

**THE DIRECT AND INTERACTIVE EFFECTS OF
PSYCHOLOGICAL CAPITAL AND PSYCHOLOGICAL
OWNERSHIP ON WORK ATTITUDES AND
WITHDRAWAL BEHAVIORS**

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الأثار المباشرة والتفاعلية لرأس المال النفسى والملكية النفسية على إتجاهات العمل وسلوكيات الانسحاب

ملخص

فحصت الدراسة الحالية الأثار المباشرة والتفاعلية لرأس المال النفسى والملكية النفسية على إتجاهات العمل (الرضا الوظيفى والالتزام التنظيمى) وسلوكيات الانسحاب (الانسحاب من الوظيفة والانسحاب من العمل). بإستخدام عينة من ٤١١ ممرض وممرضة يعملون فى المستشفيات الحكومية بمحافظة كفرالشيخ أظهرت النتائج أن رأس المال النفسى والملكية النفسية لهما أثار مباشرة وإيجابية على كل من الرضا الوظيفى والالتزام التنظيمى، وأظهرت النتائج أيضا أن التفاعل بين رأس المال النفسى والملكية النفسية أثر معنوياً على كل من الرضا الوظيفى والالتزام التنظيمى. علاوة على ذلك ، أظهرت النتائج أن رأس المال النفسى له تأثير مباشر سلبى على الانسحاب من الوظيفة ، وأن الملكية النفسية لها تأثير مباشر سلبى على كل من الإنسحاب من الوظيفة والانسحاب من العمل ، ولكن التفاعل بين رأس المال النفسى والملكية النفسية ليس له أثاراً معنوية على كل من الانسحاب من الوظيفة والانسحاب من العمل. تضمنت الدراسة الحالية المناقشة والتطبيقات العملية والحدود والتوصيات للبحث المستقبلى.

Abstract:

The present study investigated direct and interactive effects of psychological capital and psychological ownership on work attitudes (job satisfaction and organizational commitment) and withdrawal behaviors (job withdrawal and work withdrawal). Using a sample of 411 nurses who work in governmental hospitals in Kafr El-Sheikh governorate, the results showed that psychological capital and psychological ownership had positive direct effects on both job satisfaction and organizational commitment and they had significant interactive effects on them. Furthermore, psychological capital had a negative direct effect on job withdrawal and psychological ownership had negative direct effects on both job withdrawal and work withdrawal, but they didn't have significant interactive effects on them. The current study included discussion, practical implications, limitations, and suggestions for future research.

Keywords: Job satisfaction; Organizational commitment; Psychological capital; Psychological ownership; Withdrawal behaviors.

1- Introduction

The importance of positive psychology has increased recently in work environment because it delineates the function of positive relationships with others. It works on the study of conditions and processes which contribute to the optimal function performance of people, groups, and institutions (Gable and Haidt, 2005; Sheldon and King, 2001). Positive psychology has presence, not only in clinical and applied psychology but also in related fields such as human resource management and positive organizational behavior (Avey *et al.*, 2011; Luthans, 2002a). Luthans (2002b, p. 59) defined the positive organizational behavior as “the study and application of positively oriented human resource strengths, and psychological capacities that can be measured, developed, and effectively managed for performance improvement”. Luthans *et al.* (2010) indicated that the concentration on the individual’s positive psychological abilities is likely to contribute to increasing the management policies and practices effectiveness.

The previous studies tackled the positive psychological capital and psychological ownership. Both are positive psychological constructs arising from the literature of positive psychology and positive organizational behavior and they have an effect on employees' performance, attitudes, and behaviors in workplace (Avey, Avolio, *et al.*, 2009; Larson and Luthans, 2006; Luthans, Avolio, *et al.*, 2007; Norman, *et al.* 2010; Van Dyne and Pierce, 2004).

When psychological capital is regarded as individual’s positive psychological capacities (Luthans, Avolio *et al.*, 2007) and psychological ownership is considered as feelings of ownership of the employee towards the organization, job, or work (Van Dyne and Pierce, 2004), it is expected for the employee who owns both psychological capital and psychological ownership to have a “new psychological state” at workplace. Both will have relatively stronger effect on employee’s attitudes and behaviors than either of the individual effect of psychological capital or psychological ownership.

The previous studies investigated the psychological capital and psychological ownership separately. They investigated the effects of psychological capital on work attitudes and behaviors (e.g., Larson and Luthans, 2006; Luthans, Avolio, *et al.*, 2007), and these studies also investigated the effects of psychological ownership on work attitudes and behaviours (e.g., Avey, Avolio, *et al.*, 2009; Mayhew *et al.*, 2007; Van Dyne and Pierce, 2004). However, the previous studies did not examine the interactive effects of psychological capital and psychological ownership on work attitudes, and they did not also study their effects on withdrawal behaviors such as job withdrawal and work withdrawal. As a result, this study aims at investigating the direct and interactive effects of positive psychological capital and psychological ownership for the organization on work attitudes (Job satisfaction and organizational commitment) and

withdrawal behaviors (job withdrawal and work withdrawal). Figure 1 illustrates the proposed relationships among study variables.

