The Underpinnings of PsyCap Variance: An Examination of Goal Orientation and Dark Side Versus Bright Side Personality Dimensions

Mark David Scott
Abstract

The present research examines the effects of the four-factor model of goal orientation, two dimensions from the five-factor personality model, and two of the Hogan dysfunctional personality dimensions on a measure of Psychological Capital. Relationships in regard to grade level and job status, as well as intercorrelations between the individual factors of the constructs are also explored. Participants included 219 undergraduate and graduate students. Overall, the findings suggest that emotional stability, MPGO, and PPGO are all positively related to PsyCap, whereas MVGO, PVGO, excitability, and dutifulness are all negatively related to PsyCap. Furthermore, it was found that full-time employees tend to have significantly higher PsyCap than part-time employees. Theoretical and applied implications resulting from this study are discussed.
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The Underpinnings of PsyCap Variance:

An Examination of Goal Orientation and Dark Side Versus Bright Side Personality Dimensions

by

Mark David Scott

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A THESIS
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Psychological Capital ("PsyCap") is an individual’s positive psychological state of development that is characterized by a sense of self-efficacy, optimism, hope, and resiliency. PsyCap provides a framework for the application of positive psychology to organizational contexts. It recognizes relatively malleable (i.e., trainable) states of development that do not necessarily carry over into contexts outside of the business environment. The core construct of PsyCap, though recently proposed, is quickly gaining both empirical and conceptual support (Bryant & Cvengros, 2004; Luthans & Youssef, 2004; Luthans, Youssef, & Avolio, 2007; Seligman & Csikszentmihalyi, 2000).

In conceptually defining PsyCap, the current literature does not delve into its direct relationship with the more stable constructs of goal orientation and personality dimensions. Discovering the trait-like individual differences under the PsyCap state serves as a principal goal of this research. According to Luthans and Youssef (2007), there exists a general consensus within I/O Psychology that future research should take into account both the positive (e.g., five-factor personality model, mastery-approach, etc.) and the negative (e.g., Hogan dark side personality themes, performance-avoid, etc.) dimensions of personality. For this study, various positive and negative trait-like variables were selected that were deemed both applicable to the organizational setting and nomologically related to the PsyCap state of development. The primary purpose of this research is to examine the relationship between the state-like process of PsyCap and the trait-like processes of the four-factor model of goal orientation, two dimensions from
the five-factor personality model, and two of the Hogan dysfunctional personality dimensions.

*Psychological Capital*

In the present-day perspective of personnel assessment and selection, many organizations fail to realize the full potential of their human capital, instead relying on short-term "survival" human investment. Companies often prioritize the development of more "traditional" forms of organizational capital (e.g., finances, technology, proprietary information) with the assumption that employees will be "here today, gone tomorrow."

With a basis in the positive psychology movement (Seligman & Csikszentmihalyi, 2000), a new human resources perspective has been proposed that advocates organizational investment in employee Psychological Capital (PsyCap; Luthans, Youssef, & Avolio, 2007). PsyCap is defined as:

"an individual's positive psychological state of development that is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success (Luthans, Youssef, & Avolio, 2007, p. 3)."

These four "state-like" psychological capacities underlying the higher order composite construct of PsyCap differ from "trait-like" personality constructs (e.g., core self-evaluations, personality themes) in that they are relatively malleable and open to
development. In fact, it is theorized that PsyCap can be enhanced in the workplace through focused interventions (Luthans, Youssef, & Avolio, 2007). Researchers have developed an intervention model, the Psychological Capital Intervention (PCI) that consistently shows a 2% or greater increase in PsyCap (Luthans et al., 2006). PsyCap has been shown to be positively related to a variety of work performance outcomes (e.g., quantity and quality of solutions made by employers, 360 degree performance ratings, team performance, leader authenticity and effectiveness) and constructive employee attitudes (i.e., job satisfaction, commitment, engagement, awareness). In accordance with these findings, a utility analysis of the PCI has indicated a substantial return on investment (Luthans et al., 2006; Luthans, Youssef, & Avolio, 2007).

