to determine if the manipulation differentially induced the state emotions between the hope and pride conditions, independent samples t-tests were run. These analyses yielded non-significant results: state joy, state hope, and state authentic pride, t(48) = 0.55, -0.69, -0.98, ns, respectively. Thus, the emotion induction was not successful at differentially eliciting state hope and state authentic pride in the hope and pride conditions, as was also indicated by the check-emotions.

It is clear in examining these data that the state emotion measures produced distinct results from the check-emotion measures, despite the fact that they utilized the very same questionnaire items. The former demonstrated partial emotion-specific differentiation across the manipulated emotion conditions, whereas the latter demonstrated no significant differentiation. There are two plausible, complementary explanations for this difference. The first is that the check-emotion measure was administered approximately 20 minutes earlier than the state emotion measure, and it was filled out directly after participants' experienced the manipulation for the second time (as a "booster"). Because research has found that the effect of emotion manipulations diminish over time (Coan & Allen, 2007), it may be that the check-emotion measure detected higher levels of differentiated joy, hope, and pride emotions, because that is what the participants were experiencing directly after undergoing the emotion induction. About

20 minutes later, when the state emotion measures were administered, however, participants' emotions may have begun to blend together. The second is that the only activity participants engaged in between filling out the check- and state emotion measures was the anagram solutions test (i.e., job performance task). The cognitive effort involved in performing this difficult task under a ticking clock may have acted, in part, to "undo" the positive emotion manipulation by moving participants' attention away from their positive emotion memories and toward the test. Indeed, the challenge of the test is evidenced by the fact that *zero* out of 75 participants solved all of the anagrams. Consequently, the state emotion questionnaires that were completed directly after this experience, may reflect an exchange between the effect of the emotion manipulation and the influence of the anagrams test on participants' differentiated positive emotional states.

Finally, although trait emotions were not expected to be influenced by the manipulation because they are designed to capture affect as experienced by participants in general (i.e., most of the time), prior research has found a link between state and trait affect. Therefore, a one-way ANOVA was performed for the trait emotions across the three manipulation emotion conditions. As anticipated, trait joy, hope, and authentic pride were not found to differ significantly across conditions F(2, 74) = 0.33, F(2, 74) = 0.77, and F(2,74) = 0.81, ns, respectively (see Table 5).

In sum, utilizing the check emotion measures as the most valid indicator of the longer-term effectiveness of the emotion manipulation three conclusions are drawn. First, the induction elicited hope and pride in the hope and pride conditions, but not in the neutral condition. Second, joy was evoked in both the hope and pride conditions, but not in the neutral condition. Third, the manipulation seems to have induced more pride in the

pride condition than in the other emotion conditions, but equal joy and hope in the hope condition with a minimal amount of pride. The implications of these results on the hypotheses of the present work will be addressed in the discussion sections.

Table 5

Trait Emotion Means in Standard Scores (with Standard Errors) by Manipulation Condition

	Trait Joy	Trait Hope	Trait Authentic Pride
Neutral Condition (n=25)	13 (.25)	09 (.27)	.07 (.23)
Hope Condition (n=25)	.08 (.18)	03 (.16)	20 (.16)
Pride Condition (n=25)	.05 (.16)	.12 (.16)	.14 (.20)

# Effect of Demographics on Emotion Inductions, OCB Intentions, and Task Performance

To begin, male and female participants may have responded differently to the emotion manipulation, given that research has found men and women differ in their levels of affective intensity (AI; Fujita, Diener, & Sandvik, 1991). To assess if this is the case, a MANOVA was performed for check-joy, check-hope, and check-pride across gender. The two-tailed results are marginally significant, Wilks' Lambda = .901, F(3, 67) = 2.44; p = .072. Thus, men and women appear to be somewhat different in their reported levels of check-emotions (see Table 6 for emotion means by gender). To determine if this marginal effect is being driven by a gender difference on a particular check emotion, three separate independent samples t-tests were calculated, comparing check-joy, check-hope, and check-pride between male and female participants. However, the results indicate that

Table 6

Measured Emotion Means (with Standard Errors) by Gender

	Ck. Joy	Ck. Hope	Ck. Pride	St. Joy	St. Hope	St. Auth. Pride	St. Hub. Pride	Trt. Joy	Trt . Hope	Trt. Auth. Pride	Trt. Hub. Pride
Female $(n = 33)$	4.91 (.33)		5.09 (.36)	5.00 (.33)		4.93 (.32)	3.70 (.28)	5.79 (.29)	6.15 (.22)	5.70 (.30)	3.24 (.28)
Male ( <i>n</i> = 38 )	5.26 (.30)		5.42 (1.84)		6.05 (.26)	5.26 (.27)	3.87 (.33)	5.84 (.23)	6.29 (.24)	5.47 (.26)	3.63 (.33)

*Note:* Ck. Joy = check-joy; Ck. Hope = check-hope; Ck. Pride = check-pride; St. Joy = state joy; St. Hope = state hope; St. Auth. Pride = state authentic pride; St. Hub. Pride = state hubristic pride; Trt. Joy = trait joy; Trt. Hope = trait hope; Trt. Auth. Pride = trait authentic pride; Trt. Hub. Pride = trait hubristic pride.

neither check-joy, check-hope, nor check-pride are independently greater in female than in male participants, t(69) = -0.80, -0.72, 1.41, ns, respectively.

Although prior research has not produced distinct evidence that gender differences affect task performance, evidence for sex differences in citizenship behavior has been found. This research has shown that females are more likely to engage OCBs than males in certain organizational settings (e.g., Morrison, 1994). Therefore, to test for a possible main effect of gender on OCB intentions and task performance, a one-way MANOVA on these two dependent variables was performed. The results are statistically significant, Wilks' Lambda = .859; F(2.68) = 5.56; p = .006, indicating a main effect of gender on OCB intentions and task performance. However, upon examining the means for OCB intentions and task performance by gender, it appears that this effect is almost entirely due to gender-based differences in OCB intentions (see the first and sixth columns in Table 7), rather than gender differences in task performance, as prior research would

Table 7

Dependent Variable Means (with Standard Errors) by Gender

	OCB Intentions $(n = 71)$	OCBO Intentions $(n = 71)$	OCBI Intentions $(n = 71)$	OCB History $(n = 64)$	OCB Past-7 (n = 39)	Task Perform $(n = 71)$	Self-Rated Job Perform $(n = 54)$
Female	25.27	11.64	13.64	82.03	8.36	4.18	76.75
	(2.98)	(1.39)	(1.72)	(2.48)	(1.11)	(.40)	(2.99)
Male	13.87	6.34	7.26	78.56	6.10	4.24	73.85
	(1.89)	(.90)	(1.10)	(2.45)	(4.12)	(.37)	(2.91)

*Note:* Four participants did not report their gender. OCB Past-7 = OCB over the past seven days; a measure of OCB History; Task Perform = task performance; Self-Rated Job Perform = self-rated job performance.

suggest. To test for this possibility, a series of independent samples t-tests were conducted. The t-tests are highly significant for the full OCB intentions measure, t(69) = 3.32, p = .001, as well as the OCBO, t(69) = 3.27, p = .002 and OCBI, t(69) = 3.20, p = .002 subscales across gender. However, as suspected, the t-test results for task performance are not significant t(69) = -0.10, ns. Thus, females demonstrated significantly higher OCB intentions, but not task performance scores, than males. This effect may be attributable to gender-related differences in personality characteristics (e.g., women demonstrate higher levels of altruism than men in certain circumstances; e.g., Wilson, 2000). The potential interaction between emotion condition and gender on OCB intentions will be addressed in the following section.

Lastly, a one-way MANOVA was conducted testing for a main effect of race/ethnicity (African-American, Asian, Caucasian, Hispanic/Latino) on OCB intentions and task performance. The result from this analysis is not significant, Wilks' Lambda = .875; F(8, 130) = 1.12, ns, indicating that OCB intentions and task performance scores

were not affected by race/ethnicity. Separate univariate analyses for race/ethnicity were also conducted for OCB intentions and task performance, and were found not to be significant.

## Effect of Emotion Manipulation Condition on OCB and Performance

As OCB intentions and task performance may be unique psychological phenomena with distinct determinants, the results of separate univariate tests of the effect of manipulated emotion on each dependent variable are discussed in this section.

## Effect of Manipulated Emotion on Organizational Citizenship Behavior.

Upon examining the OCB intention means across the manipulated emotion conditions, it appears that the general pattern of predicted results was observed (see the OCB intentions column in Table 8). That is, OCB intentions means for the hope and pride conditions are both higher than for the OCB intentions means in the neutral condition, and the OCB intentions means between the hope and pride conditions are somewhat different. Because gender was found to have a significant effect on OCB intentions, a two-way 3 (manipulated emotions) x 2 (gender) ANOVA was performed in an omnibus analysis on OCB intentions. The F-test for gender (controlling for the effects of emotion condition) is significant, F(1, 71) = 10.67, p = .002. The F-test for emotion condition (controlling for the effects of gender) is just shy of marginally significant, F(2, 71) = 2.36, p = .102. This result may not have reached full significance because a larger sample might be needed to acquire the statistical power to detect these relatively small effect sizes. In addition, an analysis gauging a possible interaction of gender and emotion condition on

 Table 8

 Dependent Variable Means (with Standard Errors) by Emotion Manipulation Condition

		OCB Intention	OCBO Intention	OCBI Intention	OCB History	OCB Past-7	Task Perform	Self-Rated Job Perform
Neutral Condition	Male	10.08 <sup>a</sup> (2.97)	4.62 <sup>a</sup> (1.50)	5.46 <sup>a</sup> (1.53)	80.15 <sup>a</sup> (4.27)	5.33 <sup>b</sup> (1.80)	3.85 <sup>a</sup> (.37)	67.10° (4.98)
	Female	19.25 <sup>d</sup> (4.23)	8.83 <sup>d</sup> (1.83)	10.42 <sup>d</sup> (2.71)	84.17 <sup>d</sup> (4.26)	10.64 <sup>e</sup> (2.22)	4.83 <sup>d</sup> (.77)	79.32° (5.46)
	Total	14.48 <sup>f</sup> (2.67)	6.64 <sup>f</sup> (1.23)	7.84 <sup>f</sup> (1.58)	82.08 <sup>f</sup> (3.08)	8.50 <sup>g</sup> (1.06)	4.36 <sup>f</sup> (.46)	73.20 <sup>h</sup> (3.84)
Hope Condition	Male	17.44 <sup>b</sup> (3.65)	7.33 <sup>b</sup> (1.50)	10.11 <sup>b</sup> (2.37)	79.00 <sup>b</sup> (5.46)	9.00 <sup>i</sup> (1.58)	4.89 <sup>b</sup> (1.06)	79.29 <sup>e</sup> (5.71)
	Female	28.62 <sup>a</sup> (4.46)	12.69 <sup>a</sup> (2.16)	15.92 <sup>a</sup> (2.49)	83.75 <sup>d</sup> (4.30)	8.17 <sup>j</sup> (1.51)	4.23 <sup>a</sup> (.62)	77.56 <sup>b</sup> (5.75)
	Total	23.72 <sup>h</sup> (2.82)	10.72 <sup>h</sup> (1.39)	13.00 <sup>h</sup> (1.65)	81.71 <sup>k</sup> (3.17)	7.66 <sup>1</sup> (1.52)	4.04 <sup>h</sup> (.51)	78.31 <sup>g</sup> (3.96)
Pride Condition	Male	14.94 <sup>g</sup> (3.12)	7.19 <sup>g</sup> (1.54)	7.13 <sup>g</sup> (1.84)	76.10 <sup>b</sup> (3.18)	5.50 <sup>m</sup> (.78)	4.31 <sup>g</sup> (.58)	78.38 <sup>m</sup> (3.10)
	Female	28.88 <sup>m</sup> (7.60)	14.13 <sup>m</sup> (3.60)	14.75 <sup>m</sup> (4.21)	76.25 <sup>m</sup> (4.03)	5.40 <sup>n</sup> (1.03)	3.13 <sup>m</sup> (.58)	72.31 <sup>m</sup> (3.90)
	Total	19.12° (3.35)	9.16° (1.64)	9.56° (1.89)	76.17 <sup>p</sup> (2.75)	5.50 <sup>a</sup> (.60)	3.96° (.42)	75.34 <sup>g</sup> (2.53)
All Conditions	Male	13.87 <sup>q</sup> (1.89)	6.34 <sup>q</sup> (.90)	7.26 <sup>q</sup> (1.10)	78.56 <sup>r</sup> (2.45)	6.10 <sup>c</sup> (4.12)	4.24 <sup>q</sup> (.37)	73.85 <sup>s</sup> (2.91)
	Female	25.27 <sup>t</sup> (2.98)	11.64 <sup>t</sup> (1.39)	13.64 <sup>t</sup> (1.72)	82.03 <sup>r</sup> (2.48)	8.36 <sup>u</sup> (1.11)	4.18 <sup>t</sup> (.40)	76.75 <sup>v</sup> (2.99)
	Total	19.11 <sup>w</sup> (1.74)	8.84 <sup>w</sup> (.84)	10.13 <sup>w</sup> (1.00)	80.30 <sup>x</sup> (1.74)	7.14 <sup>y</sup> (.72)	4.12 <sup>w</sup> (.27)	75.35 <sup>z</sup> (2.10)

*Note:*  ${}^{a}n=13$ ;  ${}^{b}n=9$ ;  ${}^{c}n=11$ ;  ${}^{d}n=12$ ;  ${}^{e}n=7$ ;  ${}^{f}n=25$ ;  ${}^{g}n=16$ ;  ${}^{h}n=22$ ;  ${}^{i}n=4$ ;  ${}^{i}n=6$ ;  ${}^{k}n=21$ ;  ${}^{l}n=10$ ;  ${}^{m}n=8$ ;  ${}^{n}n=5$ ;  ${}^{o}n=24$ ;  ${}^{p}n=17$ ;  ${}^{q}n=38$ ;  ${}^{r}n=32$ ;  ${}^{s}n=26$ ;  ${}^{t}n=33$ ;  ${}^{u}n=18$ ;  ${}^{v}n=28$ ;  ${}^{w}N=75$ ;  ${}^{x}n=64$ ;  ${}^{y}n=39$ ;  ${}^{z}n=54$ . OCB Past-7 = OCB over the past seven days; a measure of OCB History; Task Perform = task performance; Self-Rated Job Perform = self-rated job performance.

OCB intentions was run. However, a significant interaction was not found, F(2, 71) = .159, ns. Thus, it appears that the effects of emotion condition and gender on OCB intentions are occurring largely independent of each other. In short, the central hypothesis that the three emotion manipulations would differentially influence total OCB intentions, is close to marginally supported by the present research.