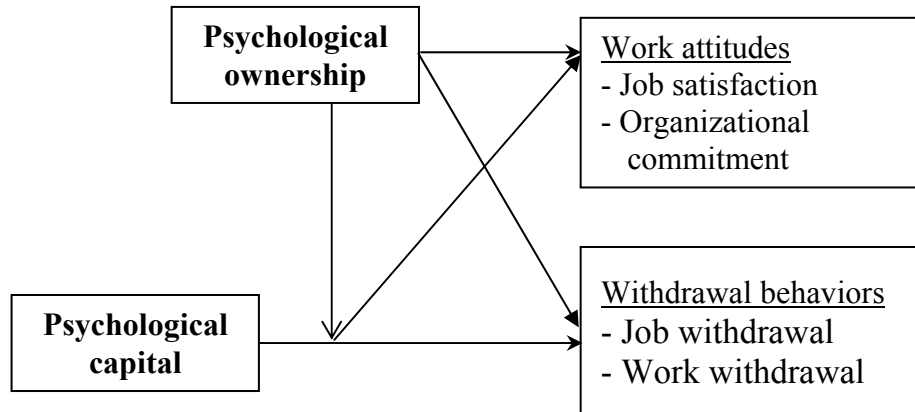


Figure 1. Theoretical model

2. Psychological capital and psychological ownership

2.1 Psychological capital

Human capital has basic components such as psychological, intellectual, emotional, and social ones. Psychological capital represents a positive contributory value in workplace (Peterson and Spiker, 2005). It consists of four positive psychological constructs. They are self-efficacy, optimism, hope, and resilience (Luthans, Avolio, *et al.*, 2007; Luthans and Youssef, 2004). Luthans, Youssef, *et al.* (2007, p. 3) defined this composite construct as “an individual’s positive psychological state of development and 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 (resilience) to attain success”.

The recent theory and empirical research have supposed that combining these four constructs into a core construct will result in a common synergistic capacity or resource (Walumbwa *et al.*, 2010). Luthans *et al.* (2005) pointed out that optimism alone is not as powerful as combining it with hope, resilience and/or self-efficacy in affecting individual’s performance. Luthans, Avolio, *et al.* (2007) showed that the combined effects of four constructs had more impact on performance and job satisfaction than any one of these constructs individually. A lot of research investigated psychological capital as a construct of four aspects. (e.g., Avey, Luthans, *et al.*, 2009; Clapp-Smith *et al.*, 2009; Luthans *et al.*, 2010; McMurray *et al.*, 2010; Norman *et al.*, 2010; Walumbwa *et al.*, 2010;

Walumbwa *et al.*, 2011). In accordance with the theoretical and empirical evidence in previous studies; the present study investigated the psychological capital as a construct comprised of four positive aspects: self-efficacy, optimism, hope, and resilience.

Self-efficacy is a belief in one's personal ability to accomplish a given task (Avey *et al.*, 2011). Clapp-smith *et al.* (2009) pointed out that the individuals with high level of self-efficacy perceive their ability to make an action to modify their environment into a successful one so as to achieve their tasks. Stajkovic and Luthans (1998, p. 66) defined self-efficacy in workplace as "the employee'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 giving context".

Optimism can act as one of the core drivers of behavior in feelings at work. Consequently, more sense of satisfaction and more perseverance in difficult situations will take place (Luthans, 2002a; Peterson, 2000). Optimism has a positive outlook about life and belief that good things will happen rather than bad things (De Hoogh and Den Hartog, 2008). At a high degree of optimism, it is expected to have better results at work more than the low degree of optimism (Schweizer and Koch, 2001).

Hope is an individual's ability to persevere toward a goal (Walumbwa *et al.*, 2010). Snyder *et al.* (1991, pp. 287) defined hope as a "positive motivational state that is based on an interactively derived sense of successful (a) agency (goal directed energy) and (b) pathways (planning to meet goals)". Hope constitutes the desire to succeed and the ability to determine, clarify, and pursue the way to success (Snyder, 2000).

Resilience is a response to events, specifically negative events and setbacks (Clapp-Smith *et al.*, 2009). Luthans (2002a, p. 702) defined resilience as the "positive psychological capacity to rebound, to 'bounce back' from adversity, uncertainty, conflict, failure, or even positive change, progress and increased responsibility". Individuals may actually become more resilient to an adverse state each time they effectively bounce back from a previous setback (Luthans, Avolio *et al.*, 2007).

The previous studies indicated that psychological capital correlated positively to work performance and work satisfaction (Luthans, Avolio *et al.*, 2007). It also correlated positively to organizational citizenship and correlated negatively to employee's deviance (Norman *et al.*, 2010). Moreover, psychological capital was positively related to well-being and positive emotions (Avey *et al.*, 2011) and had a strong relationship to work attitudes (Larson and Luthans, 2006). It also had a negative relationship to symptoms of stress, intentions to quit, and job search behaviors. (Avey, Luthans, *et al.*, 2009).

The findings of a previous study in a non-profit organization showed strong positive relationships between employee ratings of their immediate

supervisor's transformational leadership and employee ratings of organizational climate, wellbeing, employee commitment and psychological capital. It also revealed that older employees recorded significantly higher scores on psychological capital than younger employees (McMurray *et al.*, 2010). Trust in management was found to mediate the relationship between psychological capital and performance (Clapp-Smith *et al.*, 2009). Luthans *et al.* (2010) found that psychological capital had positive relationship with performance. Walumbwa *et al.* (2011) showed that collective psychological capital was significantly related to both organizational citizenship behavior and performance. Walumbwa *et al.* (2010) argued that leader psychological capital was positively related to follower performance. They also argued that the follower psychological capital-performance relationship was moderated by service climate such that the relationship was stronger when service climate was perceived to be high versus low.