Stajkovic and Luthans (1998) operationalized the PsyCap construct of "self-efficacy" in terms of the self-motivation to challenge oneself with difficult (though not impossible) tasks and goals. The authors suggest that self-efficacy can be developed and nurtured via mastery experiences. "Optimism" is thought of in terms of attribution theory, in that positive events are explained through internal causes, whereas negative events are explained through external causes (Seligman, 1998). Such a worldview promotes expectations for positive goal outcomes that motivate optimistic individuals (Carver & Scheier, 2002). The third PsyCap resource, "hope," allows for goal-directed motivation created by a sense of internalized self-control. In addition, hope involves a sense of adaptation in order to overcome obstacles and achieve set goals (Snyder, Irving, & Anderson, 1991; Snyder, 2000). Finally, according to Luthans (2002), the PsyCap state-like process of "resiliency" involves the ability to "rebound" from both clearly adverse events and potentially overwhelming positive events (e.g., increased responsibility). It
should be noted that the capacity for resiliency is not limited to extraordinary individuals. In fact, this resource can be developed in any individual willing to view setbacks as opportunities for growth (Masten, 2001).

Four-Factor Model of Goal Orientation

Goal orientation, which refers to the goals individuals implicitly pursue while attaining performance outcomes, has been one of the most widely studied and evolving constructs among motivational researchers in recent years (Dweck & Leggett, 1988). Since its inception in the field of educational psychology, goal orientation research has proved useful in predicting performance in a variety of contexts (e.g., Button et al., 1996; Payne et al., 2007; Radosevich et al., 2004; VandeWalle et al., 1999). Elliot & McGregor (2001) interpreted the goal orientation construct via a 2 X 2 goal framework that yielded the following four goal orientations: mastery-avoid (MVGO), mastery-approach (MPGO), performance-avoid (PVGO), and performance-approach (PPGO). Goal orientation was selected as a predictor of PsyCap in the present study because of its noted application within organizational contexts (e.g., Button et al., 1996) and because the majority of research has conceptualized goal orientation as a trait-like individual difference (e.g., Ames, 1992; Barron & Harackiewicz, 2001; Dweck, 1999; Elliot, 1999; Elliot & McGregor, 2001; Grant & Dweck, 2003; Urdan, 1997).

Elliot and McGregor (2001) developed the four-factor model of goal orientation by taking into account both the definition of competence (mastery/performance) and valence of competence (approach/avoid). Those pursuing a mastery goal focus on an objective, intrapersonal standard, whereas those pursuing a performance goal focus on a subjective, interpersonal standard. The distinction between mastery goal orientation and
PsyCap Variance

performance goal orientation has been implicitly theorized in the classic definition of need for achievement, wherein individuals aim to do well relative to both the requirements of the task and in comparison to others (McClelland, Atkinson, Clark, & Lowell, 1953; Murray, 1938). The valence distinction in goal orientation is also theoretically based. Several motivational theories posit that individuals adopt either approach or avoid tendencies across a variety of competency-related situations (e.g., Atkinson, 1957; Bandura, 1986; Carver & Scheier, 1981; Higgins, 1996; Murray, 1938).

The four abovementioned goal orientations are distinctly defined. First, MVGO involves striving for absolute competence, with a concentration on avoiding making any mistakes (Elliot & McGregor, 2001). An example of an individual high in MVGO is the employee whose principal goal in completing a task is the avoidance of any mistakes in regard to an intrapersonal standard. The literature findings suggest that while measures of mastery goals have been associated with adaptive outcomes (Colquitt & Simmering, 1998; Fisher & Ford, 1998; Phillips & Gully, 1997), MVGO is positively related to fear of failure and negatively related to self-determination (Elliot & McGregor, 2001).

Second, MPGO involves striving for a complete understanding of task-related information and absolute competence, with a concentration on approaching success (Elliot & Dweck, 1988; Dweck & Leggett, 1988). An example of an individual high in MPGO is the employee whose principal goal in completing a task is complete understanding and proficiency in regard to an intrapersonal standard. The literature findings suggest that MPGO is positively related to overall need for achievement, self-determination, worker self-efficacy, and motivation to learn (Colquitt & Simmering, 1998; Elliot & McGregor, 2001; Fisher & Ford, 1998; Phillips & Gully, 1997).
Third, PVGO involves striving for a normative competence standard, with a concentration on avoiding incompetence relative to others (Elliot, 1997; Elliot & McGregor, 1999; Elliot & Thrash, 2001). An example of an individual high in PVGO is the employee whose principal goal in completing a task is the avoidance of ineptitude in comparison to his/her colleagues. The literature findings suggest that PVGO is positively related to fear of failure and negatively related to self-determination, effort at work, and worker self-efficacy (Elliot & McGregor, 2001; Fisher & Ford, 1998; Ford, Smith, Weissbein, Gully & Salas, 1998).

