ECAM 15,3

260

Received October 2007 Revised January 2008 Accepted January 2008

Job satisfaction of South African quantity surveyors

Paul Bowen and Keith Cattell

Department of Construction Economics and Management, University of Cape Town, Cape Town, South Africa

Abstract

Purpose – The purpose of this paper is to report on the significance of the relationship between job satisfaction experienced by South African quantity surveyors and demographic factors, workplace characteristics, choice of career, and instances of harassment and discrimination at work.

Design/methodology/approach – Data were obtained via a web-based national questionnaire survey of the registered quantity surveyors. The results were analysed in order to establish the degree of significance between perceived levels of job satisfaction and the identified factors.

Findings – Demographic factors found to have a significant relationship with job satisfaction are gender and race. Workplace characteristics such as feelings of personal satisfaction, recognition, the opportunity to undertake challenging work and non-repetitive work, the degree of supervision, participation in decision making, and the opportunity for social interaction at work were found to be significantly associated with job satisfaction. Significant career choice factors include the fulfilment of career expectations, a willingness to choose the same career again, and a willingness to recommend the career to others. Discrimination on the basis of gender and religious affiliation were found to have a significant relationship with job satisfaction.

Originality/value – Little is known about the job satisfaction of design team professionals, particularly quantity surveyors. The findings provide indicators for managers of quantity surveying practices to facilitate improved job satisfaction amongst professional staff.

Keywords Job satisfaction, Professional services, Work design, South Africa, Quantity surveying **Paper type** Research paper

Introduction

Employee satisfaction has become a major organizational objective in recent years, with job satisfaction perceived to be a pre-condition for competitive levels of quality and organizational success (Garcia-Bernal *et al.*, 2005). Attempts at defining "satisfaction" recognise that satisfaction is the "final state of a psychological process" (Garcia-Bernal *et al.*, 2005). There is no universal definition of "job satisfaction", but it can be thought of as a multi-dimensional concept that includes a set of favourable or unfavourable feelings in terms of which employees perceive their jobs (Davis and Newstrom, 1999).



Engineering, Construction and Architectural Management Vol. 15 No. 3, 2008 pp. 260-269 © Emerald Group Publishing Limited 0969-9988 DOI 10.1108/09699980810867415 The authors are indebted to Karen le Jeune for her input to the questionnaire design, the staff of the SACQSP for e-mailing registered quantity surveyors inviting them to participate in the survey, John Bilay for his assistance with the logistics of the web-based survey and the processing of the data, Dr Titus Oshagbemi of the School of Management and Economics, The Queens University of Belfast, for his comments on the difference between job satisfaction and motivation, and the quantity surveying firm of Bham Tayob Khan Matunda Inc. for participating in the pilot survey.

Job satisfaction

The importance of job satisfaction and motivation to the wellbeing of the construction industry has been highlighted (Loosemore *et al.*, 2003). Despite the wealth of research in job satisfaction and motivation generally, little research has been undertaken concerning its application to the construction industry (Asad and Dainty, 2005). This is particularly true in respect of design team professionals. No study to date has focused solely on the job satisfaction of quantity surveyors. The purpose of this paper is to report on the relationship between job satisfaction and demographic factors, workplace characteristics, choice of career, and instances of harassment and discrimination at work. A web-based national questionnaire survey was utilised.

The quantity surveying profession in South Africa

In South Africa the quantity surveying profession is governed by the Quantity Surveying Profession Act (No. 49 of 2000) (RSA, 2000) and Regulations promulgated in terms of the Act. Only persons registered with the South African Council for the Quantity Surveying Profession (SACQSP), a statutory body, are permitted to call themselves "quantity surveyors" (Pr. QS) and perform work reserved for quantity surveyors. The requirements for registration generally consist of the holding of a four-year degree in quantity surveying, three-year's practical experience under the mentorship of a Pr.QS, and successfully passing an Assessment of Professional Competence (APC). As at June 2007, 1,756 quantity surveyors were registered with the SACQSP.

