

## State or trait: effects of state optimism on job-related outcomes

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### Summary

State optimism was hypothesized to be significantly related to six organizationally relevant outcomes above and beyond the effect of trait optimism. Moreover, state optimism was hypothesized to have effects on these six outcomes beyond the effects of positive and negative affect. Conversely, trait optimism was expected to be unrelated to the six outcome variables when controlling for state optimism as well as when controlling for affect. These hypotheses were tested with two samples. First, 772 undergraduate students were assessed to determine the impact of state versus trait optimism on task performance in the form of course grade. From this sample, the 261 students working at least 20 hours per week were similarly assessed with regard to work related distress, burnout, affective commitment, and job satisfaction. Then, a field sample of 106 employees assessed distress, burnout, affective commitment, job satisfaction, and supervisor rated task and contextual job performance. Results indicate state optimism (but not trait optimism) is a potentially powerful indicator of important organizational outcomes, even after controlling for the effects of positive and negative affect. Implications of these findings and directions for future research are discussed. Copyright © 2009 John Wiley & Sons, Ltd.

### Introduction

Over the past decade or so, much research has pointed to the power of optimism (Luthans, 2002a,b, 2003; Luthans & Youssef, 2007; Nes & Segerstrom, 2006; Peterson, 2000; Scheier, Carver, & Bridges, 1994; Seligman, 1998). This is due, at least in part, to the positive psychology movement which calls for the study of human strengths, resilience, and cultivation of wellness (Seligman, 1998). Proponents of this movement have called for the study of positive constructs like optimism to give some balance to a field that had, up until this point, primarily focused on pathology and human weakness. As a result, much has been learned about optimism and other positive constructs. Studies on optimism have primarily focused on the physical and psychological benefits of trait optimism and have shown that

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individuals, who generally believe that good things will happen in their future, benefit from this positive thinking. For example, people with trait optimism recover faster from surgery and report a higher quality of life 6 months postoperatively (Trunzo & Pinto, 2003). In addition, people high in trait optimism tend to have superior physical and psychological health (Peterson, 2000).

The link between trait optimism and general health symptoms has been consistently supported, though this is where research on optimism has typically stopped. As the positive psychology movement extends into organizational research in the form of positive organizational behavior (POB) (Luthans, 2002a), research on optimism should follow. POB focuses on the study and application of positively-oriented human resource strengths that can be *measured, developed, and effectively managed* for performance improvement in the workplace (Luthans, 2002a, b, 2003; Luthans & Youssef, 2007; Nelson & Cooper, 2007; Wright, 2003). Luthans and others support the study of positive states in relation to work outcomes because they are changeable and measurable and have significant practical implications for managers. This new line of research calls attention to an unexplored area in the current optimism literature: investigation of the effects of optimism as a malleable, manageable construct (state optimism) versus the effects of the general construct (trait optimism) on job-related outcomes. Clearly, this distinction is important from both theoretical and practical perspective and in fact, many researchers have called for more research investigating the relative contribution of state and trait measures on organizational outcomes (i.e., Wright, 1997; Wright, Cropanzano, & Meyer, 2004). In fact, Wright (2007) specifically calls for further evaluation of the widely assumed but rarely measured distinction between “state” variables espoused by POB and “trait” variables discussed in positive organizational scholarship (Cameron & Caza, 2004; Cameron, Dutton, & Quinn, 2003). This paper answers this call and investigates the relative influence of state and trait optimism on the outcome variables psychological distress, burnout, affective commitment, job satisfaction, task performance, and contextual performance.

## Optimism: Theoretical Framework

Although there is no agreed upon definition, Tiger (1979) defines optimism as “a mood or attitude associated with an expectation about the social or material future—one which the evaluator regards as socially desirable, to his advantage or his pleasure” (p. 18). There are two primary and congruent theoretical mechanisms that have been used to further define optimism and to explain the impact of optimism on attitudes and behaviors (Peterson, 2000). These are Seligman’s (1998) explanatory style model and Carver and Scheier’s (1981) self-regulatory model.

Optimism has been theorized as an explanatory style in that it relates to how an individual explains the causes of both positive and negative events (Buchanan & Seligman, 1995). Individuals who attribute the causes of bad events to external, unstable, and specific causes and attribute the causes of good events to personal and pervasive causes are optimistic. Those who attribute the causes of bad events to internal, stable, and global causes and the causes of good events to unstable causes are pessimistic. Thus, optimists take credit for positive happenstances in their lives and they believe that the personal causes of the positive events should continue to exist in the future. Furthermore, these personal causes or personal competencies will be useful in handling future situations in many different aspects of their life. Seligman (1998) call this style “learned optimism” which is in opposition to “learned helplessness” in that individuals who are able to learn that setbacks in life can be attributed to one time causes rather than a general disconnect between personal actions and outcomes and that successes are due to personal causes will be more motivated to work towards future goals.

Carver and Scheier (1981) argue that optimism influences outcomes through its self-regulatory nature. They theorize that all human behavior can be cast in goal terms and argue that when an individual becomes aware of a discrepancy between a goal and his/her present situation, an assessment process is initiated. If the individual perceives that this discrepancy can be reduced and result in desirable outcomes, s/he will continue to exert efforts to attain those desirable outcomes. If, on the other hand, the individual perceives that desirable outcomes are unattainable, s/he will reduce effort. From this perspective, it is expected that optimists continue to strive, work hard, and cope actively with the problems they encounter, while pessimists give up (Lee, Ashford, & Jamieson, 1993; Scheier & Carver, 1987; Scheier et al., 1989).

As mentioned above, these two theories have been discussed as congruent (Peterson, 2000). Both work together to explain why optimism should relate to positive outcomes, namely because individuals use their positive explanatory style to avoid allowing setbacks to discourage them and use success as an indicator that they are able to handle most situations that occur in their life. This positive explanatory style allows individuals to work harder and strive to reach their goals because they believe they have the skills to overcome the discrepancies between their current situation and their goals. Therefore, optimism involves cognitive and emotional components (as explained in Seligman's explanatory style theory) as well as motivational components (as outlined in Scheier & Carver's self-regulatory theory) and thus influences a variety of attitudes and behaviors.

## Optimism: State vs. Trait

While optimism has been almost solely investigated as a trait, many have suggested and empirically demonstrated that individuals can be trained to be optimistic (Seligman, 1998). Additionally, individuals who are generally optimistic can, at times, be pessimistic and *vice versa*. Therefore, researchers have concluded that optimism has both a trait and a state component (Luthans, 2002a; Luthans & Youssef, 2007). Trait optimism represents stable individual differences in the level of optimism generally experienced, while state optimism captures the optimism that may change based on situation or contextual factors. For example, encouragement from a supervisor who creates a situation in which reaching goals seems possible can cause an individual with little optimism in general to experience high levels of optimism at work.

Peterson (2000) further explains this by describing big and little optimism. Big (trait) optimism relates to less specific expectations and leads to desirable outcomes because it produces a general state of vigor and resilience. Little (state) optimism relates to specific expectations about positive outcomes and leads to desirable outcomes because of the specific, changeable, and context-specific nature of the construct. We argue that the self-regulatory and explanatory influences are present in both state and trait optimism; however trait optimism may differ from state optimism in its relationship with other outcomes, depending on the general versus context-specific nature of the outcome. More specifically, the more general construct, trait optimism, may relate more strongly with distal, general outcomes while the specific outcome expectancies of state optimism may relate more strongly with proximal, context-related outcomes. Thus, trait optimism relates to general outcomes like long term health because of the general nature of this variable while state optimism experienced in the workplace will relate more closely to work related outcomes. Others have made similar arguments concerning constructs with state and trait components (i.e., George, 1991). These relationships are hypothesized because states are impacted by situational and contextual factors. Thus, organizational culture or

leadership style, for example, may override the influence of chronic tendencies to impact attitudes and behavior.

To our knowledge, no research has investigated the effects of state optimism versus trait optimism on job-related outcomes. In fact, little research has investigated the relationship of trait or state optimism on job-related outcomes independently. This is particularly unfortunate when one considers the implications of understanding the effects of both trait and state optimism. From a managerial perspective, if job-related outcomes are more closely related to trait optimism, which is fairly stable, then managers should consider assessing optimism at the time of selection and should not be concerned with trying to increase employee's optimism at work. If, however, state optimism is more closely related to job-related outcomes, as we propose, then managers should foster environments and relationships with their employees which allow them to feel optimistic at work. Clearly, the choice of employment selection versus managerial intervention is quite different and thus, it is essential to investigate the possible differential effects of these two types of optimism.