However, because the aforementioned results were produced by an omnibus analysis, it remains unclear how much of the marginal effect of emotion condition on OCB intentions is the result of differences in OCB intentions between the two positive emotion conditions compared to the neutral condition, rather than differences between the hope and pride conditions. It was hypothesized that OCB intentions would be elevated in the hope and pride conditions in comparison to the neutral condition (irrespective of gender). So, to test this central hypothesis, a priori contrast tests within a two-way 3 (manipulated emotions) x 2 (gender) ANOVA were run that combined OCB intentions scores from the hope and the pride conditions (contrast weights = +1 for hope and +1pride conditions), and compared them to OCB intentions scores in the neutral condition (contrast weight = -2). One-tailed results supported the directional, a priori hypothesis for the full OCB intentions measure, F(1, 65) = 4.66, p = .018, as well as for its OCBO and OCBI subscales, F(1, 65) = 4.48, p = .019 and F(1, 65) = 4.66, p = .03, respectively. These findings lend empirical support to the present study's prediction that the induction of positive affect generally, would *cause* an increase in OCB intentions in comparison to the induction of neutral feelings.

A yet more focused set of analyses was conducted to test for pairwise emotion condition differences in OCB intentions. This was done in an attempt to pinpoint what emotions may be underlying the significant effect of the positive emotion conditions on OCB intentions (in comparison to the control condition). After examining the OCB intentions means by emotion condition (shown in the first column of Table 8), there appears to be a greater difference between OCB intentions in the hope and neutral conditions than between the pride and neutral conditions, or between the hope and pride conditions. To test for this possibility, controlling for gender, three separate a priori contrast tests within a two-way 3 (manipulated emotions) x 2 (gender) ANOVA were run. In the first contrast test, OCB intentions scores in the neutral versus the hope condition were given the contrast weights -1, +1, 0 (for the neutral, hope, and pride conditions, respectively). One-tailed results supported the directional, a priori hypothesis, F(1, 65) =3.91, p = .026. In the second contrast test, OCB intentions scores in the neutral versus the pride condition were given the contrast weights -1, 0, +1 (for the neutral, hope, and pride conditions, respectively). One-tailed results supported the directional, a priori prediction, F(1, 65) = 2.93, p = .046. In the third contrast test, OCB intentions scores in the hope versus the pride condition was given the contrast weights 0, +1, -1 (for the neutral, hope, and pride conditions, respectively). Two-tailed results were not significant, F(1, 65) =0.07, ns.

These results suggest that the significant difference in OCB intentions detected between the positive emotion conditions (combined) and the neutral condition is driven by both the difference between OCB intentions in the hope and neutral conditions, as well as between OCB intentions in the pride and neutral conditions (although the former

pairwise effect is stronger than the latter pairwise effect). Importantly, however, because the hope condition elicited as much joy as hope, and the pride condition induced elevated levels of joy (see Table 3), it is not clear how much of each of these three emotions are responsible for the significant effects. It is also unclear if the failure to find differences between the hope and pride conditions in OCB intentions resulted from an inadequate differential operationalization of the manipulated emotions (i.e., as both conditions also elicited sizable and comparable amounts of joy). That said, the different relationships between specific emotions and OCB intentions will be pursued further in regression analyses using data on measured emotions as predictors of OCB.

Moving on to the other OCB measures, the emotion manipulation conditions were not predicted to influence OCB history or OCB past-7-days. This is because OCB history and OCB past-7-days are intended to measure prior citizenship behavior that should not be affected by one's current emotion state. Accordingly, neither ANOVAs, linear contrasts, nor t-tests yielded significant two-tailed results for an effect of emotion condition on OCB history or OCB past-7-days, with one exception. Significant differences between OCB past-7-days scores in the hope versus the pride condition were found, t(21) = 2.65, p = .015. Given the means and standard errors shown in Table 8, it seems that if OCB past-7-days is significantly lower in the pride condition than the hope condition, it must also be significantly lower in the pride condition than in the neutral condition. However, this was not found. This is likely due to the comparatively small sample size and relatively large standard errors in these analyses. A plausible explanation for the unexpected significant difference between the hope and pride conditions on OCB past-7-days may be that participants in the pride condition were so concentrated on their

individual achievements and social status that they under-reported the instances in which they focused their energies on assisting coworkers at work over the previous week, and participants in the pride condition did not.

## Effect of Manipulated Emotion on Performance.

A second series of analyses were conducted to examine the effects of the emotion manipulations on task performance. The means in Table 8 appear to show that there are no significant differences in task performance across emotion conditions. Indeed, in an omnibus test using one-way ANOVA<sup>5</sup>, the effect of manipulated emotion on task performance did not reach significance, F(2, 74) = 0.21, ns.

This analysis allowed for a test of the hypothesis that the thee emotion conditions would differentially influence task performance. However, it is still unknown if manipulated positive affect generally (i.e., the hope and pride conditions together) have a significant influence on task performance compared to the neutral condition. An a priori contrast test was run that combined task performance scores from the hope and the pride conditions (contrast weights = +1 for hope and +1 pride), and compared them to task performance scores in the neutral condition (contrast weight = -2). One-tailed results do *not* support this a priori prediction, t(72) = -.63, ns.

A more focused analysis was also run to test for the effects of pairwise emotion condition differences (e.g., hope vs. pride conditions) on task performance. However, the independent samples t-tests did not yield significant results for the hope-neutral, prideneutral, or hope-pride condition comparisons, t(48) = -0.47, t(48) = -0.64, and t(48) = -0.64

Two-way ANOVAs were unnecessary for task performance (and all other dependent variables except OCB intentions) because no gender differences were found between the these variables.

0.12, *ns*, respectively. Therefore, it appears that the emotion manipulation did not have a significant effect on task performance, contrary to the predictions of the present researcher, as well as a body of prior research on positive affect and task performance (e.g., Erez & Isen, 2002).

Additionally, job performance was measured by self-report, manager-rated performance (or participants' own evaluations of their performance if they had not received a supervisor evaluation within the past year). Because self-rated job performance is intended to capture participants' on-the-job-performance over the *past* 12 months and the emotion manipulation was designed to influence *present* emotion states, an effect of emotion condition on self-rated job performance was not expected. Statistical analyses were nevertheless run to test for the possibility of these effects. As expected, neither ANOVAs nor *t*-tests produced significant two-tailed results for an effect of emotion condition on self-rated job performance.

Overall, the results of the experimental portion of the present study clearly indicate that job performance, as measured by task performance and self-rated job performance, unlike OCB intentions, was *not* significantly or differentially influenced by the manipulated emotions.

#### **Correlational Results**

In addition to examining the effects of the emotion manipulations on OCB and performance, statistics were calculated to test the study's hypotheses using correlational data relating the measured emotions and dependent variables (e.g., OCB intentions and task performance). First, bivariate correlations were calculated for all of the continuous variables in the present study. Then, multiple regressions were run to assess the unique

relationship of each predictor variable with the outcome variables. Social desirability is a potential threat to the validity of these analyses, and so a four-item measure of social desirability selected from the Marlowe-Crowne Social Desirability Scale (Marlowe & Crowne, 1960) is included the regression model for all analyses in this section. Social desirability, however, did not positively or negatively alter the significance of any of the findings when added to the regression models. In another matter concerning analysis precision, because of the generally high correlations between the check-, state, and trait emotion measures (see Table 9), multicollinearity diagnostics (i.e., tolerance and variance inflation factor values) were generated for each predictor variable in all regressions conducted in the following sections. None of these analyses were significant, suggesting that multicollinearity was not present.

For missing data, any participants who did not provide a response to a specific question or measure were dropped from that particular analysis. The largest number of dropped cases in an analysis was 36, for statistical tests including the OCB past-7-days measure. This likely occurred because 11 participants indicated they had never worked before, and therefore could not engage in OCBs at work, and many of the study sessions were run the week after spring break, when students had gone on vacation rather than to work. Also, because these participants reported that they had never been employed, 11 cases were deleted from the OCB history analyses. Lastly, in addition to the 11 participants that had never worked, some participants may have felt uncomfortable self-reporting their job performance over the past year; and so 21 participants were missing data for self-reported job performance.

Finally, as noted in the manipulation check analysis, the check- and state emotion measures used in the Results utilize a single-item operationalization of joy, hope, and pride. In addition, state hubristic pride was examined as a potential predictor of the dependent variables, for comparability, using the following single item: "I feel smug." Single-item scales were also used in this section to increase the discriminant validity of the trait emotion measures. Thus, for all analyses that include a trait emotion, trait joy, hope, authentic pride, and hubristic pride were measured by the single items: "I generally feel joyful," "I generally feel hopeful," "I generally feel proud," and "I generally feel smug," respectively.

### Check-, State, and Trait Emotions and OCB Intentions.

Pearson product-moment correlations were calculated between *check-emotions* and *OCB intentions* in a first test of the relationship between the measured emotions and OCB. The results indicate significant positive associations with check-joy (r = .36, p < .01) and check-hope (r = .27, p < .05), but not check-pride (r = .16, ns), for the full OCB intentions scale. The same general pattern of significant correlations is observed between the check-emotions, and the OCBO and OCBI subscales (see Table 9). Check-hope is significantly, positively correlated with OCB intentions, but check-pride is not, which is consistent with the manipulated emotion findings in that OCB intentions are significantly higher in the hope condition than the neutral condition, but are not significantly higher in the pride condition than in the neutral condition.

The smug item was used to measure state and trait *hubristic* pride because it produced the highest item-total correlation of all the items in the hubristic pride subscale (r = .73).

Table 9

Bivariate Correlations between the Single-Item Emotion Measures and the Dependent Variables for All Participants

	Ck. Joy (1)	Ck. Hope (2)	Ck. Pride (3)	St. Joy (4)	St. Hope (5)	St.A. Pride (6)	St.H. Pride (7)	Trt. Joy (8)	Trt. Hope (9)	Trt.A Pride (10)	Trt.H. Pride (11)	OCB In.Ttl. (12)	OCBO <sup>a</sup> In. (13)	OCBI In. (14)	OCB Hist. (15)	OCB Past7. (16)	Task Prfim. (17)	d Self Prfim. (18)
Ck.Joy(l)	1	.53**	.70**	.54**	.28*	.27*	.34**	.42**	.28*	.20†	.28*	.36**	.35**	.30**	.06	.29†	17	.19
Ck.Hope (2)		1	.63**	.43**	.42**	.38**	.19	.28*	.35**	.29*	.08	.27*	.25*	.25*	.18	.34*	07	.33*
Ck.Pride (3)			1	.49**	.29*	.41**	.29*	.29	.28*	.36**	.23†	.16	.15	.14	.24†	.31†	05	.31*
St.Joy (4)				1	.66**	.71**	.16	.69**	.50**	.48**	.15	.15	.16	.13	.12	.37*	09	.24†
St.Hope (5)					1	.72**	.18	.51**	.62**	.50**	.11	.06	.05	.05	.20	.13	.02	.09
St.A.Pride (6)						1	.33**	.57**	.55**	.64**	.27*	01	.00	03	.22†	.32*	.15	.26†
St.H.Pride (7)							1	.28**	.29*	.31**	.76**	.12	.10	.10	11	.11	.00	.12
Trt.Joy (8)								1	.72**	66**	.25*	.19	.20†	.16	.17	.32*	16	.17
Trt.Hope (9)									1	.67**	.22†	.12	.08	.14	.24	.17	20†	.15
Trt.A.Pride (10)										1	.26*	.14	.13	.12	.26*	.21	.04	.02
Trt.H.Pride (11)											1	.03	01	.04	08	.16	.07	.10
OCB.In.Ttl. (12)												1	.94**	.94**	12	.13	17	.01
OCBO.In. (13)													1	.79**	10	.12	18	.01
OCBI.In. (14)														1	12	.13	15	.00
OCB.Hist. (15)															1	.53**	.12	.36**
OCB.Past.7 (16)																1	14	.49**
Task.Prfim. (17)																	1	.17
Self.Prfim. (18)																		1

a b c d Note: N = 75 n = 64 n = 39 n = 54. Ck.Joy = check-joy; Ck.Hope = check-hope; Ck.Pride = check-pride; St.Joy = state joy; St.Hope = state hope; St.A.Pride = state authentic pride; St.H.Pride = state hubristic pride; Trt.Joy = trait joy; Trt.Hope = trait hope; Trt.A.Pride = trait authentic pride; Trt.H.Pride = trait hubristic pride; OCB In.Ttl. = OCB intentions total scale; OCBO = OCB intentions directed toward an organization; OCBI = OCB intentions directed toward individuals; OCB Hist. = OCB history; OCB Past-7-Days = OCBs engaged in over the past week; Task Prfrm. = task performance; Self Prfrm. = self-rated job performance. † p < .05 \*\* p < .05 \*\* p < .01.

To determine if any individual check-emotion is a significant predictor of OCB intentions, controlling for the other check emotions, OCB intentions was regressed onto the check-emotions (see Table 10). The total regression model is significant,  $R^2 = .17$ , adjusted  $R^2 = .14$ , F(3,74) = 4.87, p = .004. This indicates that approximately 14% of the variance in OCB intentions is attributable to the check-emotions. More specifically, the individual beta weights indicate that check-joy,  $\beta = .44$ , p = .005 is a significant, positive predictor and check-pride a marginal, negative predictor,  $\beta = .29$ , p = .092 of the full OCB intention scale. However, check-hope is not a significant predictor of OCB intentions,  $\beta = .22$ , ns. The results of the OCBO and OCBI subscales mirror those from the complete OCB intentions measure (see Table 10).

Therefore, these regressions reveal a check-emotions-OCB intentions pattern of results that is somewhat different from the bivariate correlations. That is, check-hope is no longer a significant predictor of OCB intentions, whereas check-pride increased in significance and reversed directions (i.e., became negative). Importantly, these analyses suggest that when taking each of the check-emotions into account, joy and pride have unique, contradictory associations with OCB intentions. Check-joy seems to have encouraged, while check-pride seems to have marginally discouraged commitments to engage in citizenship behavior. The results for check-pride are inconsistent, whereas the findings for check-joy are consistent with the present study's predictions. Thus, the pattern of findings for the two emotions lends empirical backing to a differentiated connection between the check-emotions and OCB intentions. This supports, at least in part, discrete emotion theory in that it shows joy and pride, despite both being positive

**Table 10**Regressions between Single-Item Emotion Measures and Each Dependent Variable for All Participants

	OCB In.Ttl. (N=75)	OCBO In. (N=75)	OCBI In. (N=75)	OCB Hist. ( <i>n</i> =64)	OCB Past-7-Days (n=39)	Task Prfrm. ( <i>N</i> =75)	Self Prfrm. ( <i>n</i> =54)
Ck.Joy	.44**	.46**	.37*	23	.09	25	08
Ck.Hope	.22	.20	.22	.08	.18	02	.24
Ck.Pride	29†	31†	26	.35†	.12	.14	.20
Ck.Emotion Model	.14**	.14**	.09*	.04	0.05	.00	.07†
St.Joy	.33†	.34†	.29†	14	.38	38*	.17
St.Hope	.07	.02	.08	.09	32	08	23
St.A.Pride	35†	30	34†	.32	.26	.57**	.29
St.H.Pride	.17	.14	.15	21	.03	09	.04
St.Emotion Model	.03	.02	.01	.03	.09	.06†	.03
Trt.Joy	.21	.28	.12	06	.40	19	.19
Trt.Hope	05	15	.04	.17	12	32†	.13
Trt.A.Pride	.04	.06	.02	.23	02	.37*	21
Trt.H.Pride	02	06	01	17	.10	.09	.08
<b>Trt.Emotion Model</b>	-0.02	.00	03	.04	.01	.07†	02

Note: All beta weights reflect all check, state, or trait emotions, respectively, entered simultaneously, into a regression predicting each dependent variable, including social desirability in the model. Model rows contain adjusted  $R^2$  values. Ck.Joy = check-joy; Ck.Hope = check-hope; Ck.Pride = check-pride; St.Joy = state joy; St.Hope = state hope; St.A.Pride = state authentic pride; St.H.Pride = state hubristic pride; St.H.Pride = trait hubristic pride; St.H.Pri

emotions, have unique relationships with an important social behavior (helping "coworkers").