Research into job satisfaction

Studies into job satisfaction have centred on differences around diverse variables, which can be grouped into two main categories: the personal characteristics of employees; and the characteristics of the job itself (see Reiner and Zhao, 1999). Research into the first group has typically dealt with issues such as: gender (Oshagbemi, 2000); age and gender (Moyes *et al.*, 2006); rank (Holden and Black, 1996); length of service (Oshagbemi, 2003); marital status, number of children, and education level (Koustelios, 2001); education level (Clark, 1997); ethnicity (Sloane and Williams, 2000); health (Clark, 1997); and psychological well-being (Wright *et al.*, 2007). Not all findings are conclusive, with contradictory findings being reported (Koustelios, 2001).

Research into job satisfaction and the second group of characteristics includes studies on: leadership style (Rad and Yarmohammadian, 2006); work characteristics and characteristics of the work environment (Irvine and Evans, 1995); job security (Yousef, 1998); disability and workplace characteristics (Uppal, 2005); adverse working conditions (Bockerman and Ilmakunnas, 2006); size of business (Davis, 2004); and socio- and racio-ethnic differences in perceptions (Friday *et al.*, 2004; Friday and Friday, 2003).

Motivation theories can be broadly classified into process and content theories (Gilbert and Walker, 2001). The former focus on how motivation occurs (e.g. expectancy theory, goal setting theory, etc.), whilst the latter focus on what motivates (e.g. Maslow's (1954, 1943) Hierarchy of Needs and Herzberg's (1966) Two Factor Theory (Motivation Hygiene Theory), etc.). A comprehensive overview of these theories, is provided by Vecchio (1995). Maslow's theory is considered one of the more influential content theories (Asad and Dainty, 2005) and has been applied to much research in construction industry motivation (see Asad and Dainty, 2005; Olomolaiye

and Ogunlana, 1988). It is considered an ideal typology for understanding motivational factors in the construction industry (Asad and Dainty, 2005).

Job satisfaction and motivation in the construction industry

"Job satisfaction" research in the construction industry has largely dealt with "motivation", with a focus on construction worker motivation (see Ogunlana and Chang, 1998). There is a paucity of material dealing with the motivation of professional staff (Asad and Dainty, 2005), notable exceptions being the work of Asad and Dainty (2005), Gilbert and Walker (2001), Smithers and Walker (2000), Hammuda and Dulaimi (1997), and Chan (1993). Asad and Dainty (2005) compared the motivation of three occupational groups in organizations of differing sizes. They found that professional staff are motivated largely by intrinsic factors, contrasting markedly with the unskilled workers. Gilbert and Walker (2001) examined the relationship between motivation and gender, particularly whether or not professional men and women are motivated or demotivated by the same variables. They found no significant differences in overall motivation, but highlighted differences with regard to the perceived attractiveness of certain workplace and job characteristics. Smithers and Walker (2000) investigated the effect of workplace environment on the motivation and demotivation of construction professionals. Variables found to be significant factors included long work hours, non-recognition for work done, and colleagues' aggressive management styles, Hammuda and Dulaimi (1997) found that the process of empowering is a powerful motivator for project managers. Chan (1993) examined the motivation of Australian project managers. He found that, with increased salary, project managers desired a corresponding increase in achievement, power and control.

No evidence could be found in the literature documenting research into the job satisfaction of design professionals in general, and quantity surveyors in particular.

