Full Length Research Paper

# Self-directed learning, job demands and job resources as predictors of job satisfaction among South African women

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Accepted 9 March, 2012

Research shows that women face various demands and barriers that have a negative impact on their job experiences and job satisfaction. At the same time increasing numbers of women are entering the labor force. Studies regarding the factors that influence the job satisfaction of women in South Africa are scarce and the role of self-directed learning in predicting job satisfaction has received limited attention. The aim of this study was to investigate the impact of job demands, job resources and self-directed learning on the job satisfaction of South African women. The results of hierarchical multiple regression analyses showed that self-directed learning explained a significant portion of the variance in job satisfaction, above and beyond the variance that was explained by job demands and resources. Self-directed learners seem to have several characteristics that facilitate adjustment to career challenges. This research has implications for organizations that strive to enhance job satisfaction in their employees.

**Key words:** Career worries, job demands-resources model, job insecurity, job satisfaction, self-directed learning, work drive, work-life balance, work involvement, work relationships.

# INTRODUCTION

The career environment has been faced with significant challenges over the last few decades. Factors such as downsizing, outsourcing, restructuring, and globalization (Heugens and Schenk, 2004; Soleymani, 2010; Ugboro, 2006) have impacted the world of work and the role, skills and abilities required of employees (Nilsson et al., 2007). These changes often have a negative influence on employees' functioning. For example, research has indicated that employees who are exposed to these factors experience lower levels of emotional and physical well-being than their non-exposed colleagues (Burke et al., 2011; Quinlan, 2007). These factors also impact negatively on job satisfaction (Malik et al., 2010).

Although all individuals in the workforce are faced with challenges, women appear to experience even more

pressure to adjust to these challenges as a result of barriers and obstacles in the workplace (Back, 2007). Despite this pressure there is an increase in the number of women participating in the international labour force, including managerial positions (cf. DeLauro, 2010). This trend is also observed in the South African context. Statistics South Africa (2010) reported that women represent an estimated 42% of the total labor force in this country. Various factors have encouraged women to become more active in the labor force. These include the increase in divorce rates, the postponement of marriage (Cabrera, 2007), personal reasons such as a need to achieve, financial and personal fulfilment, and being recognised for using their skills (O'Neil et al., 2008). In addition, there have been significant changes in the attitudes of husbands and society in general towards working women (Betz, 2005).

The changes in the career landscape and evidence of ongoing perceived career barriers have a negative impact on women's career development (Betz, 2005) and

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satisfaction (Calvo-Salguero et al., 2010). Selfdirectedness in learning may potentially support women in their efforts to cope with career-related demands and may also contribute to increased perceived levels of job satisfaction. Self-directed learning refers to the process through which an individual takes responsibility for his or her own learning and development (Clardy, 2000). In times of rapid changes leading to a constant flow of new information and job changes, organizations need to embrace a learning culture (Malik et al., 2011). Employees need to continuously update their existing skills and knowledge in order to keep pace with the changes and experience career success (Briscoe and Hall, 2006).

One of the essential features of self-directed learning involves initiative on the part of the employee (Guglielmino et al., 2004). Self-directed learners tend to have a unique personal orientation consisting of sociodemographic, psychological and personality aspects. Self-directed learners have strong meta-cognitive capacities and perform well in tasks that require critical thinking, reflection, self-evaluation, creativity and problem solving (Patterson et al., 2002).

Although women's job satisfaction has received increased attention over the last few years (cf. Lipińska-Grobelny and Wasiak, 2010; Pearson, 2008), the relationship between self-directed learning and job satisfaction has received limited attention, specifically in the South African context. Thus, the aim of this research study was to explore the relationships between selfdirected learning, job demands and job resources and working women's job satisfaction. More specifically, we were interested in investigating whether self-directed learning adds to a better understanding of job satisfaction in the presence of specific job demands and resources. In the paragraphs that follow we discuss the concept of job satisfaction and provide a brief discussion of the variables that were used to represent the job demands and resources in this research study. The job-demandresources model was used as the framework for this research and is thus also briefly addressed.

# JOB SATISFACTION

Calvo-Salguero et al. (2010: 1247) described job satisfaction as "an attitude associated with the degree to which people like or dislike their job." Job satisfaction is multi-dimensional and is influenced by a group of characteristics within the job itself (Bender et al., 2005) as well as by internal employee characteristics such as personality traits (Williamson et al., 2005) and values (Cohrs et al., 2006). Although the external-job internalindividual divide is somewhat artificial it is true that job stress is often a result of the interaction of external and internal factors. For example, the coping mechanisms that an employee uses (internal) may determine the effect of the stressful environment (external) (Cooper et al., 2001).

According to Cooper et al. (2001) the relationship between career issues and job stress needs to be considered when determining job satisfaction. Various factors impact job stress, including the type of work (Cabrera, 2007), work stressors (Conner and Douglas, 2005) and support received at work and at home (Cabrera, 2007). Environmental conditions of the workplace (Demerouti et al., 2000) and career threats can also be experienced as stressful (Conner and Douglas, 2005) and may lead to lower levels of job satisfaction. Women often report being subjected to more types of job stress than men (Betz, 2005).