Although there is an incremental number of empirical research about psychological capital, there are some challenges that the future research in which psychological capital affects other important work outcomes in different environments should be investigated (Luthans *et al.*, 2010; Walumbwa *et al.*, 2011) specially absenteeism and withdrawal behaviors (Walumbwa *et al.*, 2010).

2.2 Psychological ownership

Pierce *et al.* (2004) stated that feelings of possession are considered a true phenomenon that a lot have agreed on and they are connected to work and organizational environment. Rousseau and Shperling (2003) hypothesized that feelings of ownership could be found in the absence of legal ownership. Avey, Avolio, *et al.*, (2009, p. 174) proposed that psychological ownership falls within the emerging literature of positive organizational behaviour. They indicated that "psychological ownership has much in common with more widely recognized positive organizational behavior constructs and approaches such as psychological capital". Pierce *et al.* (2001, p. 299) defined psychological ownership as "that state in which individuals feel as though the target of ownership (material or immaterial in nature) or a piece of it is "theirs" (i.e., "It is MINE)". They concluded that psychological ownership had important emotional, attitudinal, and behavioral effects on those that experience ownership. Van Dyne and Pierce (2004) theorized that feelings of ownership can be directed towards the organization as a whole or towards specific aspects in the organization such as the group, job, work tools or work itself. The present study focuses on the organization as a target for feelings of ownership (i.e., psychological ownership for the organization).

The previous studies indicated that psychological ownership related positively to job attitudes (organizational commitment, job satisfaction, and self-esteem) and work behaviors (performance and organizational

citizenship) (Avey, Avolio, *et al.* 2009; Mayhew *et al.*, 2007; O'Driscoll *et al.*, 2006; Van Dyne and Pierce, 2004).

Chi and Han (2008) found that formal ownership was positively related to psychological ownership, and they found that justice perceptions mediated the relationships between the formal ownership and psychological ownership. Md-Sidin *et al.* (2010) pointed out that psychological ownership had significant and positive relations with job commitment, job satisfaction, and performance among business school lecturers of public universities in Malaysia. In the restaurant industry, Asatryan and Oh (2008) showed that psychological ownership had positive relationships with customer participation, customer-company identification, and customer sense of belonging. Bernhard and O'Driscoll (2011) argued that passive leadership was negatively related to employees' ownership feelings for the family business, and the psychological ownership of the organization and the job mediated the relationship between leadership style and affective organizational commitment, job satisfaction, and turnover intentions. They also argued that feelings of psychological ownership for the family business mediated the relationship between transformational leadership and organizational citizenship behavior.

Although there are those empirical studies, there are still recommendations for future research calling for continuing examining the unique contribution of psychological ownership for investigating employee's attitudes and behaviors in different environments and jobs (Asatryan and Oh, 2008; Bernhard and O'Driscoll, 2011; Mayhew *et al.*, 2007; Md-Sidin *et al.*, 2010; Van Dyne and Pierce, 2004), and investigating psychological ownership in conjunction with other psychological constructs such as psychological capital (Wagner *et al.*, 2003).

3. Work attitudes

The present study tackled work attitudes through two variables: job satisfaction and organizational commitment. This agrees with a lot of previous research which had investigated work attitudes through these two variables (e.g., Chang *et al.*, 2010; Dewettinck and Van Amejide, 2011; Larson and Luthans, 2006; Mayhew *et al.*, 2007; Yang and Mossholder, 2010).

Job satisfaction is an individual's attitude towards specific aspects in his/her job and tasks (Van Dick *et al.*, 2004). Job satisfaction answers the following question: How do I feel about my job? (Pierce *et al.*, 2004). Previous studies indicated that subordinates' psychological capital was related positively to their job satisfaction (Luthans, Avolio, *et al.*, 2007) and psychological ownership for the organization was also related to their job satisfaction (Van Dyne and Pierce, 2004).

Organizational commitment is a psychological state that binds the individual to the organization (Chang *et al.*, 2007). Organizational commitment responds to the question: Should I maintain my membership in this organization and why? (Pierce *et al.*, 2004). Previous studies indicated that there was a significant relationship between psychological capital and organizational commitment (Larson and Luthans, 2006). There was a positive relationship between psychological ownership for the organization and organizational commitment (Mayhew *et al.*, 2007; Van Dyne and Pierce, 2004).

The present study investigated the direct effects of psychological capital and psychological ownership on job satisfaction and organizational commitment in a different environment and a different job completely different from the environments and jobs which had been tackled by previous studies through the hypotheses 1 and 2.

Hypothesis 1

Psychological capital will be positively related to:

- a) Job satisfaction
- b) Organizational commitment

Hypothesis 2

Psychological ownership will be positively related to:

- a) Job satisfaction
- b) Organizational commitment

Pierce *et al.* (2001) suggested that psychological ownership satisfies three basic human needs: efficacy and effectance, self-identity, and “having a sense of place”. When employees experience psychological ownership they are able to satisfy these basic needs (Van Dyne and Pierce, 2004). Luthans, Avolio, *et al.* (2007) indicated that psychological capital represented individual motivational propensities that accrue through positive psychological constructs such as efficacy, optimism, hope, and resilience. Consequently, it is expected that the interaction between psychological capital and psychological ownership will lead to create a new psychological state inside the employee that significantly affects his/her work attitudes. The present study investigated the effect of psychological ownership as a moderating role on the relationship between psychological capital and work attitudes (job satisfaction and organizational commitment). This investigation will answer the following question: what is the effect of high or low level of psychological ownership with the high or low level of psychological capital on both job satisfaction and organizational commitment?. It is expected that this interaction will significantly affect both job satisfaction and organizational commitment at different levels of employee’s perceptions of psychological capital and psychological ownership. These suggestions lead to hypotheses 3 and 4.