Questionnaire design and methodology

The questionnaire consisted of four sections. Section A focused on demographic issues such as age, gender, race/ethnicity, qualification, income, and employment characteristics. Section B contained questions relating to the presence of motivating factors in terms of promoting feelings of job satisfaction. Factors explored included respondents' perceptions of their salary level, job security, recognition and promotion prospects, feelings of personal satisfaction regarding work completed, feedback from superiors regarding performance, task variety, use of initiative, team participation and social interaction at work. Section C explored respondents' opinions regarding their career choice. Section D covered issues relating to harassment and discrimination at work. Issues explored included perceived discrimination on the basis of gender or race, views on flexible working hours and maternity/paternity leave, and whether or not respondents had personally experienced harassment or discrimination at work. The range of motivational factors and issues included within the survey instrument were drawn from the literature (see Uppal (2005); Asad and Dainty (2005); Gilbert and Walker (2001); Smithers and Walker (2000); and Olomolaiye (1988)).

The data were collected via a web-based, online questionnaire survey. This instrument was adopted as it would facilitate the comparatively easy (and inexpensive), national coverage of every registered quantity surveyor. The SACQSP e-mailed all registered quantity surveyors for whom email addresses were on record

(n = 1, 448), requested their participation in the survey, and provided a link to a URL where the questionnaire could be completed. The final response rate of 10.08 per cent (n = 146) is considered adequate for a survey of this nature (Oppenheim, 1992). The data were analysed using SPSS for Windows, Unless otherwise stated, percentages given below relate to the responses to individual questions.

Job satisfaction of quantity surveyors

Discussion of the results

Iob satisfaction and demographic factors

The findings indicate that the majority of the respondents may be considered to be male (85 per cent), "White" (84 per cent), work in the private sector (81 per cent), operate within a PQS firm (84 per cent), hold a four-year degree or equivalent (84 per cent), married or in a permanent relationship (84 per cent), under 45 years old (55 per cent), earn in excess of R300,000 per annum (77 per cent), possess at least ten years' experience (82 per cent), have served their present organisation for more than five years (56 per cent), and served under their present line manager for five or less years (60 per cent).

Using a six-point Likert scale, respondents' levels of job satisfaction were tested with response options ranging from "I love it" to "I hate it". Whilst 88 per cent of responding quantity surveyors reported liking their jobs at least "on the whole", only 42 per cent claimed to "love it" or "like it very much" (high levels of job satisfaction).

As depicted in Table I, the only demographic factors displaying a statistically significant relationship with high levels of job satisfaction are gender (p = 0.01) and race (p = 0.04). With regard to gender differences, 68 percent of females reported high levels of job satisfaction compared to 38 percent of the men. This finding, whilst conflicting with that of Oshagbemi (2003), is noteworthy given the perception on the part of females that the industry is male-dominated (Court and Moralee, 1995). When race is considered, 22 per cent of "non-whites" compared to 46 per cent of their "white" counterparts claim to experience high levels of job satisfaction. This result may be explained by the significance of discrimination on the basis of race reported here.

Iob satisfaction and workplace factors

The majority of respondents (82 per cent) feel that they are being paid an average, to above average, salary. A total 29 percent claim to receive to be remunerated above the

Factor	Significant/insignificant (95 % CI)	<i>p</i> -value	
Gender	Significant	0.010	
Race/ethnicity	Significant	0.038	
Public/private sector	Not significant	0.808	
Employment sector	Not significant	0.478	
Education	Not significant	1.000	
Marital status	Not significant	0.756	
Age	Not significant	0.393	
Salary received	Not significant	0.120	
Years of experience	Not significant	0.156	Table I.
Employer/salaried	Not significant	0.493	Relationship between
Years with present organisation	Not significant	0.777	demographic factors and
Years under present line manager	Not significant	0.972	job satisfaction

average. The findings indicate that the majority of respondents perceive their occupation to provide themselves with high levels of security of employment (56 per cent), few prospects for promotion (59 per cent), feelings of personal accomplishment at work (79 per cent), little recognition of achievements over and above normal responsibilities (61 per cent), opportunities to do challenging and creative work (57 per cent), opportunities to do varied and non-repetitive work (56 per cent), little feedback from superiors on performance (72 per cent), a low degree of supervision by superiors (82 per cent), feeling a member of a team and participating in decision making (77 per cent), and opportunities at work for social interaction and the development of close friendships (51 per cent).

