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THE ROLE OF TENURE AS A MODERATOR TO WORK ENGAGEMENT AND JOB SATISFACTION

A Thesis

Presented to

The Faculty of the Department of Psychology

San José State University

In Partial Fulfillment

of the Requirements of Degree

Master of Science

by

Julie Katherine Rice

May 2009

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The Undersigned Thesis Committee Approves the Thesis Titled

The Role of Tenure as a Moderator to
Work Engagement and Job Satisfaction

by
Julie Katherine Rice

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ABSTRACT

THE ROLE OF TENURE AS A MODERATOR TO
WORK ENGAGEMENT AND JOB SATISFACTION

by Julie K Rice

The purpose of this study was to determine whether the three dimensions of work engagement predicted any of the four dimensions of job satisfaction and whether tenure is a moderator to that relationship. Results of this study do not support the proposition that tenure moderates the relationship between the dimensions of work engagement and job satisfaction. However, vigor and dedication do predict a significant portion of the variance in satisfaction with coworkers and supervision. Dedication also accounts for some of the variance in satisfaction with compensation.

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TABLE OF CONTENTS

Introduction 1

Work Engagement Defined 2

Work Engagement Conceptualized 2

Work Engagement Literature Review 4

Job Satisfaction Defined 7

Job Characteristics Theory of Job Satisfaction 8

Relationship between Work Engagement and Job Satisfaction 9

Relationship between Job Burnout and Job Satisfaction 9

The Role of Organizational Tenure 11

Hypothesis 12

Methods 13

Participants 13

Procedure 14

Measures 14

Results 17

Analyses 19

Additional Analysis 25

Discussion 26

Study Limitations and Directions for Further Research 27

Practical Implications 29

References 30

LIST OF TABLES

Table 1	Means, Standard Deviations and Correlations for the Dimensions of Work Engagement, Job Satisfaction and Tenure	18
Table 2	Factor Analysis of the Job Satisfaction Scale	20
Table 3	Factor Analysis of the Utrecht Work Engagement Scale	21
Table 4	Results of Hierarchical Regression Analyses for the Moderating Effect of Tenure	22

Introduction

"Americans are growing increasingly unhappy with their jobs" (The Conference Board, 2007, ¶1). In a survey of 5,000 U.S. households, the Conference Board found that less than half of Americans are satisfied with their jobs. This is down from the 61 percent reported twenty years ago (The Conference Board, 2007). Individuals who like their jobs often experience a connection or commitment to their work (Thorsen, Kaplan, Barsky, Warren & Chermont, 2003). It is this connection and commitment that has piqued the interest of organizational members and researchers to study positive job attitudes.

The purpose of this study is to examine whether work engagement predicts job satisfaction and if tenure acts as a moderator to this relationship. This study makes a unique contribution to the literature by examining the relationship between the individual facets of work engagement and the individual facets of job satisfaction along with how tenure affects this relationship. To date, no research has been conducted that examines the relationship between dimensions of work engagement and job satisfaction. By understanding this relationship, upper level management can implement changes that can improve both work engagement and job satisfaction.

Work Engagement Defined

Work engagement is a positive work-related state of mind. According to Krueger and Killham (2005), employees experiencing work engagement are more passionate about their jobs and feel connected to their organization. These employees are better equipped to address issues in the workplace such as stress and change. They tend to be more driven and are key players in helping move the organization forward (Krueger and Killham, 2005).

Work engagement is thought to be persistent over time and not affected by one particular object, event, individual, or behavior (Schaufeli, Salanova, González-Romá, and Bakker, 2002). If work engagement is in fact persistent over time, the benefits of increasing work engagement could be long lasting. Engaged employees are enthusiastic about their job and wake up in the morning wanting to go to work. When the employees are at work, they will often be so engrossed in their work that they will lose track of time. An employee that is not engaged will be distracted by non-work related issues and not wanting to be at work (Saks, 2006). Employees experiencing work engagement are able to deal with the demands of their job due to a sense of energetic and effective connection with their work activities (Schaufeli et al., 2002).

Work Engagement Conceptualized

Work engagement is a relatively new area of interest. The concept of work engagement was first introduced by Kahn in 1990 as a type of personal

engagement, which is "the simultaneous employment and expression of a person's 'preferred self' in task behaviors that promote connections to work and to others, personal presence (physical, cognitive and emotional), and active, full role performances" (p. 700). Kahn's research premise was based on Hackman and Oldham's (1980) findings that people's attitudes and behaviors are driven by their psychological experience of work (Kahn, 1990, Hackman & Oldham, 1980).