Job satisfaction has also been linked to individuals' internal and personal dispositions. Williamson et al. (2005) identified personality traits that contribute to job satisfaction. These traits include high levels of conscientiousness and low levels of neuroticism. Apart from personality traits, research has also highlighted the individual's personal role in determining his or her own job satisfaction. For example, higher levels of perceived congruence between rewards and values lead to higher levels of job satisfaction (Cohrs et al., 2006). Carless (2004) found that employees need to experience high levels of motivation in order to experience job satisfaction.

Holland and Gottfredson's (1994) definition of job satisfaction was used to conceptualize and operationalize job satisfaction within this research study. According to Holland and Gottfredson (1994) job satisfaction, as measured by the Career Attitudes and Strategies Inventory, can be defined as having positive feelings about one's job, instead of feelings of boredom, dislike and being uncomfortable with the job, and intending to stay in the job. In this study job satisfaction was further conceptualized as being influenced by a combination of organizational and individual factors. In particular, the job demands of work-life balance, career worries and job insecurity and the job resources of work relationships, work drive and work involvement were seen as influencing job satisfaction.

# Job demand 1: Work-life balance

Although men and women both report work-life imbalance (Doble and Supria, 2010), they appear to perceive this phenomenon differently (Emslie and Hunt, 2009). Women who are involved in multiple roles tend to experience continuous imbalance between these roles (Emslie and Hunt, 2009), leading to stress and distress (Watts, 2009) and ultimately lower job satisfaction (Calvo-Salguero et al., 2010).

# Job demand 2: Career worries

Work-related stress is often a result of concerns regarding one's job. Factors such as potential job loss,

unemployment and resulting financial difficulties have a negative influence on employees' emotional well-being (Owen and Fitch, 2003). Perrone et al. (2003) discussed various factors that influence career concerns as part of their motivation for developing a scale to measure adult career concerns.

## Job demand 3: Job insecurity

Organizational changes such as downsizing and restructuring have made employees aware of their own job insecurity (cf. Rundmo and Iversen, 2007) Job insecurity has been linked to job stress (Safaria et al., 2010) and has a negative impact on the well-being of employees (cf. Cooper, 2009).

# Job resource 1: Work relationships

Work relationships play an important role in women's careers (Carless, 2004; Okpara, 2006) and provide support for women's personal and professional growth. Garcia-Bernal et al. (2005) found that interpersonal relationships were the most important factor in determining women's job involvement and commitment.

# Job resource 2: Work drive

Work drive is a manifestation of an individual's personality characteristics and relates to the personality trait of conscientiousness. Conscientiousness involves being purposeful, strong-willed and determined. Salgado (1997) conducted a meta-analysis of the research concerning the relationship between personality traits and job performance and reported that conscientiousness was positively related to performance across many job performance criteria and occupational groups.

#### Job resource 3: Work involvement

Job characteristics such as the quality of relationships and future opportunities for promotion often determine a woman's emotional investment in her job (Hwang and Kuo, 2006). Without work involvement and commitment employees are less inclined to produce effective and efficient work outcomes (Long, 2005). Khan and Nemati (2011) reported a positive relationship between job involvement and job satisfaction in medical doctors.

# THE JOB DEMANDS-RESOURCES (JD-R) MODEL

The job demands-resources model (JD-R) (Bakker and Demerouti, 2007; Demerouti et al., 2001) provides a useful framework for examining the influence of various

factors on job satisfaction. This model has been used extensively to explain organizational behaviour and employee well-being (cf. Bakker et al., 2008; Boyd et al., 2011; Lee et al., 2010; Simbula, 2010).

According to the JD-R model every occupation has specific work characteristics that are related to wellbeing. Negative outcomes develop when job demands are high and job resources are limited. Job demands are the physical, social or psychological aspects of a job that require sustained physical or mental effort (such as work overload and time pressure) and that are associated with negative physiological or psychological outcomes (Demerouti et al., 2001). Job resources are the physical, psychological, social or organizational aspects of a job (such as social support and job control) that may lead to the achievement of work goals, lowering of job demands the associated negative physiological and and psychological results, and stimulation of personal growth and development (Demerouti et al., 2001).

# **Research design**

# Research approach

This study used a cross-sectional survey design to investigate interrelationships between variables within a group of participants (Struwig and Stead, 2001).

#### **RESEARCH METHOD**

#### **Research participants**

The sample consisted of 163 adult working women, with a mean age of 32.40 (SD = 10.50). Participants were obtained by means of non-random convenience sampling. Human resource departments within corporate organisations were approached for permission to distribute the questionnaires to their women employees. Participation in the research was voluntary and anonymous. Questionnaires were accompanied by a cover letter describing the purpose of the study as well as relevant ethical and practical issues. The participants were supplied with standardized instructions in order to allow them to self-administer the questionnaires in their own time. A summary of the participants' biographical information is presented in Table 1.

