JOB SATISFACTION OF SOUTH AFRICAN QUANTITY SURVEYORS: DOES AGE MAKE A DIFFERENCE?

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A previous paper has presented the results of a web-based national questionnaire survey of the opinions of South African quantity surveyors relating to the relationship between job satisfaction and racial classification. This paper examines job satisfaction within the context of age. Issues explored included demographic factors; factors influencing job satisfaction; choice of career; age, gender and race in the workplace; and age and harassment and discrimination at work. Unlike evidence documented in the literature, *very few* significant differences exist between the two respondent groupings, except with regard to: the importance of maternity and paternity leave entitlements above statutory minima; the extent to which the management of firms is seen to be male dominated; the importance of gender representivity at work as a means of combating discrimination; and the importance of respecting individual diversity within the workplace. Instances of *harassment* and *discrimination* (especially racial and gender) at work are not uncommon, although age *per se* is not seen as a significant factor.

Key phrases: Job satisfaction, age, influencing factors, harassment, discrimination, quantity surveyors, South Africa.

INTRODUCTION

This paper documents research into the relationship between the job satisfaction of South African quantity surveyors and their age. It forms part of a series of papers dealing with job satisfaction and factors such as gender, race, salary, employment status and age (see, for example, Bowen *et al* 2008a). The paper presented here should be read in conjunction with a paper published previously by this journal (Bowen *et al* 2008b) as that paper provides a review of the literature relating to job satisfaction, contextualizes the research in relation to documented evidence of job satisfaction in the construction industry, provides an overview of the quantity surveying profession in South Africa, explains the rationale for the questionnaire design, and discusses the research method and data collection process. Certain overlaps are inevitable given the need to discuss the results within the context of the literature.

In summary, data were collected from registered professional quantity surveyors (Pr.QS) using a web-based, online questionnaire survey. As at June 2007, 1756 quantity surveyors were registered with the South African Council for the Quantity Surveying Profession (SACQSP). The SACQSP emailed all registered quantity

surveyors for whom email addresses were on record (*N* = 1448), 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% (*n* = 146) is considered adequate for a survey of this nature (Oppenheim 1992).

AGE AND JOB SATISFACTION

A number of studies have examined the effects of age upon the perceptions of employees concerning their job satisfaction (e.g. Moyes *et al* 2006; Okpara 2004; Oshagbemi 2003; Sarker *et al* 2003; Yousef 1998). Using regression analysis, Moyes *et al*. (2006) researched the effects of age and gender upon the perceptions of accounting professionals concerning their job satisfaction and work-related attributes. The following factors were found to be significant to age and/or gender: job fulfilment, treatment by peers, promotion opportunities, line managers, gender discrimination, and relations with co-workers. Okpara (2004) found age to affect job satisfaction of IT managers in Nigeria and suggested that the higher turnover rate (mobility) of younger managers may be an explanation.

Oshagbemi (2003) reviewed research into age and job satisfaction, concluding that there appears to be extensive evidence of such a relationship. The nature of this relationship, whether linear or curvilinear, evidently remains unresolved, possibly being a function (at least in part) of the occupational group being examined. Sarker *et al* (2003) examined whether age and tenure are individual determinants of satisfaction, or whether there is an interaction between the two. They found that employee age is not significantly associated with overall job satisfaction, but that tenure is. Eskildsen *et al* (2003) found a near-perfect linear relationship between age and job satisfaction (p=0.01).

Employees' age (amongst other factors) was found by Yousef (1998) to contribute significantly to variations in satisfaction with job security among employees, the results indicating that satisfaction with job security increases with age. Linked to this was a finding that married individuals were more satisfied with job security then their single counterparts.

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

The data were analysed using SPSS for Windows. For the purposes of analysing age and job satisfaction, differences were assessed by grouping respondents' ages into

two categories, namely: those younger than 45 years old; and those 45 years and older. These particular categories were selected as 46% of all respondents fell into the '45 years or older' grouping. Unless otherwise stated, percentages given below relate to the responses to individual questions.