In 1997 Maslach and Leiter redefined work engagement when they rephrased job burnout to be an erosion of work engagement. According to Maslach, Schaufeli and Leiter (2001), job burnout is the opposite of work engagement because "energy turns into exhaustion, involvement turns in to cynicism, and efficacy turns into ineffectiveness (p. 416)." They characterize engagement as energy, involvement and efficacy, which are the direct opposite of job burnout.

In 2002 Schaufeli, Salanova, González-Romá, and Bakker, operationalized work engagement and redefined it as a positive work-related state of mind that is characterized by three dimensions: vigor, dedication and absorption. Schaufeli et al. (2002), characterized the first dimension, vigor, as having high levels of energy and resilience, persistence and a willingness to invest effort into ones work. The second dimension, dedication is characterized by a sense of significance, inspiration, pride, enthusiasm, and challenge (Schaufeli et al., 2002). The final dimension that contributes to work engagement is

absorption. Absorption is characterized by having difficulties detaching oneself from work while fully concentrating and being deeply engrossed in work (Schaufeli et al., 2002). These three dimensions make up work engagement as conceptualized by Schaufeli and his colleagues.

Schaufeli et al.'s conceptualization of work engagement was used in this study because it was the first to provide empirical evidence that work engagement is a distinct construct from job burnout (Schaufeli et al., 2002, Gonzalez-Roma, Schaufeli, Bakker, & Lloret, 2006). This study is following the findings of Gonzalez-Roma et al. (2006) and treating job burnout and work engagement as two distinct independent constructs. This study is also following Schaufeli's conceptualization of work engagement as having three dimensions, however some studies have treated it unidimensionally and have simply called it work engagement, this study will follow Schaufeli in treating work engagement as multidimensional.

Work Engagement Literature Review

Early studies adopted Schaufeli's conceptualization of work engagement and found that it was a distinct independent construct from job burnout (Gonzalez-Roma et al., 2006). Later, studies examined the relationship between work engagement, job resources and job demands (Scaufeli & Bakker, 2004, Hakanen, Bakker, & Schaufeli, 2006, Llorens, Schaufeli, Bakker, & Salanova, 2007). For example, Schaufeli, and Bakker (2004) conducted a study on 1,698

employees of various organizations (insurance company, Occupational Health and Safety Service company, pension fund company and a home-care institution). The study found that job resources such as performance feedback, social support from colleagues and supervisory coaching, predict some variance in work engagement and with one sample found that engagement predicted turnover intention. Further research by Hakanen, Bakker, and Schaufeli (2006) found that work engagement actually moderates the effects of job resources on organizational commitment. Hakanen et al. (2006), conclude that increasing job resources potentially leads to higher levels of work engagement and stronger career commitment.

In 2007, Bakker, Hakenen, Demerouti and Xanthopoulou conducted a study on Finnish schoolteachers looking at job resources, work engagement and job demands. Bakker et al. (2007), found that job resources (supervisor support, innovativeness, information, appreciation and organizational climate) acted as a buffer on the negative effects of job demands (pupil misbehavior) on work engagement. As teachers experience more appreciation, their level of vigor increases even with high levels of pupil misbehavior. The same is true for organizational climate on dedication and innovativeness on absorption (Bakker et al., 2007). Therefore, by increasing appreciation, improving organization climate and becoming more innovative managers can decrease the negative effects of job demands on work engagement.

Llorens et al. (2007), found that task resources, efficacy beliefs and work engagement have a reciprocal relationship over time. Work engagement increases efficacy beliefs, which increase task resources that then increase work engagement. This creates a cycle that Llorens et al. (2007) refer to as a "positive gain spiral." According to this theory, engagement increases task resources by increasing personal resources. People who experience vigor and dedication have greater personal resources to help them during a given task, which acts as a task resource and therefore increases engagement (Llorens et al., 2007).

In a more recent study, Andreassen, Ursin, and Eriksen (2007), measured the relationship between work engagement and the three dimensions of workaholism: workaholic, enjoyment of work, and drive. In their study of 235 bank employees they found that work engagement is positively correlated with drive and enjoyment of work. In a two-step regression analysis, years worked at the bank and enjoyment of work were found to predict overall work engagement (Andreaseen et al., 2007).