Table 1 show that most of the participants (72.4%) were white. Although the participants were not racially representative of the general South African population, the racial demographics in this study do offer insight into the racial distribution of many South African corporate companies. Just more than half of the sample (56.4%) spoke English as their home language. Almost 42% the women were single and never married. Married/cohabitating women made up 44.2% of the sample. Almost a quarter of the participants (22.7%) had no children, while approximately 38% had one or more children. Approximately 33% of the sample had completed Grade 12 or lower, while the rest of the sample held a higher education qualification.

#### Measuring instruments

The Sources of Work Stress Inventory (SWSI): The SWSI (De Bruin

Item	Category	Frequency	Percent	
Ethnic group	White	118	72.4	
	Non-White	43	26.4	
	Other	2	1.2	
Home language	English	92	56.4	
	Afrikaans	49	30.1	
	African Language	12	7.4	
	Other	9	4.9	
	Missing values	2	1.2	
Marital status	Single - never married	68	41.7	
	Single - divorced/separated	16	9.8	
	Single – widowed	3	1.8	
	Married/Cohabitate	72	44.2	
	Missing data	2	1.2	
Number of children	No children	37	22.7	
	One child	21	12.9	
	Two or more children	41	25.1	
	Missing data	64	39.3	
Highest qualification	Grade 12/lower	55	33.7	
	National Diploma	38	23.3	
	Bachelor's Degree	22	13.5	
	Postgraduate Degree	56	28.3	
	Missing data	2	1.2	

Table 1. Biographical information of participants (N = 163).

and Taylor, 2005) consists of 59 items rated on a Likert-type scale (1 = none at all to 5 = very much) and measures eight sources of work stress: Role ambiguity, relationships, tools and equipment, job security, career advancement, lack of autonomy, work/home interface and workload. The scale also measures general work stress. The SWSI scales have shown high internal consistency reliability in previous studies, with acceptable Cronbach alpha coefficients ranging from 0.86 to 0.94 (De Bruin and Taylor, 2005). For the purposes of this research only the results of the work-home interface and job security scales were considered. These scales yielded the following alpha coefficients: work-home interface ( $\alpha = 0.91$ ) and job security ( $\alpha =$ of 0.92).

The career attitudes and strategies inventory (CASI): The CASI (Holland and Gottfredson, 1994) measures common attitudes, feelings, experiences and obstacles that influence adults' careers. The CASI is a 130-item inventory with items rated on a four point Likert-type scale (false, mostly false, mostly true, and true) and consists of nine subscales: Job satisfaction, work involvement, skill development, dominant style, career worries, interpersonal abuse, family commitment, risk-taking style and geographical barriers. The CASI subscales have shown acceptable internal consistency reliabilities in previous studies with Cronbach alphas ranging between 0.76 and 0.92 (Holland and Gottfredson, 1994). The subscales used for this research yielded acceptable Cronbach alpha coefficients of above 0.70: Interpersonal abuse ( $\alpha = 0.94$ ), career worries (0.88), job satisfaction (0.91), dominant style (0.81) and work involvement ( $\alpha = 0.75$ ).

The Learner Self-Directedness in the Workplace Scale (LSDW):

The LSDW (De Bruin and De Bruin, 2011) is a uni-dimensional scale designed to measure levels of self-directed learning amongst individuals in workplace environments. The questionnaire consists of 13 items that are answered on a five-point Likert-type scale (strongly disagree to strongly agree). The scale has previously shown an acceptable internal consistency reliability of  $\alpha = 0.93$  (De Bruin and De Bruin, 2011). In this study a Cronbach alpha coefficient of 0.95 was obtained.

#### Statistical analyses

The statistical analyses of the data were conducted using the Statistical Package for the Social Sciences (SPSS Version 18). Descriptive statistics (means and standard deviations) and inferential statistics were obtained. Cronbach alpha coefficients were used to determine the scales' internal consistency reliabilities. Pearson's product-moment correlation coefficients were obtained to determine the relationships between the identified job demands and job satisfaction, job resources and job satisfaction and workplace self-directed learning. The correlation coefficients were examined in accordance with Tabachnick and Fidell's (2001) recommendation that coefficients r > 0.30 be regarded as meaningful. The significance of the correlations was considered at the  $p \le 0.05$  and at  $p \le 0.01$  levels.

Multiple regression analyses (with job satisfaction as the dependent variable and job demands, job resources and selfdirected learning as independent variables) were conducted to

Variable	JS	SDL	WLB	CW	JI	WR	WD	WI
JS	1							
SDL	0.434**	1						
WLB	-0.214**	-0.177*	1					
CW	-0.450**	-0.361**	0.370**	1				
JI	-0.350**	-0.193*	0.537**	0.454**	1			
WR	-0.405**	-0.257**	0.165*	0.490**	0.271**	1		
WD	0.208**	0.492**	-0.064	277**	-0.077	0.113	1	
WI	0.152*	0.268**	0.059	0.111	0.063	0.075	0.227**	1

Table 2. Correlation matrix for self-directed learning, job demands, job resources, and job satisfaction.