Thus, to further our understanding from both a theoretical and a practical perspective of how optimism can relate to job-related outcomes, this study will investigate the effects of state and trait optimism on multiple job-related outcome variables. In order to isolate and test the influence of optimism on these job-related outcomes, we will also control for affect.

## State and Trait Affect

The fundamental difference between affect and optimism is that affect is about feeling positively (or negatively) while optimism is about positive explanatory mechanisms and expectations about meeting one's goals. Regarding explanatory mechanisms, optimism has important implications for the way in which people explain the causes of events as well as regulate their actions (Scheier & Carver, 1985; Seligman, 1998). For example, optimists develop external, variable, and specific reasons for failures, whereas pessimist's attributions are internal, stable, and global when things go wrong (Seligman, 1998). In relation to goal achievement, optimism is "created, motivated, and developed in relation to the pursuit of personally valuable goals" (Luthans & Youssef, 2007, p. 331). In addition, optimism leads to persistence in goal-directed striving and includes expectancies about outcomes obtained through others and forces outside the individual (Carver & Scheier, 2002; Luthans & Jensen, 2002). Thus, due to both the explanatory mechanism and goal orientation, it is the cognitive and motivational component of optimism that distinguishes it from affect.

However, since optimism also has an affective component, affect has been shown to correlate with optimism (Weisse, 1992). In addition, state and trait positive and negative affect have been shown to correlate with many job-related and health-related outcomes (Billings, Folkman, Acree, & Moskowitz, 2000; Cohen, Doyle, Skoner, Fireman, Gwaltney, & Newsom, 1995; Erez & Isen, 2002; George, 1991; Salovey, Rothman, Detweiler & Steward, 2000). Furthermore, it has been suggested that the relationship between optimism and outcomes may partially be due to mood states (Peterson, 2000; Salovey et al., 2000). Thus, some researchers have acknowledged the need for affect as a control variable in research on optimism. Despite this acknowledgment, affect as a control has not been fully incorporated into research designs. For example, Scheier et al. (1994) indicate concern about the overlap between optimism and neuroticism and trait negative affect. However, the authors go on to control for neuroticism, but not trait negative affect. In addition, Little and colleagues (2007) look at the predictive validity of state optimism while controlling for positive state affect. Although they may be the first to call for and control for positive state affect, they did not control for negative state affect or

trait affect. We posit that because of the fundamental difference between optimism and affect, state optimism will add predictive validity to job outcomes over and above affect.

## Job-Related Outcomes

As mentioned above, many researchers have indicated the need to investigate the relative impact of state and trait variables, particularly in their relationship to organizational outcomes (i.e., Luthans, 2002a; Wright, 1997; Wright, Cropanzano & Meyer, 2004). Thus, using self-regulatory as well as explanatory theory, we investigated the relationship between state and trait optimism and the job-related outcomes psychological distress symptoms, burnout, affective commitment, job satisfaction, task performance, and contextual performance while controlling for affect.

## Psychological Distress Symptoms

Psychological distress symptoms are symptoms experienced by individuals as an outcome of stress. We have included this variable as a job-related outcome because of the belief that stress is a causal agent in organizational outcomes such as absenteeism and reduced productivity (Ganster & Schaubroeck, 1991; Ivancevich and Matteson, 1980; Parasuraman & Allutto, 1984). Furthermore, the positive impact of trait optimism on physical and psychological health is well documented (see Scheier & Carver, 1985, 1992; Scheier et al., 1994; Seligman, 1998). Therefore, we investigate the question—is trait optimism related to a context-specific, proximal measure of health such as current distress symptoms measured at work? We argue that since state optimism is influenced by contextual factors, it will predict more variance in a context-specific, proximal measure of distress such as current psychological distress symptoms.

From a theoretical perspective, this can be explained by the explanatory as well as the self-regulatory nature of optimism. Trait optimism should relate to health because individuals who reside in a general condition of vigor and resilience will generally explain the causes of events in a positive light and regulate themselves to overcome difficulty in life which in turn improves both physical and psychological functioning. Additionally, individuals who believe that their actions influence outcomes are less likely to be depressed and more likely to practice preventative health maintenance (Seligman, 1998).

However, the relationship between trait optimism and health may not be as strong as the relationship between state optimism and health when the health outcome measured is proximal and job-specific. In other words, an employee's optimism on the job may affect the psychological distress felt on the job more accurately than their general tendency to feel optimistic. Although, the theoretical mechanisms (discussed above) for these two relationships are the same, namely that a positive explanatory style and self-regulation will lead to positive health outcomes, the particular situational and contextual factors found on the job may override general tendencies. Thus, individuals may feel optimistic on the job when they do not generally feel optimistic or *vice versa*. Thus, state optimism will be related to psychological distress symptoms when controlling for trait optimism.

H1a: After controlling for trait optimism, state optimism will significantly and positively predict psychological distress symptoms.

Furthermore, in order to more rigorously test these hypotheses, we will test the effects of state optimism on psychological distress symptoms while controlling for positive and negative affect.

H1b: After controlling for affect, state optimism will positively and significantly predict psychological distress symptoms.

## **Burnout**

Burnout is a negative affective state caused by recurring stress (Shirom, 1989). Individuals who are burned out have become emotionally exhausted, feel helpless, and have lost their spirit. We argue that optimism will be negatively related to burnout because of the explanatory as well as self-regulatory nature of optimism. Individuals experiencing optimism will be less likely to burn out because these individuals realize that setbacks can be one time events and thus will not feel helpless when dealing with work issues. Furthermore, previous successes will allow an optimistic individual to feel as though s/he has the capabilities and the control to deal with future situations; again, reducing the helplessness this individual will feel. This, in turn allows an individual to continue to exert effort towards his or her work when s/he becomes aware of a discrepancy between his or her goals and his or her present situation and thus will not experience the loss of spirit characteristic of job burnout.

Some empirical support exists for this relationship as well. Optimism has been linked to stress reduction (Luthans, 2002b), health (Peterson, 2000), and coping (Scheier et al., 1994). Furthermore, in a recent meta analysis, Nes and Segerstrom (2006) found that optimists adjust their coping strategies to meet the demands of the stressors at hand. Finally, in congruence with the state-trait argument above, we hypothesize that state optimism will be related to burnout over and above trait optimism because it is the context-specific optimism experienced at work that may override general tendencies and should relate more closely to work outcomes. Thus, we hypothesize the following:

H2a: After controlling for trait optimism, state optimism will significantly and positively predict burnout.

Once again, in order to more rigorously test these hypotheses, we will test the effects of state optimism on burnout while controlling for positive and negative affect.

H2b: After controlling for affect, state optimism will positively and significantly predict burnout.

## **Affective Commitment**

Affective commitment is the desire to remain at an organization (Mowday, Porter & Steers, 1982). Clearly, this is an important outcome variable for organizations as it predicts turnover, absenteeism and even productivity (Allen & Meyer, 1996; Benkoff, 1997; Somers, 1995). Again, the theoretical rationale for the relationship between optimism and affective commitment resides in the explanatory and self-regulatory mechanisms inherent in optimism. Optimistic individuals believe they have the

skills and abilities to cause positive events in their future. Thus, optimistic individuals do not feel helpless but rather believe that their actions have positive and significant impacts on events in their life. When individuals feel as though they make an impact, they are more committed (Mowday, Porter & Steers, 1982). Indeed, other forms of commitment relate to optimism such as religious commitment (Dember & Brooks, 1989), goal commitment (Werenfels, 2006; Montgomery, Haemmerlie, & Ray, 2003), and commitment to schoolwork (Hoekman, McCormick, & Barnett, 2005). We argue that when controlling for trait optimism, state optimism will be positively related to organizational commitment while trait affect will not significantly predict affective commitment when controlling for state optimism. Again, we hypothesize this because the optimism one experiences at work should relate more significantly to the commitment one feels toward the organization than the optimism one feels in general. Thus, we hypothesize the following:

H3a: After controlling for trait optimism, state optimism will significantly and positively predict affective commitment.

