
The Implications of Positive Psychological Capital on Employee Absenteeism

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Drawing from positive psychology and positive organizational behavior (Luthans, 2002^a, 2002^b) this study utilized a field study in a high tech manufacturing firm to demonstrate how positive psychological capital reduces levels of both involuntary and voluntary absenteeism. Previous studies setting out to determine job attitude antecedents of absenteeism have been generally disappointing and account for only small levels of variance. In addition, with few exceptions conceptualization of absenteeism has been uni-dimensional despite calls by previous researchers to consider the significant differences in semantic networks of voluntary and involuntary absenteeism as separate metrics. We make this dual dimension distinction and show how previous antecedents of absenteeism contribute to one dimension more than the other. The utility of the study findings conclude the article.

Although organizations vary in the specific manner by which they allocate the costs associated with absenteeism (e.g., wages paid to temporary employees, productivity loss), one overarching fact that applies is the exorbitant direct and indirect costs of absenteeism for U.S. companies (Martinez, 1995; Shelly, 1993). Absenteeism levels in the U.S. reached a five-year high in 2004, with related costs estimated to range from \$60,000 to more than \$1 million annually for small and large companies, respectively (CCH Incorporated 2004). For human resource departments and managers battling to build credibility and extend their influence by contributing to their company's financial success (Barney, 1991; Hueslid, 1995), targeting absenteeism may present significant means for providing cost savings and added productivity. In order to accomplish this goal, researchers and practitioners must first seek to

understand potential predictors of absenteeism behavior that may be incorporated into selection systems and lead to developmental programs aimed at reducing absenteeism behavior within organizations.

Multiple meta analyses (Bycio, Hackett, & Allen, 1995; Harrison & Martocchio, 1998; Harrison, Newman & Roth, 2006) have revealed that there are both personal (e.g. anxiety, satisfaction, commitment, personality) and climatic (e.g. shift-work, flextime) factors that may predict individual-level absenteeism. However, the number of identified predictors remains somewhat restricted, and the limited predictive validity of those antecedents with regard to individual absenteeism behavior suggests that our understanding of absenteeism behavior remains fairly limited (Harrison & Martocchio, 1998). A 20-year review of absenteeism by Harrison and Martocchio (1998) found that the focus has been too heavily dependant upon attitudinal determinants such as job satisfaction, organizational commitment and job involvement. Most notably the studies that were highlighted point out that the commonly studied attitudinal variables tend not to account for the hypothesized high levels of variance in absenteeism behavior, which proposes that the absenteeism literature has grown too narrow. Harrison and colleagues (2006) recently reported a low relationship between job satisfaction and organizational commitment and absenteeism when absenteeism was considered as a single outcome variable. The purpose of this study is to move beyond existing demographic and attitudinal frameworks for understanding absenteeism behavior, and to draw from positive organizational behavior (POB) (Luthans, 2002a, 2002b) and psychological capital (Luthans, Youssef & Avolio, 2007) to understand potentially unexplored positive antecedents of

absenteeism such as positive psychological capacities.

The majority of studies in this field have focused on a single outcome construct, incorporating all absenteeism behaviors under one umbrella or investigating only voluntary absenteeism (e.g. Scott & Markham, 1982). While these approaches certainly appeal to brevity and coincide with how most human resource departments treat absenteeism behavior, they limit the ability to gain a more complete understanding of the nature of absenteeism and its antecedents. This study addresses a potentially significant gap in the literature by emphasizing the importance of considering both voluntary (e.g., vacation, deviance) and involuntary (e.g., sickness, funeral attendance) components of absenteeism. March and Simon (1958) first conceptualized this dichotomous view of absenteeism and, although subsequent researchers have called for this emphasis (Smulders, 1980), few have separated the two. Studies that have made a distinction between voluntary and involuntary absenteeism have found intriguing effects such as predictor variables contributing differently to specific sub-dimensions of absenteeism (e.g. Sagie, 1998).

Previous research by Judge and colleagues (1997) has determined personality to be a potential predictor of employee absenteeism, which may aid in the selection process but as these traits are relatively stable over time they are not as open to development. A goal of this study was to investigate a possible antecedent(s) to absenteeism behaviors that may be more directly used as a hiring mechanism to predict future employee absenteeism behavior, as well as be developed in current employees without incorporating or drastically interfering with the existing organizational system and culture.

Derived from the new focus in the field of management on positivity (Fineman, 2006; Roberts, 2006; Cameron, Dutton & Quinn, 2003) and the positive organizational behavior literature (Luthans, 2002a, 2002b), certain positive psychological capacities such as optimism, resilience, hope and self-efficacy; and more importantly their composite termed psychological capital or simply PsyCap (Luthans et al., 2007), may provide a new positive perspective and approach for understanding and

potentially managing organizational absenteeism. Theoretical and empirical support has been provided for these constructs with regard to meeting the inclusion criteria of positive organizational behavior, (e.g., being state-like and thus open to development (Luthans, 2002a). Thus, it will be suggested that PsyCap has the potential to reduce organizational absenteeism behaviors including more difficult to manage involuntary absenteeism, typically ignored as an uncontrollable/unpredictable negative event.

Theoretical Background and Hypotheses

One criticism of the empirical literature on absenteeism over the past 25 years has been the inconsistent operationalization of the absenteeism construct. Generally defined as behavior related to not attending work for all or part of a given time period, absenteeism can occur for a number of different reasons including sick leave, vacation, family medical leave, elder and child care, maternal/paternal leave, occupational deviance, bereavement, military duty, jury duty and/or other related activities/situations. Researchers seeking predictors of this behavior historically have used a composite absenteeism “score” that includes all types of voluntary and involuntary work absence (Mathieu & Kohler, 1990). The absenteeism literature and most human resource departments remain focused on the more predictable and controllable sources of variance in voluntary absenteeism such as the extent to which certain demographic variables (e.g. age; Hackett, 1990) and various types of incentive programs (e.g., positive reinforcement systems; Scott & Markham, 1982) can reduce absenteeism behavior. Conversely, work on this topic has ignored what tends to be viewed as the less predictable and controllable sources of involuntary absenteeism such as sickness (Harrison & Marticchio, 1998). This lack of distinction by way of combining all components of absenteeism into one construct may potentially be suppressing the predictive ability of certain antecedents in terms of the specific components of voluntary or involuntary absenteeism.