\*\* Correlation is significant at the 0.01 level (2-tailed). \* Correlation is significant at the 0.05 level (2-tailed). JS: Job Satisfaction; SDL: Self-Directed Learning; WLB: Work-Life Balance; CW: Career Worries; JI: Job Insecurity; WR: Work Relationships; WD: Work Drive; WI: Work Involvement.

investigate whether the independent variables could predict job satisfaction and whether self-directed learning makes a unique contribution in explaining the variance in job satisfaction.

#### Ethical issues

The nature and aim of the research were explained to the participants in a consent form that was attached to the research questionnaires. Participation in the research was voluntary and participants could withdraw from the research at any point. Participants were assured of confidentiality and anonymity. All data collected was used for research purposes only. Participants were also able to request access to the final research report.

# RESULTS

The three job demands highlighted in this study were work-life balance, career worries and job insecurity and the three highlighted job resources were work relationships, work drive and work involvement. Pearson's product-moment correlation coefficients were obtained for each of the identified job demands, job resources and workplace self-directed learning in relation to job satisfaction. The results are presented in Table 2.

Table 2 shows statistically significant correlations between job satisfaction and all the other variables. Work-life balance (r = -0.214, p < 0.01), career worries (r= -0.450, p < 0.01), job insecurity (r = -0.350, p < 0.01) and work relationships (r = -0.405, p < 0.01) had negative relationships with job satisfaction. Work drive (r = 0.208, p < 0.01), work involvement (r = 0.152, p < 0.05) and selfdirected learning (r = 0.434, p < 0.01) had positive relationships with job satisfaction. With the exception of work-life balance, work drive and work involvement all the constructs also had practically meaningful relationships with job satisfaction (r > 0.30) (Tabachnick and Fidell, 2001). Work relationships were identified by using the interpersonal abuse scale of the CASI. A negative correlation was expected as this scale provides an indication of the effect that negative work relationships have on an individual's reported job satisfaction. For the

purpose of this research interpersonal abuse/work relationships was interpreted as reflecting the positive pole of the scale. Thus, this subscale provided an indication of the effect that positive work relationships have on reported job satisfaction.

# Predictive relationship between job demands, selfdirected learning and job satisfaction

A hierarchical multiple regression analysis was performed to determine the predictive relationship of job demands and self-directed learning in relation to job satisfaction. Job satisfaction was the dependant variable in the analysis. In the first step of the analysis the independent variables were work-life balance, career worries and job insecurity. In the second step self-directed learning was added as independent variable. These results are reported in Table 3.

Table 3 shows that when the job demands were the only predictors of job satisfaction,  $R^2 = 0.218$ , F(3, 159) =14.775, p = < 0.001. Job demands explained almost 22% of the variance in job satisfaction. In step two of the analysis self-directed learning accounted for an additional 8.5% of the variance in job satisfaction ( $\Delta R^2 = 0.085$ , F(1, 158) = 19.208, p < 0.001). Career worries ( $\beta$  = - 0.359, r = -0.310, t = -4.421, p < 0.001), job insecurity ( $\beta$  = -0.187, r = -0.149, t = -2.127, p < 0.05) and self-directed learning  $(\beta = 0.312, r = 0.291, t = 4.383, p < 0.001)$  were statistically significantly related to job satisfaction in the presence of all the variables. Despite a statistically significant correlation with job satisfaction (Table 1) worklife balance does not appear to make a unique contribution to explaining job satisfaction in the presence of the other two job demands and self-directed learning. Thus, work-life balance did not have a direct effect on job satisfaction. However, it did have an indirect effect via its correlation with career worries (r = 0.370, p < 0.01), job insecurity (r = 0.537, p < 0.01) and self-directed learning (r = -0.177, p < 0.05).

Variable	В	SE B	β	t	
Step 1					
WLB	0.031	0.163	0.016	0.193	
CW	-0.431	0.098	-0.359	-4.421**	
JI	-0.522	0.246	-0.187	-2.127*	
R <sup>2</sup> = 0.218					
F = 14.775**					
Step 2					
WLB	0.046	0.155	0.024	0.298	
CW	-0.304	0.097	-0.252	-3.132**	
JI	-0.504	-0.504 0.233 -0.1		-2.164*	
SDL	0.366	0.084	0.312	4.383**	
R <sup>2</sup> = 0.303					
F = 19.208**					
$\Delta R^2 = 0.085$					

 Table 3. Regression analysis of job demands and self-directed learning with job satisfaction.

WLB = work-life balance, CW = career worries, JI = job insecurity, SDL = self-directed learning; \*p < 0.05, \*\* p < 0.01.

 Table 4. Regression analysis of job resources and self-directed learning with job satisfaction.