Kinnunen, Feldt, and Mäkikangas (2008), found that perceived organizational support explained a significant amount of variance in all three subscales of work engagement: vigor, dedication and absorption. Kinnunen et al. (2008), also found that absorption had a significant positive relationship with overcommitment, which is a pattern of excessive work related commitment and a

need for approval (Siegrist, Starke, Chandola, Godin, Marmot, Niedhammer, and Peter, 2004).

Vigor and dedication were found to have a negative relationship with effort-reward imbalance (Kinnunen, et al., 2008), which is a state of emotional distress caused by an imbalance between the amount of effort one puts forth and the gain of rewards such as money, esteem and status control (Siegrist, 1996).

Overall work engagement has been shown to generally relate to different types of work related state of mind. Although some studies have looked at the dimensions of work engagement none of them have looked at these dimensions along with the dimensions of Job Satisfaction.

Job Satisfaction Defined

Job satisfaction has been defined in many different ways ranging from emotional beliefs of how one feels about his/her job to one's thoughts about his/her job (Fritzsche & Parrish, 2004). Job satisfaction is most simply defined as "the extent to which people like their jobs" (Spector, 2000, p. 197). Job satisfaction has been linked to many different aspects of the job, including job performance, life satisfaction, health, counterproductive work behavior and withdrawal behaviors (Fritzsche & Parrish, 2004). Research has shown that people who are satisfied with their jobs tend to perform better on the job while experiencing less counterproductive work behavior and withdrawal (Fritzsche & Parrish, 2004; Spector, 2000).

Job Characteristics Theory of Job Satisfaction

The Job Characteristics Theory (JCT) was first conceptualized by Hackman and Oldham in 1975. From the Job Characteristics Theory, Hackman and Oldham developed the Job Characteristics Model (JCM) (1975, 1976, 1980). In this model, a set of three psychological states mediate between core job characteristics and job outcomes. These psychological states are experienced meaningfulness of the work, experienced responsibility for outcomes of the work and knowledge of the actual results of the work activities (Hackman and Oldham, 1975, 1976, 1980). In the JCM the five core job characteristics are skill variety, task identity, task significance, autonomy and feedback from job and the job outcomes are high internal work motivation, high satisfaction with the work, low absenteeism and turnover and high quality work performance (Hackman and Oldham, 1975, 1976, 1980).

In the Job Characteristics Model, job satisfaction is comprised of four dimensions: (1) satisfaction with job security, (2) satisfaction with compensation, (3) satisfaction with co-workers and (4) satisfaction with supervision (Hackman and Oldham, 1980). In a 2004 review of job satisfaction, Fritzsche and Parrish found that Hackman and Oldham's measure is one of the most popular facet measures of job satisfaction. By looking at the facets of job satisfaction, it is possible to tell why employees are satisfied or dissatisfied with their jobs. For

instance, if employees have low overall job satisfaction it could be simply because they have low satisfaction with their job security and compensation.

Relationship between Work Engagement and Job Satisfaction

Mauno, Kinnunen, Makikangas and Natti (2005), examined the relationship between work engagement and job satisfaction among 736 Finnish hospital staff. Mauno and colleagues found a significant positive relationship between the two constructs. However, they treated the constructs as undimensional, whereas the present study proposes to examine these two constructs as multidimensional. The advantage of examining the constructs multidimensionally is that leads to greater understanding of the affect that vigor, dedication and absorption have on specific aspects of job satisfaction, such as compensation.

To date, there is no known research that examines the relationship between the four facets of job satisfaction and the three facets of work engagement. Due to the lack of research between work engagement and job satisfaction and because work engagement and job burnout have been found to be opposite yet distinct constructs, the relationship between job burnout and job satisfaction is also examined (Gonzalez-Roma et al., 2006).

Relationship between Job Burnout and Job Satisfaction

Extensive research has been conducted on different psychological dimensions and how they relate to job burnout and job satisfaction. However,

little research has been done that actually looks at the relationship between the facets of these two constructs. Rovero (2004) found that schoolteachers with unsatisfactory supervision scored higher on the emotional exhaustion subscale of job burnout. In a similar study conducted by Mena and Bailey (2007), the employees' feeling of rapport with the supervisory relationship was negatively correlated with the emotional exhaustion and depersonalization subscales of job burnout.