Involuntary absenteeism is an absence from the workplace that, under normal circumstances, is unavoidable by the employee such as physical or psychological illness. Being coined involuntary, organizations often overlook preventive measures for reducing this type of absence (e.g., taking a proactive stance on reducing illness, decreasing the willingness of employees to miss work for minor illness, or promoting a speedy return to work when sick). Physical illness is in fact less controllable and less predictable than forms of voluntary absenteeism such as personal vacation but should not be overlooked. Multiple clinically oriented studies show that cardiovascular exercise predicts self and supervisor-reported absences (Tucker, Aldana, & Friedman, 1990). Although there are specific situations such as urgent medical procedures that are truly involuntary, results from a twelve-year longitudinal study conducted by CCH (the Human Resource Group) in 2002, found that personal illness was the single leading reason for unscheduled absences (33 percent).

Voluntary absenteeism is a reasonably avoidable absence from the workplace. Familiar examples include vacation or voluntarily choosing to be absent due to potentially unnecessary personal reasons. While extent research is divided in terms of using vacation as an outcome in absenteeism research, we followed the early classification of March and Simon (1958) and later Sagie (1998) who argues that vacation is typically under one's control, constitutes an absence from the workplace, and ought to be considered as voluntary absenteeism. The focus on absenteeism in the practitioner literature through outlets from organizations like the Society for Human Resource Management primarily targets this latter dimension of voluntary absenteeism (specifically, employees choosing not to show up for work) but lacks integration with involuntary absenteeism such as sick leave. Brooke (1986) effectively argues that this lack of distinction between voluntary and involuntary absence prevents a full understanding of the absenteeism phenomenon.

In an effort to reduce such extreme costs, researchers such as Daley and Parfitt (1996) have used quasi-experimental data to suggest that organizational exercise programs lead to better physical well-being and less

involuntary absences. Tucker and colleagues (1990) extend the importance of this distinction with their large scale study of 8,301 adult employees, showing that regular exercise or physical activity predicts cardiovascular fitness, which in turn predicts attendance at work. While these examples are focused entirely on physical activity and health, the findings clearly establish that traditional forms of "involuntary" absenteeism may be affected through various interventions, lending credence to the concept that this type of absenteeism is, in actuality, "less-voluntary" rather than involuntary. It has also been suggested that non-physical characteristics of individuals may influence such involuntary absenteeism behavior. Snyder (2002) argues that developable state-like variables, such as hope, are positively correlated with yet distinct from physical and psychological health. Such findings suggest that there may be ways to influence involuntary absenteeism that stop short of forcing employees to exercise, or requiring expensive physical health screens during the selection process. Although the distinction between voluntary and involuntary has been described as blurry in the past, we submit that a clearer distinction, both empirically and in definition, of "voluntary" and "less-voluntary" dimensions of absenteeism will yield a richer understanding of the determinants, and will result in useful descriptive and prescriptive information that research and practice have yet to establish.

The rising costs of absenteeism and the lack of strategies to reduce levels of involuntary absenteeism have led researchers to conclude that the current prescriptions offered by management scholars to leverage employee attitudes such as organizational commitment (Lin, Sandler, & Ayers, 2004; Tett & Meyer, 1993) to curb absenteeism levels have not been adequately effective. For example, Harrison and Marticchio (1998) show that after correcting for attenuation, employee attitudinal variables only account for approximately 5% or less of the variance in absenteeism. This finding led them to the conclusion that "despite consistently negative relationships...work attitudes are not telling the whole story about absenteeism." (Harrison & Marticchio (1998: 320).

Positive Psychological Capital

The crux of empirical research within the positive organizational behavior research stream has been based on identifying the antecedents and outcomes of the second order, core factor termed psychological capital (Luthans et al., 2007), which is comprised of the components resilience (Masten & Reed, 2002), optimism (Carver & Scheier, 2003), self efficacy (Bandura, 1997), and hope (Snyder, Rand, & Sigmon, 2002_b). The theoretical underpinnings of such capacities are based in applied and clinical psychology and applied to the workplace through the work of Luthans, Avolio and colleagues (Luthans, Avolio, Walumbwa, & Li, 2005; Luthans & Avolio, 2003; Luthans et al., 2007). These capacities have the advantage of being adaptable for use in selection batteries and employee development as each component and thus the composite is argued to be state-like whereas traits are more stable and fixed by age 30 (Seligman, 1998). The term “state-like” is intentionally used by Avolio and Luthans (2006) as they recommend moving away from the state vs. trait dichotomy and discuss states and traits as a continuum. Empirical and conceptual support for PsyCap as state-like suggests it is not as situational as emotions or moods, but yet is open to development given intervention or contextual cues. Emphasizing the developmental nature, Bandura (1997) discussed four strategies to positively develop self efficacy, Snyder (2000) argues that hope is developable through interventions and subsequently established the state-hope scale (Snyder et al., 1996), Carver and Scheier (2003) argue for intervention strategies to develop optimism and Masten and Reed (2002) likewise present successful strategies for resilience based interventions stemming from clinical psychology. Each of these contributions has indicated that the four capacities can be developed.

Resilience

Resilience is an adaptive system which enables an individual to rebound or “bounce back” quickly from a setback or failure. The roots are in clinical child psychology where certain children demonstrated the ability to thrive under high liability situations while others with lower levels of resilience did not (Masten, 2001; Masten & Reed, 2002). A principle of

resilience as applied to the workplace is that after a negative or positive event the employee rebounds to a higher level of motivation, rebounding beyond homeostasis (Richardson, 2002). Common themes of resilient individuals are recognized to be: (a) a firm acceptance of reality, (b) a deep belief, often buttressed by strongly held values, that life is meaningful, and (c) an astounding ability to improvise and adapt to significant change (Coutu, 2002).