Hypothesis 3

Psychological ownership will moderate the relationship between psychological capital and job satisfaction. Specifically, the positive relationship between psychological capital and job satisfaction will be stronger when psychological ownership is high rather than psychological ownership is low.

Hypothesis 4

Psychological ownership will moderate the relationship between psychological capital and organizational commitment. Specifically, the positive relationship between psychological capital and organizational commitment will be stronger when psychological ownership is high rather than psychological ownership is low.

4. Withdrawal behaviors

Organizational withdrawal is “a general group of behaviors and intentions that are consequences of negative job attitudes” (Laczo and Hanisch, 1999, p. 454). Hanisch and Hulin (1990) empirically identified two kinds of organizational withdrawal; job withdrawal and work withdrawal.

Job withdrawal was defined as the employee’s behaviors towards removing themselves from their organization and their work role (Hanisch and Hulin, 1991). It included quitting or searching for another job (Laczo and Hanisch, 1999).

Work withdrawal was defined as the employee’s behaviors which are enacting to avoid specific work tasks or minimizing the amount of time used to do certain tasks while he/she stays as a member in the organization (Hanisch and Hulin, 1991). It included lateness, absence, and unfavorable job behaviors (Hanisch and Hulin, 1990, 1991; Laczo and Hanisch, 1999). Examples from unfavorable job behaviors: using the work phone for personal calls, making excuses to get out of work, doing poor quality work, and taking frequent or long coffee or taking long lunch breaks (Liao *et al.*, 2008).

The previous studies indicated that job satisfaction and organizational commitment mediated the effects of job security on withdrawal cognitions (Davy *et al.*, 1997). They revealed that volunteer workers exhibited lower levels of both job withdrawal and work withdrawal than paid employees (Laczo and Hanisch, 1999). They indicated that job insecurity behaviors were indirectly related to turnover intentions (Emberland and Rundmo, 2010).

Punnett *et al.* (2007) found that an employee’s levels of satisfaction with co-workers, activity, responsibility, and job security, as well as loyalty to the organization, were related to absenteeism. Taris *et al.* (2001) argued that decision latitude and the stress resulting from the relationship with colleagues were associated with the withdrawal behavior. Somers (2009)

showed that highly committed groups had the strongest intention to remain and there were no differences among the commitment groups for lateness. Hemingway and Smith (1999) assured that turnover intention was significantly related to both organizational climate and occupational stressors, and higher role conflict was associated with increased turnover intentions.

It is clear that previous studies did not examine the relationship of psychological capital and psychological ownership with withdrawal behaviors. It is expected to be a negative relationship. The present study investigated the direct effects of psychological capital and psychological ownership on withdrawal behaviors (job withdrawal and work withdrawal) through the hypotheses 5, and 6.

Hypothesis 5

Psychological capital will be negatively related to:

- a) Job withdrawal
- b) Work withdrawal

Hypothesis 6

Psychological ownership will be negatively related to:

- a) Job withdrawal
- b) Work withdrawal

It is expected that the psychological state that arises from the interaction between psychological capital and psychological ownership will affect the employee's withdrawal behaviors (job withdrawal and work withdrawal). So, the effect of the moderating role of psychological ownership on the relationship between psychological capital and withdrawal behaviors will be investigated. It is expected that this interaction will significantly affect both job withdrawal and work withdrawal at different levels of employees' perceptions of psychological capital and psychological ownership. Consequently, the present study investigated the hypotheses 7 and 8.

Hypothesis 7

Psychological ownership will moderate the relationship between psychological capital and job withdrawal. Specifically, the negative relationship between psychological capital and job withdrawal will be stronger when psychological ownership is high rather than when psychological ownership is low.

Hypothesis 8

Psychological ownership will moderate the relationship between psychological capital and work withdrawal. Specifically, the negative relationship between psychological capital and work withdrawal will be stronger when psychological ownership is high rather than when psychological ownership is low.

5. Method

5.1 Sample and procedure

Data were collected from nurses in governmental hospitals in Kafr El-Sheikh governorate using a questionnaire. The size of the research population is 5890 nurses (males and females) working in 16 government hospital. The sample size was 361 nurses according to the table of determining the sample size (Krejcie and Morgan, 1970, p. 608). The sample size was increased by 25% to reach 452 nurses to raise the degree of representation of the sample for the research population. The questionnaire was distributed to stratified random sample of 452 nurses. 411 completed questionnaires were received with a response rate 91%. The sample was drawn from all governmental hospitals according to the number of nurses in each hospital. Participants' ages ranged from 19 to 60 years, with an average of 30.51 years and a standard deviation of 9.52 years. Participants' tenure with the organization ranged from 1 year to 36 years, with an average tenure of 10.16 years and a standard deviation of 8.80 years. About 89% of the survey respondents were females and 11% were males. Based on human resource data from the government health sector in the governorate, the females were 90.1% and the males were 9.9%. These percentages approached the sample percentages.

5.2. Data collection:

The questionnaire consisted of 35 items referring to the following six variables: (1) psychological capital (8 items); (2) psychological ownership (6 items); (3) job satisfaction (3 items); (4) organizational commitment (6 items); (5) job withdrawal (3 items); and (6) work withdrawal (9 items). The questionnaires were handed over to respondents and urged them to be completed. This procedure led to increased response rate (91%). Respondents were told that their responses will be anonymous. The questionnaire included personal information of respondents (Gender, age, and tenure with organization).