To test for mediation utilizing the Baron and Kenny (1986) approach, four criteria must be met: (1) the independent variable (IV) significantly affects the mediator, (2) the IV significantly affects the dependent variable (DV) in the absence of the mediator, (3) the mediator has a significant unique effect on the DV, and (4) the effect of the IV on the DV decreases when the mediator is added to the model. Thus, Sobel tests were not performed for any of the check or state emotions as predictors of the dependent variables because data from these relationships does not meet these well-established criteria simultaneously (i.e., the third or the fourth criteria were not met depending on the particular analysis).

To determine the role of the *state emotions* in OCB intentions, first bivariate correlations were calculated. These tests yielded non-significant results (see Table 9). To assess if any state emotion is significantly associated with OCB intentions, independent of the other state emotions, multiple regressions were run. The overall regression model is not significant,  $R^2 = .08$ , adjusted  $R^2 = .03$ , F(3,74) = 1.50, ns, suggesting that the state emotions do not account for a notable proportion of the variance in OCB intentions. However, the individual beta weights indicate that state joy is marginally, positively associated with OCB intentions,  $\beta = .33$ , p = .058, and state authentic pride is marginally, negatively associated with OCB intentions,  $\beta = -.35$ , p = .08. The same set of results was produced for the OCBO and OCBI subscales (see Table 10). Importantly, although less strongly, these results form a consistent pattern with the check-emotion findings: they

support a distinct *positive* relationship between current feelings of joy and OCB intentions, and a distinct *negative* relationship between current feelings of pride and OCB intentions.

Bivariate correlations were also calculated to determine if the *trait emotions* were significantly associated with OCB intentions. None of these analyses produced significant results (see Table 9). In a more focused set of analyses, OCB intentions was regressed onto the trait emotions. Neither the regression model, nor the individual beta weights are significant (see Table 10). This suggests that the trait emotions do not account for a significant proportion of the variance in OCB intentions.

In addition, gender was found to have an effect on OCB intentions. Consequently, all bivariate correlations and multiple regressions predicting OCB intentions were rerun for male and female participants separately to test the extent of the influence of gender on OCB intentions (see Tables 11 and 12 for male and female correlations, and Tables 13 and 14 for male and female regressions, respectively).

Bivariate correlations indicate that check-joy and check-hope, but not check-pride, are positively associated with OCB intentions for male participants (r = .38, p < .05; r = .36, p < .05; r = .30, ns, respectively). For female participants the correlations between the check-emotions and OCB intentions are only significant for check-joy (r = .48, p < .01). The same pattern of results for the OCBO and OCBI subscales of the OCB intentions measure was found for male and female participants (see Tables 11 and 12, respectively). Two sets of multiple regression analyses were also performed to isolate the independent effects of the check-emotions as predictors of OCB intentions separately for male and female subjects (see Tables 13 and 14, respectively). For male participants,

Table 11

Bivariate Correlations between the Single-Item Measured Emotions and All Dependent Variables for Male Participants

	Ck. Joy (1)	a Ck. Hope (2)	a Ck. Pride (3)	St. Joy (4)	St. Hope (5)	St.A. Pride (6)	St.H. Pride (7)	a Trt. Joy (8)	a Trt. Hope (9)	Trt.A. Pride (10)	Trt.H. Pride (11)	OCB In.Ttl. (12)	OCBO In. (13)	OCBI In. (14)	OCB Hist (15)	OCB Past7. (16)	Task Prfim. (17)	d Self Prfim. (18)
Ck.Joy (1)	1	.63**	.79**	.623*	.32*	.52**	.44**	.41*	.31†	.26	.40*	.38*	.37*	.29†	.08	.45*	.08	.33†
Ck.Hope (2)		1	.63**	.58**	.42**	.46**	.21	.25	.36*	.16	.00	.36*	.27	.36*	.07	.54*	05	.38†
Ck.Pride (3)			1	.63**	.41*	.59**	.41*	.25	.23	.40*	.32†	.30†	.22	.29†	.14	.40†	.11	.30
St.Joy (4)				1	.70**	.75**	.31†	.63**	.48**	.44**	.30†	.39*	.35*	.37*	.14	.46*	.03	.43*
St.Hope (5)					1	.78**	.14	.60**	.63**	.62**	.11	.36*	.30†	.35*	.15	.02	.08	.04
St.A.Pride (6)						1	.46**	.68**	.59**	.72**	.37*	.20	.12	.22	.14	.26	.25	.33
St.H.Pride (7)							1	.45**	.36*	.41**	.78**	.16	.16	.09	21	.26	05	.29
Trt.Joy (8)								1	.77**	.53**	.44**	.22	.20	.21	.09	.37†	07	.43*
Trt.Hope (9)									1	.66**	.32†	.21	.16	.23	.20	.20	13	.26
Trt.A.Pride (10)										1	.43**	.13	.05	.17	.26	.16	.18	.14
Trt.H.Pride (11)											1	.25	.22	.20	30†	.24	.06	.27
OCB.In.Ttl. (12)												1	.94**	.90**	22	.07	13	.03
OCBO.In. (13)													1	.72**	27	02	19	07
OCBI.In. (14)														1	16	.13	08	.10
OCB.Hist. (15)															1	.50*	.20	.26
OCB.Past.7 (16)																1	.01	.63**
Task.Prfim. (17)																	1	.08
Self.Prfim. (18)																		1

Note: n = 38 n = 32 n = 21 n = 26. Ck.Joy = check-joy; Ck.Hope = check-hope; Ck.Pride = check-pride; St.Joy = state joy; St.Hope = state hope; St.A.Pride = state authentic pride; St.H.Pride = state hubristic pride; Trt.Joy = trait joy; Trt.Hope = trait hope; Trt.A.Pride = trait authentic pride; Trt.H.Pride = trait hubristic pride; OCB In.Ttl. = OCB intentions total scale; OCBO = OCB intentions directed toward an organization; OCBI = OCB intentions directed toward individuals; OCB Hist. = OCB history; OCB Past-7-Days = OCBs engaged in over the past week; Task Prfrm. = task performance; Self Prfrm. = self-rated job performance. † p < .10 \* p < .05 \*\* p < .01.

Table 12

Bivariate Correlations between Single-Item Emotion Measures and All Dependent Variables for Female Participants

	Ck Joy (1)	Ck. Hope (2)	Ck. Pride (3)	St. Joy (4)	a St. Hope (5)	St.A Pride (6)	St.H. Pride (7)	a Trt. Joy (8)	Trt. Hope (9)	Trt.A Pride (10)	Trt.H. Pride (11)	OCB In.Ttl. (12)	OCBO <sup>a</sup> In. (13)	OCBI In. (14)	OCB His. (15)	OCB Prev7. (16)	Task Prfim. (17)	d Self Prfim. (18)
Ck.Joy(l)	1	.47**	.63**	.43*	.26	.04	.27	.42*	.27	.19	.14	.48**	.46**	.46**	.06	.04	.00	.07
Ck.Hope (2)		1	.71**	.27	.39*	.32†	.25	.29†	.37*	.43*	.19	.12	.11	.11	.27	10	30	.26
Ck.Pride (3)			1	.35*	.19	.27	.19	.33†	.35*	.37*	.09	.17	.19	.13	.36*	.12	20	.32†
St.Joy (4)				1	.61**	.68**	01	.75**	.54**	.58**	05	.07	.07	.07	.13	.38	22	.12
St.Hope (5)					1	.67**	.28	.41*	.58**	.36*	.20	24	26	20	.25	.30	08	.13
St.A.Pride (6)						1	.19	.49**	.48**	.59**	.24	13	09	15	.31†	.48*	.05	.23
St.H.Pride (7)							1	.12	.19	.16	.76**	.17	.16	.16	.00	01	03	08
Trt.Joy (8)								1	.69**	.81**	.05	.20	.21	.18	.25	.28	25	06
Trt.Hope (9)									1	.71**	.15	.08	.02	.13	.32†	.20	31†	.03
Trt.A.Pride (10)										1	.09	.12	.17	.06	.23	.24	15	12
Trt.H.Pride (11)											1	04	06	01	.10	.16	.00	06
OCB.In.Ttl. (12)												1	.95**	.96**	16	02	23	07
OCBO.In. (13)													1	.82**	11	01	18	02
OCBI.In. (14)														1	19	02	25	11
OCB.Hist. (15)															1	.54*	.03	.45*
OCB.Prev.7 (16)																1	32	.33
Task.Prfim. (17)																	1	.26
Self.Prfim. (18)																		1

Note: n = 33 n = 32 n = 18 n = 28. Ck.Joy = check-joy; Ck.Hope = check-hope; Ck.Pride = check-pride; St.Joy = state joy; St.Hope = state hope; St.A.Pride = state authentic pride; St.H.Pride = state hubristic pride; Trt.Joy = trait joy; Trt.Hope = trait hope; Trt.A.Pride = trait authentic pride; Trt.H.Pride = trait hubristic pride; OCB In.Ttl. = OCB intentions total scale; OCBO = OCB intentions directed toward an organization; OCBI = OCB intentions directed toward individuals; OCB Hist. = OCB history; OCB Past-7-Days = OCBs engaged in over the past week; Task Prfrm. = task performance; Self Prfrm. = self-rated job performance. † p < .10 \* p < .05 \*\* p < .01.

**Table 13**Regressions between Single-Item Emotion Measures and OCB Intentions for Male Participants

	OCB In. Ttl. $(n = 38)$	OCBO In. $(n = 38)$	OCBI In. $(n = 38)$	
Ck. Joy	.31	.49†	.07	
Ck. Hope	.21	.11	.28	
Ck. Pride	07	24	.06	
Ck. Emotion Model	.07	.06	0.03	
St. Joy	.42†	.46†	.36	
St. Hope	.60*	.59*	.47	
St. A. Pride	68*	81*	44	
St. H. Pride	.27	.31	.12	
St. Emotion Model	.00	.00	.03	
Trt. Joy	.07	.09	.06	
Trt. Hope	.16	.14	.19	
Trt. A. Pride	09	19	10	
Trt. H. Pride	.21	.22	.11	
Trt. Emotion Model	06	06	-0.06	

*Note:* All beta weights reflect all check, state, or trait emotions, respectively, entered simultaneously, into a regression predicting each OCB intentions outcome, with social desirability in the model. Model rows contain adjusted *R*<sup>2</sup> values. Ck. Joy = check-joy; Ck. Hope = check-hope; Ck. Pride = check-pride; Ck. Emotion Model = regression model including all of the check-emotions; St. Joy = state joy; St. Hope = state hope; St. A. Pride = state authentic pride; St. H. Pride = state hubristic pride; St. Emotion Model = regression model including all of the state emotions; Trt.Joy = trait joy; Trt.Hope = trait hope; Trt. A. Pride = trait authentic pride; Trt. H. Pride = trait hubristic pride; Trt. Emotion Model = regression model including all of the trait emotions; OCB In.Ttl. = OCB intentions total scale; OCBO = OCB intentions directed toward an organization; OCBI = OCB intentions directed toward individuals.

$$\dagger p < .10 * p < .05 ** p < .01$$
.

**Table 14**Regressions between Single-Item Emotion Measures and OCB Intentions for Female Subjects

	OCB In. Ttl. $(n = 33)$	OCBO In. $(n = 33)$	OCBI In. $(n = 33)$	
Ck. Joy	.63**	.57*	.62**	
Ck. Hope	02	06	.02	
Ck. Pride	21	12	26	
Ck. Emotion Model	.11	.12	.14†	
St. Joy	.55*	.51*	.53*	
St. Hope	52*	61*	42	
St. A. Pride	22	10	31	
St. H. Pride	.36†	.35	.34†	
St. Emotion Model	.11	.12	.07	
Trt. Joy	.35	.30	.37	
Trt. Hope	06	25	.11	
Trt. A. Pride	11	.13	29	
Trt. H. Pride	04	05	02	
Trt. Emotion Model	11	08	10	

*Note:* All beta weights reflect all check, state, or trait emotions, respectively, entered simultaneously, into a regression predicting each OCB intentions outcome, with social desirability in the model. Model rows contain adjusted *R*<sup>2</sup> values. Ck. Joy = check-joy; Ck. Hope = check-hope; Ck. Pride = check-pride; Ck. Emotion Model = regression model including all of the check-emotions; St. Joy = state joy; St. Hope = state hope; St. A. Pride = state authentic pride; St. H. Pride = state hubristic pride; St. Emotion Model = regression model including all of the state emotions; Trt.Joy = trait joy; Trt.Hope = trait hope; Trt. A. Pride = trait authentic pride; Trt. H. Pride = trait hubristic pride; Trt. Emotion Model = regression model including all of the trait emotions; OCB In.Ttl. = OCB intentions total scale; OCBO = OCB intentions directed toward an organization; OCBI = OCB intentions directed toward individuals.

$$\dagger p < .10 * p < .05 ** p < .01.$$

check-joy still has a sizable positive beta weight ( $\beta = .31$ ) in the regression predicting total OCB intentions, but for the male half of the sample it does not reach significance (perhaps this is because the sample size has been reduced by more than half for the gender analyses, considerably limiting statistical power). This is different from the correlation results for male participants, as well as the total sample regressions that each found check-joy was significantly predictive of OCB intentions (see Table 11 and Table 10, respectively). However, the same set of analyses performed for female participants yielded strongly significant results for check-joy,  $\beta = .63$ , p = .006. This pattern is observed for the OCBO and OCBI subscales for female participants (see Table 14). These findings are consistent with the correlational results between the check-emotions and OCB intentions for females, as well as the total sample regressions, but are distinct from the male correlations and regressions. In short, these findings indicate that current feelings of joy are more strongly associated with increases in commitment to engage in OCBs for female than for male participants (although the relationship is in the same direction for both genders).