Fourth, PPGO involves striving for success in regard to a normative competence standard, with a concentration on approaching competence relative to others (McGregor & Elliot, 2002). An example of an individual high in PPGO is the employee whose principal goal in completing a task is the attainment of favorable competency judgments in comparison to his/her colleagues. The literature findings suggest that while PPGO is positively related to overall need for achievement, it is also positively related to fear of failure and negatively related to effort at work and worker self-efficacy (Elliot & McGregor, 2001; Fisher & Ford, 1998; Ford, Smith, Weissbein, Gully & Salas, 1998).

Five-Factor Personality Model

The development of a concise taxonomy of the most salient personality differences has been an ever-present goal in the realm of personality psychology (John, 1990). One such categorization, the five-factor personality model (also referred to as the "Big 5"), recognizes the following dimensions: extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience (Tupes & Christal,
According to Block (1995), most researchers agree that this particular descriptive model of personality is an important concept that warrants future research.

The lexical hypothesis posits that most of the socially relevant and salient personality dimensions will eventually become encoded in a society's natural language (Allport, 1937). The development of the lexical hypothesis challenged personality researchers to establish a common and parsimonious taxonomy of these dimensions (John, 1990). Years of analysis and revision finally resulted in a consensus among personality researchers in favor of a five-factor model of personality (Goldberg, 1981). The present study will only deal with conscientiousness and emotional stability in order to better fit the PsyCap context from a theoretical perspective. Both dimensions have noted application within organizational contexts (e.g., Barrick & Mount, 1991; Hurtz & Donovan, 2000) and should therefore be the most predictive of PsyCap.

The first personality dimension of concern, conscientiousness, refers to the way in which we regulate and direct our impulses. Individuals who are high on conscientiousness tend to avoid trouble and achieve high levels of success through purposeful planning and persistence. The second personality dimension of concern, emotional stability, refers to the tendency to experience constructive emotions. Emotionally stable individuals tend to be less easily upset and are less emotionally reactive (Costa & McCrae, 1992).

Despite initial pessimism in regards to the use of pre-employment personality testing (Guion & Gottier, 1965), recent personnel selection research has embraced the Big 5 (conscientiousness, in particular) as having some degree of utility for the employee selection process in a variety of jobs (Barrick & Mount, 1991). Based on meta-analytic...
estimates of the criterion-related validity of explicit Big 5 measures for predicting job performance, global measures of conscientiousness consistently explain a small portion of variation in job performance. In addition, emotional stability has been shown to add a consistent, although very small, degree of explained variance within the context of certain jobs and criterion dimensions (Hurtz & Donovan, 2000).

Findings also suggest that both conscientiousness and emotional stability are positively associated with psychological health and identity (Ozer & Benet-Martinez, 2006). In addition, conscientiousness has been shown to be positively correlated with a broad range of self-efficacy domains (Hartman & Betz, 2007). Emotional stability, on the other hand, has been shown to be positively correlated with personal accomplishment and negatively correlated with emotional exhaustion and depersonalization (Bakker, Van Der Zee, Lewig, & Dollard, 2006). These particular findings help to establish the nomological network of conscientiousness and emotional stability as they relate to PsyCap.