5.3 Measures

5.3.1 Psychological capital

Psychological capital was measured with a 8-item measure found in Luthans, Youssef, *et al.* (2007) and empirically validated by Luthans, Avolio, *et al.* (2007), 2-items for every aspect of the four aspects of psychological capital. Sample items included (a) **Self-efficacy**: "I feel confident in representing my work area in management meetings"; (b) **Optimism**: "I always look on the bright side of things regarding my job"; (c) **Hope**: "If I should find myself in a jam at work, I could think of many ways to get out of it"; and (d) **Resilience**: "I usually take stressful things at work in stride" (Overall Cronbach alpha for psychological capital = 0.72).

Participants were instructed to indicate their degree of agreement from 1 = strongly disagree to 5 = strongly agree for each item.

5.3.2 Psychological ownership

Psychological ownership for the organization was measured by a 6-item measure found in Van Dyne and Pierce (2004). Sample item was: “This is my organization”. Responses were collected by using 5-point Likert scale ranging from 1= strongly disagree to 5=strongly agree for each item (Cronbach alpha = 0.71).

5.3.3 Job satisfaction

The 3-item measure of overall job satisfaction was used. It was found in Yang and Mossholder (2010). Items were “All things considered, I am satisfied with my job”, “I like my job”, and “I am generally satisfied with the work I do in this job”. Responses were collected by using 5-point Likert scale ranging from 1=strongly disagree to 5 = strongly agree for each item (Cronbach alpha = 0.82).

5.3.4 Organizational commitment

Organizational commitment was measured by a 6-item measure developed by Schwegler (2001). Sample item was: “I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful”. A 5-point Likert scale ranging from 1=strongly disagree to 5=strongly agree was used for each item (Cronbach alpha = 0.71).

5.3.5 Job withdrawal

Job withdrawal was measured by using a 3-item measure developed by Blau (1985). The 3-item involved: (1) Thinking about leaving the job; (2) Intention to search for another job; and (3) Intention to quit the job. Items were measured on a 5 point Likert scale ranging from 1=strongly disagree to 5=strongly agree for each item (Cronbach alpha = 0.85).

5.3.6 Work withdrawal

Hanisch and Hulin (1990) found that three indicators: Lateness, absence, and unfavourable job behaviors loaded on one factor, which they described as work withdrawal. Confirmatory factor analysis by Hanisch and Hulin (1991) supported this.

Work withdrawal was measured by a 9-item measure found in Blau (1998), these items were used by Hanisch and Hulin (1990, 1991) and Roznowski and Hanisch (1990). The 3-items for every indicator were: (a) **Lateness**: “How often are you late to work?”; “How desirable is being late to work?”; and “How likely is it that you will be late to work?”; (b) **Absence**: “How often are you absent from work?”; “How desirable is being absent from work?”; and “How likely is it you will be absent from work?”; and (c) **Unfavorable job behaviors**: “Using the work phone for personal calls”; “Making excuses to get out of work”; and “Using equipment for personal purposes without permission” (overall Cronbach alpha for work withdrawal =0.75). Responses were collected by using a 6-point response scale used by

Roznowski and Hanisch (1990) (never; once a year; two or three times a year; once every 3-4 weeks; more than once a week; and once or more per day).

5.3.7 Demographic variables

Three demographic variables were examined in this study: **Gender** (1=male, 2 = female); **age** (measured in years); and **Tenure with organization** (measured in years). Previous research showed these variables to be related to present outcome variables (e.g., Laczo and Hanisch, 1999; Norman *et al.* 2010; Van Dyne and Pierce, 2004).

5.4. Data analysis

SPSS and Amos were used for analyzing data. Means, standard deviations, alpha reliabilities, and confirmatory factor analysis were used for variables in the present study. Pearson correlation coefficients were used to examine the relationship among all the study variables. The hypotheses were tested by hierarchical regression analysis.

6. Analyses and Results

The means, standard deviations and correlations of all study variables were reported in Table 1. Significant correlations were identified for psychological capital with job satisfaction ($r=0.31$, $p<0.01$), organizational commitment ($r=0.48$, $p<0.01$), job withdrawal ($r=-0.23$, $p<0.01$), and work withdrawal ($r=-0.17$, $p<0.01$). Similarly, psychological ownership was significantly correlated with job satisfaction ($r=0.44$, $p<0.01$), organizational commitment ($r = 0.49$, $p<0.01$), job withdrawal ($r=-0.25$, $p<0.01$), and work withdrawal ($r=-0.26$, $p<0.01$). These correlations showed that these variables were related.

Table 2 presents fit indices for the confirmatory factor analysis models. The results indicated that the six models provided acceptable fit indices. In model 1 four facets (self-efficacy, optimism, hope, and resilience) loaded on psychological capital ($\chi^2 = 5.64$, $df = 3$, $p<0.05$, RMSEA=0.06, NFI=0.97, CFI=0.98). In model 2 six items loaded on psychological ownership ($\chi^2=20.42$, $df=6$, $p<0.05$, RMSEA=0.08, NFI=0.97, CFI=0.97). Six items loaded on organizational commitment in model 3 ($\chi^2 = 14.34$, $df=6$, $p<0.05$, RMSEA = 0.06, NFI=0.96, CFI=0.98). Model 4 combines three forms (lateness, absence, and unfavorable job behaviors) into one factor as indicators of work withdrawal ($\chi^2=88.87$, $df=21$, $p<0.05$, RMSEA=0.09, NFI=0.88, CFI=0.91). Model 5 combines two forms of work attitudes (job satisfaction and organizational commitment) into one factor ($\chi^2=96.59$, $df=22$, $p<0.05$, RMSEA=0.09, NFI=0.91, CFI=0.93). Similarly, model 6 combines two forms of withdrawal behaviors (job withdrawal and work withdrawal) into one factor ($\chi^2=215.75$, $df=47$, $p<0.05$, RMSEA=0.09, NFI=0.85, CFI=0.88).