Optimism

Seligman (Seligman & Schulman, 1986) described optimism as an attribution that is measured based on explanatory styles. An optimistic individual achieving success will make global (I can achieve this success across different domains), stable (I can consistently achieve this success) and internal (I created this success) attributions of their success. Contrarily, when encountered with failure, optimists make specific, unstable and external attributions. An alternative explanation of optimism comes from Carver and Scheier (2003) who posit optimists from an expectancy perspective as individuals that simply expect good things to happen to them, which has significant cognitive and behavioral implications (for a review see Carver & Scheier, 2003). It is important to note that PsyCap considers the value of realistic optimism, as unrealistic optimism has been shown to lead to negative outcomes (Seligman, 1998).

Self-Efficacy

With roots in social cognitive theory and a rich history of support, personal efficacy (confidence) is the PsyCap component with the strongest theoretical underpinnings. Bandura (1986, 1997) has led the research stream of personal efficacy which boasts the highest performance relationship of any other psychological construct through meta-analysis, after correcting for attenuation (Stajkovic & Luthans, 1998). Self-efficacy is defined as the individual’s conviction (or confidence) about his or her abilities to mobilize the motivation, cognitive resources or courses of action needed to successfully execute a specific task within a given context (Stajkovic & Luthans, 1998). Self-efficacy is characterized by extra effort and tenacious perseverance in accomplishing a given

task. Bandura (1997) identifies task mastery, vicarious learning or role modeling, social persuasion and psychological or physiological arousal as sources for development of self efficacy. For this discussion, we broaden the use of task specific self efficacy to a specific domain; in this case the domain of work. Employees may be more or less efficacious in particular domains such as a group of more specific and related tasks. While we broaden the conceptualization of very specific task efficacy to a larger domain, our discussion does not extend to all of life such as generalized self efficacy.

Hope

C.R. Snyder has been a pioneer in the positive psychology literature with numerous studies including a handbook on the positive psychological state of hope. Hope is comprised of three components; goals, agency thinking (will-power) and pathways (way-power). Individuals with higher levels of hope have the agentic capacity to set and pursue goals in such a way that they stay motivated throughout the pursuant process. Pathway thinking allows one to generate multiple pathways (or routes) to a goal and to identify, anticipate and prepare for obstacles using contingency plans (Snyder, 2000; Snyder, Hoza, Pelham, & Rapoff, 1997; Snyder & Lopez, 2002). Through establishing multiple pathways, individuals with higher hope can continuously envision goal attainment and success as they are prepared with alternative routes in the case of an obstacle blocking the current path. Although the PsyCap research stream is progressive there has been no examination of the link between PsyCap and more objective non-performance outcomes such as absenteeism.

Composite Positive Psychological Capacity

Positive organizational behavior research has argued that these capacities may form an overall latent factor (Luthans et al., 2007). This argument is derived from theoretical underpinnings in psychological resource theories (for a review of these theories, see Hobfoll, 2002). Resource theories assert that some psychological variables (such as hope, optimism,

self-efficacy and resiliency) are best understood and treated as manifestations of a larger underlying “resource” or latent construct which is evident in each capacity. This resource may be evident as a central construct otherwise described as a set of resources or capacities (Luthans et al., 2007). Analogous to these positive psychological capacities and a common example from the organizational behavior literature is Judge and Bono’s (2001) description and empirical validation of the core self evaluation concept. They argue that four underlying self evaluation traits (self-esteem, locus of control, generalized self efficacy, neuroticism) are actually part of a higher order latent core construct called core self-evaluation. The commonalities amongst these positive psychological capacities include positivity, effort, persistence, sustainability and agency, all featuring the process of moving or striving toward accomplishment and success. Consistent with previous assertions and empirical validation, we investigate the four components described above as representing the second order factor PsyCap.

Positive Psychological Capacities and Involuntary Absenteeism

As discussed, involuntary absenteeism continues to be underrepresented by both practitioners and researchers mainly because it has been assumed to be less controllable than voluntary absenteeism. We propose that PsyCap may be a viable means of predicting and potentially managing involuntary absenteeism and its associated costs. However, as this aspect of organizational absenteeism has typically been ignored by researchers and practitioners alike, there is sparse evidence to draw from that would directly inform our hypotheses concerning PsyCap and absenteeism. As a result, we pull from the various literatures surrounding each of the capacities in order to inform the development of our hypotheses.

Snyder and colleagues (Snyder, Irving, & Anderson, 1991) have demonstrated strong support for the positive health outcomes of the developmental state, hope. For example, high-hope individuals engage in more prevention-focused health activities, such as physical exercise, than low-hope individuals, and elicit a

stronger ability to cope with pain and stress (Snyder et al., 1991). This suggests that individuals high on hope will tend to stay home from work less often compared to individuals low on hope. When these individuals do become sick, they may recover more quickly from illness or simply work through less severe health setbacks.

Carver and Scheier (2003: 228) describe the optimistic person as one who is engaged in “health promoting behaviors” which “decreases health risk,” and decreases in health risks carry over into many work domains including psychological well-being. Strassle, McKee and Plant (1999) also posit that optimism can effectively be used as an indicator of psychological health. If an optimistic person is less likely to become sick due to increased health-promoting behaviors, it stands to reason that they may also see more value in taking care of themselves when they do become sick (i.e., resting, drinking fluids, seeking medication if needed), and viewing illness as a temporary and manageable obstacle to be dealt with in a timely manner. This type of person may view returning to work quickly as a realistic goal.

Role overload leads to job stress that has the potential to cause negative effects on physical and psychological wellness (e.g., gastrointestinal disorders, increase in blood pressure, anxiety disorders, etc. (Caplan & Jones, 1975; Cooper & Roden, 1985; Williams & Stout, 1985; Rhodewalt & Agustodottir, 1984)) and, in turn, higher levels of absenteeism (Ivancevich, 1985). Resilient individuals, although facing the same potential stressors at work, may be less likely to perceive such stimuli as actual stress, or at least perceive them to a lesser degree. The ability to cope with potentially stressful situations and not be as affected by such prevalent workplace concerns should lead to an individual experiencing less of the negative health outcomes of stress and thus display less absenteeism behavior. Furthermore, resilience has been shown to be negatively related with depression (Masten & Reed, 2002; Snyder et al., 2002a) which is a significant causal agent in absenteeism (Kouzis & Eaton, 1994).