ANALYSIS OF THE DATA

Sample profile

An age-based examination of the respondents reveals that, in keeping with the profile of quantity surveyors registered with the SACQSP, the majority (55%) of respondents are under the age of 45 years, male (<45: 78%; ≥ 45: 91%), South African citizens (<45: 95%; ≥ 45: 94%), and 'White' (<45: 76%; ≥ 45: 94%). Most report being employed in the private sector (<45: 81%; ≥ 45: 80%), in professional quantity surveying practices (<45: 84%; ≥ 45: 84%), and holding a four-year full-time degree or equivalent (<45: 80%; ≥ 45: 84%). Insofar as the personal circumstances of respondents is concerned, 83% (<45: 76%; ≥ 45: 92%) report being married or in a relationship, and 75% are parents (<45: 62%; ≥ 45: 89%).

Insofar as age is concerned, only 11% of respondents (male: 8%; female: 22%) are under the age of 30. The single largest grouping (45% of total sample) in the case of both men and women is the '45 and older' age group, accounting for 49% of men and 26% of women, respectively. Interestingly, 43% of the females are under the age of 35, and 61% are below 40 years old. In contrast, the vast majority (65%) of male respondents are 40 years or older. Issues relating to age include maturity, experience, and stage in the family life-cycle - possibly important factors when considering job satisfaction.

The employment circumstances of respondents reflect differences between the two different age groupings. Insofar as remuneration is concerned, although 75% of those less than 45 years old and 78% of those 45 years or older, respectively, receive an annual salary of R300 000 or more, a greater proportion (3x) of women (9%) than men (3%) receive a salary of less than R180 000 per annum. With regard to experience, the age profile of the younger age grouping is reflected in the number of year's experience they have had. More specifically, 31% of those less than 45 years old report less than 10 years experience in the industry compared to 3% of their older counterparts. Interestingly, whilst almost two thirds of the men claim to have had more than 15 years experience, only 39% of women report this. The comparative difference in the experience of the two age groupings does not appear to be associated with salary differences between the two groups.

Insofar as 'seniority' within the profession is concerned there appears little difference between the two groups, with 53% of the younger group and 60% of the older group, respectively, reporting being either sole proprietors, directors or partners. With regard to the length of time respondents have been with their present organisation, interesting differences between the groups emerge. More specifically, 71% of those 45 years and older report a service length of exceeding 5 years whilst only 42% of their younger counterparts report this. Differences also appear to exist between the two age groupings regarding the number of years they have served under their present line manager, with 28% and 55% of the younger and older age groupings, respectively, reporting having done so for more than 5 years.

Factors influencing feelings of job satisfaction

As described above, 6-point Likert scales were used to explore the *presence* and *importance* of motivating factors in promoting feelings of job satisfaction. The relative *importance* to the younger and older quantity surveyors of the factors tested is shown in Tables 1(a). The scores for each factor were calculated on the basis of the mean responses. The ranked factors of importance were then clustered on the basis of correspondence with Maslow's need-based hierarchy (see Asad & Dainty 2005) and are shown in Table 1(b). Statistics relevant to the overall sample are provided for comparison purposes.

The relative importance (ranking) of each Maslow factor was then determined from the mean Likert scores. Composite variables (with scores for each participant), derived from the original questions, were created for each Maslow group that was associated with more than one question. The means of the factor groupings, along with their standard errors, differences, and associated *p*-values are displayed in Tables 1(a) and 1(b). This approach meant that a person with a missing value for any of the questions was effectively excluded.

The *presence* of factors affecting the job satisfaction of younger and older quantity surveyors is depicted in Table 2(a). A similar procedure to that described above was used to determine a score for each factor, as well as the relative rank of *presence* for the factors (with mean values). The differences in the means of the two groups, together with their standards errors and associated *p*-values, are also shown. The product of the ratings for the *presence* and *importance* scores yielded a score representing the 'subjective emotion' for each factor; essentially a 'job satisfaction score' (see Table 2(b)). The various motivating factors were then ranked in terms of the derived job satisfaction scores. The product means, their differences, and associated *p*-values are also shown in Table 2(b). Again, statistics relating to the overall sample are provided.