Variable	В	SE B	β	t
Step 1				
WR	-0.618	0.091	-0.471	-6.798**
WD	0.566	0.153	0.257	3.695**
WI	0.512	0.394	0.091	1.300
$R^2 = 0.256$				
<i>F</i> = 18.200**				
Step 2				
WR	-0.497	0.093	-0.379	-5.336**
WD	0.220	0.173	0.100	1.269
WI	0.615	0.379	0.109	1.623
SDL	0.358	0.095	0.306	3.774**
$R^2 = 0.317$				
$F = 14.240^{**}$				
$\Delta R^2 = 0.062$				

WR = work relationships, WD = work drive, WI = work involvement, SDL = self-directed learning. \*p < 0.05, \*\*p < 0.01.

# Predictive relationship between job resources, selfdirected learning and job satisfaction

A hierarchical multiple regression analysis was performed to determine the predictive relationship of job resources and self-directed learning in relation to job satisfaction. Job satisfaction was the dependant variable in this analysis. In step one of the analysis the three independent variables were work relationships, work drive and work involvement. In step two self-directed learning was added as independent variable. The results of the multiple regression analysis are reported in Table 4.

Table 4 shows that with the three job resources as predictors of job satisfaction,  $R^2 = 0.256$ , F(3, 159) = 18.200, p = < 0.001. Job resources explained 25.6% of the variance in job satisfaction. In step two of the analysis self-directed learning accounted for an additional 6.2% of the variance in job satisfaction ( $\Delta R^2 = 0.062$ , F (1, 158) = 14.240, p < 0.001). Work relationships ( $\beta = -0.379$ , r = -0.351, t = -5.336, p < 0.001) and self-directed learning ( $\beta = 0.306$ , r = 0.248, t = 3.774, p < 0.001) were statistically

significantly related to job satisfaction in the presence of all the variables. It thus appears that only work relationships and self-directed learning made unique contributions to explaining job satisfaction in the presence of the other variables. Although work drive and work involvement showed statistically significant correlations with job satisfaction (Table 1) these relationships were not practically meaningful. However, it is possible that these variables had an indirect effect on job satisfaction via their relationships with self-directed learning (r = 0.492 and r = 0.268, p < 0.01).

# DISCUSSION

This research study aimed to investigate the impact of job demands, job resources and self-directed learning on the job satisfaction of working women in South Africa. The job demands, resources and self-directed learning measured in this study all showed statistically significant relationships with job satisfaction. Work-life balance, career worries and job insecurity had negative relationships with job satisfaction. These results support the findings of previous research studies. For example, Calvo-Salguero et al. (2010) found that women who experienced work-life imbalance and work-home conflict reported lowered job satisfaction and psychological wellbeing than women who did not experience work-life imbalance and work-home conflict. The harmful effect of work-related stress (which is strongly related to career worries) on job satisfaction has also been noted (Ozyurt et al., 2006). In relation to job insecurity, previous research has shown that the prospect of losing a job has detrimental consequences for employees' health and job satisfaction (Rundmo and Iversen, 2007). Many households in South Africa survive on a single income and many women are single mothers. When faced with the prospect of losing a job the individual may experience heightened anxiety and stress and a generally lowered experience of job satisfaction. These negative relationships between job demands and job satisfaction were not surprising. All the job demands investigated in this study lead to high levels of job stress, which has been shown to negatively impact employees' job experiences and satisfaction.

The results of this study also showed that job satisfaction had positive relations with work relationships, work drive and work involvement. Although Table 2 shows a negative relationship between work relationships and job satisfaction, it should be noted that the construct of work relationships was measured with the interpersonal abuse scale of the CASI and the scale scores were therefore reversed to reflect positive job relationships. Garcia-Bernal et al. (2005) found that women experienced higher overall job satisfaction if their relationships with colleagues were reciprocally positive, supportive and nurturing.

The work drive job resource has been linked to personality specifically individual traits, conscientiousness. Individuals who are conscientious are purposeful, strong-willed and determined. Costa and (1992) reported that high McCrae scores on conscientiousness are associated with occupational success. In a similar vein Strümpfer et al. (1998) found that conscientiousness was positively related to job satisfaction. The research finding regarding the positive relationship between work drive and job satisfaction was therefore unsurprising. In relation to work involvement, research has shown that being committed to and emotionally invested in your work serves as a measure of job satisfaction (Bender et al., 2005; Hwang and Kuo, 2006). The positive relationships between the job resources and job satisfaction were expected and support the JD-R model's assumption that job resources stimulate positive work outcomes. Work relationships, work drive and work involvement are a combination of internal and external job resources. The results of this study thus indicated that job satisfaction can be facilitated by internal and external employee factors. Overall, job resources appear to support women employees in their efforts to deal with work stress and result in positive work experiences.

