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Work engagement among managers and professionals in Egypt

Potential antecedents and consequences

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Abstract

Purpose – The purpose of this paper is to examine potential antecedents and consequences of work engagement in a sample of male and female managers and professionals employed in various organizations and industries in Egypt.

Design/methodology/approach – Data were collected from 242 respondents, a 48 percent response rate, using anonymously completed questionnaires. Engagement was assessed by three scales developed by Schaufeli *et al.*; vigor, dedication, and absorption. Antecedents included personal demographic and work situation characteristics as well as measures of need for achievement and workaholic behaviors; consequences included measures of work satisfaction and psychological well-being.

Findings – The following results are observed. First, both need for achievement and one workaholic job behavior are found to predict all three engagement measures. Second, engagement, particularly dedication, predict various work outcomes (e.g. job satisfaction, intent to quit). Third, engagement, again, particularly dedication, predicted various psychological well-being outcomes but less strongly than these predicted work outcomes.

Research limitations/implications – Questions of causality cannot be addressed since data were collected at only one-point in time. Longitudinal studies are needed to determine the effects of work life experiences on engagement.

Practical implications – Organizations can increase levels of work engagement by creating supportive work experiences (e.g. control, rewards, and recognition) consistent with effective human resource management (HRM) practices. But caution must be exercised before employing North American practices in the Egyptian context.

Originality/value – This paper contributes to the understanding of work engagement among managers and professionals and HRM more broadly in a large Muslim country.

Keywords Managers, Egypt, Job satisfaction, Career development

Paper type Research paper



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Work

engagement

Introduction

Organizations today are grappling with new challenges as they strive to remain competitive. These include increased financial turbulence, heightened performance pressures, new technology, an increasingly diverse workforce, and the globalization of business (Burke and Cooper, 2004; O'Toole and Lawler, 2006; Sisodia *et al.*, 2007). Organizational leaders are increasingly concluding that a unique competitive advantage resides in their human resources: all other potential competitive advantages (e.g. technology, capital, and products) can be either bought or copied (Gratton, 2000; Lawler, 2003, 2008; Pfeffer, 1994, 1998; Burke and Cooper, 2005).

Organizations need to unleash the talents and motivations of all their employees if they are to achieve peak performance (Burke and Cooper, 2007; Katzenbach, 2000; Leiter and Bakker, 2010; Ulrich, 1997). There is considerable evidence, however, that many organizations are falling short (Burke and Cooper, 2008; Sirota *et al.*, 2005). Recent efforts to improve organizational performance have begun to emphasize positive organizational behavior concepts and positive emotions (Cameron *et al.*, 2003; May *et al.*, 2004; Bakker and Schaufeli, 2008). This includes concepts such as optimism, trust, and engagement. Much of the earlier organizational behavior research focused on negative concepts and emotions such as job dissatisfaction, alienation, burnout, and intent to quit.

Work engagement has emerged as the most prominent positive organizational concept, particularly among organizational consultants (Leiter and Bakker, 2010; Schaufeli and Salanova, 2007, 2008). In fact practical interest in work engagement has outstripped the currently available research evidence. Issues such as what work engagement is, why it matters, how and why it benefits individuals and organizations, and if and how it can be increased, still need to be addressed.

This research examines potential antecedents and consequences of work engagement among managers and professionals in Egypt. We will first review some of the writing on work engagement and then consider the relevance of the work engagement concept for an Islamic country.

Literature review

Work engagement: definition, measures, and research evidence

Work engagement has received increasing research attention over the past ten years, reflecting this emphasis (Kahn, 1992; Leiter, 2005; Schaufeli and Bakker, 2004b; Schaufeli *et al.*, 2003). Engaged workers are energetic, are positively connected to their work and feel they are doing their jobs effectively (Leiter and Bakker, 2010). It is a persistent and broad affective-cognitive state. Schaufeli *et al.* (2002), view it as a positive, fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption. Vigor is characterized by high levels of energy, the willingness to invest energy in one's work and persistence in difficult times; dedication is characterized by high levels of work involvement and feelings of pride and challenge from one's work; and absorption is characterized by deep concentration in one's work the sense that time passes quickly and one is reluctant to leave their work. Others have defined work engagement in slightly different but generally consistent ways (Harter *et al.*, 2002; May *et al.*, 2004; Sirota *et al.*, 2005).