Table 1(a): Classification and *importance* of *individual* motivating factors by age according to Maslow's Hierarchy of Needs

Motivating factors grouped according to Maslow's Hierarchy of Needs	Importance of individual factors: mean scores (+/- std error)							
	Overall	Rank	Age: < 45years	Rank	Age: ≥ 45 years	Rank	Difference	*P*-value
1. Physiological needs								
(a) Money	2.09 (+/- 0.08)	9	2.06 (+/- 0.10)	9	2.12 (+/- 0.12)	9	0.06 (+/- 0.16)	*p*=0.70
2. Safety needs								
(a) Job security	2.03 (+/- 0.10)	8	2.00 (+/- 0.12)	8	2.08 (+/- 0.16)	7	0.08 (+/- 0.20)	*p*=0.80
3. Belonging needs								
(a) Job promotion prospects	2.11 (+/- 0.12)	10	2.07 (+/- 0.16)	10	2.15 (+/- 0.17)	10	0.08 (+/- 0.24)	*p*=0.57
(b) Feedback on past performance	1.87 (+/- 0.07)	6	1.87 +/- (0.11)	7	1.88 (+/- 0.10)	5	0.01 (+/- 0.15)	*p*=0.63
(c) Participation in a team	1.59 (+/- 0.05)	3	1.62 (+/- 0.07)	3	1.55 (+/- 0.07)	3	0.07 (+/- 0.10)	*p*=0.59
(d) Social interaction	2.61 +/- (0.11)	11	2.41 (+/- 0.13)	11	2.84 (+/- 0.17)	11	0.43 (+/- 0.21)	*p*=0.06
4. Need for esteem								
(a) Recognition of achievements	1.83 (+/- 0.09)	5	1.83 (+/- 0.13)	5	1.84 (+/- 0.10)	4	0.01 (+/- 0.17)	*p*=0.37
5. Need for self-actualisation								
(a) Self-satisfaction from the work done	1.42 (+/- 0.05)	1	1.42 (+/- 0.07)	1	1.42 (+/- 0.07)	1	0.01 (+/- 0.10)	*p*=0.91
(b) Challenging and creative work	1.76 (+/- 0.07)	4	1.66 (+/- 0.08)	4	1.89 (+/- 0.12)	6	0.23 (+/- 0.14)	*p*=0.24
(c) Varied and non-repetitive work	1.96 (+/- 0.07)	7	1.85 (+/- 0.08)	6	2.09 (+/- 0.13)	8	0.25 (+/- 0.15)	*p*=0.23
(d) Low degree of supervision (autonomy)	1.51 (+/- 0.05)	2	1.50 (+/- 0.07)	2	1.52 (+/- 0.08)	2	0.02 (+/- 0.10)	*p*=0.98

Scale values: 1 = Very important; 6 = Unimportant; *P*-values from the Mann-Whitney test

Table 1(b) Importance of motivating factor groupings by age according to Maslow's Hierarchy of Needs