**Hogan Dark Side Personality Dimensions**

The Hogan "dark side" personality dimensions are based on eleven recurring derailment themes from a comprehensive literature review. Each resulting theme reflects a corresponding DSM-IV Axis II personality disorder description. Although all eleven dimensions were developed specifically for the working environment, the present research will limit its focus to two dimensions, excitable and dutiful, in order to remain theoretically parsimonious in regard to the PsyCap context. Significant negative relationships between these particular dimensions and PsyCap are expected based on conceptual definitions. The excitable personality dimension corresponds with the borderline personality disorder, whereas the dutiful personality dimension corresponds
with the dependent personality disorder. Excitable individuals have the potential to be "moody and hard to please," demonstrating "intense but short-lived enthusiasm for people, projects, or things." On the other hand, dutiful individuals have the potential to be "eager to please and reliant on others for support and guidance," as well as "reluctant to take independent action or go against popular opinion." Based on research findings, individuals who score high in the excitable dimension are often easily disappointed and have a tendency to retreat from difficulties, whereas individuals who score high in the dutiful dimension have problems taking initiative and making decisions. These personality-based derailment themes, which tend to surface during stressful situations, can have negative effects on productivity, work relationships (with both colleagues and customers), managerial competence, and overall career potential (Hogan & Hogan, 2001).

The Hogan dark side personality dimensions were developed specifically to be used in the selection, development, and counseling of business leaders. The operational definitions of these dimensions were designed to gauge the core of each personality disorder. It should be noted that these themes were conceptualized as dimensions, not types (i.e., individuals may have high or low scores on any dimension) (Hogan & Hogan, 1997).

**Research Hypotheses**

Based on the previous literature review, the following hypotheses are formed in an attempt to better understand the personality antecedents of PsyCap.

*Hypothesis 1:* MPGO and PPGO will be positively correlated with Psychological Capital, whereas MVGO and PVGO will be negatively correlated with Psychological Capital.
Hypothesis 2: The five-factor personality dimensions (conscientiousness and emotional stability) will be positively correlated with Psychological Capital.

Hypothesis 3: The Hogan dark side personality dimensions (excitability and dutifulness) will be negatively correlated with Psychological Capital.

Exploratory Research Questions

Although this study does not form specific hypotheses on potential moderators of the relationship between personality traits and PsyCap, it does set out to explore the intermediary effects of grade level (graduate vs. undergraduate) and job status (full-time vs. part-time) on PsyCap. It is expected that graduate students and full-time employees have higher "career commitment," and will therefore have higher PsyCap than undergraduate students and part-time employees.

Methods

Participants

Participants included 219 students enrolled at a large state university in the Northeast U.S. 50.5 percent of the participants were female and 49.5 percent of the participants were male. 68.4 percent of the participants were undergraduates and 31.6 percent of the participants were graduates. 51.2 percent of the participants were full-time workers and 48.8 percent of the participants were part-time workers.

Procedure

Participants completed an online survey assessing their goal orientation, five-factor personality dimensions, Hogan personality derailers, and PsyCap. The participants were informed that they were participating in a study examining personality factors. Participants were recruited in-class, during a variety of psychology and business courses.
Participants were provided with an internet link to access the survey and completed the survey outside of the classroom. There were no tangible rewards (e.g., extra credit) for participation. Participation was voluntary.

Measures

Goal orientation. Goal orientation was assessed with the twelve-item Achievement Goal Questionnaire (Elliot & McGregor, 2001). This measure includes three items for each of the four goal orientation constructs (cf., Elliot & McGregor, 2001). Responses to all items in this measure were made on a seven-point scale (1 = strongly disagree; 7 = strongly agree). The authors reported adequate internal consistency estimates for each scale. Coefficient alpha in this study was .80 for mastery-approach, .79 for mastery-avoid, .84 for performance-approach, and .79 for performance-avoid. The items can be found in Appendix 1.

Five-factor personality model. Conscientiousness and emotional stability were assessed with 10 items each from the International Personality Item Pool (IPIP). The IPIP is a public domain "scientific collaboratory for the development of advanced measures of personality and other individual differences" (Goldberg, Johnson, Eber, Hogan, Ashton, Cloninger, & Gough, 2006). Responses to all items in this measure were made on a seven-point scale (1 = strongly disagree; 7 = strongly agree). Coefficient alpha in this study was .78 for the proxy dimension of conscientiousness and .86 for the proxy dimension of emotional stability (Goldberg et al., 2006). The items can be found in Appendix 2.

Hogan dark side personality dimensions. The Hogan dark side personality dimensions were assessed with an IPIP proxy of the Hogan Development Survey. The
resulting proxy survey measures two derailment themes and includes 10 items for each scale. Responses to all items in this measure were made on a seven-point scale (1 = strongly disagree; 7 = strongly agree). Coefficient alpha in this study was .76 for the proxy dimension of excitability and .71 for the proxy dimension of dutifulness (Goldberg et al., 2006). The items can be found in Appendix 3.