The most commonly used measure of work engagement was developed by Schaufeli *et al.* (2002) and comprises three components: vigor, dedication, and absorption. The accumulating research findings have shown that the measures of the three

engagement concepts are reliable, stable, and valid (Schaufeli *et al.*, 2006; Schaufeli and Salanova, 2007, 2008).

Organizational behavior researchers have considered work engagement as independent, dependent, and moderator variables in various studies. Here, is a sample of their results.

Engagement as an independent variable. Harter et al. (2002) found that levels of engagement were positively correlated with business-unit performance (e.g. customer satisfaction and loyalty, unit profitability, unit productivity, turnover levels, and safety) in almost 8,000 business units within 36 organizations. Engagement correlated 0.22 with a composite measure of performance, which increased to 0.38 when measurement error and restriction of range were taken into account. Salanova et al. (2005), in a study of front-line service workers and their customers, reported that work engagement predicted service climate which in turn predicted employee performance and then customer loyalty. Demerouti and Cropanzano (2010) and Schaufeli and Salanova (2007, 2008), based on their review of the work engagement literature, concluded that engagement is associated with positive employee attitudes, proactive job behaviors, higher levels of employee psychological well-being, and increased individual job and organizational performance (Bakker et al., 2008).

Engagement as a dependent variable. In a multi-sample study, Schaufeli and Bakker (2004a) found support for the job demands-resources model. Structural equation modeling revealed that job demands (workload, emotional demands) were positively related to burnout, but not to engagement, and job resources (social support, supervisor coaching, and feedback) were positively related to engagement and negatively related to burnout. In addition, burnout fully mediated the impact of job resources on health problems, and engagement mediated the effect of job resources on turnover intention. The authors concluded that two underlying processes can explain these results, an effort-driven high-demand process leading to burnout, which then leads to health problems, and a motivational process in which available job resources foster engagement and affect behavioral work outcomes. Hakanen and Roodt (2010) come to similar conclusions.

Mauno *et al.* (2005b), in a study of subjective job insecurity among either permanent or fixed-term employees reported lower work engagement among permanent employees. Mauno *et al.* (2005a) also found different predictors of work engagement in different organization sectors.

Demerouti et al. (2001), in a study of employees from an insurance company, reported that high-work demands and high control were associated with higher engagement. Mauno et al. (2005a) also reported an association of high-time pressures with higher levels of engagement.

Engagement as a moderator variable. Leiter and Harvie (1998), in a study of a large-scale organizational change in a hospital setting, reported that work engagement moderated the relationship of supportive supervision, confidence in management, effective communication and work meaningfulness and acceptance of the change.

In a study of the correspondence between supervisors and staff members during major organizational changes, Leiter and Harvie (1997) demonstrated supervisors' confidence in the organization, their work engagement and assessment of work hazards, contributed to predicting staff members' engagement, and supervisor cynicism and exhaustion contributed to staff member cynicism and professional efficacy.

Salanova and Schaufeli (2008), in two large samples of Spanish and Dutch managers and employees, reported that engagement (vigor, dedication) fully mediated the relationship of job resources (job control, feedback, and variety) and proactive work behaviors.

It is important to study engagement because it is linked to positive individual and work-related outcomes (Schaufeli and Salanova, 2007, 2008). The present study examines potential predictors and consequences of work engagement in a sample of men and women managers and professionals working in various organizations and industries in Egypt. While there is some consensus on the workplace antecedents of engagement (e.g. support, feedback, and coaching) and consequences of work engagement (e.g. commitment, satisfaction), there is less agreement on personal characteristics (e.g. demographics and personality factors) associated with levels of work engagement. The question of who are engaged workers therefore needs additional attention. Schaufeli and Salanova (2007, 2008) found inconsistent or at best small effects due to demographic characteristics, and among personality factors, some evidence that individuals high on extraversion and low on neuroticism reported higher levels of work engagement. In addition, occupation type and organizational level had some effects on engagement; managers, executives, and entrepreneurs score relatively high on engagement while blue collar workers, police officers, and home care staff score relatively low on engagement.

Who are your engaged workers? Two lines of previous research are likely to shed some light on this question. First, there is a considerable body of work examining the relationship of need for achievement and positive individual contributions (McClelland, 1985; Steers and Braunstein, 1976). Individuals scoring high on McClelland's need for achievement strive to excel, they seek out feedback on how they are performing, they are more concerned with reaching their objectives than with whatever rewards might follow from this success, they set challenging but realistic goals, and they spend lots of time thinking about how they might do things better. Second, an emerging stream of research has shown relationships of workaholic behaviors and work engagement-type outcomes (Burke, 2007; Burke and Cooper, 2008). Workaholism is generally seen as a stable individual difference characteristic. Mudrack (2007), for example, has developed measures of two workaholic behavior patterns (non-required work, control of others) that were likely to be associated with levels of work engagement.