Motivating factors grouped according to Maslow's Hierarchy of Needs	Importance of factor groupings: mean scores (+/- std error)							
	Overall	Rank	Age: < 45 years	Rank	Age: ≥ 45 years	Rank	Difference	*P*-value
1. Physiological needs	2.09 (+/- 0.08)	5	2.06 (+/- 0.10)	5	2.12 (+/- 0.12)	4	0.06 (+/- 0.16)	*p*=0.70
(a) Money								
2. Safety needs	2.03 (+/- 0.10)	3	2.00 (+/- 0.12)	3	2.08 (+/- 0.16)	3	0.08 (+/- 0.20)	*p*=0.80
(a) Job security								
3. Belonging needs	2.06 (+/- 0.06)	4	2.00 (+/- 0.08)	3	2.14 (+/- 0.08)	5	0.14 (+/- 0.12)	*p*=0.13
(a) Job promotion prospects								
(b) Feedback on past performance								
(c) Participation in a team								
(d) Social interaction								
4. Need for esteem	1.83 (+/- 0.09)	2	1.83 (+/- 0.13)	2	1.84 (+/- 0.10)	2	0.01 (+/- 0.17)	*p*=0.37
(a) Recognition of achievements								
5. Need for self-actualisation	1.65 (+/- 0.05)	1	1.60 (+/- 0.06)	1	1.72 (+/- 0.08)	1	0.12 (+/- 0.10)	*p*=0.35
(a) Self-satisfaction from the work done								
(b) Challenging and creative work								
(c) Varied and non-repetitive work								
(d) Low degree of supervision (autonomy)								

Scale values: 1 = Very important; 6 = Unimportant; *P*-values from the Mann-Whitney test

Table 2(a): *Presence* of individual motivating factors by age

Motivating factor	Presence of individual factors: mean scores (+/- std error)							
	Overall	Rank	Age: < 45 years	Rank	Age: ≥ 45 years	Rank	Difference	*P*-value
Salary (with presence adjusted)	3.33 (+/- 0.10)	8	3.15 (+/- 0.13)	8	3.53 (+/- 0.15)	9	0.37 (+/- 0.20)	*p*=0.07
Security of employment	2.84 (+/- 0.13)	6	2.87 (+/- 0.17)	6	2.80 (+/- 0.20)	6	0.07 (+/- 0.26)	*p*=0.67
Prospects for promotion	3.50 (+/- 0.16)	10	3.38 (+/- 0.21)	9	3.65 (+/- 0.24)	11	0.27 (+/- 0.32)	*p*=0.39
Feelings of personal satisfaction and accomplishment	2.10 (+/- 0.09)	2	2.03 (+/- 0.11)	1	2.19 (+/- 0.14)	3	0.16 (+/- 0.18)	*p*=0.51
Recognition for achievements above normal responsibilities	3.38 (+/- 0.13)	9	3.38 (+/- 0.16)	9	3.38 (+/- 0.21)	8	0.00 (+/- 0.27)	*p*=0.98
Opportunity to do challenging and creative work	2.82 (+/- 0.13)	5	3.00 (+/- 0.18)	7	2.59 (+/- 0.18)	4	0.41 (+/- 0.26)	*p*=0.15
Varied and non-repetitive work	2.69 (+/- 0.10)	4	2.73 (+/- 0.14)	4	2.63 (+/- 0.15)	5	0.10 (+/- 0.21)	*p*=0.67
Regular feedback on performance	3.75 (+/- 0.12)	11	3.89 (+/- 0.16)	11	3.57 (+/- 0.19)	10	0.32 (+/- 0.25)	*p*=0.20
Low degree of supervision and encouraged to show initiative	1.93 (+/- 0.10)	1	2.07 (+/- 0.14)	2	1.77 (+/- 0.13)	1	0.30 (+/- 0.19)	*p*=0.11
Participation in a working team	2.13 (+/- 0.09)	3	2.19 (+/- 0.12)	3	2.07 (+/- 0.14)	2	0.12 (+/- 0.19)	*p*=0.30
Opportunities for social interaction and the development of close friendships	2.84 (+/- 0.11)	6	2.79 (+/- 0.16)	5	2.89 (+/- 0.15)	7	0.10 (+/- 0.22)	*p*=0.49

Scale values: 1 = Very important; 6 = Unimportant; *P*-values from the Mann-Whitney test

Table 2(b) *Importance* of factor product scores (subjective emotion of job satisfaction) by age