Once again, in order to more rigorously test these hypotheses, we will test the effects of state optimism on burnout while controlling for positive and negative affect.

H3b: After controlling for affect, state optimism will positively and significantly predict affective commitment.

## Job Satisfaction

Another important organizational outcome is job satisfaction or a pleasurable emotional state resulting from the appraisal of one's job or job experiences (Locke, 1976). From a theoretical perspective, optimism should relate to job satisfaction because of the explanatory functions of optimism. Individuals who use optimism when explaining the causes of events will view their job more favorably than individuals who experience helplessness. Optimistic individuals realize that setbacks do not need to become chronic on the job and that these negative events can be isolated so as to not cloud one's overall satisfaction with the job.

In fact, optimism has been linked to happiness (Dember & Brooks, 1989; Peterson, 2000), satisfaction and morale (Seligman, 1998), relationship satisfaction (Field, 2004), life satisfaction (Leung, Moneta, & McBride-Chang, 2005), satisfaction with performance (Werenfels, 2006), satisfaction with school (Hoekman, McCormick, & Barnett, 2005), and job satisfaction (Al-Mashaan, 2003). Presumably, when individuals believe that positive outcomes are in their future, they are more likely to feel positively towards their life and their relationships and we contend they are more likely to be satisfied with their job. We argue that when controlling for trait optimism, state optimism will be positively related to job satisfaction while trait affect will not significantly predict affective commitment when controlling for state optimism. Again, we hypothesize this because the optimism one experiences at work should relate more proximally to satisfaction one feels on the job. Thus, we propose the following relationship between optimism and job satisfaction:

H4a: After controlling for trait optimism, state optimism will significantly and positively predict job satisfaction.

Again, in order to more rigorously test these hypotheses, we will test the effects of state optimism on burnout while controlling for positive and negative affect.

H4b: After controlling for affect, state optimism will positively and significantly predict job satisfaction.

## Task Performance

Seligman (1998) states that “optimists can make the difference between getting the job done well or poorly or not at all” (p. 255). Because individuals who are optimistic on the job tend to stay more goal focused and believe that they can achieve their goals despite of difficulties on the job and because these individuals do not allow setbacks to make them feel helpless, they will perform better on the job.

Although optimism has been linked to performance in various forms such as class performance (Lee et al., 1993), perseverance and achievement (Peterson, 2000), sales (Seligman, 1998), and leadership (Chemers, Watson, & May, 2000; Wunderley, Reddy, & Dember, 1998), studies of optimism and actual job performance are limited. Results from Begley, Lee, and Czajka (2000) showed a significant relationship between trait optimism and supervisor rated job performance as well as an interaction effect in which the relationship between achievement striving and job performance was stronger for individuals high in optimism. However, once again, these studies did not assess state versus trait optimism or control for affect. Thus, we propose the following relationship between optimism and task performance:

H5a: After controlling for trait optimism, state optimism will significantly and positively predict task performance.

Again, in order to more rigorously test these hypotheses, we will test the effects of state optimism on burnout while controlling for positive and negative affect.

H5b: After controlling for affect, state optimism will positively and significantly predict task performance.

## Contextual Performance

Our final dependent variable is contextual job performance or organizational citizenship behavior. Although we know of no studies that have examined optimism and contextual performance, we believe that a strong case can be made for the proposed relationship.

Job performance typically focuses on activities that are formally recognized as part of one’s job. However, these are not the only behaviors important for employee and organizational effectiveness. Organ (1977) points out that task performance beyond a particular level is replaced by regular attendance, predictability, following the rules, not making waves, avoiding hassles, co-operation, and general tendencies toward compliance. Contextual performance (Borman & Motowidlo, 1993) is a

multidimensional construct encompassing organizational citizenship behavior (Smith, Organ, & Near, 1983), prosocial organizational behavior (Brief & Motowidlo, 1986), organizational spontaneity (George & Brief, 1992), civic virtue (Graham, 1986), sportsmanship, and organizational courtesy (Organ, 1988). The dimensions of contextual performance are “(1) persisting with enthusiasm and extra effort as necessary to complete own task activities successfully; (2) volunteering to carry out task activities that are not formally part of own job; (3) helping and co-operating with others; (4) following organizational rules and procedures; and (5) endorsing, supporting, and defending organizational objectives” (Coleman & Borman, 2000, p. 27). The cognitive, affective, and motivational components of optimism appear to relate to these dimensions. When we consider that people experiencing optimism: “are easily motivated to work harder; are more satisfied and have high morale; have high levels of aspiration and stretch goals; persevere in the face of obstacles and difficulties; analyze personal failures and setbacks as temporary, not as personal inadequacies, and view them as one-time unique circumstances; and tend to make one feel upbeat and invigorated both physically and mentally” (Luthans, 2002b, p. 64), it seems likely that optimists will exhibit higher levels of contextual performance. This should particularly be the case when optimism is experienced on the job. Thus, we argue that the motivational component of optimism, in general, and the contextual nature of state optimism, specifically, will predict contextual performance even after controlling for trait optimism. Thus, we propose the following relationship between optimism and contextual performance:

H6a: After controlling for trait optimism, state optimism will significantly and positively predict contextual performance.

Again, in order to more rigorously test these hypotheses, we will test the effects of state optimism on contextual performance while controlling for positive and negative affect.

H6b: After controlling for affect, state optimism will positively and significantly predict contextual performance.

Two studies were conducted to increase the validity and generalizability of our proposed theoretical relationships. The confirmatory factor analysis conducted in Study 1 demonstrates the independent nature of state and trait optimism. In addition, the first study includes students employed in a variety of occupations, thereby increasing external validity. The second was conducted within the context of a single organization and compliments Study 1 by including supervisor ratings of task and contextual job performance and controls for both state and trait positive and negative affect.

## Study 1

### *Method*

#### **Participants and procedure**

Study 1 consisted of a sample of undergraduate students. Nine hundred students from a large university in the southern U.S. who were enrolled in a single undergraduate management course were asked to complete two surveys for extra credit. The first survey measured state optimism, trait optimism, trait positive and negative affect and demographic variables. Seven hundred seventy two respondents completed the first survey, which consisted of an 86 per cent response rate. A second survey was conducted 2 weeks later and measured distress, burnout, affective commitment, and job satisfaction.

Both surveys were completed by 744 participants, which consisted of an 83 per cent overall response rate. At the end of the semester, course grade was obtained from the instructor. All 772 participants were used for a confirmatory factor analysis and to test hypothesis 5, with course grade used as a measure of task performance. For hypotheses 1–4, 245 of the 744 participants were not currently employed and could not complete the job-related measures, reducing the sample to 499. Of the remaining sample, 238 worked 20 hours per week or less. In order to ensure a more job relevant sample, they were removed, leaving 261 participants working over 20 hours per week. Of the 261 study participants, 131 were male and 130 were female, 221 were Caucasian and 40 were minorities. The average age of the participants was 21 years and they had an average of 5 years of part and full time work experience. Contextual performance was not assessed in Study 1.

## Measures

*State and trait optimism:* State and trait optimism were measured by using the revised Life Orientation Test (LOT) (Scheier et al., 1994). The revised LOT is a six-item measure designed to assess trait optimism. For trait optimism, respondents were asked to indicate their degree of general agreement “over the past year” with statements such as “I’m always optimistic about my future”, using a 5-point response scale ranging from 1 (strongly disagree) to 5 (strongly agree). The internal consistency reliability of the scale was 0.83.

For state optimism, respondents were asked to indicate their degree of agreement “over the past week” with a modified version of the LOT. Items were changed to indicate their current state of optimism with statements such as “Currently, I’m optimistic about my future”, using a 5-point response scale ranging from 1 (strongly disagree) to 5 (strongly agree). The internal consistency reliability of the scale was 0.87.

*Trait positive and negative affect:* Positive and negative trait affect was measured with the PANAS (Watson, Clark & Tellegen, 1988). The positive and negative affect schedule (PANAS) is a 20-item measure consisting of 10 items for positive affect and 10 items for negative affect. A sample item for positive affect is “interested”, while “distressed” indicates a sample item for negative affect. The measure can be used to assess both trait and/or state affect. In accordance with procedures outlined by Watson and colleagues, trait affect was measured by asking respondents to “Indicate to what extent you have felt this way during the past year” on a 5-point response scale ranging from 1 (very slightly or not at all) to 5 (always). The internal consistency reliability of the scale was 0.92 for trait positive affect and 0.90 for trait negative affect.