Islamic work ethic and values

Very little attention has been devoted to understanding the Islamic work ethic (IWE) and values; the vast majority of the writing and research on the work ethic and work values has been conducted in north America and western Europe. Is the IWE consistent with being work engaged? Ali (2005), more than any other academic, has examined the IWE. The IWE views work as a virtue, necessary for contributing to a balanced life. Ali (2005) identified four components in the IWE: effort, competition, transparency, and socially responsible conduct. Effort is held in high reared in the IWE. These four components produce benefits for both the individual and the community.

Ali developed an IWE scale and reported data from 150 Arab Muslim students attending US universities. This sample scored high, having a mean of 4.3 on a five-point scale. He then administered a shorter version of the IWE to managers in some Arab countries (Kuwait, UAE, and Saudi Arabia) and again reported high scores,

the means in these countries being greater than 4.0. Thus, individuals in the Middle East indicate generally high scores on the IWE.

One must approach these data with caution however. Because managers and university students from the Middle East score high on the IWE does not mean that they work hard or work effectively in their jobs and organizations. Work engagement, as a concept, does seem consistent with the IWE and both valid and relevant to Egyptian employees and their employing organizations.

In addition, other factors in Egypt may influence levels of employee work engagement. The cultural values in Egyptian society as a whole, and organizations more specifically, are patriarchal and hierarchical. Hofstede (1980) found that all Middle Eastern countries shared similar societal and cultural values. These countries indicated large power differences, scored high on uncertainty avoidance, scored high on collectivism, and scored slightly above average on masculinity. Men have been shown to harbor negative views of the ability of women to succeed in organizations (Mostafa, 2003; Whiteoak *et al.*, 2006). Many Egyptian organizations are family-owned and family-managed, with preference given to family members. There has been relatively little human resource management (HRM) research carried out in Egypt; human resources have not been considered a priority (Budhwar and Mellahi, 2007).

Objectives of the research

The following general hypotheses, building on the reviews of Schaufeli and Salanova (2007, 2008) were considered:

- H1. Personal demographic characteristics such as age and gender would be unrelated or only weakly related to levels of work engagement.
- H2. Particular stable individual difference characteristics (e.g. workaholic behaviors, need for achievement) would be positively related to levels of work engagement.
- H3. Work engagement would in turn be positively associated with both work outcomes such as job and career satisfaction and indicators of psychological well-being such as low levels of exhaustion and psychosomatic symptoms.

Method

Procedure

Data were collected between October 2008 and January 2009 from service and manufacturing organizations in two Egyptian cities (Alexandria and Cairo). Members of the research team contacted about 50 organizations in these cities requesting their participation in the research. The 24 cooperating organizations then provided a list of managers and professionals to the researchers. Service organizations included telecommunications, banks, educational institutions, and a maritime service provider. Manufacturing organizations included pharmaceutical, petroleum, and production companies focusing upon production of milk, juice, and food. Approximately, 500 managers and professionals were contacted of which 242 provided completed questionnaires, a 48 percent response rate. Questionnaires were completed anonymously in English. The respondents are best described as a large convenience

Respondents

Table I presents the demographic characteristics of the sample. Over half were male (60 percent), almost all worked full-time (93 percent), over half were 30 years of age or younger (61 percent), most were single (62 percent), without children (64 percent), were university graduates (95 percent), worked 40 hours a week or less (42 percent), were in middle management (33 percent), supervised others (66 percent), earned over LE25,000 a year of income (46 percent), had relatively short job and organizational tenures (60 percent having two years or less of job tenure and 37 percent having two years or less of organizational tenure), and worked in organizations of varying sizes, the average being about 1,000 employees. Respondents fell into several functions: IT and logistics, 16 percent; marketing and sales, 14 percent; finance, 13 percent; production, 11 percent; and customer service, 9 percent.

Measures

Work engagement. Three aspects of work engagement were measured using scales developed by Schaufeli et al. (2002) and Schaufeli and Bakker (2004b).