Other research looking at facets of job burnout and job satisfaction have looked at facets of job burnout and their relationship to overall job satisfaction (Bailey, 2006, Jiang, Xichao, & Yan, 2004, Manoni & Eisner, 2006). Research conducted by Bailey (2006) found emotional exhaustion to be a strong inverse predictor of overall job satisfaction. Jiang, Xichao, and Yan (2004), also examined the relationship between the three facets of burnout and overall job satisfaction. Jiang et al. (2004), found that emotional exhaustion and cynicism had a significant negative correlation with job satisfaction and professional efficacy had a significant positive correlation with job satisfaction.

Manoni and Eisner (2006) looked at the relationship between job burnout and job satisfaction however they combined job satisfaction and organizational commitment because they believed that the two dimensions make up "overall work-related attitudes." This study found that there were strong negative correlations between the burnout facets and job satisfaction/commitment. They

found that reduced personal accomplishment had the strongest negative relationship with job satisfaction/commitment while emotional exhaustion had a stronger relationship than depersonalization. Because this research combined job satisfaction and organizational commitment, it is not possible to determine what the relationship would be between job satisfaction and the burnout facets without the influence of organizational commitment.

Previous research has shown that work engagement and job satisfaction have a positive relationship. However, no research has been done looking at the relationship between the individual dimensions. Some of the dimensions of job burnout have been found to have a negative relationship with job satisfaction although not all four of the individual dimensions were examined.

The Role of Organizational Tenure

Organizational tenure has been found to account for a significant proportion of unique variance in job satisfaction (Hoath, Schneider & Starr, 1998). However, the effects of tenure as a moderator have been conflicting. Duffy, Ganster and Shaw (1998) found that tenure negatively affected the relationship between job satisfaction and counterproductive work behavior, while Hellman (1997) did not find tenure to be a moderator between job satisfaction and intention to leave.

Although no research to date has been done looking at the relationship between work engagement and tenure, it is desirable to consider whether tenure

moderates the relationship between the three dimensions of work engagement and satisfaction with supervision as well as satisfaction with coworkers. Perhaps new employees who are engaged in their work will be initially satisfied with their supervisor and coworkers. While their tenure increases, they may become more autonomous and, although they remain engaged, their satisfaction with supervision and coworkers may diminish.

Hypothesis

The purpose of this study is to examine the relationship between the three facets of work engagement and the four facets of job satisfaction. Previous research has shown that emotional exhaustion is highly correlated to unsatisfactory supervision (Rovero, 2004). Therefore, it is proposed that vigor predicts satisfaction with supervision. No other specific hypothesis can be made due to the lack of any theoretical backing. Therefore, two research questions are posed. The first question, do any of the three facets of work engagement predict satisfaction with job security or satisfaction with compensation? The second question, does tenure moderate the relationship between any of the three facets of work engagement and satisfaction with coworkers or satisfaction with supervision?

Methods

Participants

Surveys were distributed to all 308 King Library employees in San Jose, California. The overall response rate was 54% (n = 167). The King Library is made up of 57% San Jose Public Library (SJPL) employees and 43% San Jose State University (SJSU) employees. This is unique in the business world, because these employees are in the same company, have two different employers, with different pay and different benefits. Everyone in this population was selected to participate in this study. Approximately 80% of SJSU employees responded while, less than half of the SJPL employees completed the survey. The reason for this discrepancy is unknown; however, this does indicate a difference between the two employment groups. Differences in employer are accounted for in the analyses.

Demographic questions inquired about tenure, employer, employment status, and unit. These questions were asked to ensure the sample was representative of the population. As requested by the library, no questions regarding gender or ethnicity were included. The average tenure was 10.3 years (SD = 8.79). San Jose Public Library employees represent 62.7% of the sample, 52.5% being full-time employees, with all units being represented.

Procedure

Surveys were provided to the unit heads, which then gave a survey to each person in their unit. Each survey came in an addressed envelope that could be sealed and placed in inter-campus mail. Inter-campus mailboxes are located on each floor of the library and mail is collected daily. Each participant was informed of where the mailboxes were located and asked to return the survey to any one of the mailboxes. Instructions on the surveys insured complete confidentiality and asked participants to draw on their experiences in the past month.