Table 1
Means, standard deviations, and intercorrelations among study variables

Variable	M	SD	1	2	3	4	5	6	7	8
1. Gender	1.89	0.31								
2. Age	30.51	9.52	-0.31**							
3. Tenure	10.16	8.80	-0.27**	0.95**						
4. Psychological capital	3.73	0.60	0.13**	-0.04	-0.01					
5. Psychological ownership	3.42	0.67	-0.08	0.11*	0.17**	0.47**				
6. Job satisfaction	4.02	0.79	0.02	0.16**	0.22**	0.31**	0.44**			
7. Organizational commitment	3.43	0.74	0.13**	0.07	0.11*	0.48**	0.49**	0.44**		
8. Job withdrawal	1.58	0.78	-0.03	-0.11**	-0.17**	-0.23**	-0.25**	-0.49**	-0.28**	
9. Work withdrawal	2.05	0.67	-0.03	0.24**	0.15**	-0.17**	-0.26**	-0.06	-0.13**	0.18**

N = 411. *p<0.05. ** p<0.01

Table 2
Results of confirmatory factor analyses

Models	χ^2	df	RMSEA	NFI	CFI
Model 1- 4 Factors as indicators of psychological capital	5.64*	3	0.06	0.97	0.98
Model 2- 1 Factor as an indicator of psychological ownership	20.42*	6	0.08	0.97	0.97
Model 3- 1 factor as an indicator of organizational commitment	14.34*	6	0.06	0.96	0.98
Model 4- 3 Factors as indicators of work withdrawal	88.87*	21	0.09	0.88	0.91
Model 5- 2 Factors (two forms of work attitudes)	96.59*	22	0.09	0.91	0.93
Model 6- 2 Factors (two forms of withdrawal behaviors)	215.75*	47	0.09	0.85	0.88

*p<0.05

6.1. Examining the direct and interactive effects on work attitudes

Hierarchical regression analyses were used to test both direct and interactive effects of psychological capital and psychological ownership on both job satisfaction and organizational commitment.

The results are summarized in Table 3. Step 2, in each analysis, showed that psychological capital was positively and significantly related to both job satisfaction ($\beta=0.13$, $p<0.01$) and organizational commitment ($\beta=0.30$, $p<0.01$). These results provide support for hypothesis 1. These results are consistent with previous research that found a significant relationship between psychological capital, job satisfaction, and organizational commitment (Larson and Luthans, 2006) and with previous research that found a significant positive relationship between psychological capital and job satisfaction (Luthan, Avolio *et al.*, 2007).

Similarly, psychological ownership was positively and significantly related to both job satisfaction ($\beta=0.34$, $p<0.01$) and organizational commitment ($\beta=0.35$, $p<0.01$). These results support hypothesis 2. These results also are consistent with previous studies. The results of previous research demonstrated positive links between psychological ownership for the organization and employee attitudes (Organizational Commitment and Job Satisfaction) (Van Dyne and Pierce, 2004). Mayhew *et al.* (2007) argued that psychological ownership predicted job satisfaction and organizational commitment.

In step 3 the interaction terms were entered in each analysis. As can be seen, the psychological capital and psychological ownership interaction was significantly related to both job satisfaction ($\beta= 0.94$, $p<0.01$, $\Delta R^2=0.04$) and organizational commitment ($\beta= 0.34$, $p<0.10$, $\Delta R^2=0.02$).

The plot of these interactions (see figure 2 and figure 3) showed that high levels of psychological capital, when employees were characterized by a high degree of psychological ownership, were associated with higher levels of both job satisfaction and organizational commitment rather than low perceptions of psychological capital under conditions of low psychological ownership. In addition, the plot indicates a little change in both job satisfaction and organizational commitment perceptions at low levels of psychological ownership resulting from low and high levels of psychological capital. These results support hypotheses 3 and 4.

6.2 Examining the direct and interactive effects on withdrawal behaviors

Table 4 provides the results of hierarchical regression analyses to test both direct and interactive effects of psychological capital and psychological ownership on both job withdrawal and work withdrawal. Step 2 in each analysis indicated that psychological capital was negatively and significantly related to job withdrawal ($\beta=-0.15$, $p<0.01$) but it was not significantly related to work withdrawal. These results partially support

Hypothesis 5. As can be seen, psychological ownership was negatively and significantly related to both job withdrawal ($\beta=-0.13$, $p<0.05$) and work withdrawal ($\beta=-0.22$, $p<0.01$). These results support Hypothesis 6.

The previous studies examined the relationship between withdrawal behaviors (such as lateness and turnover intentions) and another variables (such as job security and insecurity, satisfaction, loyalty, commitment, and stress) (e.g. Davy *et al.*, 1997; Emberland and Rundmo, 2010; Punnett *et al.*, 2007; Taris *et al.*, 2001). But the previous studies did not examine the relationship of psychological capital and psychological ownership with job and work withdrawal. Accordingly, the results of the current study are addition to the results of previous studies.