Vigor was measured by six items ($\alpha = 0.72$). "At my work I feel bursting with energy" dedication was assessed by five items ($\alpha = 0.88$). "I am proud of the work that I do." Absorption was measured by six items ($\alpha = 0.74$) "I am immersed in my work" respondents indicated their agreement with each item on a five-point Likert scale (1 – strongly disagree, 3 – neither agree nor disagree, and 5 – strongly agree).

Personal demographics and work situation characteristics. A number of personal demographics (e.g. age, gender, education, marital, and parental status) and work situation characteristics (e.g. organizational level, job, and organization tenure) were measured by single items (Table I). These included the following measures.

Stable individual difference characteristics. Need for achievement. Need for achievement (Nach) was measured by a five-item scale ($\alpha = 0.62$) developed by Steers and Braunstein (1976). One item was "I try very hard to improve on my past performance at work."

Workaholic behaviors. Two workaholic behavior scales developed by Mudrack (2007) were included. One, non-required work, had four items ($\alpha=0.82$). An item was "Thinking of ways to improve the quality of work provided to customers and/or coworkers." The other, control of others, also had four items ($\alpha=0.74$). One item was "Fixing problems created by other people."

A wide range of outcome variables were included in this study covering both work and extra-work domains. These variables were consistent with those typically used in studies of work and well-being more generally (Barling *et al.*, 2005; Schabracq *et al.*, 2003).

Work outcomes. Job satisfaction was measured by a seven-item scale ($\alpha = 0.80$) developed by Kofodimos (1993). An item was "I feel challenged by my work." Respondents indicated their levels of satisfaction on a five-point Likert scale (1 – very dissatisfied, 3 – neutral, and 5 – very satisfied).

Career satisfaction was measured by a five-item scale ($\alpha = 0.88$) developed by Greenhaus *et al.* (1990). One item was "I am satisfied with the success I have achieved in my career." Respondents indicated their levels of satisfaction on a five-point Likert

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	n	%
Gender		
Male	146	60.3
Female	96	39.7
Work status		
Full time	226	93.4
Part time	16	6.6
Marital status	10	0.0
Married	92	38.0
Single	150	62.0
Parental status	100	02.0
Children	86	35.5
No children	156	64.5
Education	100	01.0
High school	12	5.0
Bachelors	185	80.6
Masters	35	14.4
Hours worked	30	14.4
40 or less	102	42.1
41-45	51	21.1
46-50	49	20.7
51-55	7	2.9
56-60	20	8.2
61 or more	12	5.0
Organizational level		
Non-management	70	28.9
Lower management	56	23.1
Middle management	80	33.1
Senior management	36	14.9
Organizational tenure		
1-2 years	90	37.2
3-5	55	22.7
6-10	56	23.2
11 or more	41	16.9
Organizational size		
250 or less	59	20.2
251-500	36	14.9
501-1,000	47	19.4
1,001-2,000	34	14.1
2,001-5,000	70	28.9
5,001 or more	6	2.5
Age	Ŭ	=. 0
25 or less	73	30.2
26-30	74	30.5
31-35	29	12.0
36-40	13	5.4
41-45	13	5.4
	40	
46 or older	40	16.5
Length of marriage	26	40.0
1-5 years	36	40.0
6-10	13	14.4
		(continued)

Table I.
Demographic
characteristics of sample

	n	%	Work
11-15	7	7.8	engagement
16-20	19	21.1	
21-25	17	18.9	
26 or more	4	4.4	
Number of children	_		40
0	155	64.0	49
1	27	11.2	
2	44	18.2	
3 or more	16	6.6	
Income (LE)	10	0.0	
10,000 or less	62	25.6	
10,001-15,000	16	6.6	
15,001-20,000	22	9.1	
20,001-25,000	30	12.4	
25,001 or more	112	46.3	
Supervisory duties	112	10.0	
Yes	161	66.5	
No	81	33.5	
Job tenure	OI.	00.0	
1-2 years	145	59.9	
3-5	51	21.1	
6-10	43	17.8	
11 or more	3	1.2	
Function	Ü	1.2	
Finance	32	13.2	
Production	26	10.7	
IT	23	9.5	
Customer service	22	8.1	
Marketing	18	7.4	
Sales	17	7.0	
Logistics	17	7.0	Table I.

scale (1 - very satisfied, 3 - neither satisfied nor dissatisfied, and 5 - very dissatisfied).

Job stress was measured by a nine-item scale ($\alpha = 0.59$) developed by Spence and Robbins (1992). An item was "Sometimes I feel like my work is going to overwhelm me."