Individuals that are generally high in self-efficacy tend to believe that they have the ability to deal with situations presented to them

to arrive at success. As a result, these individuals are likely to view potential work stressors as achievable challenges rather than as disproportionately difficult. When faced with obstacles and hardship one may tend to react in a more productive manner, pooling resources, creating action plans, etc., rather than focusing most of their attention on the existence and nature of the problem/circumstances at hand. As a result, efficacious individuals tend to display lower levels of blood pressure and reported job stress (Bandura, 1997). Given the established impact of stress related illnesses, the lower instance of employees that are high on self-efficacy perceiving stress in the workplace is likely to be related to less instances of illness (involuntary absenteeism). Furthermore, when ill, efficacious employees are likely to believe that they have both the ability and control to overcome illness (whether through individual action or seeking medical assistance), and a stronger orientation toward returning to work (i.e., I know I can still perform well despite my illness). Therefore, when efficacious people are sick or otherwise absent from the workplace, they see themselves as the means to getting back to work (Gist, 1987) which they recognize as the specific domain in which they achieve success (Bandura, 1997).

The nature of individuals characterized by higher levels of PsyCap will contribute to lower levels of illness, or the ability to fight through and return quickly from illness, resulting in less involuntary absenteeism within the organizational context. Specifically, the combination of the four components will act as a better predictor than any of the four individual components.

While we feel that the most interesting hypotheses are those involving the potential impact of PsyCap on involuntary absenteeism, a construct typically dismissed as unpredictable and uncontrollable, there is also reason to believe that PsyCap may predict voluntary absenteeism as well. One could argue that proposing PsyCap as a predictor of both forms of absenteeism begs the question of whether there is a useful distinction between the two dimensions of absenteeism. However, the nature of this study is exploratory, so while we will not hypothesize any specific differences, it is possible that different patterns of relationships

exist between PsyCap and involuntary absenteeism versus voluntary absenteeism. For example, resilience, the ability to rebound and become motivated after a negative event, may have an even greater effect on voluntary absenteeism in the sense that individuals dealing with difficult work situations are less likely to engage in deviant absenteeism behavior strictly as a result of being upset with current working conditions. The existence of different patterns of relationships would provide evidence for different absenteeism constructs, as well as establish which capacities are most likely to have an impact on reducing absenteeism behaviors.

Positive Psychological Capacities and Voluntary Absenteeism

Bandura (1997) effectively argued that employees with higher levels of efficacy choose more physically and intellectually challenging work, and are more self-determined to accomplish tasks assigned despite circumstances that may prevent task accomplishment. These findings suggest that a highly efficacious employee is more likely to attend work regardless of any perceived obstacles. The potential impact of self-efficacy on voluntary absenteeism has been bolstered by researchers such as Porter and Steers (1973), who demonstrated that higher levels of aggression, enacted as a result of self-efficacy (Bandura 1997; Bandura & Locke, 2003), lead to lower levels of absenteeism. Additionally, practitioners have in some cases utilized self-efficacy development in an effort to curbe absenteeism behavior. Latham and Frayne (1989) described self-efficacy as the crux of an effective absenteeism program, thus employees with higher levels of self-efficacy can be expected to have lower levels of voluntary absenteeism.

Porter and Steers (1973) also demonstrate that higher levels of emotional stability lead to lower levels of absenteeism. This may be due to emotionally stable individuals who are secure in their interpersonal interactions and with their image and sense of self, who are therefore less likely to miss work due to interpersonal issues or social anxiety regarding the work environment. Additionally,

these types of employees may be less apt to react negatively when faced with any degree of failure at work, especially when such failure is socially visible and psychological safety is threatened (Edmonson, 1999). Resilience, characterized by a staunch view of reality (Coutu, 2002) promotes emotional stability (Masten & Reed, 2002) and positive coping (Fredrickson, Tugade, Waugh, & Larkin, 2003) counteracting emotional instability and potentially lowering levels of voluntary absenteeism.

Carver and Scheier (2003) suggest that optimistic individuals expect good things to happen to them, which has significant cognitive and behavioral implications. Specifically, an optimistic employee may hold firm to the belief that if he/she attends work, they will be successful in earning recognition, reward and/or promotion. Contrarily, given the external attribution of negative events described by Seligman (1998), when faced with negative outcomes the optimistic person will likely attribute the failure to external causes, avoiding any sense of blame that may lead to deviant absenteeism behavior.

Hopeful individuals are more likely to have established functional goals, providing them with directed motivation to work towards said goals on a daily basis (Snyder, 2002a). Furthermore, hopeful individuals are more likely to have established multiple means (pathways) of attaining the same goal. By establishing multiple means to the same end, employees high on hope ensure that the failure of one project does not lead to overall failure and a potential increase in deviant absenteeism behaviors or vacation/time off tendencies in an attempt to avoid the negative emotions associated with the “scene of the failure”.

Overall, individuals with higher levels of PsyCap will generate pathways to effectively pursue and attain personal goals within the work domain (Snyder et al., 2002b). In addition, employees will aggressively pursue those goals (Bandura, 1997) expecting to achieve success (Carver & Scheier, 2003) while being resilient to setbacks (Masten & Reed, 2002). Engaging in stimulating work and holding a perception that the organization embodies the infrastructure within which the employee can obtain success of personal goals will lead those employees to desire participation in the organization, thus

lending credence to the potential combinatorial impact of the composite PsyCap on voluntary absenteeism. Thus we hypothesize the following:

Hypothesis 1: *Hope will have a negative relationship with involuntary and voluntary absenteeism.*

Hypothesis 2: *Optimism will have a negative relationship with involuntary and voluntary absenteeism.*

Hypothesis 3: *Resilience will have a negative relationship with involuntary and voluntary absenteeism.*

Hypothesis 4: *Self-efficacy will have a negative relationship with involuntary and voluntary absenteeism.*