Finally, the interaction terms were entered in step 3 in each analysis. As seen in Table 4, the psychological capital and psychological ownership interaction was not significantly related to both job withdrawal and work withdrawal. These results don't support Hypotheses 7 and 8.

Table 3
Hierarchical regression analyses for job satisfaction and organizational commitment

Variable	Job satisfaction			Organizational commitment		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Gender	0.05	0.06 ^t	0.09*	0.16**	0.15**	0.16**
Age	-0.60**	-0.33*	-0.38**	-0.26 ^t	0.08	0.07
Tenure	0.81**	0.49**	0.56**	0.41**	0.01	0.04
Psychological capital		0.13**	0.64**		0.30**	0.47**
Psychological ownership		0.34**	0.91**		0.35**	0.56**
Interaction term (psychological capital and psychological ownership)			0.94**			0.34 ^t
Total R ²	0.09	0.25	0.29	0.04	0.34	0.36
Δ in R ²		0.16**	0.04**		0.30**	0.02 ^t

N = 411. ^tp<0.10. *p<0.05. **p<0.01

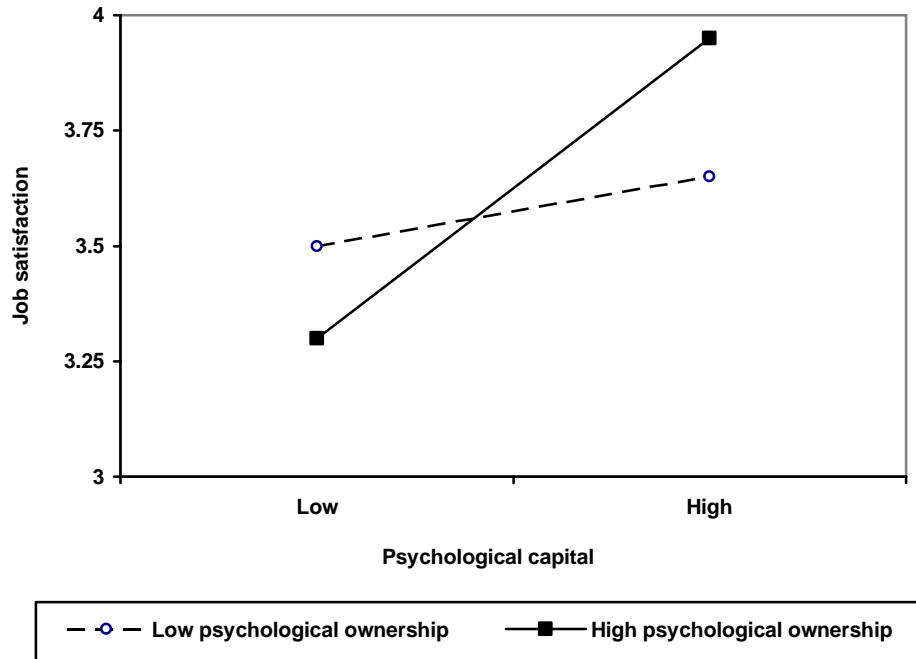


Figure 2. Interactive effects of psychological capital and psychological ownership on job satisfaction.

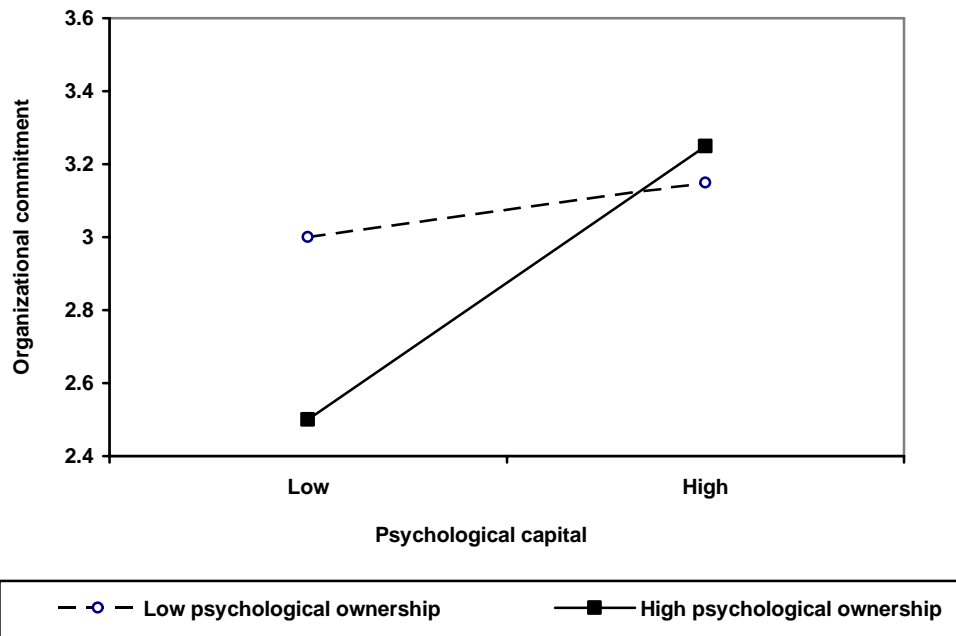


Figure 3. Interactive effects of psychological capital and psychological ownership on organization commitment.