As can be seen from Table II, a number of the workplace factors have a significant relationship with job satisfaction (p < 0.02). Using Maslow's Hierarchy of Needs as a basis for categorizing these significant factors, it is noteworthy that all fall into the higher-order needs categories. More specifically, personal satisfaction, doing varied, non-repetitive and challenging work, and working with minimal supervision all fall within the "need for self-actualisation". Recognition of extraordinary work falls within the "need for esteem", whilst participation and social interaction may be classed as falling within the "need to belong". Reference to Tables I and II indicates that "physiological needs" and "safety needs" are not significantly related to job satisfaction. These results conflict somewhat with those reported by Asad and Dainty (2005).

Job satisfaction and career choice issues

The results indicate that the majority of respondents were probably, or definitely, not well informed about career prospects before entering the profession (52 per cent), with only 9 per cent claiming to have definitely been well informed. The majority report that their career expectations have been probably or definitely been met (85 per cent), would probably or definitely choose the same career again (69 per cent), and would probably or definitely recommend a career in quantity surveying to others (75 per cent). Considerably fewer respondents provided emphatic responses to the above questions, with "definitely" being cited by less than 25 per cent of respondents in each instance.

As reflected in Table III, all career choice factors display a significant (p < 0.001) relationship with job satisfaction, with the exception of "being informed about career

Factor	Significant/not significant (95% CI)	p-value
Feelings towards salary received	Not significant	0.160
Security of employment	Not significant	0.356
Prospects of promotion	Not significant	0.134
Feelings of personal satisfaction	Significant	< 0.001
Recognition for extraordinary work	Significant	0.001
Opportunity to do challenging and creative work	Significant	0.003
Varied and non-repetitive work	Significant	0.010
Feedback on performance	Not significant	0.157
Degree of supervision and initiative	Significant	0.011
Participation in decision-making	Significant	0.017
Opportunity for social interaction	Significant	< 0.001

Table II.Relationship between workplace factors (characteristics) and job satisfaction

Job satisfaction of quantity surveyors

265

Job satisfaction and gender and race discrimination at work

The majority of respondents, whether satisfied with their jobs or not, feel that they are remunerated above equivalent colleagues in the organization on the basis of their gender (69 per cent) or race (50 per cent), are permitted flexible working hours by employers (74 per cent), work for an organization where the statutory minima with respect to maternity and paternity leave are applied (81 per cent), work in male-dominated organizations (82 per cent), do not perceive themselves to be subject to a higher degree of supervision because of their gender (87 per cent) or race (84 per cent), are given due recognition for achievements regardless of gender (80 per cent) or race (70 per cent), and operate within a safe working environment (59 per cent).

Table IV indicates that, with the exception of remuneration bias on the basis of gender, maternity and paternity leave entitlements above statutory minima, and the security of the working environment (which is marginal, p = 0.069), the remaining factors indicate a significant relationship with job satisfaction ($p \le 0.031$). More specifically, with the exception of the issue of supervision and gender/race, a far greater proportion of persons reporting high levels of job satisfaction (than those with job dissatisfaction) agreed strongly with the questions being posed. The reverse was

Factor	Significant/not significant (95% CI)	<i>p</i> -value	
Informed about career prospects Fulfilment of career expectations Choose the same career again Recommend the career to others	Marginal significance Significant Significant Significant	0.068 < 0.001 < 0.001 < 0.001	Table III. Relationship between career choice issues and job satisfaction