*Psychological Capital.* Psychological Capital was assessed with the 24-item PsyCap Questionnaire (PCQ) (Luthans, Youssef, & Avolio, 2007). Responses to all items in this measure were made on a seven-point scale (1 = strongly disagree; 7 = strongly agree). Reported coefficient alphas for each of the four 6-item adapted measures and the overall PsyCap measure for four study samples are as follows: hope (.72, .75, .80, .76); resilience (.71, .71, .66, .72); self-efficacy (.75, .84, .85, .75); optimism (.74, .69, .76, .79); and the overall PsyCap (.88, .89, .89, .89). The items can be found in Appendix 4.

**Results**

**Descriptive Statistics**

Table 1 presents the descriptive statistics and intercorrelations of all the variables of this study.

**Test of Hypotheses: Goal Orientation and PsyCap**

Hypothesis 1 predicted that MPGO and PPGO would be positively correlated with PsyCap, whereas MVGO and PVGO would be negatively correlated with PsyCap. An examination of the correlations presented in Table 1 indicates that both MPGO ($r = .267, p < .001$) and PPGO ($r = .149, p = .016$) positively correlated with PsyCap, whereas both PVGO ($r = -.244, p < .001$) and MVGO ($r = -.224, p < .001$) negatively correlated with PsyCap. These results support Hypothesis 1.
Test of Hypotheses: Five-Factor Personality Dimensions and PsyCap

Hypothesis 2 predicted that the five-factor personality dimensions (conscientiousness and emotional stability) would be positively correlated with PsyCap. An examination of the correlations presented in Table 1 indicates that emotional stability positively correlated with PsyCap ($r = .198, p = .001$). The relationship between conscientiousness and PsyCap was not significant. These results partially support Hypothesis 2.

Test of Hypotheses: Hogan Dark Side Personality Dimensions and PsyCap

Hypothesis 3 predicted that the Hogan dark side personality dimensions (excitability and dutifulness) would be negatively correlated with PsyCap. An examination of the correlations presented in Table 1 indicates that both excitability ($r = -.175, p = .005$) and dutifulness ($r = -.385, p < .001$) negatively correlated with PsyCap. These results support Hypothesis 3.

Exploratory Analyses

A total of three regression analyses were conducted to more thoroughly evaluate the above results and to explore the intermediary effects of job status (full-time vs. part-time) and grade level (graduate vs. undergraduate) on PsyCap. When conducting these analyses, the independent variables were divided into three groups (goal orientation, five-factor personality dimensions, and Hogan dark side personality dimensions) in order to reduce the risk of chance when accounting for observed variance.

The first regression analysis was conducted to test the effects of job status, grade level, and goal orientation on PsyCap. At the first step, PsyCap was regressed on both job status and grade level. Results indicated that job status ($\beta = .34, p < .01$) was a significant
predictor, counting for 8.5 percent of the variance at Step 1. When goal orientation was added at the second step, results indicated that MPGO ($\beta = .21, p < .01$), MVGO ($\beta = -.14, p < .05$), and PPGO ($\beta = .16, p < .05$) were all significant predictors, accounting for 10.9 percent of unique variance at Step 2. Table 2 presents the results of this analysis in detail.

The second regression analysis was conducted to test the effects of job status, grade level, and the five-factor personality dimensions on PsyCap. At the first step, PsyCap was again regressed on both job status and grade level. When the five-factor personality dimensions were added at the second step, results indicated that emotional stability ($\beta = .15, p < .05$) was a significant predictor, accounting for two percent of unique variance at Step 2. Table 3 presents the results of this analysis in detail.

The third regression analysis was conducted to test the effects of job status, grade level, and the Hogan dark side personality dimensions on PsyCap. At the first step, PsyCap was again regressed on both job status and grade level. When the Hogan dark side personality dimensions were added at the second step, results indicated that dutifulness ($\beta = -.34, p < .01$) was a significant predictor, counting for 12.0 percent of the variance at Step 2. Table 4 presents the results of this analysis in detail.