Measures

Job Satisfaction Scale. Job satisfaction was measured using Hackman and Oldham's (1980) job satisfaction scale. This 10 item scale measures job satisfaction by looking at four facets: (1) satisfaction with job security, (2) satisfaction with compensation, (3) satisfaction with coworkers and (4) satisfaction with supervision. Satisfaction with job security was measured using two items such as "The amount of job security I have." Satisfaction with compensation was measured with two items such as "The amount of pay and fringe benefits I receive" and satisfaction with coworkers uses three items such as "The people I talk to and work with on the job." An example of one of the three items for satisfaction with supervision is "The overall quality of the supervision I receive in my work." All ten job satisfaction items were scored on a five-point

likert type scale ranging from 1 (extremely dissatisfied) to 5 (extremely satisfied). Internal consistency reliabilities were determined for each scale. Satisfaction with job security was $\alpha = 0.88$, satisfaction with compensation was $\alpha = 0.72$, satisfaction with coworkers was $\alpha = 0.74$ and satisfaction with supervision was $\alpha = 0.89$.

Utrecht Work Engagement Scale. Work engagement was measured using the 17 item Utrecht Work Engagement Scale (UWES) developed by Schaufeli, Salanova, Gonzalez-Romana, and Bakker (2002). The UWES is composed of six items measuring vigor, five dedication items and six absorption items. A typical vigor item is "At my job, I am very mentally resilient." Dedication is measured with items such as "My job inspires me" and absorption is measured using items such as "Time flies when I am working." Due to an error in the data collection process only three of the six absorption items where included in this study. All items were scored on a five-point likert type scale ranging from 1 (never) to 5 (always). Schefeli et al. (2002), reported an internal consistency reliability of $\alpha = 0.79$ for the vigor subscale, $\alpha = 0.89$ for the dedication subscale and $\alpha = 0.72$ for the absorption subscale.

Tenure was simply measured with the question "Approximately, how long have you been working for SJSU or SJPL?" All answers were converted into years with months being converted into a decimal.

Employer was measured by asking "Who is your primary employer" with the option of "San Jose Public Library" or "San Jose State University."

Results

Table 1 presents the means, standard deviations and correlations for each dimension. The means for the dimensions of work engagement and job satisfaction were slightly above the middle. The means for these dimensions ranged from 3.18 (SD = 0.89) for absorption to 3.81 (SD = 0.75) for satisfaction with coworkers.

Significant correlations were found for all three work engagement dimensions. Within the three dimensions of work engagement, vigor and dedication had the strongest correlation ($r = .76$, $p < .01$). Correlations above .70 can indicate redundancy, which can be problematic. All four dimensions of job satisfaction were also significantly correlated. Within the four dimensions of job satisfaction, satisfaction with supervision and satisfaction with coworkers had the strongest correlation ($r = .57$, $p < .01$).

All three work engagement dimensions and all four dimensions of job satisfaction were significantly correlated. Satisfaction with coworkers had the strongest correlation with each of the three dimensions of work engagement. Satisfaction with coworkers was significantly correlated with vigor ($r = .58$, $p < .01$), dedication ($r = .57$, $p < .01$) and absorption ($r = .44$, $p < .01$).

Tenure was significantly correlated with dedication ($r = .17$, $p < .05$), absorption ($r = .20$, $p < .05$), satisfaction with job security ($r = .46$, $p < .01$) and satisfaction with compensation ($r = .18$, $p < .05$). The only significant

Table 1 Means, Standard Deviations and Correlations for the dimensions of Work Engagement, Job Satisfaction and Tenure

Variable	Mean	SD	1	2	3	4	5	6	7	8
Work Engagement										
1.Vigor	3.52	.67	--							
2. Dedication	3.53	.93	.76**	--						
3. Absorption	3.18	.89	.56**	.68**	--					
Job Satisfaction										
4. Job Security	3.52	1.02	.19*	.23**	.26**	--				
5. Compensation	3.21	1.15	.37**	.46**	.26**	.23**	--			
6. Coworkers	3.81	.75	.58**	.57**	.44**	.27**	.21**	--		
7. Supervision	3.66	.98	.38**	.40**	.16*	.27**	.26**	.57**	--	
8. Tenure	10.29	8.79	.06	.17*	.20*	.46**	.18*	-.05	-.02	--
9. Employer	1.47	.50	-.14	-.16*	-.13	.12	-.42**	.11	.11	-.08

**Correlation is significant at the .01 level *Correlation is significant at the .05 level

Employer is coded 1 = SJPL and 2 = SJSU

correlations for employer were dedication ($r = -.16$, $p < .05$) and satisfaction with compensation ($r = -.42$, $p < .01$).