Factor	Significant/ not significant (95% CI)	<i>p</i> -value	
Remunerated above equivalent colleagues on the basis of gender	Not significant	0.120	
Remunerated above equivalent colleagues on the basis of race	Significant	0.031	
Flexibility of work hours	Significant	0.006	
Statutory minima maternity and paternity leave entitlements	Not significant	0.141	
Male-dominated management of the organisation	Significant	0.015	
Greater degree supervision on the basis of gender	Significant	0.004	Table IV.
Greater degree supervision on the basis of race	Significant	0.005	Relationship between
Recognition of achievements regardless of gender	Significant	0.006	gender and race
Recognition of achievements regardless of race	Significant	0.001	discrimination at work
Secure physical working environment	Marginal significance	0.069	and job satisfaction

true with regard to supervision in relation to gender or race. In relation to gender, these findings accord to a large degree with those of Gurjao (2006), Sommerville *et al.* (1993), and Gale (1991).

Job satisfaction and harassment and discrimination at work

Instances of personally-experienced harassment and discrimination at work are evident. Most prevalent forms of harassment include racial harassment (13 per cent), harassment on the basis of gender (6 per cent), and sexual harassment (4 per cent). The most prevalent forms of discrimination at work include discrimination on the basis of race (35 per cent), gender (12 per cent), education (7 per cent), and religious affiliation (4 per cent).

A significant relationship does not exist between job satisfaction and any of the forms of harassment (see Table V). However, when job satisfaction and discrimination at work is considered, interesting results emerge. Specifically, a significant relationship exists between job satisfaction and discrimination on the basis of race and religious affiliation (both p < 0.40). In both of these instances, a far greater proportion of respondents report low levels of job satisfaction claim to have suffered such discrimination at work; particularly in respect of racial discrimination. In South Africa, any form of discrimination is contrary to the provisions of the Constitution (RSA, 1996).

Conclusions

The focus of this paper has been an examination of the opinions of South African quantity surveyors regarding their job satisfaction. More specifically, it has centred on a number of issues, namely, the significance of the relationship between job satisfaction and demographic factors, workplace characteristics, issues relating to gender and race at work, and harassment and discrimination in the workplace. An overview of research relating to the nature of job satisfaction was provided. Motivation theory was introduced and previous research into job satisfaction and motivation in the construction industry was discussed. The dearth of literature relating to quantity surveyors' job satisfaction was noted.

Harassment/discrimination personally experienced at work	Significant/ not significant (95% CI)	<i>p</i> -value
Sexual harassment	Not significant	0.241
Racial harassment	Not significant	0.455
Harassment on the basis of sexual orientation	Not significant	1.000
Harassment on the basis of religious affiliation	Not significant	0.138
Harassment on the basis of gender	Not significant	1.000
Discrimination on the basis of education	Not significant	1.000
Discrimination on the basis of race/ethnicity	Significant	0.034
Discrimination on the basis of sexual orientation	Not significant	1.000
Discrimination on the basis of religious affiliation	Significant	0.039
Discrimination on the basis of physical disability	Not significant	1.000
Discrimination on the basis of gender	Not significant	0.434

Table V. Relationship between harassment and discrimination at work and job satisfaction

Job satisfaction

of quantity

surveyors

Significant differences in perceived levels of job satisfaction were found to exist on the basis of both gender and race, with greater proportions of females and "whites" reporting higher levels of job satisfaction than their male and "non-white" counterparts. The majority of workplace characteristics found to be significantly associated with job satisfaction may be classed as falling within the "need for self-actualisation" category i.e. feelings of personal satisfaction in doing the work, undertaking challenging and creative work, doing varied and non-repetitive work, and being allowed to show initiative with a low degree of supervision. The remaining factors of significance fall within the "need for esteem" and "need to belong" categories. Salary is not significantly associated with job satisfaction. Interestingly, confirmatory feelings about career choice are positively associated with feelings of job satisfaction.

Discrimination in the workplace on the basis of both gender and race is significantly associated with job satisfaction in a number of ways. For example, high levels of job satisfaction are experienced, by proportionately more respondents who feel that they have flexibility of work hours, and whom receive recognition regardless of gender or race.