Do the state emotions reveal a similar pattern of predictors of OCB intentions across genders? State joy and state hope, are significantly, positively correlated with OCB intentions for male participants (r = .39, r = .36, p < .05, respectively). However, none of these correlations are significant for female participants (see Table 12). Therefore, the state emotions produced the same pattern of correlations as the check-emotions for male, but not for female subjects. A more precise analysis that takes each of the state emotions into account as predictors of OCB intentions was also run. These calculations indicate that state hope is significantly, positively related and state authentic pride is significantly,

negatively related to OCB intentions for male subjects,  $\beta$  = .60, p=.04 and  $\beta$  = -.68, p=.035, respectively, and state joy is marginally significant,  $\beta$  = .41, p=.084. Results for the same set of calculations for female participants reveal that state joy is significantly, positively related and state hope is significantly, negatively related to OCB intentions,  $\beta$  = .55, p= .037 and  $\beta$  = -.52, p=.016, respectively, and state hubristic pride is marginally significant,  $\beta$  = .36, p=.059. Unexpectedly, these regression results show that state hope is contradictorily associated with OCB intentions in male versus female participants (which is especially curious given that check-hope was not significantly associated with OCB intentions for either sex).

Finally, trait emotions were examined to determine if there were gender differences in their associations with OCB intentions. The results of bivariate correlations and multiple regressions were not significant for male or female subjects (see Tables 11 and 12, and Tables 13 and 14, respectively).

In sum, gender differences appear to be present in the correlational results for OCB intentions. The main difference between male and female participants is that state hope is strongly and positively associated with OCB intentions for male, but is strongly and negatively associated with OCB intentions for female participants. The other observed differences are that check-and state joy are strongly predictive of OCB intentions for female participants, but are not significantly predictive for male participants, although the results are in the same direction; and state authentic pride is negatively predictive of OCB intentions for male subjects, but is not significantly predictive for female subjects, although it is in the same direction. Taken together, as revealed in the correlational results for the total sample, even when taking gender into

account, particular positive emotions appear to have differential and unique relationships to OCB intentions, lending empirical support to the theory that positive emotions are discrete and have distinguishable relationships to important social cognitions and behaviors. The potential pathways underlying the gender differences in these associations will be examined in the discussion section.

# Check-, State, and Trait Emotions and OCB History.

Given the findings for OCB intentions, what are the relationships of the measured emotions to *OCB history*? No check-emotions were expected to be significantly associated with OCB history, because the former measures one's *present* emotion states, whereas the latter measures patterns of *past* behavior. Accordingly, bivariate correlations were calculated between the check-emotions and OCB history, and are not significant (see Table 9). Additionally, multiple regression analyses were run in an attempt to discern if any individual check-emotion is a significant predictor of OCB history, controlling for the effects of the other check-emotions. The results of these tests indicate that check-pride is a marginally significant predictor of OCB history,  $\beta = .35$ , p = .068. However, neither check-hope nor check-joy are significantly associated with OCB history,  $\beta = .08$  and  $\beta = .19$ , ns, respectively.

Are the *state emotion* measures correlated with OCB history as they are with the check-emotion measures? As with the check-emotion analyses, state emotions were not expected to be significantly associated with OCB history, because the former measures current feelings, whereas the latter measures previous behavior. Bivariate correlations were calculated and found this to be accurate; there were no significant state emotion-OCB history correlations (see Table 9). Because the state emotions are highly correlated,

the bivariate correlation results could be potentially obscuring a significant association between a particular state emotion and OCB history. As a result, multiple regressions were run entering the state emotions simultaneously as predictors of OCB history. However, as expected, none of these results reached significance (see Table 10). This suggests that participants' state emotions (which were measured approximately 20 minutes after the check-emotions) are not significantly related to their OCB history.

Lastly, bivariate correlations between the *trait emotions* and OCB history were conducted. Trait authentic pride is significantly and positively associated with OCB history (r=.26, p < .05). In an attempt to isolate the independent relationship of each trait emotion to OCB history, OCB history was regressed onto the trait emotions. However, in the regression analyses, trait authentic pride is not a significant predictor of OCB history, nor are the other trait emotions (see Table 10).

# Check, State, and Trait Emotions and OCB Past-7-Days.

The third and final measure of citizenship behavior administered was *OCB past-7-days*. Although this scale gauges behavior similar to OCB history, it is designed to detect OCBs engaged in over the seven days prior to subjects' participation in the study, whereas OCB history is open to OCBs engaged in during the past generally. As a result, the former provides a different operationalization of OCB that may be less susceptible to memory distortion and social desirability bias than the latter. However, because OCB past-7-days measured previous behavior it was not expected to be associated with check or state emotions. Nevertheless, bivariate correlations indicate that check-hope, state authentic pride, and state joy are significantly and positively correlated with OCB past-7-days (r = .34, r = .32, r = .37, p < .05, respectively). To determine the extent of this effect,

OCB past-7-days was regressed onto the check and state emotions, in two separate sets of analyses. According to these results, neither the check- nor the state emotions are significant predictors of OCB past-7-days (see Table 10).

Trait positive emotions were also entered into bivariate correlations with OCB past-7-days. They were expected to be positively associated with OCB past-7-days because prior research has consistently indicated a link between positive emotional disposition and past citizenship behavior (e.g., Williams & Shiaw, 1999). Although the results do not confirm prior research on the relationship between general positive affect (all of the positive emotions) and past citizenship behavior, they do indicate that trait joy, and only trait joy, is positively correlated with OCB past-7-days (r = .32, p < .05). To determine if trait joy remains a significant predictor of OCB past-7-days when controlling for the other trait emotions, trait emotions were entered into a multiple regression analysis predicting OCB past-7-days. The total regression model is not significant (see Table 10). The individual beta weights indicate that trait joy does not remain a significant predictor of OCB past-7-days when controlling for the other trait emotions. However, it is worth noting that trait joy still produced a fairly substantial individual beta weight compared to the other trait emotions, i.e.,  $\beta = .40$  (see Table 10). Bearing this in mind, the trait findings for OCB past-7-days appear to be more congruent with the OCB intentions results (where check-joy was found to be the strongest covariate of OCB intentions), than with the OCB history results (where check-pride was found to be the strongest covariate of OCB history). Does this, then suggest that OCB history and OCB past-7-days are operationally distinct OCB measures?

Although the three items that comprise the OCB past-7-days measure were taken from the OCB history scale, some language was added to two out the three OCB past-7days items, preventing sufficient comparability. For example, one item in the OCB history measure is, "Assisted others with their work duties," but the item in OCB past-7days measure is, "Assisted others with their work duties (if assisting them is not a job requirement of yours)." Thus, to effectively test the potential distinctness of the OCB history versus the OCB past-7-days measures, scores on only the single item that was worded the same in the two scales (i.e., "Give up time to help others who have work or nonwork problems") were separately regressed onto the measured emotions. The results of these analyses indicate no significant findings for the emotion measures as predictors of the single-item OCB history measure (see Table 15). In comparison, the total regression model employing the state emotions as predictors of the single-item OCB past-7-days is just shy of significance,  $R^2 = .22$ , adjusted  $R^2 = .13$ , F(4.41) = 2.54, p = .056. Also, the individual beta weights produced by this regression model show that state authentic pride is just shy of significance as a positive predictor of the single-item OCB past-7-days measure,  $\beta$  = .52, p = .052. Together, these results suggest that the single-item OCB past-7-days measure is a more discriminantly valid operationalization of past citizenship behaviors than the traditional and often-used OCB history measure (Lee & Allen, 2002).

Table 15

Regressions between Single-Item Emotion Measures, and Single-Item OCB History or Single-Item OCB Past-7-Days Measures for All Participants

	OCB History $(n = 64)$	OCB Past-7-Days $(n = 39)$
Ck. Joy	17	06
Ck. Hope	.01	.28
Ck. Pride	.07	.63
Ck. Emotion Model	03	.04
St. Joy	07	.19
St. Hope	.07	32
St. A. Pride	.11	.52†
St. H. Pride	10	27
St. Emotion Model	05	.13†
Trt. Joy	.05	.11
Trt. Hope	.04	.13
Trt. A. Pride	.04	.12
Trt. H. Pride	08	19
Trt. Emotion Model	05	.00

*Note:* All beta weights reflect all check, state, or trait emotions, respectively, entered simultaneously, into a regression predicting each outcome variable, with social desirability in the model. Model rows contain adjusted  $R^2$  values. Ck. Joy = check-joy; Ck. Hope = check-hope; Ck. Pride = check-pride; Ck. Emotion Model = regression model including all of the check-emotions; St. Joy = state joy; St. Hope = state hope; St. A. Pride = state authentic pride; St. H. Pride = state hubristic pride; St. Emotion Model = regression model including all of the state emotions; Trt. Joy = trait joy; Trt. Hope = trait hope; Trt. A. Pride = trait authentic pride; Trt. H. Pride = trait hubristic pride; Trt. Emotion Model = regression model including all of the trait emotions. † p < .10 \* p < .05 \*\* p < .01.

## **Summary of Correlational Results**

Overall, based on the present results, it appears that there is evidence to support three constellations of findings. The first pattern is that current feelings of joy (i.e., checkand state joy) are positively associated with OCB intentions, and current feelings of pride (i.e., check- and state pride) are negatively related to OCB intentions. These findings suggest that the emotions of joy and pride, are differentially associated with commitments to engage in citizenship behavior. The second finding is that participants who were feeling elevated levels of check-pride were more likely to recall greater OCB history, or that individuals with greater OCB history experienced elevated levels of check-pride. The third pattern is that the measured positive emotions, especially the check-emotions, are differentially associated with the three operationalizations of OCB. This pattern is evidenced especially well by the findings that check-joy is associated with OCB intentions, and check-pride is associated with OCB history, above and beyond the other check emotions, while OCB past-7-days is not significantly related to any of the checkemotion measures. Reasons for these unique patterns of relationships and their implications for the hypotheses of this research, as well as discrete emotion theory, will be explored in the General Discussion.

# Check-, State, and Trait Emotions and Job Performance.

To test if the measured emotions are significantly associated with job performance, a series of correlations and multiple regressions were calculated. To start, the *check emotions* were entered into a series of bivariate correlations with *task performance* (i.e., scores on the anagram solutions test). The results indicate no significant associations between these variables (see Table 8). To determine if unique

associations are revealed when isolating the effects of each check-emotion, task performance was regressed onto the check-emotions. These analyses did not yield significant results either (see Table 10).

Are the state emotions more strongly associated with task performance than the check-emotions? To assess if this is the case, bivariate correlations were generated between the state emotions and task performance. However, the results were not significant (see Table 9). The state emotions were also entered as predictors of task performance into a multiple regression analysis to test if any of the state emotions have a unique association with task performance. The results indicate that state joy is negatively predictive of task performance,  $\beta = -.38$ , p = .029. This finding suggests that current feelings of joy hinder task performance, which is contrary to previous research on general positive affect and task performance (e.g., Isen, 1984; Isen et al., 1987). In contrast, state authentic pride is strongly, positively predictive of task performance,  $\beta = .57$ , p = .005. This is consistent with prior research that found positive affect is positively associated with improvements in task performance (Erez & Isen, 2002). However, this extends previous research by identifying a relationship that is unique to the particular positive emotion pride. The underlying pathway may be that pride encouraged persistence on the challenging test.

Alternatively, these findings may suggest that, due to the order in which the measures were administered (i.e., the state emotion measures were completed *after* the performance task), current feelings of joy did not hinder participants' task performance, but rather task performance lead participants to feel significantly less joy. Similarly, perhaps participants did not feel high levels of pride and then perform better on the

anagrams task, but rather their feelings of pride increased as a *consequence* of engaging in the task. Making an effort to do well on the difficult anagrams task may have somewhat decreased participants' joyful feelings; however, after completing the task, participants may have felt somewhat proud of either their perseverance and/or their performance on the anagram test. Interestingly, regardless of the interpretation, these findings reveal, even more distinctly than with citizenship behavior, that different positive emotions have unique associations with a valuable behavior: task performance.

Is a similar pattern present in the trait emotions? Bivariate correlations between the trait emotions and task performance indicate that this is not the case; they are not significant (see Table 9). Additionally, multiple regression analyses were run with the trait emotions as predictors of task performance. The total regression model is not significant (see Table 10). However, the individual beta weights do indicate that trait authentic pride is a strong, positive predictor and trait hope is a marginal, negative predictor of task performance,  $\beta = .37$ , p = .028 and  $\beta = -.32$ , p = .068, respectively. Thus, trait authentic pride may have enhanced anagram performance by boosting participants willingness to persist at the cognitively-demanding task. It is worth noting that unlike state authentic pride, where the direction of the relationship was less clear, trait authentic pride is very likely increasing task performance (as opposed to the other way around). That is, as trait authentic pride measures a person's stable disposition toward experiencing pride, it should not be altered by temporary performance on a particular task, whereas there is reason to believe that trait pride may influence the more malleable construct of task performance.

In addition to task performance, job performance was also operationalized via a self-report questionnaire. This measure asked participants to rate their the job performance over the past 12 months according to an official review by their work supervisor, or how they think the supervisor would have evaluated them (whether or not they agreed with it). Although the check- and state emotions were not expected to be associated with self-rated job performance, because the former are present feelings and the latter are past behaviors, the trait emotions were expected to be associated with self-rated job performance based on prior research on positive affect and job performance (e.g., Williams & Shiaw, 1999). The bivariate correlations indicate that check-hope and check-pride are both significantly and positively associated with self-rated job performance (r = .33, r = .31, p < .05, respectively). However, when three separate multiple regression analyses were performed to isolate the possible unique effects of a particular check-, state, or trait emotion on self-rated job performance, the results were not significant.

Ultimately, the performance analyses suggest two patterns of findings. First, trait pride may be associated with slight increases in task performance, and higher trait pride individuals may experience elevated levels of state authentic pride prior to, during, and/or after performing a challenging cognitive task. Second, state joy may hinder task performance (or it is possible that task performance may lead to reduced feelings of state joy, e.g., if working on the anagrams test was trying). These findings, as with the correlational results for OCB, suggest that particular positive emotions have distinct relationships with important cognitions and behaviors, offering support to the discrete

theory of emotions. Questions concerning the reasons for these unique associations will be addressed later on in the General Discussion.