The dataset was checked for univariate and multivariate outliers. There were no significant outliers. The means for each dimension were also checked for normality and again there were no significant issues.

Analyses

In order to determine the factor structure, a confirmatory factor analysis was done on the Utrecht Work Engagement Scale and the Job Satisfaction Scale. A forced four-factor analysis with Oblimin rotation was done on the Job Satisfaction Scale. Table 2 shows that all items loaded on the appropriate dimensions according to Hackman and Oldham (1979). A forced three-factor analysis with Oblimin rotation was done on the Utrecht Work Engagement Scale. Table 3 reports that the items did not load on the factors as found by Schaufeli, Salanova, Gonzalez-Romana and Bakker (2002). For the purpose of the study, dimensions were treated as proven by Schaufeli et al. (2002).

In order to answer the research questions, hierarchical moderated regression analyses were conducted in which the three factors of engagement were regressed in separate analyses with each of the four factors of job satisfaction. As reported in Table 4, the first regression was done on satisfaction with job security. Employer and tenure were entered in step one in order to control for variance explained by these variables. Vigor, dedication and absorption were regressed simultaneously in step two. The results indicate that tenure predicts satisfaction with job security ($\beta = .46$, $p < .01$; $\Delta R^2 = .22$, $p < .01$). None of the three dimensions of work engagement had significant betas but they

Table 2. Factor Analysis of the Job Satisfaction Scale

Dimension	Item	Factor 1	Factor 2	Factor 3	Factor 4
Security	The amount of job security I have.	.97			
Security	How secure things look for me in the future in the King library.	.90			
Compensation	The amount of pay and fringe benefits I receive.		.95		
Compensation	The degree to which I am fairly paid from what I contribute to king library.		.95		
Coworkers	The people I talk to and work with on my job.	.32		.57	
Coworkers	The chance to get to know other people while on the job.			.84	
Coworkers	The chance to help other people while at work.			.88	
Supervision	The degree of respect and fair treatment I receive from my unit head.				.90
Supervision	The amount of support and guidance I receive from my unit head.				.90
Supervision	The overall quality of the supervision I receive in my work.				.87
	% of Variance	39.55	17.13	14.21	10.01

Table 3. Factor Analysis of the Utrecht Work Engagement Scale

Dimension	Item	Factor 1	Factor 2	Factor 3
Vigor	When I get up in the morning, I feel like going to work.	.81		
Vigor	At my work, I feel bursting with energy.	.86		
Vigor	At my work, I always persevere, even when things do not go well.			.80
Vigor	I can continue working for very long period of time.			.81
Vigor	At my job, I am very mentally resilient.	.63		.47
Vigor	At my job I feel strong and vigorous.	.88		
Dedication	To me, my job is challenging.	.31	.56	
Dedication	My job inspires me.	.64	.43	
Dedication	I am enthusiastic about my job.	.77	.31	
Dedication	I am proud of the work that I do.	.44	.39	
Dedication	I find the work that I do full of meaning and purpose.	.37	.56	
Absorption	When I am working, I forget everything else around me.		.87	
Absorption	Time flies when I am working.		.83	
Absorption	I get carried away when I am working.		.63	
	% of Variance	53.66	9.47	8.10

Table 4. Results of Hierarchical Regression Analyses for the Moderating Effect of Tenure

		Sat w/ Job Security		Sat w/ Compensation		Sat w/ Coworkers		Sat w/ Supervision	
		β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1	Employer	.10	.22**	-.43**	.21**	.09	.01	.05	.00
	Tenure	.46**		.15*		-.05		-.02	
Step 2	Vigor	.18	.06**	.13	.15**	.36**	.45**	.31**	.24**
	Dedication	-.08		.33**		.29**		.28*	
	Absorption	.19		-.08		.11		-.09	
Step 3	Tenure * Vigor					-.51	.01	-.13	.00
	Tenure * Dedication					.15		-.24	
	Tenure * Absorption					.43		.21	

**Significant at the .01 level *Significant at the .05 level
Employer is coded 1 = SJPL and 2 = SJSU

did have a significant change score ($\Delta R^2 = .06$, $p < .01$), indicating that as a set they account of additional variability over employer and tenure. Also note worthy were the beta weights for vigor and dedication. Although neither were significant, vigor had a positive beta ($\beta = .18$) while dedication had a negative beta ($\beta = -.08$). This is due to the high correlation between vigor and dedication ($r = .76$, $p < .01$) and indicates that vigor is acting as a negative suppressor for dedication. For the first research question, none of the engagement dimensions uniquely predicted satisfaction with security.