Hypothesis 5: *Overall PsyCap will have a negative relationship with involuntary and voluntary absenteeism.*

Hypothesis 6: *Overall PsyCap will have a more negative relationship with voluntary and involuntary absenteeism than any individual component of overall PsyCap.*

Job Attitudes

The potential drawbacks of the previous single dimension conceptualization of absenteeism have been a general focus of our discussion. When making theoretical assertions on antecedents of absenteeism, researchers have crafted their arguments with the intent to target voluntary absenteeism. For example, highly committed employees are those that wish to remain with their employing organizations (Mowday, Porter, & Steers, 1982) and this commitment leads them to attend work more often. A similar argument is made for job satisfaction in that employees satisfied with their place of work will be less likely to voluntarily miss days of work, as they experience positive emotions with workplace attendance. Contrarily, researchers have often ignored investigations of involuntary absenteeism likely because it has either been seen as unavoidable in nature (e.g. sick leave) or simply a benefit

offered by the organization. However, we feel that PsyCap may provide unique explanatory power in terms of predicting absenteeism behavior given the potential to affect the dual dimensions of the absenteeism construct. Additionally, as the evidence provided above suggests, PsyCap may be more directly malleable than either of those two constructs and therefore potentially offers a better tool for managing absenteeism. Finally, given the potential relationships highlighted earlier with regard to PsyCap and health and return-to-work behavior (links that have not been well established for traditional attitude constructs), we anticipate PsyCap will be a primary predictor of involuntary absenteeism compared to satisfaction and commitment.

Hypothesis 7: *Overall PsyCap will have a stronger relationship with involuntary absenteeism than job satisfaction or organizational commitment.*

Method

A sample of 105 engineering managers participated in this study out of 116 that were invited for a response rate of 90.5%. There was a mix of electrical and mechanical engineers from a large Fortune 100 firm that specializes in high tech manufacturing and employs several thousand engineers worldwide. This particular division is responsible for the engineering the electrical wiring design of the primary product. Responsibilities include power generation, wire routing, equipment installation design, production illustration, coordinating with suppliers and the factory workers (manufacturing). Managers have frequent contact with all levels of the organization including presenting to vice presidents. The average age and tenure were approximately 46 and 15 years, respectively. Although all ethnicities and both sexes were represented in the sample, the majority of participants were white (68.4%) and male (79%). This demographic breakdown was consistent with the larger engineering population of the organization and previously the larger aerospace engineering industry (Rast, 2004) lending support for external validity of the findings to at least the engineering industry, despite the limited

demographic diversity.

Procedure

PsyCap, job satisfaction, and organizational commitment measures were administered through a secure on-line server at the participant's convenience over the course of one week. Participants were sent an e-mail that included an introduction to the project and a randomly generated 6 digit code to "log in" to the survey. Survey responses and absenteeism measures that were provided by the organization's human resources department were linked with this identifier. Thus, only individuals who received the e-mail with their unique code would have access to this server ensuring our sampling procedure did not extend beyond the sampling frame. Common method bias was partially addressed per Podsakoff and colleagues (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) recommendations as independent and dependant variables were gathered at different times. Common source bias was limited as individual employees used self report measures and the organization's Human Resources department provided the dependant variable data through their HRIS.

Measures

All of the data and measures used in this study were operationalized, collected and measured at the individual level of analysis. The PsyCap questionnaire used in this study was developed by Luthans and colleagues (2007) consisting of four subscales for the four PsyCap components of hope, self-efficacy, resilience and optimism. Overall, reliability of the PsyCap questionnaire was acceptable (.90). The reliabilities of the sub-scales were also acceptable by general standards with the exception of optimism which was lower than expected (Self-efficacy = .82, Hope = .81, Resilience = .78, Optimism = .65). However, .6 alphas are still recognized as reasonable (Peterson, 1994; Slater, 1995) and the overall PsyCap measure was very high at .90. Example items from the subscales include "I feel confident in representing my work area in meetings with management (self-efficacy)", "There are lots of ways around any problem (hope)", "When I have a setback at work, I have

trouble recovering from it and moving on (resilience, reverse coded)," and "When things are uncertain for me at work I usually expect the best (optimism)."

Although the purpose of this study was not to validate the PsyCap measures (see Luthans et al., 2007) we conducted a confirmatory factor analysis using maximum likelihood techniques to confirm previous psychometric support from existing studies. Each item was set to load in its relative capacity (hope items with hope, optimism items with optimism, self-efficacy items with self-efficacy, and resilience items with resilience). Considering the rationale from resource theories that these positive psychological capacities may reflect a single underlying latent construct, each capacity was set to load on an overall positive psychological capacity latent factor. The fit indices for the second order factor model are as follows: CFI = .981, RMSEA = .025, and SRMR = .065. Hu and Bentler (1999) suggest adequate fit indices for CFA close to or below .08 for SRMR, .06 for RMSEA, and at or above .95 for CFI indicate adequate fit. Given these suggestions, we found strong support for the proposed factor structure and, along with previous POB research, preliminary support for the assertion that these four capacities may represent an underlying latent factor. In addition, a CFA with a single order factor (e.g. all items loading on a single PsyCap factor) did not yield acceptable indices. Therefore, our results support the work of Luthans and colleagues (2007) that PsyCap is best understood as a second order factor.

Affective organizational commitment data was gathered using the scale developed by Allen and Meyer (1990). An example question is "I feel like I am part of a family at the company for which I work". The 4-item organizational commitment scale displayed good reliability ($\alpha = .81$). The job satisfaction measure was adapted from Hackman and Oldham (1980) and is often used in organizational research (Judge & Bono, 2001). An example item is "Generally speaking, I am very satisfied with my job". The three item scale had a good reliability (.86). Consistent with the PsyCap questionnaire, the attitude surveys used a 1-6 scale with identical scales and response options.