The results of the multiple regression analyses showed that job demands accounted for approximately 22% of the variance in job satisfaction while job demands accounted for almost 26% of the variance in job satisfaction. These results are in keeping with the findings reported in existing research reports. For example, Demerouti et al. (2000) found that among a group of nurses, job demands had a strong positive effect on exhaustion, and that job resources had a strong negative effect on disengagement. Both exhaustion and disengagement had negative relationships with life satisfaction in this sample. Bakker et al. (2003) also reported an energy depletion process that is facilitated by job demands and which leads to negative work outcomes, as well as evidence of a motivational process that starts with job resources and which result in positive work outcomes. The similarity between the results of this study and the results of previous studies suggests that trends regarding job satisfaction among South African women mirror those of international samples.

This research made a unique contribution through focusing on the relationship between self-directed learning and job satisfaction. The results showed that there is a positive relationship between these two variables. In order to understand this positive relationship the characteristics of a self-directed learner need to be considered. In self-directed learner need to be considered. In self-directed learner assuming personal responsibility for learning (Brockett and Hiemstra, 1991). Thus, employees with a self-directed learning personal orientation are more likely to take personal responsibility for the learning that is required to adjust to the career environment and experience job satisfaction. Their metacognitive and cognitive abilities as well as their personal tendencies towards being selfdisciplined, responsible, conscientious, emotionally stable, curious, open to new learning and confident (De Bruin, 2007) may create an environment that reduces the impact of job demands and increases the impact of job resources on job satisfaction.

The results of the hierarchical multiple regression analyses showed that self-directed learning explained a significant unique portion of the variance in job satisfaction once the influence of job demands and resources had been removed (8.5 and 8.2% respectively). The literature on self-directed learning states that assuming personal responsibility is a central characteristic of the self-directed learner (Brockett and Hiemstra, 1991). This characteristic possibly serves as a buffering person input that moderates negative external influences. Alternatively, it is possible that self-directed learners' personal orientation helps them develop an optimal approach to their experiences and the application of these learning experiences. This then informs their levels of job satisfaction.

Although the focus of this study was on the internal dimensions of the self-directed learner the possibility that external characteristics or self-directed learning activities and processes may also contribute to employees' levels of job satisfaction should not be ignored. Further research that specifically addresses the process aspect of self-directed learning would be useful in exploring this hypothesis.

# LIMITATIONS

Two of the major limitations of this research are its failure to account for cultural differences in job satisfaction and the underrepresentation of black women in the sample. According to Crotty and Bonorchis (2006) black workers tend to crowd at the lower end of most occupations in South Africa. The South African government has implemented legislation designed to facilitate participation of black professionals in the corporate environment (cf. Employment Equity Act, 1998; Skills Development Act, 1998). This legislation specifically targets black African women who were previously prevented from participating freely in the labor force.

The potential lack of generalisability of the results also represents a limitation. In this study small numbers of participants were sourced from a variety of industry sectors and this raises questions regarding the applicability of the results across all South African business sectors. In addition, the participants were exclusively residents of Gauteng, specifically Johannesburg. The job satisfaction experiences reported in this study can therefore not be generalised to people outside of this economic centre in South Africa.

# CONCLUSION

The findings of this research contribute to understanding the demands and resources that influence job satisfaction. In addition, the study provides insight into the role that self-directed learning plays in the experience of job satisfaction. This knowledge can provide both employers and career psychology professionals with a better understanding of the challenges that women employees experience and with resources that may facilitate positive job satisfaction experiences.

This study confirmed that job demands and job resources predict the job satisfaction of South African women employees. The research also found that learner self-directedness contributes significantly to job satisfaction. These insights may enable organizations and career psychology practitioners to create and implement programs that could assist employees in coping with career demands and thus experiencing higher levels of job satisfaction.

# RECOMMENDATIONS

Research attention is increasingly being focused on the fact that women are entering the world of work more easily and more readily than ever before. Moreover, women represent more than half of all students in South African higher education institutions (International Education Association of South Africa, 2011). The results of this research may be useful to corporate employers in order to help them create an awareness of the job demands and resources that impact women's career development. It may also guide higher education institutions in their attempts to prepare their women students for the world of work.

This research study only made use of quantitative measures. Future research might benefit from using qualitative measures to gain a broader view of the contextual and intrinsic factors that impact women's experiences of job satisfaction. Further, qualitative research would provide organizations with the opportunity to identify job demands and develop learning programs to counter the negative effects these demands have on their employees.

#### ACKNOWLEDGEMENT

This article is based on research supported by the National Research Foundation under grant number TTK2008060400016.

#### REFERENCES

Back DP (2007). Perceptions and reactions to career barriers among women in executive leadership roles at community colleges.