Intent to quit ($\alpha = 0.84$) was measured by two items (e.g. "are you currently looking for a different job in a different organization?"), using a yes/no format. This scale had been used previously by Burke (1991).

Psychological well-being. Psychosomatic symptoms was measured by 19 items ($\alpha=0.85$) developed by Quinn and Shepard (1974). Respondents indicated how often they experienced each physical condition (e.g. headaches) in the past year on a four-point frequency scale (1 – never, 4 – often).

Emotional exhaustion. It was measured by a scale from the Maslach Burnout Inventory (Maslach *et al.*, 1996). The scale had nine items ($\alpha = 0.74$). One item was "I feel emotionally drained from my work." Responses were made on a seven-point frequency scale (1 - never, 7 - daily).

Results

Work-family conflict was measured by a nine-items scale ($\alpha = 0.83$) developed and validated by Carlson et al. (2000). Three forms of conflict, time-, strain- and behavior-based were each measured by three items. One item was "My work keeps me from my family activities more than I would like."

Descriptive statistics

The three work engagement measures were significantly and positive inter-correlated (p < 0.001): vigor and dedication, 0.53; vigor and absorption, 0.54; and dedication and absorption, 0.50. These values were consistent with those reported by Schaufeli and Salanova (2007) who found these to typically be about 0.65. The mean values for

the engagement scales were also moderately high and fairly typical of employed managerial and professional samples: vigor, 3.5; dedication, 3.3; and absorption, 3.5.

Predictors of work engagement

Personal demographic, work situation, and personality factors. Hierarchical regression analyses were first undertaken in which the three measures of work engagement were regressed on three blocks of predictors. The first block of predictors (n = 5) consisted of personal demographic characteristics (e.g. age, marital status, and level of education). The second block of predictors (n = 4) consisted of work situation characteristics (e.g. organizational level, organizational, and job tenure). The third block of predictors (n = 3) consisted of the measure on Nach and the two-workaholic job behaviors. When a block of predictors accounted for a significant amount on increment in explained variance on a given outcome variable (p < 0.05), all measures within such blocks having significant and independent relationships with this outcome (p < 0.05) were identified. The sample size for all regressions reported in this manuscript was 241.

Personal demographic, work situation, and personality factors. Table II presents these results. The following comments are offered in summary. First, all three blocks of predictors accounted for a significant amount or increment in explained variance on vigor. Men, single employees, employees in smaller organizations and those scoring higher on non-required work or on Nach reported higher levels of vigor (Bs = 0.30, 0.20, 0.14, 0.38, and 0.12, respectively). Second, two of the three blocks of predictors accounted for a significant amount or increment in explained variance on dedication (not work situation characteristics). Respondents who were single, less highly educated, men, and those scoring higher on non-required work and on Nach indicated higher levels of dedication (Bs = 0.25, 0.17, 0.13, 0.28, and 0.18, respectively). Third, all three blocks of predictors accounted for a significant amount or increment in explained variance on absorption. Managers having less education, working in smaller organizations, and reporting higher levels of Nach and on non-required work indicated higher levels of absorption (Bs = 0.21, 0.23, 0.28, and 0.24, respectively).

Two general observations are worth noting. First, men, respondents having less education, single individuals, and individuals working in smaller organizations were more work engaged. These findings, though indicating stronger and more consistent relationships than hypothesized, were, in general, supportive of our H1. Second, both Nach and one workaholic job behavior (non-required work) were significant predictors

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Work engagement	R	R^{2}	ΔR^{2}	P	Work engagement
Vigor					3.8.
Personal demographics Gender (0.30) Marital status (0.20)	0.27	0.08	0.08	0.01	
Work situation Organizational size (0.14)	0.34	0.12	0.04	0.05	51
Personality Non-required work (0.38) Nach (0.12) Dedication	0.51	0.26	0.14	0.001	
Personal demographics Marital status (0.25) Education level (0.17) Gender (0.13)	0.35	0.12	0.12	0.001	
Work situation Organizational level (0.18)	0.39	0.15	0.03	NS	
Personality Non-required work (0.28) Nach (0.18) Absorption	0.53	0.28	0.13	0.001	
Personal demographics Education level (0.21)	0.31	0.09	0.09	0.001	
Work situation Organizational size (0.23)	0.37	0.13	0.04	0.05	
Personality Nach (0.28) Non-required work (0.24)	0.52	0.26	0.13	0.001	Table II. Predictors of work engagement

of work engagement supporting our *H2*. These findings address the question of "who are your engaged employees?"