The absenteeism data for each participant in this sample was gathered from the human resources department records. The data was provided in multiple forms from the most recent 12 months including vacation (mean = 69.91 hours), sick leave (47.91 hours), and leave without pay (LWOP) (mean = 6.23 hours) which was unaccounted for absence typically followed by formal company corrective action. We separated the data into the two types of absenteeism following the typology of voluntary and involuntary absenteeism provided by Sagie (1998). Specifically, vacation and leave without pay “are typically under one’s control” (voluntary absenteeism) while “certified sickness and family obligation are normally beyond the employee’s control” (Sagie, 1998: 162). Although considered by human resource practitioners as a benefit, vacation fits the definition of a voluntary absence and has been treated as such since March and Simon (1958) first labeled vacation as an aspect of voluntary absenteeism.

This coding scheme is also consistent with Steel and Rentsch (1995). Both dimensions of absenteeism data were collected between the years 2004 and 2005.

Analysis and Results

Before testing our hypotheses, we examined the relationships between participants’ demographic characteristics (e.g., age, gender, tenure, level within the organization) and both voluntary and involuntary absenteeism and found no significant relationships. Using the same demographic data we also performed ANOVA to test for mean differences in each of the absenteeism dimensions. Results showed no differences between groups of demographic variables, therefore they were not included in the analyses

Table 1:

	Mean and S.D.	1.	2.	3.	4.	5.	6.	7.
1. Hope	4.82 (.558)	1.0						
2. Resilience	4.92 (.476)	.687**	1.0					
3. Self-efficacy	5.03 (.556)	.596**	.609**	1.0				
4. Optimism	4.59 (.572)	.660**	.554*	.560**	1.0			
5. PsyCap	4.83 (.455)	.877**	.825**	.825**	.825*	1.0		
6. Involuntary Absenteeism	17.77 (22.3)	-.303**	-.089	-.310**	-.375**	-.332**	1.0	
7. Voluntary Absenteeism	131.8 (52.5)	-.288**	-.219*	-.086	-.237*	-.252**	-.101	1.0

Intercorrelations among Variables

* $p < .05$ (2-tailed)

** $p < .01$ (2-tailed)

N = 95

Hypothesis 1 predicted a negative relationship between hope and both involuntary and voluntary absenteeism. We found full support for this hypothesis as hope was related to both involuntary ($r = -.303$, $p < .01$) and voluntary ($r = -.288$, $p < .01$) absenteeism.

Likewise, hypothesis 2 which predicted optimism would have a negative relationship with absenteeism was fully supported as optimism was negatively related to both involuntary ($r = -.375$, $p < .01$) and voluntary absenteeism ($r = -.237$, $p < .05$). We found

partial support for hypothesis 3 as resilience was negatively related to voluntary absenteeism ($r = -.219, p < .05$) but not significantly with involuntary absenteeism ($r = -.089, p > .05$). We also found partial support for hypothesis 4 as self efficacy was not significantly and negatively related to voluntary absenteeism ($r = -.086, p > .05$) but was negatively related to involuntary absenteeism ($r = -.310, p < .01$).

Hypotheses 5 and 6 predicted relations between PsyCap and absenteeism. We found full support for hypothesis 5 as PsyCap was negatively related to both voluntary ($r = -.252, p < .05$) and involuntary ($r = -.332, p < .01$) absenteeism. Hypothesis 6 predicted that PsyCap would have a stronger relationship with absenteeism than any of the components. In the case of voluntary absenteeism, PsyCap out-predicted resilience, self-efficacy and optimism but hope was found to be a better predictor. In the case of involuntary absenteeism, PsyCap was a better predictor than self-efficacy, resilience and hope but optimism was found to be a better predictor than PsyCap. Overall, while PsyCap out-predicted most components, it did not out-predict all components on either dimension of absenteeism. Therefore, we found partial support for hypothesis 6.

Hypothesis 7 predicted that overall PsyCap would have a stronger negative effect on involuntary absenteeism than popular job attitudes historically used such as job satisfaction and organizational commitment (Harrison & Martocchio, 1998). To test hypothesis 7 we used a function of multiple regression in what has been termed usefulness analysis (Darlington, 1990) following the example of Judge and others (Judge, Bono, Thoresen, & Patton, 2003). Usefulness analysis is a series of step-wise regressions designed to determine what variable is most “useful” with regard to variance in predicting the outcome variable. The composite PsyCap is entered in the first step followed by the competing variable (both job satisfaction and organizational commitment individually and combined) in the second step. The delta in variance is tested for significant effects. For example, the first step in Table 2 shows that job satisfaction does not add significant variance in predicting the outcome variable above and beyond PsyCap. Next, the process is reversed. The competing variables are entered into step 1, and PsyCap is entered into step 2 to see if additional variance is explained.

Table 2:
Usefulness Analysis of PsyCap Compared to Job Satisfaction and Organizational Commitment

	Involuntary Absenteeism			Voluntary Absenteeism		
	R ²	ΔR ²	β	R ²	ΔR ²	β
Usefulness Comparison 1-a						
Model 1	.111	.111**		.063	.063*	
PsyCap			-.333**			-.251*
Model 2	.113	.002		.134	.071*	
PsyCap			-.299*			-.062
Job Satisfaction			-.059			-.327*
Usefulness Comparison 1-b						
Model 1	.054	.054*		.132	.132**	
Job Satisfaction			-.233			-.363**
Model 2	.114	.059*		.134	.002	
Job Satisfaction			-.059			-.327*
PsyCap			-.299*			-.062
Usefulness Comparison 2-a						
Model 1	.110	.110**		.062	.062*	
PsyCap			-.331**			-.249*
Model 2	.116	.006		.194	.132**	
PsyCap			-.299**			-.095
Org. Commitment			-.083			-.395**
Usefulness Comparison 2-b						
Model 1	.040	.040		.186	.186**	
Org. Commitment			-.200			-.431**
Model 2	.116	.076*		.194	.008	
Org. Commitment			-.083			-.395**
PsyCap			-.299*			-.095
Usefulness Comparison 3-a						
Model 1	.110	.110**		.062	.062*	
PsyCap			-.331**			-.249*
Model 2	.116	.006		.198	.136**	
PsyCap			-.302*			-.058
Org. Commitment			-.087			-.347*
Job Satisfaction			-.007			-.095
Usefulness Comparison 3-b						
Model 1	.055	.055		.196	.196**	
Org. Commitment			-.092			-.348*
Job Satisfaction			-.165			-.128
Model 2	.116	.060*		.198	.002	
Org. Commitment			-.087			-.347*
Job Satisfaction			.007			-.095
PsyCap			-.302*			-.058