#### **OCB** and Performance.

Prior research has found significant positive associations between organizational citizenship behavior and job performance (Podsakoff & MacKenzie, 1994, 1997; Van Scotter, Motowidlo, & Cross, 2000). To test if OCB and performance were related to one another in the present study, separate bivariate correlations were run between each of the OCB measures (OCB intentions, OCB history and OCB past-7-days) and each performance measure (task performance and self-rated job performance). These correlations show significant relationships between OCB history and self-rated job performance (r = .36, p < .01), and OCB past-7-days and self-rated job performance (r = .36, p < .01).49, p < .01). No other associations are significant (see Table 9). However, both of these measures may be particularly susceptible to social desirability bias because there exist strong social expectations that individuals be helpful to one another and perform well at their jobs. To examine this possibility, self-rated job performance was regressed separately onto OCB history and OCB past-7-days, controlling for social desirability. The results indicate that both associations remain significant and rule out, at least in part, social desirability as a confound in these findings,  $\beta = .32$ , p = .021 and  $\beta = .47$ , p = .003, respectively. Thus, it seems the present research replicates, in part, an important finding in the literature: rises in OCB are associated with increases in job performance (or vice versa).

Given that both OCB history and OCB past-7-days measure previous OCBs, it would be expected that if one predicts self-rated job performance, so would the other.

Indeed, the correlation coefficient between the two OCB measures is large (r = .53, p < .01). However, OCBs engaged in over the past week is a notably more robust predictor of self-rated job performance than OCBs engaged in during the past generally (i.e.,  $\beta$  = .47 versus  $\beta$  = .32). Why might this be?

Multiple regressions were performed entering OCB history and OCB past-7-days simultaneously as predictors of self-rated job performance to determine if either OCB scale has a unique association with self-rated performance. Interestingly, it appears that these measures were capturing related, although somewhat different constructs, as OCB history is no longer predictive of self-rated job performance, whereas OCB past-7-days remains a significant, positive predictor of self-rated performance,  $\beta = .14$ , ns and  $\beta = .40$ , p=.026, respectively. In an additional analysis, OCB intentions was added into the aforementioned regression model predicting self-rated job performance, to determine which, if any OCB measure (i.e., OCB intentions, OCB history, OCB past-7-days) is significantly and independently predictive of self-rated performance. The results continue to indicate that OCB past-7-days is a significant predictor of self-rated job performance, β = .39, p = .035, whereas OCB intentions and OCB history are not significant predictors,  $\beta$ = .15 and  $\beta$  = .04, ns, respectively. However, as mentioned in the previous regression section, to test the the relative validity of the OCB history and OCB past-7-days scales, analyses using the single-item measures of the two variables are necessary. Therefore, a multiple regression analysis was conducted that entered in the single-item OCB history and the single-item OCB past-7-days measures simultaneously as predictors of self-rated job performance. The total regression model is highly significant,  $R^2 = .32$ , adjusted  $R^2$ =.28, F(2,37) = 8.10, p = .001. The individual beta weights also indicate that OCB past7-days is a highly significant, positive predictor of self-rated job performance,  $\beta$  = .43, p = .006, whereas OCB history is not a significant predictor,  $\beta$  = .24, ns. These findings support the notion that OCB past-7-days is a more reliable and valid measure of OCB than a popular OCB history measure (Lee & Allen, 2002). Perhaps because it focuses self-reporting to recent events, the OCB past-7-scale may be less susceptible to social desirability and affect-congruency biases, as well as lapses and inaccuracies in memory retrieval, which allows it to better predict important organizational behaviors like job performance.

Lastly, there is evidence in prior research that OCB intentions and OCB history are positively associated with one another (Williams & Shiaw, 1999), as well as that task performance and manager-rated job performance (for which self-rated job performance is a proxy measure) are also predictive of each other. Therefore, two sets of bivariate correlations were calculated, this first was between OCB intentions and OCB history, and the second was between task performance and self-rated job performance, to test for replications of these relationships. However, support was not found for either association in the present research (see Table 9). These analyses are notable then, in that they suggest OCB intentions and OCB history, as well as task performance and self-rated job performance, as measured in the present study, each captured somewhat empirically distinct constructs. As noted in the previous paragraph, OCB history and OCB past-7-days are highly correlated with one other, and yet, still these variables have yielded significantly different associations with the predictor variables (e.g., check-pride and state joy, respectively).

Overall, these results may help to explain the series of findings observed where the same particular positive emotion is differentially associated with the same outcome variable, depending on its operationalization (e.g., check-pride and OCB intentions versus check-pride and OCB history). More broadly, these differences across measures may be useful in reaching a coherent understanding of the set of results that are in some cases consonant with, and in other cases contrary to the predictions of the present research. These issues will be addressed in further detail in the General Discussion.

#### **GENERAL DISCUSSION**

# Did the Emotion Manipulations Significantly Effect OCB Intentions?

The first prediction of the present work was that both the hope and pride manipulations, i.e., positive affect in general, would raise OCB intentions scores significantly higher than the neutral manipulation (control). The present research supports this hypothesis. That is, OCB intentions are greater in the hope condition as well as in the pride condition than in the neutral condition. Why was this found?

There are a two converging lines of research that suggest a strong link between positive affect and citizenship behavior. The first set of studies found strong, positive associations between positive affect and organizational commitment (Cropanzano, James, & Konovsky, 1993). Indeed, individuals with higher levels of positive affect were found to spend more time at work than individuals lower on positive affect. Prior research has also found that individuals who demonstrate higher levels of commitment to their position of employment (i.e., organizational commitment) are significantly more likely to engage in OCBs than individuals less committed to their job and employer (Lepine et al., 2002; Organ & Ryan, 1995). One study even found that organizational commitment was a more robust predictor of OCB than a construct that has been widely shown to be predictive of citizenship behavior, that is, procedural justice (Schappe, 1998). Therefore, it may be that individuals who were experiencing elevated levels of positive emotion (i.e., are in the hope or pride condition), may have also been experiencing a greater sense of commitment to their organization and coworkers (i.e., Rutgers University, and Rutgers student peers, as measured in the present study) than participants in the neutral condition. As a result, they may have been more likely to commit to future OCBs.

Another tenable pathway for the unique effect of manipulated hope on OCB intentions may be through job satisfaction. That is, previous research has found that both state and trait levels of positive affect are a reliable predictor of job satisfaction (see Brief & Weiss, 2002 for a review), and decades of research and a group of meta-analyses indicate a robust positive association between job satisfaction and organizational citizenship behavior (Lepine et al., 2002; Organ et al., 2006; Organ & Ryan, 1995). In this case, then, participants in the hope and pride conditions may have felt a temporary increase in their satisfaction with their experience as part of the Rutgers community, and as a result, may have been more willing to commit time and effort to volunteering for that community.

Bringing both lines of research together, individuals in the hope and pride conditions may have felt more committed to and satisfied with the organizational and interpersonal aspects of Rutgers University life than individuals in the neutral condition, and this may have lead to a greater boost in OCB intentions in the former than in the latter conditions. However, if commitment and satisfaction are the mechanisms underlying the effect of positive emotion on OCB intentions, then why is the size of the effect of the hope condition notably larger than the size of the effect of the pride condition on OCB intentions (compared to neutral condition)?

There are a number of plausible reasons for why pride may have a less positive influence on OCB intentions than hope. First, pride is a complex sociomoral emotion that often carries with it competing implications for socially adaptive behaviors (e.g., Kristjánsson, 2002; Tracy & Robins, 2007). For instance, Hart and Mastuba (2007) found that although pride in one's community was positively predictive of community

volunteering, pride in one's self was negatively related to volunteering. This suggests that pride elicited by somewhat different cognitive appraisals may have separate, even contradictory effects on the same social action (e.g., citizenship behavior). Given the autobiographical recollections method used in the present research to induce pride, there is a possibility that variability in participants' memories and appraisals evoked different affective experiences of pride, and therefore, had an inconsistent influence on OCB intentions. Second, a number of psychologically maladaptive traits and behaviors have been linked to certain pride-centered social cognitions that may reduce or counter one's interest in helping others, such as narcissism, neuroticism, and aggression (e.g., Bushman & Baumeister, 1998; Hart & Matsuba, 2007; Tracy & Robins, 2004, 2007). Third, and perhaps most importantly, pride is a positive emotion distinct from hope in that it is categorized as a "self-conscious" emotion, meaning that it is generally felt toward the self rather than toward objects or other people. An important consequence of this appraisal pattern is "social disengagement," i.e., pride has been found to widen the perceived distance between self and other, particularly in Western cultures like the United States (Kitayama, Markus, & Kurokawa, 2000; Kitayama, Markus, & Matsumoto, 1995). Because perceptions of self-other closeness and similarity are fundamentally important to the motivation of cooperation, reciprocity, and altruistic behavior (Cialdini, Brown, Lewis, Luce, & Neurberg, 1997; Cunningham, 1986; Oveis, Horberg, & Keltner, 2010; Sober & Wilson, 2001), by triggering social disengagement, pride may actually reduce the emotional impetus for extending oneself to assist others and engage in actions such as organizational citizenship behavior.

The second hypothesis of the present research was that manipulated hope and manipulated pride would differentially influence OCB intentions. However, although it is the case that compared to the neutral condition, the positive emotion conditions caused a greater commitment to engage in future OCBs, the difference between the hope and pride conditions is minimal. Why was the second central hypothesis of the present work not supported?

The predicted pattern of results may not have been found because the emotion manipulation was ineffective at inducing hope and pride independently of joy. As indicated in the manipulation check analysis, check-joy was induced in the hope condition at levels equal to check-hope in that condition, and check-joy levels were also quite high compared to check-pride in the pride condition (see Table 3). Furthermore, the levels of joy were equivalent in the hope and pride conditions. Therefore, any effect that the hope condition had on participants' reports of OCB intentions may have overlapped, to a notable degree, with the effect of the pride condition vis-à-vis induced joy. In effect, this may have limited the unique, differential influence of manipulated hope and pride on OCB intentions.

Interestingly, pronounced differences between male and female participants were found for OCB intentions. Females committed to approximately twice as many hours to engage in OCBs at Rutgers over a three-week period as their male peers. Prior research has found that in certain circumstances women are more likely than men to engage in helpful or prosocial behavior (e.g., Anderson, 1993; Andreoni & Vesterlund, 2001; Belansky & Boggiano, 1994). For instance, a particular aspect of altruistic action that has been widely studied is volunteering, and research has found that women are not only

more likely to volunteer, but they engage in a greater number of hours of volunteering activities than their male counterparts (Wilson, 2000; Wuthnow, 1995). Within the domain of organizational citizenship behavior, gender has been studied only minimally (Kidder & Parks, 2001). However, among the few studies that have examined it, female, but not male gender was found to have a significant positive relationship with citizenship behavior (coding female gender as 0 and male gender as 1, and entering gender into a correlation with OCB; Morrison, 1994; Van Dyne & Ang, 1998).

Why might women engage more frequently in altruistic actions and specifically, citizenship behavior? Sociocultural norms have a powerful affect on gender roles and consequently, play a significant role in gender differences in a range of social behaviors. In particular, social norms, at least in the West, encourage women to adopt communal roles, like helpers, caretakers, and even organizational citizens, whereas they dictate that men adopt agentic roles that are centered around autonomy, competition, and achievement (Eagly & Mladinic, 1989; Eagly & Steffen, 1984; Heilman, 2001). In support of this reasoning, Heilman and Chen (2005) found that the expectations regarding altruistic citizenship behavior (i.e., OCB) are considerably higher for women than men (e.g., "putting in extra time to help coworkers with work-related problems" was rated as significantly more important to the role of female than male employees by both men and women; p. 439). Thus, it is likely that cultural and occupational gender stereotype prescriptions are largely responsible for the marked sex differences found in OCB intentions in the present study.

# Did the Emotion Manipulation Conditions Have an Effect on Task Performance?

The emotion manipulation was not found to have a significant effect on task performance. Prior research has found that experimentally induced positive affect enhances anagram performance specifically (Erez & Isen, 2002), as well as certain skills that are valuable to performance in different organizational contexts, such as negotiation and cooperative bargaining (Carnevale et al., 1986), flexible thinking (Isen & Daubman, 1984), and creative problem solving (Isen et al., 1985, 1987). So, why was task performance not affected by the emotion inductions in the present work?

The present study employed an emotion manipulation that relied on deliberate thought and conscious recall of personal events to elicit a particular positive emotion (e.g., "Think of an experience ...that caused you to feel intense pride"). Moreover, the hope and pride manipulations were designed to cause participants to relive an especially potent emotional experience, i.e., they were asked to remember a time when they felt "intense hope" or "intense pride." However, past research that has found positive affect improves task performance has predominantly induced positive emotions nonconsciously and subtly, that is, outside the awareness of the participants. For example, Erez and Isen (2002) induced positive affect by giving participants a free bag of candy at the outset of the experiment to test the influence of positive emotion on anagram performance. Although these positive emotion manipulations have been validated in many studies (e.g., Isen, 1999), the emotions elicited through the autobiographical recollection method used in the present work have been found to have large enough effects to produce significant changes in physiological activity (Ekman, Levenson, & Friesen, 1983; Levenson, 1992). Therefore, the intensity of the positive affective states

induced in the present study are likely significantly greater than those induced in previous research.

Bearing this in mind, consider also that the anagram solutions test used to measure task performance was found to be "moderately difficult" in Porath and Erez (2007, 2009), and had to be completed within a limited time period (i.e., 10 anagrams in 10 minutes). This, therefore, may not have been an easy feat for participants. Indeed, none of the subjects in the present study were able to solve all 10 anagram puzzles in the allotted time, and the mean score on the anagrams test in the present work is approximately one full point lower than in Erez and Isen (2002). As a result, the task may have induced a notable degree of performance anxiety in the participants.

Thus, subjects may have experienced a sizable reduction in their manipulated positive emotions when transitioning from the relatively pleasant relived emotion experience to the relatively unpleasant anagrams test. Such a contrast or fluctuation in affective experiences may have significantly reduced the durability of the positive emotion inductions, thereby minimizing the effects of manipulated emotion on task performance. Because of the comparatively weaker strength of the positive emotions induced, and the higher performance on the anagrams test found in past research, any contrast in emotional states experienced by participants in that work may have been negligible. Consequently, significant differences in task performance between emotion conditions were observed in prior studies, but not in the present research.

# What do the Associations between the Measured Emotions and the Outcome Variables Reveal?

# **Organizational Citizenship Behavior.**

Participants' feelings of joy were found to predict the amount of time and effort they would dedicate to future OCBs (i.e., OCB intentions) above and beyond feelings of hope or pride. Moreover, the correlational data from the present research shows that, when controlling for the effects of the other positive emotions, joy and only joy is significantly associated with an increase in OCB intentions. This is consistent with the finding that check-joy is significantly elevated in both the hope and pride conditions, the two conditions in which OCB intentions were found to rise (compared to the neutral condition).