Motivating factor	Subjective emotion of job satisfaction: Product scores (Presence x Importance): mean scores (+/- std error)							
	Overall	Rank	Age: < 45 years	Rank	Age: ≥ 45 years	Rank	Difference	*P*-value
Salary (with presence adjusted)	6.98 (+/- 0.34)	8	6.65 (+/- 0.47)	8	7.39 (+/- 0.50)	9	0.74 (+/- 0.69)	*p*=0.24
Security of employment	5.76 (+/- 0.40)	6	6.08 (+/- 0.62)	7	5.37 (+/- 0.46)	5	0.71 (+/- 0.77)	*p*=0.81
Prospects for promotion	7.73 (+/- 0.63)	10	7.25 (+/- 0.80)	10	8.33 (+/- 1.00)	10	1.08 (+/- 1.28)	*p*=0.26
Feelings of personal satisfaction and accomplishment	3.11 (+/- 0.19)	2	3.06 (0+/-.26)	1	3.17 (+/- 0.28)	2	0.11 (+/- 0.38)	*p*=0.55
Recognition for achievements above normal responsibilities	6.10 (+/- 0.34)	7	5.93 (+/- 0.47)	6	6.32 (+/- 0.50)	7	0.39 (+/- 0.69)	*p*=0.44
Opportunity to do challenging and creative work	5.00 (+/- 0.29)	4	4.96 (+/- 0.36)	4	5.07 (+/- 0.48)	4	0.11 (+/- 0.60)	*p*=0.78
Varied and non-repetitive work	5.46 (+/- 0.29)	5	5.18 (+/- 0.35)	5	5.80 (+/- 0.49)	6	0.62 (+/- 0.60)	*p*=0.64
Regular feedback on performance	7.04 (+/- 0.34)	9	7.15 (+/- 0.47)	9	6.90 (+/- 0.50)	8	0.25 (+/- 0.69)	*p*=0.87
Low degree of supervision and encouraged to show initiative	3.08 (+/- 0.20)	1	3.28 (+/- 0.30)	2	2.85 (+/- 0.27)	1	0.43 (+/- 0.40)	*p*=0.32
Participation in a working team	3.52 (+/- 0.19)	3	3.65 (+/- 0.27)	3	3.35 (+/- 0.26)	3	0.30 (+/- 0.38)	*p*=0.63
Opportunities for social interaction and the development of close friendships	8.19 (+/- 0.55)	11	7.60 (+/- 0.72)	11	8.91 (+/- 0.85)	11	1.30 (+/- 1.11)	*p*=0.14

Scale values: 1 = Very important; 6 = Unimportant; *P*-values from Mann-Whitney test

Overall levels of job satisfaction

Quantity surveyors' overall levels of job satisfaction for the two age groups are shown in Table 3. A variety of response options were provided, ranging from 'I love it' to 'I hate it' on a 7-point Likert scale. The percentage response against each category is given.

Table 3: Overall feelings of job satisfaction by age (n = 141)

Feeling of job satisfaction	Responses	
	Age: < 45 years (n=77)	Age: ≥ 45 years (n=64)
I love it	12%	14%
I like it very much	34%	23%
On the whole I like it	44%	49%
I am indifferent to it	10%	6%
I am not really keen on it	0%	6%
I dislike it a great deal	0%	0%
I hate it	0%	2% (n=1)

Scale values: 1 = I love it; 7 = I hate it: Mean value = 2.61; Fisher's exact test: *p*-value=0.13

Perceptions of the degree to which aspects of quantity surveying practice cause job dissatisfaction are given in Table 4.

Table 4: Aspects of the job giving rise to job dissatisfaction by age (n = 136)

Aspects of job	Responses	
	Age: < 45 years (n=75)	Age: ≥ 45 years (n=61)
Interactions with other professionals	11%	16%
Measuring quantities of builders' work	29%	15%
Preparation of final accounts	16%	18%
The provision of cost estimates	5%	10%
Project administration	19%	13%
Other	20%	28%

Note: 1 = Interactions with other professionals; 5 = Project administration; Fisher's exact test: *p*-value=0.26

A function of professional life is the requirement to sometimes undertake overtime (paid or unpaid) to meet the work demands of the organization. Overtime is invariably done at the expense of leisure and family time. Quantity surveyors' opinions regarding overtime as a source of dissatisfaction and access to leisure time were explored using 'yes', 'no' and 'not applicable' questions (with the exception of overtime). The results are shown in Table 5.