*Psychological distress symptoms:* Psychological distress symptoms were measured with a revised nine-item measure of the SCL-90 (Derogatis & Cleary, 1977). Sample items are “difficulty in sleeping” and “forgetfulness”. Psychological distress symptoms were measured by asking respondents to “Indicate to what extent you have felt this way during the past week” on a 5-point response scale ranging from 1 (very slightly or not at all) to 5 (always). The internal consistency reliability of the scale was 0.90.

*Burnout:* Burnout was measured with a nine-item emotional exhaustion sub-scale from Maslach & Jackson (1981). Respondents were asked to describe the way they feel about work in general such as “I feel emotionally drained from my work”, using a 5-point response scale ranging from 1 (strongly disagree) to 5 (strongly agree). The internal consistency reliability of the scale was 0.88.

*Affective commitment:* Affective commitment was measured with an eight-item scale from Allen and Meyer (1990). Respondents were asked to describe the way they feel about work in general such as “I would be very happy to spend the rest of my career with this organization”, using a 5-point response

scale ranging from 1 (strongly disagree) to 5 (strongly agree). The internal consistency reliability of the scale was 0.78.

*Job satisfaction:* Job satisfaction was measured with a five-item scale from Hackman and Oldham (1975). Respondents were asked to describe the way they feel about work in general such as “I would be very happy to spend the rest of my career with this organization”, using a 5-point response scale ranging from 1 (strongly disagree) to 5 (strongly agree). The internal consistency reliability of the scale was 0.87.

*Task performance:* Task performance was measured based on the final percentage grade in the course.

### Confirmatory factor analysis

State optimism, trait optimism, positive affect and negative affect were assessed with confirmatory factor analysis in order to ensure both that state and trait optimism are distinct from PA/NA and that state optimism is distinct from trait optimism. The measurement model was tested with nested models using confirmatory factor analysis (CFA) with LISREL v.8.50. With the sample of 772, all 32 indicators for the four latent variables were included. The four latent variables covaried with each other; coefficients ranged from 0.74 between state and trait optimism to 0.05 between positive and negative affect. This four factor model fit the data well ( $\chi^2 = 2590.63$ ,  $df = 458$ , CFI = 0.94, RMSEA = 0.078) and was a significantly better fit to the data than a three factor model with state and trait optimism combined as one factor ( $\Delta\chi^2 = 458.04$ ,  $\Delta df = 3$ ,  $p = .001$ , CFI = 0.93, RMSEA = 0.085).

### Results

The means, standard deviations, zero-order correlations, and reliability coefficients are reported in Table 1. Internal consistency reliability coefficients for the study variables were satisfactory and ranged from 0.78 to 0.92.

Table 1. Descriptive statistics and correlations from Study 1

Variable	Mean	SD	1	2	3	4	5	6	7	8
1. State optimism	3.48	0.74	(0.87)							
2. Trait optimism	3.52	0.66	0.70*	(0.83)						
3. Trait positive affect	3.79	0.75	0.41*	0.45*	(0.92)					
4. Trait negative affect	2.49	0.83	-0.37*	-0.29*	-0.15*	(0.90)				
5. Distress symptoms	2.39	0.87	-0.37*	-0.30*	-0.25*	0.42*	(0.90)			
6. Burnout	2.48	0.74	-0.41*	-0.32*	-0.34*	0.30*	0.32*	(0.88)		
7. Affective commitment	3.10	0.67	0.20*	0.12*	0.24*	0.01	-0.06	-0.35*	(0.78)	
8. Job satisfaction	3.34	0.92	0.29*	0.19*	0.27*	-0.14*	-0.11	-0.60*	0.62*	(0.87)
9. Task performance	78.19	10.81	0.24*	0.09*	0.14*	-0.09*	-0.16*	-0.11*	0.00	0.04

Note:  $N = 261$  at both Time 1 (state optimism, trait optimism, PA, and NA) and at Time 2 (distress, burnout, affective commitment, and job satisfaction);  $N = 772$  for objectively measured classroom performance. Reliability coefficients ( $\alpha$ ) on the diagonal.

\* $p < .05$  (two tailed).

Table 2. Study 1: results of hierarchical regression analysis for trait versus state optimism

Outcome	Distress symptoms	Burnout	Affective commitment	Job satisfaction	Task performance
Step 1: trait optimism— $R^2$	0.09*	0.10*	0.02*	0.04*	0.01*
Step 2: state optimism— $R^2$	0.14*	0.17*	0.04*	0.08*	0.07*
State optimism— $\Delta R^2$	0.05*	0.07*	0.03*	0.05*	0.06*
Step 1: state optimism— $R^2$	0.14*	0.17*	0.04*	0.08*	0.06*
Step 2: trait optimism— $R^2$	0.14*	0.17*	0.04*	0.08*	0.07*
Trait optimism— $\Delta R^2$	0.00	0.00	0.00	0.00	0.01*
Standardized $\beta$					
State optimism	-0.31*	-0.38*	0.23*	0.31*	0.31*
Trait optimism	-0.09	-0.05	-0.04	-0.03	-0.10*

Step 1 indicates the percent of variance explained ( $R^2$ ) for the control variable only. Step 2 indicates the per cent of variance explained ( $R^2$ ) for all variables simultaneously. After step 2, the incremental variance explained ( $\Delta R^2$ ) is reported. Standardized regression coefficients ( $\beta$ ) are reported from the second stage of the regression.  $N = 261$  for distress, burnout, commitment, and satisfaction;  $N = 772$  for classroom performance.

\* $p < .05$  (two tailed).

### Hypotheses testing

As can be seen in Table 2, a series of hierarchical regressions were run to test hypotheses 1a–5a, assessing incremental variance in state optimism over trait optimism. Trait optimism was entered into a regression equation with each of the job-related variables as the dependent variable. In step 2, state optimism was added to the equation to test the additional variance in each of the outcome variables explained by state optimism. Although not formally hypothesized, hierarchical regressions were run in a similar manner but the order of entry was reversed such that state optimism was entered in step 1 and trait optimism entered in step 2.

Hypothesis 1–5a proposed state optimism will significantly predict psychological distress symptoms, burnout, affective commitment, job satisfaction and task performance after controlling for trait optimism. Results indicated that state optimism predicts an additional variance in psychological distress symptoms ( $\Delta R^2 = 0.05$ ), burnout ( $\Delta R^2 = 0.07$ ), affective commitment ( $\Delta R^2 = 0.03$ ), job satisfaction ( $\Delta R^2 = 0.05$ ), and task performance ( $\Delta R^2 = 0.06$ ). Thus, hypotheses 1–5a were supported.

Furthermore, although we offered no formal hypotheses, we assessed trait optimism after controlling for state optimism. It should be noted that trait optimism is significantly correlated with all five job-related variables. However, when trait optimism was added to the equations after controlling for state optimism, the changes in  $R^2$  were not significant for any of the job-related outcomes (with the exception of task performance which generated a negative  $\beta$ , indicating a negative relationship), demonstrating that trait optimism did not explain additional variance in these outcomes, when controlling for state optimism.

In order to more rigorously test these findings, we also tested the effects of state optimism on each job-related outcome using trait positive and negative affect as controls. Results (shown in Table 3) indicated that state optimism did predict additional variance in psychological distress symptoms ( $\Delta R^2 = 0.03$ ), burnout ( $\Delta R^2 = 0.05$ ), affective commitment ( $\Delta R^2 = 0.02$ ), job satisfaction ( $\Delta R^2 = 0.03$ ), task performance ( $\Delta R^2 = 0.04$ ), when controlling for affect, providing support for hypothesis 1–5b.

Furthermore, in assessing trait optimism, after controlling for trait positive and negative affect, trait optimism did significantly predict two of the five job-relevant outcomes (distress  $\Delta R^2 = 0.01$  and burnout  $\Delta R^2 = 0.01$ ), although the magnitude of these relationships was smaller than the state optimism results shown above.