Additional regression analyses indicated that interaction effects amongst the independent variables were not significant predictors of PsyCap.

In further analyzing the exploratory research questions, a 2 (grade level: graduate vs. undergraduate) x 2 (job status: full-time vs. part-time) ANOVA was conducted to examine whether these variables differed on PsyCap. Results of this analysis revealed a significant main effect of job status on PsyCap, $F(1,219) = 11.694, p = .001, \eta^2 = .052$. 

Specifically, full-time employees have significantly higher PsyCap ($M = 131.39$) than part-time employees ($M = 123.33$). The main effect of grade level was not significant ($p = .269$), nor was the interaction between grade level and job status ($p = .715$).

**Discussion**

This study was conducted to investigate the effects of the four-factor model of goal orientation, two dimensions from the five-factor personality model, and two of Hogan's dysfunctional personality dimensions on a measure of PsyCap. The intermediary effects of grade level and job status on PsyCap were also explored. Overall, the findings suggest that the state-like process of PsyCap is significantly related to a variety of more trait-like motivation and personality constructs. Specifically, emotional stability, MPGO, and PPGO are all positively correlated with PsyCap, whereas MVGO, PVGO, excitability, and dutifulness are all negatively correlated with PsyCap. Furthermore, it was found that full-time employees tend to have significantly higher PsyCap than part-time employees. As the results of the exploratory regression analyses implied, the possibility of job status mediating the relationships between the present study's independent variables and PsyCap should be considered.

As previously mentioned, the four-factor model of goal orientation takes into account both the definition of competence (mastery/performance) and valence of competence (approach/avoid) (Elliot & McGregor, 2001). In terms of what the literature has found the four orientations to be related to, it could certainly be argued that the approach valence be thought of as more "psychologically positive," whereas the avoid valence be thought of as more "psychologically negative." As also previously mentioned, PsyCap is theoretically defined as a "positive psychological state of development"
PsyCap Variance 19

(Luthans, Youssef, & Avolio, 2007). Based on this understanding, it was hypothesized that MPGO and PPGO would positively correlate with PsyCap, while MVGO and PVGO would correlate negatively with PsyCap. The results of this study confirmed this supposition.

In further discussing the findings of the present study in regard to the four-factor model of goal orientation, it should be noted that few empirical studies on MVGO exist given that particular dimension's newness (Elliot & McGregor, 2001; Pintrich, 2000). In addition to examining the theoretical underpinnings of PsyCap, the present research also increases our comprehensive understanding of the recently proposed MVGO factor by demonstrating its positive and significant correlation with dutifulness and excitability, and its negative and significant correlation with conscientiousness, emotional stability, and PsyCap.

The majority of hypothesized relationships between PsyCap and both the "dark side" and "bright side" personality dimensions were supported by this study's results. However, it should be noted that only three out of four of these personality dimensions provided a statistically significant correlation. Conscientiousness, despite its positive relationship with a broad range of self-efficacy domains (Hartman & Betz, 2007) and psychological health and identity (Ozer & Benet-Martinez, 2006), did not demonstrate a significantly positive relationship with PsyCap ($r = .035, p = .578$). One could argue that this finding lends credence to the idea that PsyCap is an entity in and of itself, and not merely a sum of its four parts (Luthans, Youssef, & Avolio, 2007).

On the other hand, the negative correlation between the "dark side" personality dimension of dutifulness and PsyCap proved rather large. A separate regression analysis
utilizing PsyCap as the dependent variable and dutifulness as the sole independent variable indicated that this particular personality dimension alone accounted for nearly 15 percent of the variance in PsyCap. Based on these results, organizations that strive to promote PsyCap amongst employees may want to especially consider dependently-inclined individuals when planning focused interventions. Employees that are often reluctant to take independent action may require supplementary support in nurturing the psychological capacities underlying the higher order positive construct of PsyCap.