The second regression was done on satisfaction with compensation. Employer and tenure where entered in step one and vigor, dedication and absorption were regressed simultaneously in step two. The beta weights were significant for both employer ($\beta = -.43$, $p < .01$) and tenure ($\beta = .15$, $p < .05$) with $\Delta R^2 = .21$, $p < .01$. In step two, dedication had the only significant beta ($\beta = .33$, $p < .01$; $\Delta R^2 = .15$, $p < .01$). This answers the final part of the first research question, dedication does significantly predict satisfaction with compensation. Also noteworthy was the negative beta for absorption ($\beta = -.08$). This again indicates a suppressor effect with absorption acting as the suppressor.

The third regression was done on satisfaction with coworkers. Employer and tenure where entered in step one and vigor, dedication and absorption were regressed simultaneously in step two. The interaction between tenure and vigor, tenure and dedication, and tenure and absorption were entered in step three. The results indicate that employer ($\beta = .09$) and tenure ($\beta = -.05$) are not significant predictors of satisfaction with coworkers. In the second step, vigor ($\beta = .36$, $p < .01$) and dedication ($\beta = .29$, $p < .01$) both had significant betas ($\Delta R^2 = .45$, $p < .01$). In the final step, none of the interactions

had a significant beta or change R^2. This answers part of the second research question, although vigor and dedication both predict satisfaction with coworkers, tenure is not a moderator.

The forth regression was done on satisfaction with supervision. Employer and tenure were entered in step one and vigor, dedication and absorption were regressed simultaneously in step two. The interaction between tenure and vigor, tenure and dedication, and tenure and absorption were entered in step three. Employer ($\beta = .05$) and tenure ($\beta = -.02$) are not significant predictors of satisfaction with supervision. In step two, vigor ($\beta = .31$, $p < .01$) and dedication ($\beta = .28$, $p < .05$) both had significant betas ($\Delta R^2 = .24$, $p < .01$). In the final step, none of the interactions had a significant beta or change R^2. This answers the final part of the second research question, vigor and dedication do account for some variance in satisfaction with supervision but tenure does not act as a moderator. Also noteworthy was the negative beta for absorption ($\beta = -.09$). This again indicates that absorption is causing a suppressor effect.

Overall the four regression analyses found the dimensions of work engagement to account for variance in the dimensions of job satisfaction. Tenure accounted for significant variance in satisfaction with job security and compensation but did not account for variance in satisfaction with coworkers or supervision. The three engagement dimensions accounted for additional variance above that account for by tenure with job security and compensation but particularly accounted for a large amount of variance for the satisfaction with coworkers and supervision, which tenure did not account for. Tenure does not appear to moderate any of these relationships.

Additional Analysis

Due to the strong significant correlation between vigor and dedication, a second set of regressions were done on satisfaction with coworkers and satisfaction with supervision. The first regression removed vigor and looked at the interaction affects. There were no significant changes by removing vigor. The second regression removed dedication and again no significant changes were found for the interaction affects. However, by removing dedication, the suppressor effect on absorption was eliminated giving absorption an insignificant yet positive beta for satisfaction with supervision.

To determine whether vigor predicts satisfaction with supervision, a correlation and regression analysis was done. As reported in Table 1, vigor is significantly correlated with satisfaction with supervision ($r = .38$, $p < .01$). The regression between vigor and satisfaction with supervision in Table 4 is also significant ($\beta = .31$, $p < .01$; $\Delta R^2 = .24$, $p < .01$). The significant correlation and significant beta support the hypothesis that vigor predicts satisfaction with supervision.

Discussion

The purpose of this study was to determine weather the three dimensions of work engagement predicted any of the four dimensions of job satisfaction and weather tenure is a moderator to that relationship. Vigor and dedication do predict a significant portion of the variance in satisfaction with coworkers and satisfaction with supervision. Results of this study do not support the proposition that tenure moderates the relationship between the dimensions of work engagement and job satisfaction. This means that the amount of variance that vigor and dedication accounted for in satisfaction with coworkers and satisfaction with supervision is consistent regardless of employee tenure. Dedication was also found to account for some of the variance in satisfaction with compensation.