Instances of harassment and discrimination at work are not uncommon, the forms of discrimination that are significant being on the basis of race and religious affiliation. Proportionately more persons experiencing these forms of discrimination report lower levels of job satisfaction than their colleagues.

The results provide valuable indicators for how quantity surveying firms can create a more conducive work environment for professional staff.

References

- Asad, S. and Dainty, A.R.J. (2005), "Job motivational factors for disparate occupational groups within the UK construction sector: a comparative analysis", *Journal of Construction Research*, Vol. 6 No. 2, pp. 223-36.
- Bockerman, P. and Ilmakunnas, P. (2006), "Do job disamenities raise wages or ruin job satisfaction?", *International Journal of Manpower*, Vol. 27 No. 3, pp. 290-302.
- Chan, A.P.C. (1993), "Motivation of project managers", Proceedings of the CIB W-65 "Organisation and Management of Construction: The Way Forward" Conference, Trinidad, West Indies, pp. 931-42.
- Clark, A. (1997), "Job satisfaction and gender: why are women so happy at work?", *Labour Economics*, Vol. 4 No. 4, pp. 341-72.
- Court, G. and Moralee, J. (1995), Balancing the Building Team: Gender Issues in the Building Profession, Institute of Employment Studies, Brighton.
- Davis, G. (2004), "Job satisfaction survey among employees in small businesses", *Journal of Small Business and Enterprise Development*, Vol. 11 No. 4, pp. 495-503.
- Davis, K.Y. and Newstrom, J.W. (1999), Comportamiento Humano en al Trabjo: Comportamiento Organizacional, 10th ed., McGraw-Hill, Mexico City.
- Friday, S.S. and Friday, E. (2003), "Racioethnic perceptions of job characteristics and job satisfaction", *Journal of Management Development*, Vol. 22 No. 5, pp. 426-42.
- Friday, S.S., Moss, S. and Friday, E. (2004), "Socioethnic explanations for racioethnic differences in job satisfaction", *Journal of Management Development*, Vol. 23 No. 2, pp. 152-68.
- Gale, A.W. (1991), What is Good for Women is Good for Men. Action Research Aimed at Increasing the Proportion of Women in Construction, Chapman and Hall, London.