* $p < .05$, ** $p < .01$

Despite the dominance of job attitudes, most notably job satisfaction and organizational commitment, in absenteeism research, results in Table 2 show that PsyCap is a better predictor overall of involuntary absenteeism than both job satisfaction and organizational commitment. Typically in usefulness analysis one component is compared to another on variance predicted. However, in our analysis we went one step further and compared PsyCap to both organizational commitment and job satisfaction. As shown in Table 2, when entered first into the regression model, job satisfaction and organizational commitment collectively were not significant predictors of involuntary absenteeism ($R^2 = .055, p = .12$). Therefore, not surprisingly, when entered into the hierarchical regression model after accounting for PsyCap, job satisfaction and organizational commitment did not account for additional significant variance in involuntary absenteeism ($\Delta R^2 = .006, p = .78$). In contrast, PsyCap was a significant predictor of involuntary absenteeism when entered into the model first ($R^2 = .11, p < .01$), and more importantly explained significant variance in involuntary absenteeism over and above the traditional antecedents of job satisfaction and organizational commitment when they were partialled out ($\Delta R^2 = .06, p < .05$). Therefore, through the multivariate technique of usefulness analysis we determined that job satisfaction and organizational commitment were not significant predictors of involuntary absenteeism. However, PsyCap was found to be a more useful predictor of involuntary absenteeism than both job satisfaction and organizational commitment.

Although not considered in an a priori hypothesis, we conducted a post hoc usefulness analysis using the PsyCap, job satisfaction and organizational commitment to predict voluntary absenteeism. As evident in Table 2, when PsyCap was entered as the first variable in the regression model, it did explain significant variance in voluntary absenteeism ($R^2 = .062, p < .05$), and both satisfaction and commitment individually accounted for significant additional variance ($\Delta R^2 = .136, p < .01$). However, when entered into the second step in a hierarchical regression, PsyCap did not predict significant variance above commitment, satisfaction or both

of them combined. Satisfaction and commitment combined to predict a large amount of variance in voluntary absenteeism ($R^2 = .196, p < .001$). Although PsyCap was positively correlated with voluntary absenteeism and acts alone as a significant predictor of this form of absenteeism, it was not as “useful” as job satisfaction and organizational commitment in predicting this dimension. Therefore, our results suggest that PsyCap is a more useful predictor of involuntary rather than voluntary absenteeism and may help explain involuntary absenteeism whereas traditional antecedents of job satisfaction and organizational commitment do not.

Discussion

The use of a dichotomy framework of absenteeism was based on theoretical assertions from March and Simon (1958), recommendations to follow this distinction by Smulders (1980), and empirical work that followed this distinction by Sagie (1998). Our results support Harrison and Martocchio (1998) and more recently, Harrison and colleagues (2006) conclusion that employee attitudes are not telling the complete story concerning absenteeism. Specifically, it was found that positive psychological capacity, both in terms of its components and as a composite PsyCap, were generally related to absenteeism behaviors by employees. This research represents a move away from the traditional view that absenteeism is most closely and somewhat exclusively related to aspects of job satisfaction and organizational commitment. Furthermore, when conceptualizing involuntary absenteeism separately, PsyCap remains significantly related to these behaviors and a potentially viable means for managing this type of absenteeism while job satisfaction and organizational commitment do not. This may help researchers understand why positive job attitudes theoretically lead to lower levels of absenteeism but account for such little variance in how previous studies measured the outcome (single dimension).

In addition, although, PsyCap was not as useful of a predictor of voluntary absenteeism as job satisfaction and organizational commitment, when looked at individually, PsyCap was

comparatively close to both constructs in terms of its relationship to voluntary absenteeism. In terms of practical use, one must take into account where a manager may want to focus their attention and limited training budget when attempting to manage absenteeism. Job satisfaction and organizational commitment are employee attitudes that should be of concern to managers given their relation to multiple organizational and employee outcomes (see Moorman, Niehoff & Organ, 1993). However, while companies can attempt to mold these attitudes over time through company policy, leadership, organizational structure, culture, etc., both of these attitudes are developed over time through experiences within a company. It is not feasible to think that one could effectively train an individual to be satisfied with a company, or to be committed to their job and to the organization through a short term developmental program. However, research has shown that PsyCap may be developed in a much shorter time frame such as a micro intervention (Luthans, Avey, Avolio, Norman, & Combs, 2006). Given that it is perhaps more malleable than either satisfaction or commitment, and that it is not inherently tied to the experience of working for the company, PsyCap development may provide a more effective platform for reducing or controlling the costs associated with absenteeism behaviors, both involuntary and voluntary.

Furthermore, job satisfaction and organizational commitment require time spent within a company to develop and thus do not lend themselves to employee selection as a means for controlling absenteeism (despite their relation with voluntary absenteeism behaviors). While tests may be used to predict satisfaction and commitment based on fit, no test can accurately ascertain an applicant's actual job satisfaction or commitment toward an organization that the person has never worked for, therefore hindering selection based on these components. PsyCap, while developable within employees, may also be tested for as an existing capacity of applicants, and therefore be used as an additional selection tool when voluntary absenteeism and especially involuntary absenteeism (along with other positive outcomes of PsyCap, Luthans et al., 2005) are of concern to a company.

In addition, the distinction that was made between voluntary and involuntary absenteeism 25 years ago (Smulders, 1980) is still a productive method to bring focus to the "blur" of absenteeism research. By making this distinction we were able to demonstrate that traditional correlates of absenteeism, job satisfaction and organizational commitment, were not related to involuntary forms of absenteeism while PsyCap and its components were. The existence of different potential antecedents lends support to the conceptual distinctions between the two forms of absenteeism and suggests that both components should be considered when attempting to fully understand and manage absenteeism. Based on the findings of this study, we propose that PsyCap provides potentially important means for predicting and controlling the costs associated with involuntary absenteeism, an aspect of absenteeism that has typically been left out of research in this field.