Consequences of work engagement. Consistent with previous research on the consequences of work engagement, indicators of both work outcomes and psychological well-being were included.

These were the following.

Predictors of work outcomes. Table III presents the results of hierarchical regression analyses in which four work outcomes were regressed on three blocks of predictors (personal demographics, work situation characteristics, and measures of work engagement). Work engagement accounted for a significant increment in explained variance in all cases. Let us first consider job satisfaction. All three blocks of predictors accounted for a significant amount or increment in explained variance. Respondents in shorter marriages, men, younger respondents, those having longer organizational tenure, those working in smaller organizations, those having shorter job tenure, those at higher organizational levels, and managers scoring higher on dedication, scoring higher on vigor, and lower on absorption indicated more job satisfaction (Bs = 0.30, 0.13, -0.21, 0.24, -0.16, -0.25, 0.15, 0.40, 0.24, and -0.20, respectively).

Two of the three blocks of predictors accounted for a significant increment in explained variance on career satisfaction (not personal demographics). Respondents at

AJEMS 1,1	Work outcomes	R	R^{2}	ΔR^2	P
1,1	Job satisfaction Personal demographics Length of marriage (0.30) Gender (0.13)	0.24	0.06	0.06	0.05
52	Age (-0.21) Work situation Organizational tenure (0.24) Organizational size (-0.16) Job tenure (-0.25) Organizational level (0.15)	0.44	0.20	0.14	0.001
	Engagement Dedication (0.48) Absorption (-0.20) Vigor (0.24) Career satisfaction	0.67	0.45	0.25	0.001
	Personal demographics	0.21	0.04	0.04	NS
	Work situation	0.29	0.08	0.04	0.05
	Organizational size (0.12)	0.23	0.00	0.04	0.00
	Engagement Dedication (0.55) Absorption (-0.40) Vigor (0.22) Job stress	0.61	0.38	0.30	0.001
	Personal demographics	0.20	0.04	0.04	NS
	Work situation Organizational tenure (0.20)	0.26	0.04	0.03	0.05
	Engagement Vigor (0.24) Dedication (-0.16) Intent to quit	0.38	0.14	0.07	0.001
	Personal demographics Gender (0.29) Age (-0.31) Marital status (0.19) Education level (-0.13)	0.36	0.13	0.13	0.001
	Work situation	0.39	0.16	0.03	NS
Table III. Work engagement and work outcomes	Engagement Dedication (-0.36) Vigor (-0.21) Absorption (0.19)	0.56	0.31	0.15	0.001

higher organizational levels, those scoring higher on dedication, and higher on vigor, and lower on absorption, indicated more satisfaction with their careers (Bs = 0.12, 0.55, 0.22, and -0.40, respectively).

Two blocks of predictors accounted for significant increments in explained variance on job stress (not personal demographics). Managers having longer organizational tenure, those scoring higher on vigor, and those scoring higher on dedication, indicated higher levels of job stress (Bs = 0.20, 0.24,and 0.16,respectively).

Finally, two blocks of predictors (not work situation characteristics) indicated a significant amount or increment in explained variance on intent to quit. Men, younger

respondents, those that were single, more educated respondents, respondents scoring lower on dedication, and on vigor, but scoring higher on absorption indicated a greater intent to quit (Bs = 0.29, 0.31, 0.19, 0.13, -0.36, -0.21, and 0.19, respectively). More research is needed to determine whether the findings involving absorption are real or a statistical artifact.

Predictors of psychological well-being. Table IV shows the results of hierarchical regression analyses in which three measures of psychological well-being were regressed on the same three blocks of predictors. The measures of work engagement accounted for a significant increment in explained variance on all three indicators of well-being.

Let us first consider exhaustion. Two blocks of predictors (not work situation characteristics) accounted for a significant amount or increment in explained variance on exhaustion. Women, managers scoring lower on dedication, and managers scoring higher on absorption, reported higher levels of exhaustion (Bs = 0.11, -0.25, and 0.19, respectively).

Two blocks of predictors (not personal demographics) accounted for a significant amount or increment in explained variance on work-family conflict. Managers working in larger organizations, managers at lower organizational levels, and managers scoring higher on absorption, indicated higher levels of work-family conflict (Bs = 0.20, -0.17, and 0.25, respectively).