Table 3. Study 1: results of hierarchical regression analysis for state and trait optimism when controlling for affect

Outcome	Distress symptoms	Burnout	Affective commitment	Job satisfaction	Task performance
State Optimism					
Step 1: affect— $R^2$	0.21*	0.18*	0.06*	0.08*	0.03*
Step 2: state optimism— $R^2$	0.24*	0.23*	0.08*	0.11*	0.06*
State optimism— $\Delta R^2$	0.03*	0.05*	0.02*	0.03*	0.04*
Standardized $\beta$					
Trait positive affect	-0.12	-0.21*	0.19*	0.18*	0.05
Trait negative affect	0.33*	0.18*	0.10	-0.04	-0.01
State optimism	-0.20*	-0.26*	0.16*	0.20*	0.22*
Trait optimism					
Step 1: affect— $R^2$	0.21*	0.18*	0.06*	0.08*	0.03*
Step 2: trait optimism— $R^2$	0.22*	0.20*	0.06*	0.08*	0.03
Trait optimism— $\Delta R^2$	0.01*	0.01*	0.00	0.00	0.00
Standardized $\beta$					
Trait positive affect	-0.13*	-0.24*	0.23*	0.23*	0.13*
Trait negative affect	0.36*	0.23	0.06	-0.09	-0.08*
Trait optimism	-0.14*	-0.14	0.03	0.06	0.01

Step 1 indicates the percent of variance explained ( $R^2$ ) for PA and NA only. Step 2 indicates the per cent of variance explained ( $R^2$ ) for all variables simultaneously. After step 2, the incremental variance explained ( $\Delta R^2$ ) is reported for state or trait optimism. Standardized regression coefficients ( $\beta$ ) are reported from the second stage of the regression.  $N = 261$  for distress, burnout, commitment, and satisfaction;  $N = 772$  for classroom performance.

\* $p < .05$  (two tailed).

## Study 2

### Method

#### Organizational context

This research took place in a large residential treatment center in the Midwest that provides a highly structured environment for at-risk youth. These youths lived at the facility from months to years. Treatment staff members were responsible for the direct supervision of the youths placed at the organization and provide 24 hour a day/7 day per week supervision. Approximately two treatment staff members were responsible for a living unit of approximately 12 youths. The job entails a high level of interpersonal interaction with other staff as well as clients/customers who are often difficult to manage. Due to the high level of job stress characteristic of this job, this organization experiences approximately 100 per cent turnover annually for this job.<sup>1</sup> Therefore, we anticipated this job context to be ideal for the study of optimism.

Based on the high level of turnover, this organization hired treatment workers approximately six times per year. Each new hire group was given an initial survey at the time of hire and a second survey at 3-months of employment. Considering that Aspinwall and Taylor (1992) found that optimists adjust more favorably to life transitions on the job, a youth treatment workplace provided a unique context in which to assess optimism (the life transition being new employment in a highly stressful job.)

<sup>1</sup>Although 51 per cent of study participants were currently enrolled in college, college students are not hired for summer or seasonal employment. Additionally, of those employees who left prior to administering Survey 2, 50 per cent were current college students and 50 per cent were not currently enrolled in college and thus, we do not believe that the turnover was due to the more transient nature of college employment.

### Participants and procedure

The field sample used in this study consists of 205 newly hired treatment workers at a large residential treatment center in the Midwest. Of the 205 study participants, 117 were male and 88 were female, 157 were Caucasian and 48 were minorities. The average age of the respondents was 27 years (ranging from 21 to 54 years of age) and they had an average of 5 years of full time employment prior to being hired. Furthermore, 15 per cent study participants had only a high school education, 62 per cent study participants had at least some college, and 23 per cent had at least a bachelor's degree.

Of the 205 newly hired treatment workers, 181 volunteered to complete a survey of trait measures on the first week of hire, indicating an 88 per cent response rate. This survey included trait optimism, trait positive affect, trait negative affect, and demographic variables.

After 3 months of employment in the position of youth treatment worker, 54 of the 205 newly hired workers had left the organization, leaving 151 employees eligible for a second survey. Of these remaining employees, 118 (78 per cent) volunteered to complete a survey which contained measures of state optimism and state positive and state negative affect. Also in the 3-month survey were the outcome variables psychological distress symptoms, burnout, affective commitment, and job satisfaction.

In addition to self-report measures, the employee's supervisor was asked to complete a survey measuring task and contextual job performance. Supervisor-rated task and contextual job performance data were obtained for 133 of the 151 employees remaining at 3-months of employment, indicating a supervisor response rate of 88 per cent. Due to inconsistency in response rate among all three of the administered surveys, full data were obtained for 106 study participants.

### Measures

*Trait optimism:* Trait optimism was measured by using the revised six-item LOT (Carver, & Bridges, 1994). This instrument was administered once the employees had been hired but before they began their jobs. Thus, the optimism indicated is likely general rather than job related. The internal consistency reliability of the scale was 0.74.

*State optimism:* State optimism was measured with the original LOT (Scheier & Carver, 1985). The scale is an eight-item self-report measure which, like the revised LOT scale, was designed to assess trait optimism. The LOT measure was then modified in accordance with the procedure outlined in Study 1 in order to assess state optimism. The internal consistency reliability of the scale was 0.78.

*Trait positive and negative affect:* Positive and negative trait affect were measured with the PANAS (Watson et al., 1988). The internal consistency reliability of the scale was 0.95 for trait positive affect and 0.91 for trait negative affect.

*State positive and negative affect:* In accordance with procedures outlined by Watson and colleagues (1988), state positive and negative affect were also measured with the PANAS. In order to assess affect as a state rather than a trait, respondents were asked to "Indicate to what extent you have felt this way during the past week". The internal consistency reliability of the scale was 0.92 for state positive affect and 0.89 for state negative affect.

*Psychological distress symptoms:* Psychological distress symptoms were measured with a revised nine-item measure of the SCL-90 (Derogatis & Cleary, 1977). The internal consistency reliability of the scale was 0.86.

*Burnout:* Burnout was measured with a six-item scale from (Erickson & Ritter, 2001). Respondents were asked to describe the way they feel about work in general such as "I feel emotionally drained from

work”, using a 5-point response scale ranging from 1 (strongly disagree) to 5 (strongly agree). The internal consistency reliability of the scale was 0.91.

*Affective commitment:* Affective commitment was measured with an eight-item scale from Allen & Meyer (1990). The internal consistency reliability of the scale was 0.80.

*Job satisfaction:* Job satisfaction was measured with a five-item scale found in Hackman and Oldham’s (1975), Job Diagnostic Survey. The internal consistency reliability of the scale was 0.61.

*Task performance:* A job requirements analysis was conducted for the position of “Youth Treatment Worker”. One of the researchers (a former incumbent and supervisor) developed a thorough list of 18 task statements. These task statements were derived from internal (organizational specific documentation such as the job description, performance evaluation, and training documentation) and external (O-NET and related external job descriptions) analyses. This list of task statements was then evaluated and rank ordered by approximately 20 incumbents and supervisors of the organization. The five performance criteria found to be consistently identified as important for job success were retained as the measure of task performance. Supervisors were asked to describe the performance of their subordinate on performance dimensions such as “Engages responsibly in meetings and work-group activities”, using a 5-point response scale ranging from 1 (strongly disagree) to 5 (strongly agree). The internal consistency reliability of the scale was 0.92.

*Contextual performance:* Contextual job performance was measured with a 15-item scale based on Coleman and Borman’s (2000) measure. The Coleman and Borman model includes the three dimensions of interpersonal citizenship performance, organizational citizenship performance, and job/task citizenship performance. The interpersonal citizenship dimension has two sub-dimensions; interpersonal altruism and interpersonal conscientiousness. The organizational citizenship dimension has two sub-dimensions; organizational allegiance/loyalty and organizational compliance. Three items were selected for each of the five contextual performance dimensions of; interpersonal altruism, interpersonal conscientiousness, organizational allegiance/loyalty, organizational compliance, and job/task conscientiousness. Supervisors were asked to describe the performance of their subordinate on performance dimensions such as “helps other organizational members”, using a 5-point response scale ranging from 1 (strongly disagree) to 5 (strongly agree). The internal consistency reliability of the scale was 0.96.

## Results

The means, standard deviations, zero-order correlations, and reliability coefficients are reported in Table 4. Internal consistency reliability coefficients for the study variables, with the exception of job satisfaction, were satisfactory and ranged from 0.74 to 0.96. The internal consistency reliability coefficient for the widely used Hackman and Oldham’s (1975) job satisfaction measure was only 0.61. This indicates potential problems with the interpretation of results related to the job satisfaction measure.