- Unpublished Ph.D thesis, The University of North Carolina at Greensboro, DAI, 68(4): 1296A.
- Bakker AB, Demerouti E (2007). The Job Demands-Resources model: State of the art. J. Manag. Psychol., 22(3): 309-328.
- Bakker AB, Van Emmerik H, Van Riet P (2008). How job demands, resources, and burnout predict objective performance: A constructive replication. Anxiety Stress Copin, 21(3): 309-324.
- Bender KA, Donohue SM, Heywood JS (2005). Job satisfaction and gender segregation. Oxford Econ. Pap., 57(3): 479-496.
- Betz NE (2005). Women's career development. In SD Brown, RW Lent (Eds.), Career development and counseling: Putting theory and research into practice. New York: Wiley, pp. 253-280.
- Boyd CM, Bakker AB, Pignata S, Winefield AH, Gillespie N, Stough C (2011). A longitudinal test of the job demands-resources model among Australian university academics. Appl. Psychol. Intl. Rev., 60(1): 112-140.
- Briscoe JP, Hall DT (2006). The interplay of boundaryless and protean careers: Combinations and implications. J. Vocat. Behav., 69(1): 4-18.
- Brockett RG, Hiemstra R (1991). Self-direction in learners: Perspectives in theory, research, and practice. London: Routledge.
- Burke RJ, Ng EWS, Wolpin J (2011). Hospital restructuring and downsizing: Effects on nursing staff well-being and perceived hospital functioning. Europe's J. Psychol., 1, 81-98.
- Cabrera EF (2007). Opting out and opting in: Understanding the complexities of women's career transitions. Career Dev. Intl., 12(3): 218-237.
- Calvo-Salguero A, Carrasco-González AM, Salinas-Martínez de Lecea JM (2010). Relationship between work-family conflict and job satisfaction: The moderating effect of gender and the salience of family and work roles. Afr. J. Bus. Manag., 4(7): 1247-1259.
- Carless SA (2004). Does psychological empowerment mediate the relationship between psychological climate and job satisfaction? J. Bus. Psychol., 18(4): 405-425.
- Clardy A (2000). Learning on their own: Vocationally oriented selfdirected learning projects. Hum. Resource Dev. Q., 11(2): 105-126.
- Cohrs JC, Abele AE, Dette DE (2006). Integrating situational and dispositional determinants of job satisfaction: Findings from three samples of professionals. J. Psychol., 140(4): 363-395.
- Conner DS, Douglas SC (2005). Organizationally induced work stress: The role of employee bureaucratic orientation. Pers. Rev., 34(2): 210-225.
- Cooper CL (2009). Editorial: Stress & Health. J. Int. Soc. Invest. Stress, 25(2): 127.
- Cooper CL, Dewe PJ, O'Driscoll MP (2001). Organizational stress: A review and critique of theory, research and applications. London: Sage.
- Costa PT Jr, McCrae RR (1992). Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI): Professional Manual. Odessa, FL: Psychological Assessment Resources.
- Crotty A, Bonorchis R (2006). Executive pay in South Africa: Who gets what and why. Cape Town: Double Storey Books.
- De Bruin GP, Taylor N (2005). Sources of Work Stress Inventory: Technical Manual. Johannesburg: Jopie van Rooyen.
- De Bruin K, De Bruin GP (2011). Development of the Learner Self-Directedness in the Workplace Scale. SAJIP, 37(1): 10.
- De Bruin K (2007). Measuring self-directed learning in the workplace: The development of a new instrument. 13th South African Psychology Congress. Durban: Convention Centre.
- DeLauro RL (2010). Successes and further goals for women in the workforce. Hum. Rights, 37(3): 9-11.
- Demerouti E, Bakker AB, Nachreiner F, Schaufeli WB (2000). A model of burnout and life satisfaction amongst nurses. J. Adv. Nurs., 32(2): 454-464.
- Demerouti E, Bakker AB, Nachreiner F, Schaufeli WB (2001). The Job Demands-Resources Model of burnout. J. Appl. Psychol., 86(3): 499-512.
- Doble N, Supria MV (2010). Gender differences in the perception of work-life balance. Management, 5(4): 331-342.
- Employment Equity Act (1998). Pretoria, South Africa: Government Printer [Laws].
- Emslie C, Hunt K (2009). 'Live to work' or 'work to live'? A qualitative