Several limitations to the present study should be noted. First, as all of the variables were measured via online survey-based self-reports, the results of the present study are limited by a common-method bias. Future research should examine the robustness of these findings utilizing additional operationalizations of the study's variables and a multitrait-multimethod matrix to assess the construct validity of the resulting measure set (Campbell & Fiske, 1959). Second, as the online survey could be considered quite lengthy, there is the risk that certain participants resorted to response sets in order to quickly complete the study. Third, the generalizability of these results may be limited to a student population. College students were a convenient sample that allowed for relative ease of data collection. Fortunately, full-time working graduate students were part of the sample, which may alleviate the generalizability issue to some extent. As PsyCap is theorized as a developmental process within the working environment, future research should explore this study's hypothesized relationships with other populations and contexts (e.g., business).

Several theoretical and applied implications result from this study. First, as suggested above, future research should continue to examine the theoretical
underpinnings of PsyCap in different settings, with different populations, and utilizing a variety of operationalizations. Second, additional individual difference variables (e.g., other personality constructs, job seniority, etc.) that may predict PsyCap variance should be examined since they may have incremental explanatory power over the independent variables of the present study.

In terms of applied implications, managers, trainers, and HRM practitioners may utilize these results in order to effectively adapt their focused PsyCap interventions based on individual differences in goal orientation, personality, and job status. Prior studies have shown that PsyCap can be developed, and that PsyCap development is a profitable endeavor for organizations (Luthans et al., 2006; Luthans, Youssef, & Avolio, 2007). Although the abovementioned Psychological Capital Intervention (PCI) consistently shows a two percent or greater increase in PsyCap (Luthans et al., 2006), updated interventions could incorporate more intensive development models for individuals with an avoidance goal orientation, with underlying "dark side" personality dispositions, or who work part-time. Such an intervention would take into account the underlying trait-like factors in employees' individual propensities to PsyCap development.

In sum, the results from this study highlight a few important findings. First, MPGO and PPGO were positively and significantly correlated with PsyCap, whereas MVGO and PVGO are negatively and significantly correlated with PsyCap. Second, emotional stability was positively and significantly correlated with PsyCap, whereas excitability and dutifulness were negatively and significantly correlated with PsyCap (with dutifulness demonstrating a rather large correlation). Finally, full-time employees tend to have significantly higher PsyCap than part-time employees.
The present research adds to the I/O Psychology literature by bolstering the conceptual definition of PsyCap, furthering "dark side" versus "bright side" research in the field, assisting in the process of predicting individuals high in PsyCap based on underlying goal orientation, personality factors, and job status, and providing applied implications for the development of PsyCap interventions.
References


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public-domain personality measures. *Journal of Research in Personality, 40*, 84-96.


Figure 1. Conceptual Model of Major Study Variables

Goal Orientation
1. Mastery Avoid
2. Mastery Approach
3. Performance Avoid
4. Performance Approach

Bright Side Enablers
1. Conscientiousness
2. Emotional Stability

Dark Side Derailers
1. Dutiful
2. Excitable

Job status
Grade level

PsyCap
TABLE 1. Means, Standard Deviations, and Intercorrelations of Variables

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Note. N = 219
*p ≤ .05. **p ≤ .01.
TABLE 2. Regression Analyses Examining the Influence of Job Status, Grade Level, and Goal Orientation on PsyCap

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<th>$\Delta F$</th>
<th>$\beta$</th>
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Note. $N = 219$. $R^2$ = the proportion of variance in the dependent variable accounted for by all predictors in the regression equation. $\Delta R^2$ = the incremental variance accounted for by the predictor variables entered at each step. $\Delta F$ = the F ratio to assess the significance of the incremental variance accounted for. $\beta$ = standardized regression coefficients. $B$ = unstandardized regression coefficients. $SE$ = standard error of B. * denotes a statistic that is significant at the .05 level. ** denotes a statistic that is significant at the .01 level.
TABLE 3. Regression Analyses Examining the Influence of Job Status, Grade Level, and the Five-Factor Personality Dimensions on PsyCap

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*Note. N = 219. R² = the proportion of variance in the dependent variable accounted for by all predictors in the regression equation. ΔR² = the incremental variance accounted for by the predictor variables entered at each step. ΔF = the F ratio to assess the significance of the incremental variance accounted for. β = standardized regression coefficients. B = unstandardized regression coefficients. SE = standard error of B. * denotes a statistic that is significant at the .05 level. ** denotes a statistic that is significant at the .01 level.*
TABLE 4. Regression Analyses Examining the Influence of Job Status, Grade Level, and the Hogan Dark Side Personality Dimensions on PsyCap