## Hypotheses testing

As can be seen in Table 5, a series of hierarchical regression analyses were run to test Hypotheses 1a–6a, assessing incremental variance in state optimism over trait optimism. As in Study 1, trait optimism was entered into a regression equation with each of the job-related variables as the dependent variable. In step 2, state optimism was added to the equation to test the additional variance in each of the outcome

Table 4. Study 2: descriptive statistics and correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. State optimism	3.75	0.57	(0.78)											
2. Trait optimism	3.60	0.59	0.64*	(0.74)										
3. Trait positive affect	4.04	0.68	0.30*	0.51*	(0.95)									
4. Trait negative affect	1.96	0.71	-0.17 <sup>+</sup>	-0.37*	-0.30*	(0.91)								
5. State positive affect	3.94	0.64	0.47*	31*	0.29*	0.04	(0.92)							
6. State negative affect	1.65	0.63	-0.41*	-0.27*	-0.07	0.32*	-0.35*	(0.89)						
7. Distress symptoms	1.96	0.75	-0.44*	-0.32*	-0.07	0.39*	-0.31*	0.59*	(0.86)					
8. Burnout	2.25	0.84	-0.36*	-0.24*	-0.32*	0.34*	-0.26*	0.39*	0.36*	(0.92)				
9. Affective commitment	3.34	0.63	0.35*	0.17 <sup>+</sup>	0.25*	-0.09	0.28*	-0.01	-0.16 <sup>+</sup>	-0.45*	(0.80)			
10. Job satisfaction	3.75	0.58	0.44*	0.30*	0.33*	-0.18 <sup>+</sup>	0.38*	-0.31*	-0.29*	-0.63*	0.49*	(0.61)		
11. Task performance	3.83	0.80	0.16 <sup>+</sup>	-0.01	-0.04	-0.04	-0.07	-0.05	-0.17 <sup>+</sup>	-0.04	0.09	0.02	(0.92)	
12. Contextual performance	3.72	0.73	0.23*	0.11	0.09	-0.03	0.05	0.03	-0.17 <sup>+</sup>	-0.09	0.19*	0.11	0.89*	(0.96)

Note: Time 1—*N* = 181 (trait optimism, trait PA, and trait NA); supervisor rated performance *N* = 133 (task performance and contextual performance). Time 2—*N* = 118 (state optimism, state PA, state NA, distress symptoms, burnout, affective commitment, and job satisfaction). Reliability coefficients ( $\alpha$ ) in the diagonal. <sup>+</sup>*p* < .10; \**p* < .05 (two tailed).

Table 5. Study 2: results of hierarchical regression analysis for trait versus state optimism

Outcome	Distress symptoms	Burnout	Affective commitment	Job satisfaction	Task performance	Contextual performance
Step 1: trait optimism— $R^2$	0.10*	0.06*	0.03 <sup>+</sup>	0.09*	0.00	0.03 <sup>+</sup>
Step 2: state optimism— $R^2$	0.23*	0.13*	0.11*	0.20*	0.02	0.04
State optimism— $\Delta R^2$	0.12*	0.07*	0.08*	0.12*	0.01	0.02
Step 1: state optimism— $R^2$	0.23*	0.13*	0.11*	0.20*	0.02	0.04*
Step 2: trait optimism— $R^2$	0.23*	0.13*	0.11*	0.20*	0.02	0.04
Trait optimism— $\Delta R^2$	0.00	0.00	0.00	0.00	0.00	0.00
Standardized $\beta$ s						
State optimism	-0.46*	-0.34*	0.37*	0.44*	0.15	0.17
Trait optimism	-0.03	-0.02	-0.07	0.02	-0.04	0.05

Step 1 indicates the percent of variance explained ( $R^2$ ) for the control variable only. Step 2 indicates the per cent of variance explained ( $R^2$ ) for all variables simultaneously. After step 2, the incremental variance explained ( $\Delta R^2$ ) is reported. Standardized regression coefficients ( $\beta$ ) are reported from the second stage of the regression.  $N = 106$ .

<sup>+</sup> $p < .10$ ; \* $p < .05$  (two tailed).

variables explained by state optimism. Although not formal hypotheses, hierarchical regression analyses were conducted with the order of entry reversed, such that state optimism was entered in step 1 and trait optimism entered in step 2.

Hypothesis 1–6a proposed state optimism will significantly predict distress, burnout, commitment, satisfaction, task performance, and contextual performance after controlling for trait optimism. Results indicated that state optimism predicts additional variance in psychological distress symptoms ( $\Delta R^2 = 0.12$ ), burnout ( $\Delta R^2 = 0.07$ ), affective commitment ( $\Delta R^2 = 0.08$ ), and job satisfaction ( $\Delta R^2 = 0.12$ ), but not task or contextual performance. Thus, hypotheses 1–4a were supported and hypotheses 5–6a were not supported. It should be noted that when controlling for trait optimism, state optimism failed to predict additional variance in contextual job performance ( $\Delta R^2 = 0.02$ ). Based on power analysis (Cohen, 1988), the sample size would have to be increased to nearly 300 in order for this effect size to obtain a satisfactory power level of 0.70. Although if entered first, state optimism was a significant predictor of contextual performance ( $R^2 = 0.04$ ).

Furthermore, although no formal hypotheses were presented, we assessed trait optimism, after controlling for state optimism. Although, trait optimism was significantly correlated with the job-related variables of psychological distress, burnout and job satisfaction, when trait optimism was added to the equations after controlling for state optimism, the changes in  $R^2$  were not significant for any of the job-related outcomes. This indicated that trait optimism did not explain additional variance in these outcomes.

In order to more rigorously test these findings, we tested the effects of state optimism on each job-related outcome using all four types of affect as controls (state and trait, positive and negative). Results (shown in Table 6) indicated that state optimism did predict additional variance in psychological distress symptoms ( $\Delta R^2 = 0.03$ ), affective commitment ( $\Delta R^2 = 0.06$ ), job satisfaction ( $\Delta R^2 = 0.03$ ), task performance ( $\Delta R^2 = 0.04$ ) and contextual performance ( $\Delta R^2 = 0.06$ ) when controlling for affect, providing support for hypothesis 1b, 3b, 4b, 5b, and 6b. However, state optimism did not predict a significant portion of the variance in burnout after controlling for affect, thereby finding no support for hypothesis 2b.

Furthermore, in assessing trait optimism, after controlling for state and trait positive and negative affect, trait optimism did not significantly predict any job-relevant outcomes. When trait optimism was

Table 6. Study 2: results of hierarchical regression analysis for state and trait optimism when controlling for affect

Outcome	Distress symptoms	Burnout	Affective commitment	Job satisfaction	Task performance	Contextual performance
State optimism						
Step 1: affect— $R^2$	0.42*	0.28*	0.13*	0.28*	0.02	0.01
Step 2: state optimism— $R^2$	0.46*	0.29*	0.18*	0.31*	0.06	0.07
State optimism— $\Delta R^2$	0.03*	0.01	0.06*	0.03*	0.04*	0.06*
Standardized $\beta$						
Trait positive affect	0.11	-0.20*	0.11	0.19*	-0.08	0.04
Trait negative affect	0.26*	0.24*	-0.11	-0.07	-0.05	-0.03
State positive affect	-0.15 <sup>+</sup>	-0.13	0.19 <sup>+</sup>	0.19 <sup>+</sup>	-0.18	-0.11
State negative affect	0.34*	0.18 <sup>+</sup>	0.24*	-0.16	0.06	0.13
State optimism	-0.23*	-0.11	0.30*	0.22*	0.26*	0.30*
Trait optimism						
Step 1: affect— $R^2$	0.42*	0.28*	0.13*	0.28*	0.02	0.01
Step 2: trait optimism— $R^2$	0.44*	0.28*	0.13*	0.28*	0.02	0.03
Trait optimism— $\Delta R^2$	0.01	0.00	0.00	0.00	0.01	0.02
Standardized $\beta$						
Trait positive affect	0.11	-0.23*	0.14	0.21*	-0.07	0.04
Trait negative affect	0.26*	0.25	-0.12	-0.08	-0.05	-0.02
State positive affect	-0.20*	-0.17 <sup>+</sup>	0.28*	0.25*	-0.11	-0.04
State negative affect	0.40*	0.22*	0.15	-0.22*	-0.01	0.06
Trait optimism	-0.14	0.02	0.03	0.06	0.11	0.17

Step 1 indicates the percent of variance explained ( $R^2$ ) for PA and NA only. Step 2 indicates the percent of variance explained ( $R^2$ ) for all variables simultaneously. After step 2, the incremental variance explained ( $\Delta R^2$ ) is reported for state or trait optimism. Standardized regression coefficients ( $\beta$ ) are reported from the second stage of the regression.  $N = 106$ .