Why was this particular association found? Prior research on positive emotions and OCB has consistently found a positive association between the two constructs (e.g., George & Brief, 1992; Williams & Shiaw, 1999). However, this research has almost entirely focused on the role of general positive affect in citizenship behavior, rather than the effect of particular positive emotions. Additionally, there is a rich literature in social psychology that has shown individuals tend to be more altruistic, both in a out of the workplace, when experiencing positive affect (happiness or joy) than when experiencing neutral or negative feelings (e.g., Aderman, 1972; George, 1991; Isen, Clark, & Swartz, 1976; Isen & Levin, 1972; see Lyubomirsky, King, & Diener, 2005 for a review; Rosenhan, Salovey, & Hargis, 1981). The mechanisms through which this is posited to occur are many. One of the most empirically established viewpoints is that individuals experiencing positive emotions will interpret the actions of others around them in a more

favorable light. This leads them to render affect-congruent social judgments (Forgas, 1995, 2008; Isen, 1999b, 2008). For example, individuals experiencing positive affect may perceive that coworkers are behaving more helpfully, and more frequently than they actually are, and so those individuals may be more eager or willing to 'return the favor,' as the social-psychological force of reciprocity can be quite compelling (Cialdini, 2001).

Moving on to measured pride, counter to predictions, the emotion was found to be marginally, *negatively* predictive of OCB intentions. Why might this be the case, especially in noting that manipulated pride produced significantly elevated levels of OCB intentions (compared to the control condition)? Because the pride manipulation elicited notable levels of joy and hope, as well as pride, it is not clear whether manipulated pride actually increased OCB intentions, or if it was the result of the joyful or hopeful feelings that were also induced in that condition. In taking this issue into account, and removing the effects of hope and joy on the pride-OCB intentions relationship, it was revealed that on its own, pride is negatively associated with OCB intentions. However, this still does not explain why Hodson (1998) found a positive association between pride and OCB, but the present work did not.

As noted, pride has been associated both with increases as well as decreases in prosocial behavior (i.e., volunteering), depending on the source of the prideful feelings (Hart & Matsuba, 2007). That is, Hart and Matsuba (2007) found "pride in community" to positively predict community volunteering, but pride in oneself in general to negatively predict the same volunteering behavior. Similarly, Hodson (1998) measured "pride in work," not pride in general or pride in other areas of subjects' lives to positively predict citizenship behavior. Importantly, then, empirical evidence suggests that the particular

focus of pride is central to the nature of its effect on altruistic behavior. Do these findings, then indicate that there are different kinds of pride? They do not, because although there are reliable cognitive appraisal patterns that produce particular emotions (e.g., pride), some variability in the specific elicitors and outcomes of a particular emotion is to be expected (e.g., Roseman, 1984), and is thus not evidence that different types of a distinct emotion (e.g., pride) exist. In the present study, participants recalled a range of events that elicited pride from various areas of life that may or may not have been related to their work lives (e.g., from playing on a winning sports team, to watching one's nephew jump off the diving board for the first time). Consequently, the domain specificity found to be important for pride to predict rises in prosocial behavior in prior research was lacking in the present study. Considering this fact, together with research indicating that pride triggers social disengagement and status-seeking behaviors focused on elevating the dominance of the self in relation to others (Kitayama, Markus, & Kurokawa, 2000; Tracy & Robins, 2007), offers a plausible account of why measured pride produced results contrary to this study's hypotheses.

Measured hope also produced results different from the predictions of the present work. That is, when analyzed with data from the total sample, hope was found to have no significant associations with OCB intentions. However, interestingly, analyses using measured hope to predict OCB intentions for male and female subjects separately, because gender was found to have an effect on OCB intentions, produced distinct results. For male participants measured hope significantly, *positively* predicted, whereas for female subjects measured hope significantly, *negatively* predicted OCB intentions. Given that research suggests women tend to act more altruistically than men, both in and out of

the workplace, why might such a distinct gender difference have emerged for OCB intentions in the present study?

An assessment of several randomly selected written summaries of the hope memories that participants used in the relived emotion task (i.e., the hope manipulation) shows that male subjects were more likely to be hopeful about a positive event that is yet to happen (e.g., winning a sports championship, or graduating from college), whereas female subjects were more likely to be hopeful about a negative event diminishing or not occurring (e.g., a sick family member becoming less ill, or not having to drop out of college). As a result, it may be that male participants were experiencing a more positively valenced hope and female participants a more negatively valenced hope. #9 Does this then mean that categorically different kinds of hope were elicited by the emotion induction (which split down gender lines)? As mentioned in regard to pride, certain patterns of cognitive appraisals reliably trigger particular emotions (e.g., hope); however some variability in the specific causes and effects of an emotion is to be expected, and therefore does not in itself evidence distinct types of a particular emotion. Given the gender differences in the hope induced, it would follow that, based on research on positive and negative emotions and helping behavior (e.g., Isen et al. 1976), male participants' hopeful feelings would be more positively predictive of, and female participants' hopeful feelings more negatively predictive of OCB intentions. This may be why contradictory effects of male hope and female hope were observed, and also why null results were found for measured hope as a predictor of OCB intentions with the total sample.

Taken together, it seems that measured joy was found to be the only unique predictor of OCB intentions because, unlike hope, joy was positively associated with OCB intentions for both male and female participants (although more strongly for female participants). Additionally, unlike pride, the particular trigger of joy (i.e., domain specificity) does not appear to significantly affect its relationship with altruistic behavior. This is supported by the finding that check-joy predicted OCB intentions across the emotion conditions where events characterized by both hope and/or pride may have been recalled. Overall, these findings provide support for the discrete theory of positive emotions (Frijda & Parrott, in press; Roseman, in press; Roseman et al., 2010), in that they reveal a significant and distinct association of one particular positive emotion (i.e., joy), but not two other particular positive emotions (i.e., pride and hope), with a highly valued social behavior: organizational citizenship behavior.

#### Task Performance.

It was hypothesized that the positive emotions, both manipulated and measured, would enhance or be positively related to task performance. The manipulated emotions were not found to have a significant influence on task performance. But, the measured state emotions did reveal significant associations of joy and pride with task performance. That is, state joy is strongly predictive of decreases, and state authentic pride is strongly predictive of increases in task performance. However, why do state joy and state authentic pride have such distinct associations with task performance, contrary to the predictions of the present research that posited that both positive emotions should augment performance?

State joy may be negatively predictive of task performance because research has found that when experiencing positive emotions individuals want to prolong their pleasant feelings, and so they become more averse to behaviors that might reduce their hedonic state (Forest, Clark, Mills, & Isen, 1979; Isen & Simmons, 1978; Roseman et al., 2010). Therefore, participants experiencing high levels of joy might have averted their attention from the challenging anagrams task, consciously or unconsciously, in order to avoid losing their positive feelings. Because of the aforementioned difficulty of the task, this lack of interest and concentration on it may have effectively hindered rather than enhanced participants' task performance: the more joy participants were feeling, the less inclined they were to work on or persist in working on the challenging anagrams test. Note also that there did not appear to be much of a counter to the influence of this moodpreserving inclination (e.g., the motivational force of higher cash reward for higher performance). Similarly, research conducted on joy has consistently found that individuals feel inclined to "play" and "explore" when experiencing joy (Fredrickson, 1998, 2000). These action tendencies are at odds with the performance task in which participants were required to focus their thinking to solve a number of anagrams under a ticking clock. Consequently, participants who reported higher levels of joy might have been looking to continue to "feel good" and "play," rather than to exert the mental effort necessary for the task. This contrast between action and action tendencies may have lead joyful participants to underperform.

If is it the case that individuals seek to extend their pleasant feelings and engage in a playful activity when experiencing positive emotions (e.g., joy), and the performance task is counter to such aims, then why is state authentic pride strongly and positively

associated with task performance? Tracy and Robins (2007) have identified, and Roseman et al. (2010) found some empirical evidence in support of, the motivation to succeed and achieve in various life domains, so as to climb social hierarchies and attain either prestige or dominance, as goals characteristic of pride. With respect to task performance specifically, Williams and DeSteno (2008) found that pride significantly boosts individuals' levels of persistence (or achievement motivation), on a long and challenging task (e.g., mental rotation task). Furthermore, they found that greater persistence translated into improvements in task performance. Therefore, it may be that the short-term costs associated with moving away from a pleasant memory to focus on a cognitively demanding task may have been overridden by perceptions about the possible long-term social gains of high performance driven by feelings of pride.

Fascinatingly, upon examining the measured emotions' relationships to OCB intentions and task performance together, a clear pattern emerges. Current feelings of joy positively predict OCB intentions, but negatively predict task performance, whereas current feelings of pride negatively predict OCB intentions, but positively predict task performance. These diametrically opposed associations of joy and pride with OCB intentions and task performance lend empirical support to the notion that positive emotions are significantly differentiated from one another because of their unique effects on social behaviors of high import. Importantly, the present study was able to identify these

emotion-specific patterns because it is one of the first to look for distinct effects of different positive emotions, rather than looking at positive affect in general, on widely-studied social behaviors.

#### **OCB** and Performance.

Prior research has found that citizenship behavior is predictive of increases in employee performance evaluations, career advancement, and organizational effectiveness (Podsakoff & MacKenzie, 1994, 1997; Van Scotter et al., 2000). Consequently, analyses of OCB were utilized to predict job performance as operationalized in the present research. Interestingly, the results from the present study support prior findings on this relationship. That is, the more citizenship behaviors a subject reported engaging in over the week prior to participating in the experiment (i.e., OCB past-7-days), the higher their self-reported job performance ratings.

There are a number of reasons that have been proposed for the positive association between OCB and performance (Organ et al., 2006). First, certain managers may consider OCBs to be essential to the effective functioning of their organization, and therefore, reward employees for engaging in them, although they are not required to do so (Organ, 1988). Second, managers may perceive citizenship behaviors as a sign of a particularly motivated, hard-working, and dedicated employee. For their extraordinary organizational commitment, workers may be rewarded with higher performance reviews (Podsakoff, MazKenzie, & Hui, 1993). Third, when others go out of their way to help someone, that person typically feels socially responsible to reciprocate in some way (Cialdini, 2001). Supervisors may return OCBs with OCBs of their own, or because their time is more restricted, they evaluate employees that engage in OCBs more frequently than others favorably. Which of these mechanism underlie the OCB-performance association found in the present work is unclear. Nevertheless, this finding is consistent with the notion that

OCBs are a valuable construct to investigate because the benefits they confer on employees that engage in them are enduring and substantive.

#### **Conclusions: Theoretical and Empirical Contributions**

The results from the present work offer new findings that extend both the applied social psychology and emotion theory literatures. To begin, this is the first study to establish, via an experimental manipulation of emotion, a *causal* relationship between a particular positive emotion and organizational citizenship behavior. Prior research has either studied positive affect as a general trait, or measured, rather than manipulated state positive affect to determine its relationship to OCB (Hodson, 1998; Podsakoff et al., 2000; Staw & Barsade, 1993; Staw et al., 1994; Williams & Shiaw, 1999). Therefore, this is a fundamental step forward in research on OCB. For, if OCB's relationships to important organizational constructs (e.g., job performance and job satisfaction) are to be clearly understood, elucidating with specificity the pathways of its direct antecedents is necessary.

Moreover, establishing a causal connection between positive emotions and OCB also provides evidence regarding the *direction* of the relationship between the two variables. That is, it has remained unknown whether increases in positive feelings drive a rise in OCB, and/or if engaging in more OCBs results in elevated positive feelings. Not understanding whether positive affect is a cause or an effect of OCB has made it quite difficult for researchers to untangle and map the complicated interrelationships between positive affect, OCB, and job performance. For instance, one set of popular questions has been: Does positive affect increase OCB, which then augments job performance? Or, does OCB increase positive affect, which then heightens performance? The present work

advances answers to these questions in that it provides support for the first part of the former model, and in so doing, enriches frequently cited theories of the interconnections between these constructs (see Lande & Conte, 2007; Organ, Podsakoff, & MacKenzie, 2005). Future research will have to address the possibility of causal bidirectionality in the positive emotion-OCB relationship.

Applied social psychologists have not yet been able to use research on positive affect and OCB to increase OCBs, among other reasons, because there was scant evidence of causation and directionality. However, now that it is known that particular positive emotions directly enhance citizenship behavior, they may serve as intervention targets for organizational strategists and mangers. One potential problem, however, is that the induction technique used in this study elicits positive emotions only briefly (i.e., 20-30 minutes; see Coan & Allen, 2007). What would be the utility in designing an intervention based on this work if the positive effects just last for 20-30 minutes? Promisingly, there are validated, evidence-based methods for increasing the repeated, daily experience of positive emotions (e.g., practicing gratitude; see Lyubomirsky, 2008 for a thoughtful review of long-term positive emotion-enhancement approaches). Therefore, despite the short-lived effectiveness of the emotion induction used in this study, there exist related techniques used in people's personal lives that may be leveraged to sustainably enhance citizenship behavior in organizations by sustainably augmenting positive emotional experiences. The degree to which the specific laboratory-based technique (autobiographical recall of positive emotion events) used in this study for boosting OCBs can be adapted for application to workplace settings over the long-term, however, is yet to be determined. That said, the present research may still more directly

inform the development of interventions that target emotions to enhance desirable organizational behaviors. For instance, if a manager is interested in increasing a worker's helping behavior, she may want to make him feel proud of himself. However, this research suggests that it is of critical importance for the manager to elicit her employee's pride in a specific domain (e.g., past contributions to organizational event planning), rather than just general pride in the self (e.g., he is a competent person), as the former may trigger "authentic pride" that enhances OCBs whereas the latter may trigger "hubristic pride" that diminishes OCBs. Overall, more research on the applicability of these findings to organizational settings is warranted; however, the present study has brought the possibility of using research on positive emotions to improve important organizational outcomes closer to realization.

Additionally, there is a debate that has been ongoing for some time about how well differentiated positive emotions are from one another in comparison to negative emotions (Ekman, 1992a, 1992b; Ekman & Davidson, 1994; Oatley et al., 2006; Plutchik, 2003). One camp of researchers contends that positive emotions are not distinguishable enough from one another to say that "discrete" positive emotions exist at all (Barrett, 2006; Tellegen et al., 1999). Other researchers argue that positive emotions are as well differentiated from one another as negative emotions, based on observed differences in phenomenology, behaviors, and goals (e.g., Roseman, 1984; Roseman et al., 2009, 2010). In support of discrete emotion theory, the present experiment found that a hope manipulation (which increased joy and hope, but not pride), produced a significant increase in OCBs compared to a control condition; a pride manipulation (which differentially increased felt pride) also boosted OCBs compared to the neutral condition

(though less strongly than the hope condition). If the outcomes of different positive emotions were so similar to one another so as to indicate that they are all minor variants of the same set of psychological states, then hope and pride should have had an equivalent influence on OCBs. Yet, this was not found.