- Garcia-Bernal, J., Gargallo-Castel, A., Marzo-Navarro, M. and Rivera-Torres, P. (2005), "Job satisfaction: empirical evidence of gender differences", Women in Management Review, Vol. 20 No. 4, pp. 279-88.
- Gilbert, G.L. and Walker, H.T. (2001), "Motivation of Australian white-collar construction employees: a gender issue?", *Engineering, Construction and Architectural Management*, Vol. 8 No. 1, pp. 59-66.
- Gurjao, S. (2006), *Inclusivity: The Changing Role of Women in the Construction Workforce*, report, Chartered Institute of Building, Ascot.
- Hammuda, I. and Dulaimi, M.F. (1997), "Theory and application of empowerment in construction: a comparative study of the different approaches to empowerment in construction, service and manufacturing industries", *International Journal of Project Management*, Vol. 15 No. 5, pp. 289-96.
- Herzberg, F. (1966), Work and the Nature of Man, World Publishing, Cleveland, OH.
- Holden, E.W. and Black, M.M. (1996), "Psychologists in medical schools professional issues for the future: how are rank and tenure associated with productivity and satisfaction?", Professional Psychology: Research and Practice, Vol. 27 No. 4, pp. 407-14.
- Irvine, D.M. and Evans, M.G. (1995), "Job satisfaction and turnover among nurses: integrating research findings across studies", *Nursing Research*, Vol. 44 No. 4, pp. 246-53.
- Koustelios, A. (2001), "Personal characteristics and job satisfaction of Greek teachers", International Journal of Educational Management, Vol. 15 No. 7, pp. 354-8.
- Loosemore, M., Dainty, A. and Lingard, H. (2003), *Human Resource Management in Construction Projects: Strategic and Operational Approaches*, Spon Press, London.
- Maslow, A.H. (1943), "A theory of human motivation", Psychological Review, Vol. 50, pp. 370-96.
- Maslow, A.H. (1954), Motivation and Personality, Harper, New York, NY.
- Moyes, G.D., Williams, P.A. and Koch, B. (2006), "The effects of age and gender upon the perceptions of accounting professionals concerning their job satisfaction and work-related activities", *Managerial Auditing Journal*, Vol. 21 No. 5, pp. 536-61.
- Ogunlana, S.O. and Chang, W.P. (1998), "Worker motivation on selected construction sites in Bangkok, Thailand", *Engineering, Construction and Architectural Management*, Vol. 5 No. 1, pp. 68-81.
- Olomolaiye, P.O. (1988), "An evaluation of bricklayers' motivation and productivity", unpublished PhD thesis, Loughborough University of Technology, Loughborough.
- Olomolaiye, P.O. and Ogunlana, S.O. (1988), "A survey of construction operative motivation on selected sites in Nigeria", *Building and Environment*, Vol. 23 No. 3, pp. 179-85.
- Oppenheim, A.N. (1992), Questionnaire Design, Interviewing and Attitude Measurement, Pinter Publishers, London.
- Oshagbemi, T. (2000), "Gender differences in the job satisfaction of university teachers", Women in Management Review, Vol. 15 No. 7, pp. 331-43.
- Oshagbemi, T. (2003), "Personal correlates of job satisfaction: empirical evidence from UK universities", *International Journal of Social Economics*, Vol. 30 No. 12, pp. 1210-32.
- Rad, A.M.M. and Yarmohammadian, M.H. (2006), "A study of relationship between managers leadership style and employees' job satisfaction", *Leadership in Health Services*, Vol. 19 No. 2, pp. xi-xxviii.
- Reiner, M.D. and Zhao, J. (1999), "The determinants of job satisfaction among United States Air Force's security police", *Review of Public Personnel Administration*, Vol. 19 No. 3, pp. 5-18.

Republic of South Africa (1996), Constitution of the Republic of South Africa (Act 108 of 1996), available at: www.polity.org.za/html/govdocs/constitution/saconst.html, (accessed 10 July 2007).

Job satisfaction of quantity surveyors

Republic of South Africa (2000), *Quantity Surveying Profession Act (Act 49 of 2000)*, available at: www.info.gov.za/gazette/acts/2000/a49-00.pdf (accessed 11 July 2007).

269

- Sloane, P. and Williams, H. (2000), "Job satisfaction, comparison earnings, and gender", *Labour*, Vol. 14 No. 3, pp. 473-502.
- Smithers, G.L. and Walker, D.H.T. (2000), "The effect of the workplace on motivation and demotivation of construction professionals", Construction Management and Economics, Vol. 18 No. 7, pp. 833-41.
- Sommerville, J., Kennedy, P. and Orr, L. (1993), "Women in the UK construction industry", Construction Management and Economics, Vol. 11 No. 4, pp. 285-91.
- Uppal, S. (2005), "Disability, workplace characteristics and job satisfaction", *International Journal of Manpower*, Vol. 26 No. 4, pp. 336-49.
- Vecchio, R.D. (1995), Organizational Behavior, 3rd ed., Harcourt Brace College Publisher, Orlando, FL.
- Wright, T.A., Cropanzano, R. and Bonett, D.G. (2007), "The moderating role of employee positive well being on the relationship between job satisfaction and job performance", *Journal of Occupational Health Psychology*, Vol. 12 No. 2, pp. 93-104.
- Yousef, D.A. (1998), "Satisfaction with job security as a predictor of organizational commitment and job performance in a multicultural environment", *International Journal of Manpower*, Vol. 19 No. 3, pp. 184-94.

Corresponding author

Paul Bowen can be contacted at: Paul.Bowen@uct.ac.za