<sup>+</sup> $p < .10$ ; \* $p < .05$  (two tailed).

added to the equations in which job-related outcomes were the dependent variables (see Table 6), the changes in  $R^2$  were not significant, indicating that trait optimism did not explain additional variance in these outcomes.

## Discussion

Though ample research exists that examines the effects of trait optimism on health-related outcomes, to our knowledge no studies have looked at the effects of both state and trait optimism on job-related outcome variables. This study examined the organizational impact of both state and trait optimism. In it, we argue that although state and trait optimism may both have benefits through optimism's explanatory and self-regulatory nature, they should have different effects on job-related outcomes because of the context-specific nature of state optimism and the general nature of trait optimism. Thus, individuals feeling "currently" optimistic at work are more likely to reap the benefits of optimism in terms of shorter term work-related outcomes.

We tested our assertions in a rigorous manner in two studies. These studies were conducted to increase the validity and generalizability of our proposed theoretical relationships. The first study includes a sample ranging 261 to 772 and surveyed students employed in a variety of occupations. The second study assessed 106 newly hired employees within the context of a single organization and adds

to Study 1 by controlling for both state and trait positive and negative affect and adds supervisor ratings of task and contextual job performance.

In each of these studies, we conducted two sets of analyses. The first set of analyses controlled for trait optimism, while the second included positive and negative affect as control variables. In both studies, we found that when controlling for state optimism and affect separately, trait optimism did not substantially increase the variance explained in any of the job-related outcomes variables. However, state optimism generally accounted for additional variance the outcomes measures when controlling for trait optimism and all of the outcomes (except burnout in the field sample) when controlling for affect. In addition, Study 1 utilized confirmatory factor analysis to reveal the independent nature of state optimism from trait optimism and positive and negative affect.

From a theoretical perspective, our overall findings support the idea that more context-specific states relate more closely with context-specific outcomes. Additionally, these findings support the theoretical rationale that the explanatory nature and self-regulatory function of optimism influences more than health. Thus, when individuals feel optimistic at work or when they feel as though discrepancies between their current situation and their goals are possible to reduce, they will have more positive attitudes about work and exhibit more positive behaviors at work. Feeling generally optimistic may not impact these attitudes and behaviors because the more immediate state may override any potential impacts. In addition, despite suggestions that the relationship between optimism and outcomes may partially be due to state affect (Little, Gooty, & Nelson, 2007; Peterson, 2000; Salovey et al., 2000) and trait affect (Scheier et al., 1994), state optimism is unique from affect and predicts job-related outcomes even after accounting for state and trait positive and negative affect. Therefore, an important implication of this study is the significance of state optimism as a unique predictor of job-related outcomes above and beyond affect

These findings also illustrate the importance of state optimism in the workplace and support a management focus on increasing state optimism at work rather than hiring individuals who are generally optimistic. From a practical perspective, these findings tell managers that creating an environment which encourages optimism can have a great impact on many important job-related outcomes. Simply by increasing employees' optimism, managers may see increases in their commitment to the organization and satisfaction with the job as well as an increased job performance and citizenship behavior. Furthermore, this optimism may reduce psychological distress which can lead to negative health and performance consequences. Based on the breadth of outcomes associated with state optimism, managers may want to concern themselves with the level of optimism of subordinates in a wide range of situations.

### *Limitations and future research*

This study is not without limitations. First, some of the regressions involved in this study were subject to common method variance (CMV), though we made attempts to reduce the effects of CMV by collecting data at multiple points in time in multiple studies and through the use of objective task performance and supervisor ratings of task and contextual performance (Spector, 2006). In addition, Spector (2006) suggests controlling for negative affect in some situations in an effort to remove its potentially biasing effect. In the current study, negative affect was controlled based on theoretical reasons, thereby providing the added benefit of reducing CMV. In order to further minimize the impact of CMV future research should utilize additional methods of measurement such as attendance, turnover, and objective measures of actual job performance.

The non-experimental nature of the data provides limitations to predictions of causality. For example, it could be argued that being satisfied with one's job may lead to increased state optimism.

Collecting data at two points in time reduced some of the problems with this design; however, a longitudinal and/or experimental design is recommended for future studies to improve upon this limitation. Additionally, assessing optimism longitudinally provides opportunities to assess trait optimism over time. Seligman (1998) found that optimistic sales workers outsold pessimists by 21 per cent during the first year, and outsold pessimists by 57 per cent in the second year. Thus, it stands to reason that the impact of the more distal trait optimism may have a larger impact on organizational outcomes over a longer time period, even when state optimism has lost its impact.

Future research should also explore the antecedents of state optimism as well as the causal mechanism underlying these relationships. For example, Sethi & Seligman (1993) found that optimism changes as a result of the influence others have on them in their church. Also, more optimistic leaders have more optimistic followers (Wunderley et al., 1998), indicating that leaders can diffuse optimism into the workforce (Luthans, 2002b). Can optimism be increased through training, supervisor interactions, peer support, or organizational culture? Future research should determine what strategies can be employed so that optimism can be increased in the workplace.

The results of this study suggest that state optimism is important on the job. The variety of job-related outcomes assessed in this study provides a more broad understanding of optimism as important in multiple aspects of the job. State optimism was also shown to be more valid than trait optimism based on the proximal and context specific nature of the study design. In addition, state optimism demonstrated incremental prediction of job-related outcomes even when controlling for state and trait positive and negative affect. Based on our findings, we are quite “optimistic” about the future of optimism as a central concept for POB.

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## References

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, *63*, 1–18.
- Allen, N. J., & Meyer, J. P. (1996). Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior*, *49*, 252–276.