All three blocks of predictors accounted for a significant amount or increment in explained variance on psychosomatic symptoms. Older, managers in shorter marriages, managers working in smaller organizations, managers scoring lower on

Psychological well-being	R	R^2	ΔR^2	P
Exhaustion				
Personal demographics Gender (0.34)	0.33	0.11	0.11	0.001
Work situation	0.38	0.14	0.03	NS
Engagement	0.45	0.20	0.06	0.001
Dedication (-0.25)				
Absorption (0.19)				
Work-family conflict				
Personal demographics	0.21	0.04	0.04	NS
Work situation	0.32	0.10	0.06	0.01
Organizational size (0.20)				
Organizational level (-0.17)				
Engagement	0.38	0.14	0.04	0.05
Absorption (0.23)				
Psychosomatic symptoms				
Personal demographics	0.31	0.10	0.10	0.001
Age (0.56)				
Length of marriage (-0.29)				
Work situation	0.39	0.16	0.06	0.01
Organizational size (-0.17)				
Engagement	0.48	0.23	0.07	0.001
Vigor (-0.35)				
Absorption (0.26)				

Table IV. Work engagement and psychological well-being

vigor and managers scoring higher on absorption indicated more psychosomatic symptoms (Bs = 0.56, -0.29, -0.17, -0.35, and 0.26, respectively).

In all three analyses (exhaustion, work-family conflict, and psychosomatic symptoms) managers indicating higher levels of absorption also reported more negative psychological well-being. Managers indicating higher levels of vigor and dedication also reported fewer psychosomatic symptoms and lower levels of exhaustion, respectively. Although the three work engagement components are significantly and positively inter-correlated, they seem to sometimes relate to outcomes in opposite directions. It may well be that absorption is a particularly debilitating form on work engagement having adverse consequences. These latter findings may also be a statistical artifact rather than a valid result however.

These results provided support for our H3. Again, two more general observations are worth noting. First, dedication was more strongly and consistently related to both work and well-being outcomes than were the two other engagement measures. Second, work engagement accounted for greater increments in explained variance on the work outcomes than on the indicators of psychological well-being.

Discussion

This research examined potential antecedents and consequences of work engagement in a large sample of managers and professionals working in various organizations and industries in Egypt. An increasing number of organizations are concluding that they need to unleash the untapped potential of all their employees if they are to compete successfully in an increasingly demanding global market place (Burke and Cooper, 2008; Lawler, 2008).

The results indicated that both personal demographic and work situation characteristics and stable individual difference motivations represented by need for achievement (McClelland, 1985) and workaholic job behaviors (Mudrack, 2007) were consistent and strong predictors of all three engagement factors: vigor, dedication, and absorption (Table II). The consistent relationships of personal demographic and stable personality factors with levels of work engagement were at odds with earlier conclusions of Schaufeli and his colleagues and warrant further study.

Work engagement, in turn, was found to have fairly consistent, but moderate, relationships with several work outcomes and indicators of psychological well-being (Tables III and IV). Engagement, it seems, has potentially positive consequences for both employees and their employing organizations.

Why should work engagement be associated with valued individual and organizational-level work and well-being outcomes? Work engagement is a positive, satisfying, feeling, and motivational state of well-being at work. Engaged employees have more energy, are more job involved and more strongly identified with their work (Leiter and Bakker, 2010). Work engagement diminishes job burnout. Work engaged employees will embrace more challenging work; engaged workers use more of their talents. Engagement seem to produce an upward spiral in which "the rich get richer"; in work terms, engaged workers invest more in their work acquire more skills, and then commit themselves to even more challenging assignments which in turn leads to increasing levels of work engagement.

What characteristics and experiences foster work engagement. On the one hand, some individual personality characteristics (e.g. need for achievement, proactive

personality) are associated with higher levels of work engagement. On the other hand, work engagement results from job resources such as support and encouragement at work, feedback on performance about one's job performance, opportunities to use a wide variety of skills, discretion in how one undertakes one's job, chance to learn, initiatives that reduce the negative effects of workplace demands, and when employees values fit their organization's vision and mission. Both individual and organizational factors play an important role in the experience of being truly work engaged.

Practical implications

The accumulating research findings on work engagement have added considerably to our understanding of implications for building more effective organizations. The research that has considered the organizational environment associated with high levels of work engagement has reported that organizational support plays a central role (Demerouti *et al.*, 2001). Fortunately there is some understanding of the processes on mechanisms that underlay levels of support (Leiter and Maslach, 2010).