Table 4
Hierarchical regression analyses for job withdrawal and work withdrawal

Variable	Job withdrawal			Work withdrawal		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Gender	-0.05	-0.04	-0.05	0.07	0.06	0.06
Age	0.55**	0.40**	0.41**	0.97**	0.91**	0.90**
Tenure	-0.71**	-0.54**	-0.56**	-0.85**	-0.66**	-0.65**
Psychological capital		-0.15**	-0.29*		-0.04	0.07
Psychological ownership		-0.13*	-0.31 ^t		-0.22**	-0.06
Interaction term (psychological capital and psychological ownership)			0.28			-0.23
Total R ²	0.060	0.117	0.119	0.122	0.177	0.178
Δ in R ²		0.057*	0.002		0.055*	0.001

N = 411. ^tp<0.10. *p<0.05. **p<0.01

7. Discussion:

The present study showed that psychological capital and psychological ownership have positive direct effects on job satisfaction and organization commitment. These results indicated that an employee who has a self-efficacy, optimism, hope, and resilience (i.e., psychological capital), and has a sense of ownership of the organization (i.e., psychological ownership for the organization) will be satisfied with his job and be committed towards his organization.

Furthermore, this study explored new results in positive organizational behavior field. It proved that psychological capital and psychological ownership had interactive effects on job satisfaction and organizational commitment. These interactive effects express employees' attitudes and behaviors in Egyptian work context. It indicated that the high level of psychological ownership with the high level of psychological capital associates with the high levels of both job satisfaction and organizational commitment. These results indicated that the interaction of psychological capital and psychological ownership construct a new psychological state may grant an employee "psychological wealth" lead to be more satisfaction and more committed to the organization.

The current study is the first research which examined the relationship between psychological capital, psychological ownership, and work attitudes within the Egyptian work context. Therefore, it is hoped that this study will open new horizons for research in this field in Egypt and offers useful recommendations for the application in the workplace.

The present study demonstrated that psychological capital had been negatively and significantly related to job withdrawal, but it had not been significantly related to work withdrawal. These results indicated that positive psychological capital increased the desire of hospital nurses to stay with the organization. They did not think of leaving it. However, it did not affect work withdrawal (i.e., lateness, absence and unfavorable job behaviors) significantly.

Further more, this study demonstrated that psychological ownership had been negatively and significantly related to both job withdrawal and work withdrawal. These results indicated that feelings of ownership for the organization increase the desire of hospital nurses to stay with the organization and decrease their work withdrawal behaviors. Although previous studies did not examine the relationship between psychological capital, psychological ownership, and withdrawal behaviors, the current study provided useful results and unique insights in the field of organizational behavior and positive psychology.

7.1 Practical implications

According to the results of current study, employees who were more efficacious, hopeful, resilient, and optimistic may be more satisfied and committed better than their counterparts with lower psychological capital. Consequently, developmental efforts which focus on enhancing psychological capital in hospital nurses and their leaders may offer a strong return on investment (Walumbwa *et al.*, 2010). Luthans, Youssef, *et al.* (2007) indicated that the investment in psychological capital may yield very substantial returns beyond the other more traditional forms of capital investment. Research suggested that component of efficacy, hope, resilience and optimism, as well as overall psychological capital can be developed through training interventions (see Luthans *et al.*, 2006; Luthans *et al.*, 2008; Luthans *et al.*, 2010; Luthans, Youssef, *et al.*, 2007).

With respect to psychological ownership, Van Dyne and Pierce (2004) indicated that managers may want to pay special attention to employee's feelings of possession when employee's attitudes (e.g., satisfaction and commitment) were critical to work effectiveness. Consequently, managers may want to design work to give employees the opportunity to exercise control, to acquire knowledge, and personally to invest in their work (Van Dyne and Pierce, 2004). Pierce *et al.* (2004, p. 528) speculated that "having control over organizational processes (e.g., strategic goal-setting and resource distribution and so on) would have more impact on feelings of ownership for the organization than having control over "lower-level" issues, such as specific work procedures". The managers of governmental hospitals must strive to give nurses enough autonomy and allow them to participate in decision making. These can enhance their sense of psychological ownership for the organization (Md-Sidin *et al.*, 2010).

7.2 Limitations and suggestions for future research

The present study investigated the direct and interactive effects of psychological capital and psychological ownership on nurses' attitudes and behaviors who work in governmental hospitals. Those nurses have job withdrawal and work withdrawal chances to work at private hospitals or medical centers either temporarily or permanently. Additionally, the governmental hospital is a public property and not a private one and the nurses, working in, are not legal owners of it. Consequently, nurses' ownership feelings in this study go back to psychological ownership and not to legal ownership.

The present study investigated only the psychological ownership for the organization. There is still a wide scope in front of future research to examine the psychological ownership for the job, work, or goal relationship to nurses' attitudes and behaviors. Future research should continue to explore the unique contribution of psychological capital and psychological ownership for understanding employee's attitudes and behaviors in other

public institutions (such as academic institutions and schools) and private institutions. Specifically, research may investigate the effects of psychological capital and psychological ownership on permanent employees' attitudes and behaviors versus temporary employees.

Future research also should investigate the direct and interactive effects of psychological capital and psychological ownership on other variables such as loyalty, trust, and job insecurity. Future studies need to examine the relationship between psychological capital or psychological ownership and other concepts such as autonomy, organizational support, and psychological empowerment. Future work may study the influence of positive leadership styles such as servant and empowering leadership on psychological capital or psychological ownership.

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