Furthermore, the measured emotions reveal distinct patterns for joy and pride as predictors of citizenship behavior and task performance. That is, prior research has found that general positive affect is positively associated with OCBs (e.g., Williams & Shiaw, 1999); however, the present research discovered that the effect of positive feelings on OCB depends on the particular positive emotion involved. Indeed, only joy positively predicted, whereas only pride negatively predicted OCB intentions. The fact that the latter finding is contrary what Hodson (1998) discovered, indicates not only the importance of investigating the effects of positive emotions at the discrete level of analysis, but it also suggests that domain specificity, as Hart and Matsuba (2007) have posited, is a determining factor in how pride is associated with social behavior (as they found that pride can positively predict voluntary moral behavior).

Previous research has also found that positive affect generally, and pride specifically, increase task performance (e.g., Erez & Isen, 2002; Williams & DeSteno, 2008). These findings were replicated in the present work in that state authentic pride was found to be positively predictive of task performance. However, the present study extends past research by showing that joy, contrary to much theory and evidence (Isen, 1999a, 1999b), is *negatively* predictive of task performance in some instances (perhaps when working on a challenging task is likely to decrease the joy that a person is feeling and there is no compelling, alternate motivation to persist at it). This suggests that not all

positive emotions are always equally associated with desirable behaviors and outcomes, as the dimensional view of affect may lead one to believe (e.g., Tellegen et al., 1999).

Ultimately, the results for the measured emotions reveal that joy and pride have significant and distinct relationships with two important behaviors: organizational citizenship behavior and task performance. Hence, this study expands the extent to which discrete positive emotion theory is supported by empirical research, and provides evidence which may lead emotion scientists to conclude that joy and pride are in fact distinct positive emotions.

Finally, the more citizenship behaviors participants reported engaging in over the week prior to the experiment (i.e., OCB past-7-days), the higher their self-reported job performance ratings. In contrast, participants' OCB intentions or general OCB history were not found to be significant predictors of their self-rated job performance. Because all of the studies to the present researcher's knowledge that have examined associations between OCB and performance have employed measures gauging OCBs from an undefined period of time – and this type of OCB measure was found to be a weaker predictor of self-rated job performance than OCB past-7-days – it may be the case that the strength of the relationship between OCB and performance has gone under-reported or even been distorted in some studies. In support of this notion, research has shown that the self-reports of distant memories are faced with various threats to validity (e.g., social desirability, memory decay, and affect-congruency) to a greater extent than more recent memories (Stone et al., 2000). Thus, the present study offers a methodological contribution to the OCB literature: the reliability and validity of operationalizations of OCB will likely be improved through restricting their temporal response range. This

discovery may be of notable value to organizational scholars and applied psychologists looking to unpack the complex associations between OCB and job performance so as to augment them.

#### **Study Limitations**

The present study has a number of limitations. First, as previously discussed, the emotion manipulation was not effective at differentially influencing hope and pride independent of each other, or independent of joy. Although autobiographical recollection methods have been used quite extensively in research on emotions, much of that research has focused on inducing general positive affect (e.g., happiness) or distinct negative emotions (e.g., sadness or fear; Coan & Allen, 2007). As a result, substantial adaptations to Singer and Salovey's (1988) manipulation were made to tailor it to the purposes of the present research. However, because this adapted manipulation was only pilot tested on seven subjects, further work is needed before it can be used to successfully induce particular positive emotions. For instance, working through the process with subjects to isolate a moment in time when they felt only one specific positive emotion (e.g., hope), and not others (e.g., joy), while tracking their progress in the relived emotion task might bear fruit. Additionally, because the memories that the participants recalled in order to elicit their assigned emotion were of their choosing, there was significant variability in the types of emotional events that were recalled. Consequently, different shades of hope and pride may have been induced, and exerted a confounding influence on the particular relationships of interest to the present work. One way to address this issue, as Hart and Matsuba (2007) did in their study of measured pride as a predictor of volunteering, is to

specify a particular domain of pride to be recalled and relived by participants (e.g., pride in one's community, or pride in one's work).

Second, the participant sample came from a pool of undergraduate psychology students at Rutgers-Camden. As a result of the potential biases associated with this particular sample, most notably Western cultural influences – the generalizability of the findings to individuals in other cultural systems may be limited. This is because a number of important social-psychological phenomena, including cooperation and competition, as well as self-conscious emotions (e.g., pride), have been found to vary significantly across cultures (Fessler, 2007; Henrich et al., 2010a, 2010b; Wong & Tsai, 2007).

Third, the ecological validity of the task performance measure used in the present study may be limited. That is, despite the fact that organizational researchers often employ anagrams as proxy measures of on-the-job skills and performance (e.g., Aiello et al., 1993; Erez & Judge. 2001; Jussim et al., 1995; Porath & Erez, 2007, 2009), the face validity of such tests is questionable. For instance, how much does performance on an anagram solutions test genuinely reflect the duties of an accountant, janitor, or electrical engineer?

Fourth, prior research has consistently indicated a number of confounding issues with explicit self-report operationalizations, such as social desirability and a reluctance or inability to engage in introspection (Orne, 1962; Rosenberg, 1969; Tedeschi, Schlenker, & Bonoma, 1971; Weber & Cook, 1972). These effects may bias participants' answers on the OCB and job performance self-report measures, the check, state, and trait hope and pride scales, and/or the job profile/demographic questionnaire. In an attempt to control for social desirability, the present researcher administered four items from the Marlowe-

Crowne Social Desirability Scale (Marlowe & Crowne, 1960). Nevertheless, this is not likely to eliminate the full extent of this threat to validity.

Finally, the central OCB operationalization chosen for this study measured intentions to engage in OCB, not actual citizenship behavior. Because the theoretical construct of the study is defined in terms of real actions taken, this may reduce the construct validity of OCB in the present study. However, the theory of reasoned action posits that the likelihood of an action being committed is related to the specificity of the behavioral intent (Ajzen & Fishbein, 1977), and the OCB intention measure for this study is designed to be as specific and relevant to the participant pool as possible (i.e., items that tap into Rutgers student and institution-related OCBs, such as "Hour many hours will you read to a blind Rutgers student?" or "How many hours will you participate in campus cleanup activities sponsored by the Office of Campus involvement?" respectively.). In further defense of this approach, research has found that intentions can predict a variety of actual behaviors (e.g., Doran, Stone, Brief, & George, 1991; Glasman & Albarracin; 2006), specifically for organizationally-relevant actions (e.g., Kraut, 1975; Locke, 1968; Mobley, Griffeth, Hand, & Meglino, 1979). Nevertheless, assessing the influence of emotions on actual citizenship behaviors would be preferable.

#### **Future Directions**

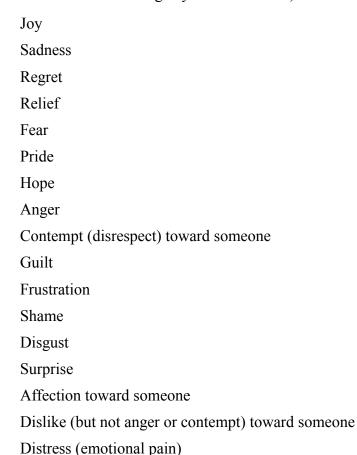
The findings from the present research and its limitations suggest a number of worthwhile avenues for future research. First, future research should attempt to replicate this research with a larger sample size (e.g., 50, rather than 25 participants per condition), as it will reduce standard error and potentially push the differences between OCB intentions in the hope and pride conditions to significance (a central prediction that was

indicated but not fully supported by this work). Second, the measured emotions revealed joy and pride to be the most predictive of OCB intentions and task performance. Thus, conducting studies in which joy, pride, and other positive emotions (e.g., affection, gratitude, compassion) are manipulated, and compared to a neutral condition to isolate their unique causal effects on OCB intentions and task performance, would extend the applied positive psychology and emotion theory literatures. Third, the creation and testing of new scales to measure discrete positive emotions more effectively is greatly needed. This is important because although the hope and pride scales designed by Snyder et al. (1996) and Tracy and Robins (2007), respectively, have been used frequently in recent research, their discriminant validity was limited in the present work. That is, they seemed to measure a series of constructs that confounded the accurate measurement of the target emotions, perhaps with general positive affect. As more research is conducted on discrete positive emotions, the need for valid and reliable discrete emotion scales will continue to increase. Lastly, inducing different positive emotions, and measuring actual citizenship behavior and manager-rated job performance among business professionals at a company, rather than measuring self-reported OCB intentions and job performance among college students at Rutgers, would go a long way to establishing the generalizability of these findings. This would then help scientists and managers to effectively design and utilize training programs that enhance citizenship behavior and job performance in the workplace.

#### APPENDIX A: EMOTION INDUCTION INSTRUCTIONS

#### SELECTING A SPECIFIC EMOTION EXPERIENCE YOU HAVE HAD

- 1. Think of an experience at some point in your life that caused you to feel <u>intense</u> <u>pride [intense hope / completely neutral]</u>. The experience you choose should be one in which there was a moment when you felt intense pride [intense hope / completely neutral] and were not aware of feeling any other emotions at the same time. If you can think of more than one specific experience like this, choose one that is as recent as possible.
- 2. When you have an experience in mind, please read through the list below. **Make sure that you were not feeling any other emotion on this list** at the same time as the moment when you were feeling pride [hope / neutral]. If you were also feeling another emotion, please choose a different experience (one in which there was a moment when you felt intense pride [intense hope / completely neutral] but were not aware of feeling any *other* emotions).



3. (a) Once you know the <u>experience</u> you are going to use, write down a brief <u>title</u> for the experience (in which there was a moment when you felt intense pride [intense hope / completely neutral] but were not aware of feeling any other emotions). Write the title for your emotion event on the line below.
PRIDE [HOPE / NEUTRAL] experience:
(b) Please confirm which emotion you are writing about:
SELECTING A PARTICULAR MOMENT AS A REFERENCE POINT FOR ANSWERING THE QUESTIONS:
Now we are going to ask you to choose a particular <u>moment</u> in time within the experience you selected to serve as a reference point.
(a) Think back and remember a moment in this experience when you felt intense <u>pride</u> [intense <u>hope</u> / completely <u>neutral</u> ] but were not aware of feeling any other emotions.
(b) On the line below, please give this moment a name:

4.

When you have answered the questions above, please put on the headphones on top of your computer, and adjust the size if necessary. When you are ready: (a) click Track 1 ONCE on the computer screen, and (b) press the ENTER key to continue. You can increase the volume level of the audio at any time by turning the round knob under the right side of the monitor CLOCKWISE, or decrease the volume by turning the knob COUNTERCLOCKWISE. [Note: The script spoken in these audio files can be found in the description of the emotion induction procedures in the Method section.]

#### APPENDIX A: EMOTION INDUCTION INSTRUCTIONS

1. In the space below, please jot down the highlights of **what made you feel <u>intense</u> pride**, and **what your <u>intense pride</u> was like** at that moment in time (in as much detail as you can remember).

When you have answered the question above, please move on to Questionnaire  $\#\ 3$  in your folder to continue

## APPENDIX B: ORGANIZATIONAL CITIZENSHIP BEHAVIOR–INTENTIONS SURVEY

#### INDIVIDUAL ACTIVITY PREFERENCES

<u>Instructions</u>: Different people are interested in doing different activities. This is a questionnaire about activity preferences. A number of campus organizations are looking for volunteers to help with different activities they have planned. We are going to ask you how much you are interested in each of these activities. Please answer each question below indicating your **actual commitment** to engage in the following activities over the next 3 weeks. Please circle only **one** response to each question.

- 1. How many hours will you participate in campus cleanup activities sponsored by the Office of Campus Involvement?
  - 0 hours 1 hour 2 hours 3 hours 4 hours 5 hours more than 5 hours
- 2. How many hours will you assist students who have been absent catch up on their schoolwork?
  - 0 hours 1 hour 2 hours 3 hours 4 hours 5 hours more than 5 hours
- 3. How many emails will you write to recruit members for campus clubs and organizations, such as The Gleaner (student newspaper) or WCCR (student radio station)?
  - 0 emails 1 email 2 emails 3 emails 4 emails 5 emails more than 5 emails
- 4. How many campus tours will you give to new Rutgers students?
  - 0 tours 1 tour 2 tours 3 tours 4 tours 5 tours more than 5 tours
- 5. How many hours will you post fliers around campus to promote a Rutgers athletic event?
  - 0 hours 1 hour 2 hours 3 hours 4 hours 5 hours more than 5 hours

- 6. How many hours will you volunteer at a soup kitchen?
  - 0 hours 1 hour 2 hours 3 hours 4 hours 5 hours more than 5 hours
- 7. How many hours will you attend an after-school event to show support for Rutgers, such as an alumni reunion, or Rutgers Day?
  - 0 hours 1 hour 2 hours 3 hours 4 hours 5 hours more than 5 hours
- 8. How many phone calls will you make to high school students interested in learning about what college is like at Rutgers?
  - 0 calls 1 call 2 calls 3 calls 4 calls 5 calls more than 5 calls
- 9. How many hours will you read to a blind Rutgers student?
  - 0 hours 1 hour 2 hours 3 hours 4 hours 5 hours more than 5 hours
- 10. How many hours will you mentor a child through a community youth organization, such as Big Brothers Big Sisters?
  - 0 hours 1 hour 2 hours 3 hours 4 hours 5 hours more than 5 hours
- 11. How many hours will you spend working on brochures to promote Rutgers?
  - 0 hours 1 hour 2 hours 3 hours 4 hours 5 hours more than 5 hours
- 12. How many hours will you tutor Rutgers freshman students online in a subject of interest to you?
  - 0 hours 1 hour 2 hours 3 hours 4 hours 5 hours more than 5 hours

When you have answered the questions above, please move on to Questionnaire # 4 in your folder to continue.

# APPENDIX C: ORGANIZATIONAL CITIZENSHIP BEHAVIOR-HISTORY QUESTIONNAIRE

#### HISTORY OF WORK BEHAVIOR

<u>Instructions</u>: Please use the 7-point scale under the questions below to indicate how often **you have engaged in** the following behaviors at your current job.

- (a) If you have multiple jobs, answer the questions in reference to the position where you work the most hours per week. If your hours per week are the same for multiple jobs, select the job where you have been working the longest.
- (b) If you are **not** employed at present, please answer the questions in regard to the last job you have worked.
- 1. Keep up with developments in the organization.