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<th>$\Delta F$</th>
<th>$\beta$</th>
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Note. $N = 219$. $R^2$ = the proportion of variance in the dependent variable accounted for by all predictors in the regression equation. $\Delta R^2$ = the incremental variance accounted for by the predictor variables entered at each step. $\Delta F$ = the F ratio to assess the significance of the incremental variance accounted for. $\beta$ = standardized regression coefficients. B = unstandardized regression coefficients. SE = standard error of B. * denotes a statistic that is significant at the .05 level. ** denotes a statistic that is significant at the .01 level.
APPENDIX 1. List of items from the Achievement Goal Questionnaire

1) It is important for me to do better than the other students.
2) It is important for me to do well compared to others in this course.
3) My goal in this class is to get a better grade than most of the other students.
4) I worry that I may not learn all that I possibly could in this class.
5) Sometimes I’m afraid that I may not understand the content of this class as thoroughly as I’d like.
6) I am often concerned that I may not learn all that there is to learn in this class.
7) I want to learn as much as possible from this class.
8) It is important for me to understand the content of this course as thoroughly as possible.
9) I desire to completely master the material presented in this class.
10) I just want to avoid doing poorly in this class.
11) My goal in this class is to avoid performing poorly.
12) My fear of performing poorly in this class is often what motivates me.
APPENDIX 2. List of items from the IPIP proxy measure of the five-factor personality model

1) I respect authority.
2) I enjoy being reckless.
3) I try to follow the rules.
4) I use swear words.
5) I stick to the rules.
6) I do things that others find strange.
7) I would never cheat on my taxes.
8) I do crazy things.
9) I do things by the book.
10) I do unexpected things.
11) I rarely get irritated.
12) I have frequent mood swings.
13) I am relaxed most of the time.
14) I get upset easily.
15) I seldom get mad.
16) I am often in a bad mood.
17) I am not easily annoyed.
18) I have days when I'm mad at the world.
19) I am not easily bothered by things.
20) I get stressed out easily.
APPENDIX 3. List of items from the IPIP proxy measure of the Hogan Development Survey

1) I get irritated easily.
2) I am not easily annoyed.
3) I get angry easily.
4) I try to forgive and forget.
5) I am quick to judge others.
6) I have a good word for everyone.
7) I am annoyed by others' mistakes.
8) I am easily put out.
9) I can't stand being contradicted.
10) I judge people by their appearance.
11) I worry about what people think of me.
12) I don't care what others think.
13) I conform to others' opinions.
14) I am not concerned with making a good impression.
15) I feel it's OK that some people don't like me.
16) I need the approval of others.
17) I want to form my own opinions.
18) I want to amount to something special in others' eyes.
19) I do what others do.
20) I want to be different from others.
APPENDIX 4. List of items from the PsyCap Questionnaire

1) I feel confident analyzing a long-term problem to find a solution.
2) I feel confident in representing my work area in meetings with management.
3) I feel confident contributing to discussions about the company's strategy.
4) I feel confident helping to set targets/goals in my work area.
5) I feel confident contacting people outside the company (e.g., suppliers, customers) to discuss problems.
6) I feel confident presenting information to a group of colleagues.
7) If I should find myself in a jam at work, I could think of many ways to get out of it.
8) At the present time, I am energetically pursuing my work goals.
9) There are lots of ways around any problem.
10) Right now I see myself as being pretty successful at work.
11) I can think of many ways to reach my current work goals.
12) At this time, I am meeting the work goals that I have set for myself.
13) When I have a setback at work, I have trouble recovering from it, moving on.
14) I usually manage difficulties one way or another at work.
15) I can be "on my own," so to speak, at work if I have to.
16) I usually take stressful things at work in stride.
17) I can get through difficult times at work because I've experienced difficulty before.
18) I feel I can handle many things at a time at this job.
19) When things are uncertain for me at work, I usually expect the best.
20) If something can go wrong for me work-wise, it will.
21) I always look on the bright side of things regarding my job.
22) I'm optimistic about what will happen to me in the future as it pertains to work.
23) In this job, things never work out the way I want them to.
24) I approach this job as if "every cloud has a silver lining."