Leiter (2005) offers a comprehensive look at interventions in the workplace designed to enhance engagement with work. Increasing engagement with work is a challenging and complex undertaking. As the research findings show, engagement stems from the employees contact with a work environment.

Leiter offers a conceptual framework to build engagement with work that considers the targets of intervention, strategies for intervention and potential consequences. Intervention targets include energy at work, involvement with one's work, and efficacy at work. Intervention strategies involve both individuals and organizational or workplace levels. It is critical to remember that individuals have different views and values about work — which can change over time — and that employees must participate in building engagement at work. Finally, the six areas of work life considered in the present study can serve as targets for change (e.g. workload, control, rewards, and recognition).

Schaufeli and Salanova (2007, 2008) suggest a number of ways to build work engagement. These include:

- · enhancing the person-job fit;
- · matching individual and organizational needs;
- developing a meaningful psychological contract that links personal goals of individual employees with organizational resources;
- surveys of employee demands and resources and their association with positive and negative outcomes;
- job redesign that reduces stressors and increases resources;
- leadership development that build a positive emotional climate in the workplace;
 and
- developing training programs that are targeted at both organizational health and individual well-being.

Our findings suggest that engagement at work is associated with positive work and individual well-being outcomes and that stable individual difference factors are a major contributor to levels of employee engagement. They are consistent with the results of an increasing number of recent studies (Gonzalez-Roma *et al.*, 2006; Hakanen

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et al., 2005; Langelaan et al., 2006; Montgomery et al., 2003; Sonnentag, 2003) reflecting the importance of understanding and increasing employee engagement. Our findings extend our understanding of engagement in ways that have practical implications such as those suggested by Schaufeli and Salanova (2007) who suggest that selection, goal setting and the articulation of a challenging "contract" between the individual and the organization are ways to heighten engagement.

The Egyptian reality

Egypt is a country that currently has high levels of unemployment, relatively low levels of personal income, is in transition from government (state) managed enterprises to private sector ownership and management, has a high proportion of family-owned and managed enterprises, and is making relatively slow economic progress.

The respondents in our sample expressed relatively high intentions to quit their current jobs in the current year. It is not clear, however, what alternatives they are contemplating, particularly in light of the current world-wide economic downturn. This raises the issue of whether the relatively young men and women in our sample will have to continue in jobs that they would prefer to change; a reality that likely erodes work engagement. Egyptian organizations therefore may be facing significant challenges as they make efforts to improve levels of employee work engagement.

A word of caution

The individual and organizational benefits of work engagement found in this sample of Egyptian managers' replicates results obtained in several other countries (Schaufeli and Salanova, 2007, for a review). HRM initiatives designed to increase work engagement have typically been proposed for the highly developed countries in the world (the USA, Canada, The Netherlands). There is evidence (Hofstede, 1980) that the societal and cultural values of Egypt, though changing and moving slowly towards those in the West, are different from those in Western developed countries. Some writers (Aycan, 2001; Wasti, 1998) have cautioned against the direct application of Western HRM approaches to Turkey in the case of Aycan, or more broadly, in the case of Wasti. We believe these cautions should be heeded. Aycan (2001) suggests that greater attention be paid to adapting Western-based HRM practices to the Turkish culture and values and/or preparing Turkish employees for the introduction of Western HRM practices.

Limitations

This research has some limitations. First, all data were collected using self-report questionnaires raising the possibility of responses being affected by a common-method. Second, the data were collected at one-point in time making it difficult to establish causal relationships. Third, a few of the measures had levels of internal consistency reliability below the generally accepted level of 0.70. Fourth, the extent to which these findings generalize to respondents working in other industrial sectors or respondents in other countries is not clear.

Future research directions

Several future research directions would add to our understanding of work engagement in Egyptian organizations. First, it is necessary to replicate this study

in other samples, occupations and industrial sectors. Second, other stable personality characteristics (e.g. proactive personality, big five) should be considered. Third, a wider array of work contributions such as organizational citizenship behaviors, team contributions, attendance, and job performance would highlight the organizational benefits following from engaged workers. Fourth, there is a need for longitudinal research to examine the effects of an upward spiral of increasing work engagement over time. Finally, given that so much is known about work engagement generally, intervention studies in which efforts are made to influence levels of work engagement should be designed and implemented.

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