1	2	3	4	5	6	7
never	very rarely	rarely	sometimes	often	very often	always

2. Go out of the way to make newer employees feel welcome in the work group.

1	2	3	4	5	6	7
never	very rarely	rarely	sometimes	often	very often	always

3. Show genuine concern and courtesy toward coworkers, even under the most trying business or personal situations.

1	2	3	4	5	6	7
never	very rarely	rarely	sometimes	often	very often	always

4. Give up time to help others who have work or nonwork problems.

1	2	3	4	5	6	7
never	very rarely	rarely	sometimes	often	very often	always

5. Assist others with their duties.

1	2	3	4	5	6	7
never	very rarely	rarely	sometimes	often	very often	always

6.	Share personal property with others to help their work.						
1 never	2 very rarely	3 rarely	4 sometimes	5 often	6 very often	7 always	
7.	Attend functions	that are not	required but tha	t help the o	organizational in	nage.	
1 never	2 very rarely	3 rarely	4 sometimes	5 often	6 very often	7 always	
8.	Willingly give yo	ur time to h	elp others who	have work-	related problem	S.	
1 never	2 very rarely	3 rarely	4 sometimes	5 often	6 very often	7 always	
9.	Help others who l	have been a	bsent.				
1 never	2 very rarely	3 rarely		5 often	6 very often	7 always	
10.	Adjust your work off.	schedule to	accommodate	other emplo	oyees' requests t	for time	
1 never	2 very rarely	3 rarely	4 sometimes	5 often	6 very often	7 always	
11.	Demonstrate self-respect when representing the organization in public.						
1 never	2 very rarely	3 rarely	4 sometimes	5 often	6 very often	7 always	
12.	Express loyalty toward the organization.						
1 never	2 very rarely	3 rarely	4 sometimes	5 often	6 very often	7 always	

13. I	Defend the orga	nization when	n other emplo	yees critici	ize it.					
1 never	2 very rarely	3 rarely	4 sometimes	5 often	6 very often	7 always				
14.	14. Take action to protect the organization from potential problems.									
1 never	2 very rarely	3 rarely	4 sometimes	5 often	6 very often	7 always				
15. I	Demonstrate co	ncern about th	ne image of tl	he organiza	tion.					
1 never	2 very rarely	3 rarely	4 sometimes	5 often	6 very often	7 always				
16.	Offer ideas to in	nprove the fur	nctioning of t	the organiza	ation.					
1 never	2 very rarely	3 rarely	4 sometimes	5 often	6 very often	7 always				
<u>Instructions</u> : Today is//_ (fill in date). For each statement below, please circle <u>one</u> number that indicates how often you have engaged in the following behaviors over the <u>previous seven days</u> (the week ending yesterday) when you were at work. If you have not worked over the previous seven days, please skip questions 17-19, and read the directions at the bottom of the page.										
17. Give	en up time to he	elp others who	have work o	or nonwork	problems.					
0 hours	1 hour 2 h	ours 3 hour	s 4 hours	5 hours	6 hours					
other time amount										
18. Ass your		h their work o	duties (if assi	sting them	is <u>not</u> a job requii	rement of				
0 hours other tin	1 hour 2 h	ours 3 hour	rs 4 hours	5 hours	6 hours					

19. Expressed loyalty toward the organization (through actions, gestures or words).						
0 times	1 time	2 times	3 times	4 times	5 times	6 times
other amount of times						
20. Please write in the blank space below how many hours have you worked over the previous seven days (during the week ending yesterday).						

**STOP. Do <u>not</u> continue.** Please look up and wait patiently for the next set of instructions from the experimenter.

#### APPENDIX D: EMOTION INDUCTION BOOSTER INSTRUCTIONS

#### MEMORY ACCURACY QUESTIONNAIRE

1. In the space below, please jot down the highlights of what made you feel intense pride [intense hope / completely neutral], and what your intense pride [intense hope / completely neutral feelings] was [were] like at that moment in time in as much detail as you can remember.
[Note: Participants completed this questionnaire directly after listening, again, to one of the emotion induction audio tracks. See the Procedure portion of the Method section for complete details.]

When you have answered the question above, please move on to Questionnaire # 6 in your folder to continue.

## APPENDIX E: ANAGRAM SOLUTIONS TEST (TASK/JOB PERFORMANCE)

#### WORD GAME INSTRUCTIONS

- 1. You are about to play two timed word games. The first game is for practice, and the second game is scored. Each game consists of solving 10 anagrams. An anagram is a sequence of letters which can be rearranged to form an English word. For example, "rosht" can be rearranged to spell "short."
- 2. You must use **all of the letters** in each of the 10 anagrams to form a valid word. There is **only one** answer to each anagram.
- 3. Please follow the instructions above throughout the word game. But **DO NOT START THE GAME YET**. When you are done reading these instructions, please look up and wait patiently for the experimenter to tell you when to begin.

## APPENDIX E: ANAGRAM SOLUTIONS TEST (TASK/JOB PERFORMANCE)

## PRACTICE WORD GAME

Below are a series of anagrams. No foreign words, plurals or proper nouns can serve as solutions. Please print each word clearly.

bnrow	 forop _	
hacrn	 lateb	
pleex	 yehrm	
nigic	 ginthk	
ungle	deimmu	

If you are done with the practice game before the five minutes has elapsed - **STOP. Do** <u>not</u> **continue.** Please wait patiently for the next set of instructions from the experimenter.

# APPENDIX E: ANAGRAM SOLUTIONS TEST (TASK/JOB PERFORMANCE) REAL WORD GAME

Below are a series of anagrams. No foreign words, plurals or proper nouns can serve as solutions. Please print each word clearly.

kalfe	blentao
snilaoi	remude
ciimtv	loroc
sodpiee	ecepsa
elbmut	gegirrt

If you are done with the real game before the ten minutes has elapsed – **STOP. Do <u>not</u> continue.** Please look up and wait patiently for the next set of instructions from the experimenter.

#### APPENDIX F: STATE HOPE, PRIDE, AND JOY QUESTIONNAIRE

#### CURRENT FEELING QUESTIONNAIRE

**Instructions:** Below is a series of statements that describe different ways people may or may not feel. For each statement, please use the scale provided and indicate the extent to which you feel this way **RIGHT NOW** (at this very moment). To confirm that you understand these directions, please respond to the following question by putting a check mark ( $\sqrt{}$ ) next to the one correct answer. I am going to respond to the statements in this questionnaire based on:

	•	v (at this very r					
1. I feel	accomplis	hed.					
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True
2. I feel	like I am a	chieving.					
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True
3. I feel	superior to	others.					
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True
4. I feel	conceited.						
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True
5. At thi	s time, I ar	n meeting the	goals that I	have set for	myself.		
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True

_	T C 1	C* 1 .
6.	I teel	confident.
U.	11001	commuciii.

o. Tieci	comident.						
1 Completely False	2 Mostly False		4 Slightly False			7 Mostly True	8 Completely True
7. I feel	egotistical						
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True
8. I have	e a sense of	f direction at p	resent.				
1 Completely False	2 Mostly False		4 Slightly False		6 Somewhat True	7 Mostly True	8 Completely True
9. I feel	fulfilled.						
1 Completely False	2 Mostly False	3 Somewhat False	~ ,	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True
10. I can	think of ma	any ways to rea	ach my curr	ent goals.			
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False			7 Mostly True	8 Completely True
11. I feel	productive	<b>.</b>					
1 Completely False	_		4 Slightly False	-	6 Somewhat True		J
12. I feel	like I have	self-worth.					
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True
13. I have	e a positive	outlook towa	rd life at pre	sent.			
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True

	_						
1		3	4	5	6	7	8
Completely		Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False		False	False	True	True	True	True
15. I feel	successful						
1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True
16. There	are lots of	ways around	any problem	that I am f	acing now.		
1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True
17. I feel	proud.						
1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True
18. Right	now, I see	myself as bein	ng pretty suc	ecessful.			
1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True
19. I feel	my life has	s value and wo	orth at preser	ıt.			
1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True
20. I feel	optimistic	about the futur	re.				
1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True

2.1	A 4 41 4 4 4 *	T 4' 11	• 1
21.	At the present time.	I am energetically	nurciiina mwanaic
41.	At the brescht time.	i am cherechean v	Dursume my goars.

1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True

#### 22. I believe that each day has potential.

1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True

#### 23. I feel hopeful.

1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True

#### 24. If I should find myself in a jam, I could think of many ways to get out of it.

1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True

## 25. I feel joyful.

1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True

When you have answered the questions above, please move on to Questionnaire # 9 in your folder to continue.

#### APPENDIX G: TRAIT HOPE, PRIDE, AND JOY QUESTIONNAIRE

#### GENERAL FEELING QUESTIONNAIRE

<u>Instructions</u>: Below is a series of statements that describe different ways people may or may not feel. For each statement, please use the scale provided and indicate the extent to which you feel this way <u>IN GENERAL (most of the time)</u>. To confirm that you understand these directions, please respond to the following question by putting a check mark ( $\sqrt{}$ ) next to the one correct answer. I am going to respond to the statements in this questionnaire based on:

		(at this very r l (most of the					
1. I gene	erally feel a	accomplished.					
l Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True
2. I gene	erally feel l	ike I am achie	ving.				
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True
3. I gene	erally feel s	superior to othe	ers.				
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True
4. I gene	erally feel o	conceited.					
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True
5. In ger	neral, I am	meeting the go	oals that I ha	ve set for m	nyself.		
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True

_	. 11 0 1	C 1 .
6.	I generally feel co	ntident
0.	i gonorum i reci co	illiaciit.

6. I gene	rany teel c	confident.					
1 Completely False		3 Somewhat False		5 Slightly True		7 Mostly True	8 Completely True
7. I gene	rally feel e	egotistical.					
1 Completely False		3 Somewhat False	4 Slightly False			7 Mostly True	
8. I gene	erally have	a sense of dire	ection.				
1 Completely False			4 Slightly False		Somewhat		8 Completely True
9. I gene	erally feel f	ulfilled.					
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False		Somewhat	7 Mostly True	8 Completely True
10. I gene	erally can tl	hink of many v	ways to reac	h my goals.			
1 Completely False		3 Somewhat False	4 Slightly False			7 Mostly True	8 Completely True
11. I gene	erally feel p	productive.					
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True		7 Mostly True	8 Completely True
12. I generally feel like I have self-worth.							
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True
13. I gene	rally have	a positive outl	ook toward	life.			
1 Completely False	2 Mostly False	3 Somewhat False	4 Slightly False	5 Slightly True	6 Somewhat True	7 Mostly True	8 Completely True

14.	Ι	generally f	eel smug.
14.	1	generally	cci siliug.

1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True
15. I gene	erally feel s	successful.					
1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True
16. In ger	neral, there	are lots of way	ys around ar	ny problem	that I am facir	ng.	
1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True
17. I gene	erally feel p	oroud.					
1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True
18. In ger	neral, I see	myself as bein	g pretty suc	cessful.			
1	2	3	4	5		7	8
Completely	Mostly	Somewhat	Slightly	Slightly		Mostly	Completely
False	False	False	False	True		True	True
19. I gene	erally feel r	ny life has val	ue and wortl	1.			
1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True
20. I generally	feel optim	nistic about the	future.				
1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True

	- 1			
21.	In conorol	I energetically	7 1011110110	100 T 7 C C C C C
Z I	III generar	T energencamy	/ Dursue	miv goais

1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True
22. I gene	erally belie	ve that each da	y has poten	tial.			
	J						
1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True
23. I gene	erally feel h	nopeful.					
	,	•					
1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True
24. In ger	neral, if I sl	nould find mys	self in a jam.	I could thin	nk of many wa	avs to get o	out of it.

1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True

#### 25. I generally feel joyful.

1	2	3	4	5	6	7	8
Completely	Mostly	Somewhat	Slightly	Slightly	Somewhat	Mostly	Completely
False	False	False	False	True	True	True	True

When you have answered the question above, please move on to Questionnaire # 10 in your folder to continue.

#### APPENDIX H: DEMOGRAPHIC & WORK EXPERIENCE QUESTIONNAIRE

#### **BACKGROUND INFORMATION**

<u>Instructions</u>: Please read each item carefully. Indicate the answer that best suits you. Your answers to the questions and all other information you provide will be **completely anonymous**.

- (a) If you have multiple jobs, answer the questions below in reference to the position where you work the most hours per week. If your hours per week are the same for multiple jobs, select the job where you have been working the longest.
- (b) If you are **not** employed at present, please answer the questions in regard to the last job you have worked.
- (c) If you have NEVER worked mark question # 1 "Never Worked," then skip to question # 10.

1. What is your present job title or position name?				
2. What kind of work do you do on this job?				
3. How long have you worked in your present job for your current employer?				
yearsmonths				
4. Please circle whether or not you are employed by Rutgers University in this job?				
Yes No				
5. Please circle your work time status:				
full time (30+ hours a week) or part time (29 hours or less)				
6. How many hours a week do you usually work at this job?				

7. F	7. Please circle a pay type (you can make multiple selections):							
	Hourly	Salary	Commission	Other (fill in)				
	Please circle apployment to		indicate what you	consider your current position of				
	4. Long-t	term career						
	5. Tempo	orary job						
9a.	supervisor you by writ or not you a evaluation 0 (Fails to 1 25 (Needs 1 50 (Meets 1 75 (Exceed	in the past 12 ting one numagreed with the from your summer of the from your summer of the from your summer of the from	2 months, please in aber anywhere from the rating that was appervisor in the passenance Expectations					
	Performanc	ce Rating Nu	ımber					
9b.	supervisor evaluation performand anywhere	in the past 1 from your so ce rating you from 0-100 b	2 months, answer of upervisor in the past think he/she would	mance evaluation from your work question 9a. If you have <u>not</u> received an st 12 months, please indicate the job d give you by writing <u>one</u> number below (whether or not you would agree e you).				
	25 (Needs 1 50 (Meets 1 75 (Exceed	Improvemen Performance Is Performan	mance Expectation t) Expectations) ce Expectations) rmance Expectatio					
	Performance	ce Rating Nu	mber					

-	ow are a number of statements concerning personal attitudes and nd circle whether the statement is <u>true</u> or <u>false</u> as it pertains to you
10. No matter who I'm	alking to, I'm always a good listener.
True	False
11. I'm always willing t	o admit it when I make a mistake.
True	False
12. I am always courted	sus, even to people who are disagreeable.
True	False
13. There have been tin	nes when I was quite jealous of the good fortune of others.
True	False
	ow are questions concerning your personal background. Read each ndicate the answer that best pertains to you.
14. Circle your gender:	Male or Female
15. When were you bor	n (month/year)? (/) [example: 12/1987]
16. Circle your race/eth	nicity:
African-American	Asian Hispanic/Latino White
Other (please specify	y)
17a. What is your colleg freshman, skip to o	ge Grade Point Average (GPA) (if you are a first semester question 17b.)?
17b. What was your hig	gh school Grade Point Average (GPA)?

18. Please circle whether you go to college part-time or full-time?

Full-time (12 credits or more)

Part-time (less than 12 credits)

19. What was you	score on the Verbal section (more recently known as the Critical
Reading section)	of the SAT?
20. Have you been	diagnosed with or do you have reason to believe that you may have
dyslexia?	
Yes	No

You should have completed <u>all</u> of the questionnaires in your folder at this time. Please check to make sure your folder is empty. If for some reason, you overlooked a questionnaire, please raise your hand and tell the experimenter before answering any other questionnaires. If you are done, simply turn over this questionnaire and look up. There may be others who are not finished yet, so please wait patiently for the next set of instructions from the experimenter.

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