Even though vigor and dedication were both found to be predictors of satisfaction with coworkers and satisfaction with supervision, this is cautionary since vigor and dedication are so highly correlated. The high correlation between vigor and dedication was expected as other studies have found similar correlation issues (Kinnunen, et al., 2008; Bakker et al., 2007). The high correlations within the work engagement dimensions were also problematic because they created a suppressor effect. Although the high correlations created a suppressor effect, removing the individual dimensions did not create a significant change in the variance accounted for by the other dimensions.

While vigor and dedication were both predictors, absorption was not found to have any predictive value. Perhaps this is because absorption may not be a component of work engagement but is instead a consequence (Salanova and Schaufeli, 2008). Future research should look more into this issue.

Study Limitations and Directions for Further Research

The primary limitation for this study was that although this study purposed the dimensions of work engagement predicted the dimensions of job satisfaction, the study was actually correlational and a causal direction could not be inferred. Therefore, it may actually be that dimensions of job satisfaction predict dimensions of work engagement. It was originally thought that an employee experiencing the dimensions of work engagement would be generally more satisfied with their job because they are engaged in their work. For example, an employee that is engrossed in their work and experiencing a sense of pride and enthusiasm may be more satisfied with their compensation because they like what they are doing. This same employee might be more satisfied with their coworkers and supervision because they are experiencing vigor, dedication and absorption. However, vigor and dedication accounted for significant variance in satisfaction with coworkers and satisfaction with supervision and only accounted for minimal variance in satisfaction with compensation and no variance in satisfaction with job security. It seems likely that the relationship could in fact be the other way around and that how satisfied one is could affect the amount of engagement they are experiencing. It is known that job resources affect work engagement and it could be that coworkers and supervisors are in fact a job resource. It also seems possible that instead of dedication predicting the variance in satisfaction with compensation that it is in fact the compensation or financial recognition that gives the employee the sense of significance, inspiration and pride. Future research should look at causation to determine weather vigor and dedication actually predict satisfaction with coworkers and supervision

or if it is in fact the opposite with job satisfaction dimensions predicting work engagement dimension.

Another limitation to this study was that the organization did not allow identifying demographics to be collected. Therefore, no information about age, ethnicity or gender could be collected. It is possible that age and/or gender act as a moderator between work engagement and job satisfaction. Future research should explore this possibility.

Future research should look at work engagement with another measure of job satisfaction. With the dimensions of work engagement accounting for more variance in satisfaction with coworkers and supervision than they did for security and compensation it is possible that work engagement affects interpersonal relationships. Although, it is possible that the relationship would be the other way around with interpersonal relationships affecting work engagement. Therefore, future research should look at some of the other dimensions that are thought to be part of job satisfaction. The Minnesota Satisfaction Questionnaire is made of 20 dimensions such as satisfaction with social status, creativity, working conditions, recognition and achievement (Weiss, Dawis and England, 1967). By examining the relationship between the dimensions of work engagement and different aspects of job satisfaction researchers can determine if work engagement is in fact related to interpersonal relationships, benefits or some other aspect such as creativity.

With the present study finding a strong relationship between work engagement and satisfaction with coworkers, future research should also look at the relationship between work engagement and coworker support. It is known that job resources increase

work engagement and therefore it is conceivable that coworker support is a job resource that would improve work engagement (Schaufeli et al., 2004).

Finally, future research should examine the similarities and differences between absorption and flow. The absorption dimension of work engagement is very similar to the concentration or absorption dimension of flow as defined by Csikszentmihalyi in 1990. Csikszentmihalyi's definition is being in a state of intense concentration or absolute absorption. More recently Bakker (2008) developed the Work-related Flow Inventory (WOLF) to measure flow. The items used in the WOLF are very similar to the absorption scale of UWES developed by Schaufeli et al. (2002). This relationship should be examined in depth.

Practical Implications

While the directional relationship between work engagement and job satisfaction is not yet known, it could be that the relationship is reciprocal. Employees who are experiencing vigor and dedication are more satisfied with their coworkers and supervisors, and it is possible that positive interaction with their coworkers and supervisors leads employees to experience vigor and dedication. Since employees that are experiencing work engagement and job satisfaction help improve the organization by reducing turnover and increasing productivity, it is important that managers and other organization members foster an environment where dedicated employees can be invigorated while having positive interactions with their coworkers and supervisors.

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