- Al-Mashaan, O. (2003). Associations among job satisfaction, optimism, pessimism, and psychosomatic symptoms for employees in the government sector in Kuwait. *Psychological Reports, 93*, 17–25.
- Aspinwall, L., & Taylor, S. (1992). Modeling cognitive adaptations: A longitudinal investigation of the impact of individual differences and coping on college adjustment and performance. *Journal of Personality and Social Psychology, 63*, 989–1003.
- Begle, T., Lee, C., & Czajka, J. (2000). The relationship between Type A behavior and optimism with job performance and blood pressure. *Journal of Business and Psychology, 15*, 215–227.
- Benkoff, B. (1997). Disentangling organizational commitment: The dangers of the OCQ for research policy. *Personnel Review, 26*, 114–136.
- Billings, D., Folkman, S., Acree, M., & Moskowitz, J. (2000). Coping and physical health during caregiving: The roles of positive and negative affect. *Journal of Personality & Social Psychology, 79*, 131–142.
- Borman, W., & Motowidlo, S. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt, & W. Borman (Eds.), *Personnel selection*. San Francisco, CA: Jossey-Bass. Frontiers Series.
- Brief, A., & Motowidlo, S. (1986). Prosocial organizational behaviors. *Academy of Management Review, 11*, 710–725.
- Buchanan, G. M., & Seligman, M. E. P. (1995). *Explanatory style*. Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc.
- Cameron, K., & Caza, A. (2004). Contributions to the discipline of positive organizational scholarship. *American Behavioral Scientist, 47*, 731–739.
- Cameron, K., Dutton, J., & Quinn, R. (2003). *Positive organizational scholarship: Foundations of a new discipline*. San Francisco: Berrett-Koehler.
- Carver, C., & Scheier, M. (1981). *Attention and self-regulation: A control theory approach to human behavior*. New York: Springer-Verlag.
- Carver, C., & Scheier, M. (2002). Optimism. In C. R. Snyder, & S. Lopez (Eds.), *Handbook of positive psychology* (pp. 231–242.) Oxford, UK: Oxford University Press.
- Chemers, M., Watson, C., & May, S. (2000). Dispositional affect and leadership effectiveness. A comparison of self-esteem, optimism, and efficacy. *Personality and Social Psychology Bulletin, 26*, 267–277.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cohen, S., Doyle, W. J., Skoner, D. P., Fireman, P., Gwaltney, J. M., & Newsom, J. T. (1995). State and trait negative affect as predictors of objective and subjective symptoms of respiratory viral infections. *Journal of Personality and Social Psychology, 68*, 159–169.
- Coleman, V., & Borman, W. (2000). Investigating the underlying structure of the citizenship performance domain. *Human Resource Management Review, 10*, 25–44.
- Dember, W., & Brooks, J. (1989). A new instrument for measuring optimism and pessimism: Test-retest reliability and relations with happiness and religious commitment. *Bulletin of the Psychonomic Society, 27*, 365–366.
- Derogatis, L. R., & Cleary, P. A. (1977). Factorial invariance across gender for the primary symptom dimensions of the SCL-90. *British Journal of Social & Clinical Psychology, 16*, 347–356.
- Erez, A., & Isen, A. M. (2002). The influence of positive affect on the components of expectancy motivation. *Journal of Applied Psychology, 87*, 1055–1067.
- Erickson, R. J., & Ritter, C. (2001). Emotional labor, burnout, and inauthenticity: Does gender matter? *Social Psychology Quarterly, 64*, 146–163.
- Field, N. (2004). Optimism, coping, social support and romantic relationship satisfaction: A mediational analysis. *Dissertation Abstracts International, 64*(7-B), 3581.
- Ganster, D. C., & Schaubroeck, J. (1991). Work stress and employee health. *Journal of Management, 17*, 235–271.
- George, J. (1991). State or trait: Effects of positive mood on prosocial behaviors at work. *Journal of Applied Psychology, 76*, 299–307.
- George, J., & Brief, A. (1992). Feeling good-doing good: A conceptual analysis of the mood at work-organizational spontaneity relationship. *Psychological Bulletin, 112*, 310–329.
- Graham, J. (1986). Organizational citizenship behavior informed by political theory. Paper presented at the annual meeting of the *Academy of Management*, Chicago, IL.
- Hackman, J. R., & Oldham, G. R. (1975). Job diagnostic survey, reliability & validity for job reassignment & job change effects evaluation. *Journal of Applied Psychology, 60*, 159–170.
- Hoekman, K., McCormick, J., & Barnett, K. (2005). The important role of optimism in a motivational investigation of the education of gifted adolescents. *Gifted Child Quarterly, 49*, 99–110.

- Ivancevich, J. M., & Matteson, M. (1980). *Stress and work: A managerial perspective*. Glenview, IL: Scott-Foresman.
- Lee, C., Ashford, S., & Jamieson, L. (1993). The effects of type A behavior dimensions and optimism on coping strategy, health, and performance. *Journal of Organizational Behavior*, *14*, 143–157.
- Leung, B., Moneta, G., & McBride-Chang, C. (2005). Think positively and feel positively: Optimism and life satisfaction in late life. *International Journal of Aging & Human Development*, *16*, 335–365.
- Little, L. M., Gooty, J., & Nelson, D. L. (2007). Measurement of positive organizational behavior constructs. In Nelson, D. L. & Cooper C. L. (Eds.), *Positive organizational behavior: Accentuating the positive at work*. Thousand Oaks, CA: Sage Publications.
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunette (Ed.), *Handbook of Industrial and Organizational Psychology*. Chichester, UK: John Wiley.
- Luthans, F. (2002a). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, *23*, 695–706.
- Luthans, F. (2002b). Positive organizational behavior: Developing and managing psychological strengths. *Academy of Management Executive*, *16*, 57–75.
- Luthans, F. (2003). Positive organizational behavior (POB): Implications for leadership and HR development and motivation. In R. M. Steers, L. W. Porter, & G. A. Begley (Eds.), *Motivation and leadership at work* (pp. 187–195). New York: McGraw-Hill/Irwin.
- Luthans, F., & Jensen, S. M. (2002). Hope: A new positive strength for human resource development. *Human Resource Development Review*, *1*, 304–322.
- Luthans, F., & Youssef, C. (2007). Emerging positive organizational behavior. *Journal of Management*, *33*, 321–349.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, *2*, 99–113.
- Montgomery, R., Haemmerlie, F., & Ray, D. (2003). Psychological correlates of optimism in college students. *Psychological Reports*, *92*, 545–547.
- Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism, and turnover*. New York: Academic Press.
- Nelson, D. & Cooper C. L. (Eds.). (2007). *Positive organizational behavior: Accentuating the positive at work*. Thousand Oaks, CA: Sage.
- Nes, L., & Segerstrom, S. (2006). Dispositional optimism and coping: A meta-analytic review. *Personality and Social Psychology Review*, *10*, 235–251.
- Organ, D. (1977). A reappraisal and reinterpretation of the satisfaction-cause-performance hypothesis. *Academy of Management Review*, *2*, 46–53.
- Organ, D. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lenington, MA: Lexington Books.
- Parasuraman, S., & Allutto, J. A. (1984). Sources and outcomes of stress in organizational settings: Toward development of a structural model. *Academy of Management Journal*, *27*, 330–350.
- Peterson, C. (2000). The future of optimism. *American Psychologist*, *55*, 44–55.
- Salovey, P., Rothman, A., Detweiler, J., & Steward, W. (2000). Emotional states and physical health. *American Psychologist*, *55*, 110–121.
- Scheier, M., & Carver, C. (1987). Dispositional optimism and physical well-being: The influence of generalized outcome expectancies on health. *Journal of Personality*, *55*, 169–210.
- Scheier, M., Mathew, K., Owens, J., Magovern, G., Lefebvre, R., Abbott, R., et al. (1989). Dispositional optimism and recovery from coronary artery bypass surgery: The beneficial effects on physical and psychological well-being. *Journal of Personality and Social Psychology*, *57*, 1024–1040.
- Scheier, M., & Carver, C. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, *4*, 219–247.
- Scheier, M., & Carver, C. (1992). Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. *Cognitive Therapy and Research*, *16*, 201–228.
- Scheier, M., Carver, C., & Bridges, M. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the life orientation test. *Journal of Personality and Social Psychology*, *67*, 1063–1078.
- Seligman, M. (1998). *Learned optimism*. New York: Pocket Books.
- Sethi, S., & Seligman, M. (1993). Optimism and fundamentalism. *Psychological Science*, *4*, 256–259.
- Shirom, A. (1989). Burnout in work organizations. In L. Cooper, & I. T. Robertson (Eds.), *International review of industrial and organizational psychology*. Chichester, UK: John Wiley.

- Smith, C., Organ, D., & Near, J. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology, 68*, 653–663.
- Somers, M. J. (1995). Organizational commitment, turnover, and absenteeism: An examination of direct and interaction effects. *Journal of Organizational Behavior, 16*, 49–58.
- Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend. *Organizational Research Methods, 9*, 221–232.
- Tiger, L. (1979). *Optimism: The biology of hope*. New York: Simon & Schuster.
- Trunzo, J. J., & Pinto, B. M. (2003). Social support as a mediator of optimism and distress in breast cancer survivors. *Journal of Consulting and Clinical Psychology, 71*, 805–811.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063–1070.
- Weisse, C. S. (1992). Depression and immunocompetence: A review of the literature. *Psychological Bulletin, 111*, 475–489.
- Werenfels, P. (2006). Effects of optimism on goal-setting performance. *Dissertation Abstracts International, 66*(7-B), 3988.
- Wright, T. A. (1997). Time revisited in organizational behavior. *Journal of Organizational Behavior, 18*, 201–204.
- Wright, T. A. (2003). Positive organizational behavior: An idea whose time has truly come. *Journal of Organizational Behavior, 24*, 437–442.
- Wright, T. A. (2007). A look at two methodological challenges for scholars interested in positive organizational behavior. In Nelson, D. L. & Cooper C. L. (Eds.), *Positive Organizational behavior: Accentuating the positive at work*. Thousand Oaks, CA: Sage Publications.
- Wright, T. A., Cropanzano, R., & Meyer, D. G. (2004). State and trait correlates of job performance: A tale of two perspectives. *Journal of Business and Psychology, 18*, 365–383.
- Wunderley, L., Reddy, W., & Dember, W. (1998). Optimism and pessimism in business leaders. *Journal of Applied Social Psychology, 28*, 751–760.

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