Utility Analysis

The most significant implication for HRM practitioners as a result of this study is the notion that PsyCap can be developed. Researchers at the Gallup Leadership Institute have developed an intervention model that consistently shows a 2% or greater increase in PsyCap (Luthans et al., 2006). Considering the results in this study, PsyCap accounts for 11% of the variance in involuntary absenteeism. Discounting medical benefits, the labor rate in our sample is approximately \$100 per hour on average. Last year the mean employee at this organization took 48 sick hours. This company has 179,000 employees for a total loss due to sick leave of \$859.2 million per year. Our analysis shows PsyCap accounts for 11% of the variance in voluntary absenteeism or about \$92 million. Given that PsyCap interventions typically increase levels of PsyCap at least 2%, this organization may experience a 1.8 million dollar savings in lost labor due to one organizational-wide intervention. Considering that the typical utility analysis formula uses five years, the potential cost savings is quite significant at approximately an 8.5 million dollar savings. A review of the literature on utility analysis (Brogden & Taylor, 1950; Cascio, 1991; Cascio & Ramos, 1986; Cronbach &

Gleser, 1965; Hunter & Schmidt, 1983; Hunter, Schmidt, & Judiesch, 1990; Schmidt, Hunter, McKenzie, & Muldrow, 1979) demonstrated numerous challenges and ambiguous assumptions facing researchers when placing a dollar amount on interventions considering all the noise in a field environment. However, this simple utility analysis shows the potential impact that a PsyCap intervention may make on the organization's "bottom line" when considering potential effects on absenteeism.

Limitations

A danger in any cross sectional design is that the conversation assumes and builds theory for causality; but it is only implied. While we were able to obtain absenteeism statistics and measure individual satisfaction, commitment and PsyCap, we are unable to state with complete confidence what the levels of said variables were at the time when the absenteeism behaviors took place. This innate challenge of predicting past behavior with current levels of predictors such as PsyCap should be considered as a limitation to our conclusions as it limits our ability to suggest that PsyCap was or was not the cause of reduced voluntary absenteeism or involuntary absenteeism among employees. While our study was a first attempt to investigate the relationship between PsyCap and absenteeism behaviors in a real-world setting, an improved future study would involve three primary improvements. First, an intervention approach needs to be taken in order to determine the extent to which training program-based PsyCap development influences actual absenteeism trends. Second, a longitudinal study is needed to allow for tracking of included variables over time. As absenteeism behaviors are brought on by multiple, non-predictable factors, a longitudinal study would allow us to determine how variables such as PsyCap, job satisfaction, organizational commitment, and absenteeism behaviors moved together over time. A third method of improving the study would be expanding the sample frame. In this case we focused on a relatively small sample of electrical and mechanical engineers. Future research should expand this sample to determine the ability to replicate findings across populations. Combined, these improvements will allow for stronger statements regarding the

impact of PsyCap on both voluntary and involuntary absenteeism.

Smulders (1980) called the distinction between voluntary and involuntary absenteeism "blurry". In our study we submit that one potential limitation is the nature of long term sick leave. Organizations are weary of those very few employees to take unnecessary sick leave and especially long term sick leave. In some cases, this type of absenteeism should be coded as voluntary because it does not occur under normal circumstances and is voluntary by the employee. Identifying those unique cases will continue to be a challenge to absenteeism researchers.

Research Implications

This study may be among the first known integrations of positive psychological variables and objective HR outcomes, and provides an additional dimension to a growing body of work in positive organizational behavior. The supporting evidence that PsyCap is related to involuntary absenteeism when traditional attitude variables were not gives further support to the contention that PsyCap and related positive psychology variables may provide unique explanatory capabilities for various organizational phenomena. In this case it may be worth reconsidering absenteeism, a fairly well studied behavior, in terms of its relation to PsyCap, particularly with regard to involuntary forms of absenteeism.

The current findings provide additional support for the contention that PsyCap as a construct is a useful variable over and above any of its individual components. The more significant relationships and potentially superior predictive ability of PsyCap with regard to absenteeism behaviors lends further credence to the establishment of PsyCap as a significant and viable individual characteristic variable.

In terms of future research, potential next steps are the consideration of PsyCap, positive organizational scholarship (Cameron, Dutton et. al, 2003), and positive emotions on employee wellness outcomes, based on Barbara Fredrickson's (2001) broaden and build theory of positive emotions. This research stream is beginning to take root (Fredrickson et al., 2003) and has many extension possibilities. In addition, future research should consider the

impact of PsyCap at the team and larger group levels. Specifically, how might a collective sense of PsyCap, or the PsyCap of a team or organizational leader influence individual absenteeism behavior or the development of individual PsyCap itself? For example, if an individual is fairly low on resilience, self-efficacy and hope but their teammates are strong on these components; does that individual pull form to the team's strengths or act in line with those team characteristics when operating within the team context, thus affecting their absenteeism behaviors? Both within and outside of the absenteeism field of study, there are many potentially interesting implications for individual, team, and organizational level phenomenon related to positive psychology, positive organizational behavior, and specifically PsyCap,

Conclusion

We combined one of the oldest variables in HRM literature with one of the newest variables in Organizational Behavior literature. This study represents one example of how investment in developing PsyCap presents potential competitive advantages to firms as they seek to leverage human capital for a competitive advantage. By separating absenteeism into voluntary and involuntary components, we were able to display a unique relationship between PsyCap and involuntary absenteeism, a behavior that has typically been ignored as an unmanageable aspect of absenteeism behavior. Due to the developmental nature, both may be selected for and trained by organizations, we present PsyCap as a means to manage and control some of the costs associated with absenteeism within an organization. Furthermore, the dynamic combination and higher order construct, PsyCap has demonstrated yet another positive outcome in the organizational context through negative relationships with absenteeism. Given these findings and the growing evidence for the influence of positive psychology variables, organizational theorists and behaviorists can and should continue to leverage the ground-breaking work in psychology as it applies to important organizational phenomenon.

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