- study of work-life balance among men and women in mid-life. Gend. Work Organ., 16(1): 151-172.
- Garcia-Bernal J, Gargallo-Castel A, Marzo-Navarro M, Rivera-Torres P (2005). Job satisfaction: Empirical evidence of gender differences. Women Manag. Rev., 20(4): 279-288.
- Guglielmino LM, Long HB, Hiemstra R (2004). Self-direction in learning in the United States. IJSDL, 1: 1-15.
- Heugens P, Schenk H (2004). Rethinking corporate restructuring. J. Public Affairs, 4(1): 87-101.
- Holland JL, Gottfredson GD (1994). Career Attitudes and Strategies Inventory: An inventory for understanding adult careers. Odessa, FL: Psychological Assessment Resources.
- Hwang I, Kuo J (2006). Effects of job satisfaction and perceived alternative employment opportunities on turnover intention - An examination of public sector organisations. J. Am. Acad. Bus., 8(2): 254-259.
- International Education Association of South Africa (2011). Education: Facts and figures. Study South Africa (9<sup>th</sup> ed). Retrieved on 17 November 2011 from http://www.ieasa.studysa.org/resources/Study\_SA/Facts\_Figures\_se ction.pdf
- Khan K, Nemati AR (2011). Impact of job involvement on employee satisfaction: A study based on medical doctors working at Riphah International University Teaching Hospitals in Pakistan. Afr. J. Bus. Manag., 5(6): 2241-2246.
- Lee RT, Lovell BL, Brotheridge CM (2010). Tenderness and steadiness: Relating job and interpersonal demands and resources with burnout and physical symptoms of stress in Canadian physicians. J. Appl. Soc. Psychol., 40(9): 2319-2342.
- Lipińska-Grobelny A, Wasiak K (2010). Job satisfaction and gender identity of women managers and non-managers. Intl. J. Occup. Med. Environ., 23(2):161-166.
- Long A (2005). Happily ever after: A study of job satisfaction in Australia. Econ. Rec., 81: 303-322.
- Malik ME, Danish RQ, Usman A (2011). Impact of motivation to learn and job attitudes on organizational learning culture in a public service organization of Pakistan. Afr. J. Bus. Manag., 5(3): 844-854.
- Malik MI, Ahmad A and Hussain S (2010). How downsizing affects the job satisfaction and life satisfaction of layoff survivors. Afr. J. Bus. Manag., 4(16): 3564-3570.
- Nilsson JE, Flores LY, Berkel LV, Schale CL, Linnemeyer RM, Summer I (2007). International career articles: A content analysis of four journals across 34 years. J. Vocat. Behav., 70: 620-613.
- O'Neil DA, Hopkins MM, Bilimoria D (2008). Women's careers at the start of the 21<sup>st</sup> century: Patterns and paradoxes. J. Bus. Ethics, 80(4): 727-743.
- Okpara JO (2006). The relationship of personal characteristics and job satisfaction: A study of Nigerian managers in the oil industry. J. Am. Acad. Bus., 10(1): 49-58.
- Owen TR, Fitch TW (2003). Career concerns of displaced workers in vocational training. Commun. Coll. J. Res. Pract., 27(3): 191-201.
- Ozyurt A, Hayran O, Sur H (2006). Predictors of burnout and job satisfaction among Turkish physicians. QJM-Intl. J. Med., 99(3): 161-169.
- Patterson C, Crooks D, Lunyk-Child O (2002). A new perspective on competencies for self-directed learning. J. Nurs. Educ., 41(1): 25-31.
- Pearson QM (2008). Role overload, job satisfaction, leisure satisfaction, and psychological health among employed women. J. Couns. Dev., 86(1): 57-63.
- Perrone KM, Gordon PA, Fitch JC, Civiletto CL (2003). The Adult Career Concerns Inventory: Development of a short form. J. Employment Couns., 40(4): 172-180.
- Quinlan M (2007). Organisational restructuring/downsizing, OHS regulation and worker health and wellbeing. Intl. J. Psychiat., 30(4-5): 385-399.
- Rundmo T, Iversen H (2007). Is job insecurity a risk factor in occupational health and safety? IJRAM, 7(2): 165–179.
- Safaria T, bin Othman A, Wahab MNA (2010). Religious coping, job insecurity and job stress among Javanese academic staff: A moderated regression analysis. Int. J. Psychol. Studies, 2(2): 159-169.
- Salgado JF (1997). The five-factor model of personality and job

performance in the European community. J. Appl. Psychol., 82(1): 30-43.

- Simbula S (2010). Daily fluctuations in teachers' well-being: A diary study using the Job Demands-Resources model. Anxiety Stress Copin, 23(5): 563-584.
- Skills Development Act No 97 (1998). Pretoria, South Africa: Government Printer [Laws].
- Soleymani M (2010). The heavy price of globalization: Globalization and sustainable development. Perspect. Global Dev. Technol., 9(1/2): 101-118.
- Statistics South Africa (2010). Mid-year population estimates 2010.
- Statistical release P0302, Pretoria: Government Printer, Strümpfer DJW, Danana N, Gouws JF, Viviers MR (1998). Personality dispositions and job satisfaction. South. Afr. J. Psychol., 28(2): 99-102.
- Struwig FW, Stead GB (2001). Planning, designing and reporting research. Cape Town: Pearson Education.

- Tabachnick BG, Fidell LS (2001). Using multivariate statistics (4<sup>th</sup> ed.). Boston, MS: Allyn & Bacon.
- Ugboro IO (2006). Organizational commitment, job redesign, employee empowerment and intent to quit among survivors of restructuring and downsizing. J. Behav. Appl. Manag., 7(3): 232-257.
- Watts JH (2009). 'Allowed into a man's world' meanings of work-life balance: Perspectives of women civil engineers as 'minority' workers in construction. Gend. Work Org., 16(1): 37-57.
- Williamson JM, Pemberton AE, Lounsbury JW (2005). An investigation of career and job satisfaction in relation to personality traits of information professionals. Libr. Q., 75(2): 122-141.