Table 5: Overtime as a source of dissatisfaction by age

Overtime versus leisure time	Age: < 45 years			Age: ≥ 45 years			*P*-value
	Yes	No	Not applicable	Yes	No	Not applicable	
Paid overtime is a source of job dissatisfaction to me (n=76; 64)	1%	25%	74%	2%	17%	81%	*p*=0.60
Unpaid overtime is a source of job dissatisfaction to me (n=77; 65)	23%	29%	48%	14%	32%	54%	*P*=0.36
Access to me leisure time is very important in influencing my feelings of job satisfaction (n=77; 64)	91%	9%	-	80%	20%	-	*p*=0.09

P-values from Fisher's exact test

Choice of career

Comparative data relating to factors influencing the choice of career by quantity surveyors are shown in Table 6.

Table 6: Factors influencing career choice by age (n = 140)

Factor of influence	Responses	
	Age: < 45 years (n=77)	Age: ≥ 45 years (n=63)
Status of the profession	3%	1%
Family / tradition	9%	16%
Salary	26%	32%
Security	9%	13%
None (drifted into career)	32%	27%
Other	21%	11%

Fisher's exact test: *p*-value=0.47

Table 7 indicates the two groups of quantity surveyors' opinions (with the benefit of hindsight) regarding issues relating to their choice of career. Aspects covered are: were they well informed about a career in quantity surveying; has their career to-date fulfilled their expectations; would they choose the same career again; would they consider moving to another type of career in the built environment; and would they recommend a career in quantity surveying to others?

Finally, respondents were provided with a number of factors on a 6-point Likert scale and asked to rank their importance when choosing a career. The overall ranking of the factors was determined by calculating the mean score of each factor. The results (as well as standard errors for the means) are given in Table 8.

Table 7: Respondents' feelings regarding their choice of career by age

Opinions regarding choice of career	Age: < 45 years				Age: ≥ 45 years				*P*-value
	Definitely 'yes'	Probably 'yes'	Probably "no"	Definitely 'no'	Definitely 'yes'	Probably 'yes'	Probably ' no'	Definitely 'no'	
Well informed about career choice? (n=78; 64)	8%	42%	33%	17%	11%	36%	36%	17%	***p*=0.84**
Fulfilment of career expectations? (n=78; 62)	23%	60%	14%	3%	24%	63%	11%	2%	*p*=0.97
Choice of same career again? (n=78; 64)	24%	49%	23%	4%	17%	47%	27%	9%	*p*=0.44
Consideration of alternative built environment employment? (n=78; 63)	14%	44%	31%	11%	10%	36%	41%	13%	*p*=0.53
Recommend a career in quantity surveying to others? (n=78; 64)	29%	50%	18%	3%	15%	55%	25%	5%	*p*=0.22

Scale values: 1 = Definitely 'yes'; 4 = Definitely 'no'; *P*-values from Fisher's exact test

Table 8: Ranking of factors considered important in choosing a career by age

Factors considered in career choice	Age: < 45 years		Age: ≥ 45 years		Difference	*P*-value
	Ranking (mean) score (+/- std error)	Rank	Ranking (mean score) (+/- std dev)	Rank	Mean score (+/- std error)	
Having a job with a high position (status) [Belonging need] (n=78; 64)	2.99 (+/- 0.20)	6	2.88 (+/- 0.21)	5	0.11 (+/- 0.29)	*p*=0.81
Working as part of a supportive team [Belonging need] (n=75; 61)	2.92 (+/- 0..19)	5	2.74 (+/- 0.22)	4	0.18 (+/- 0.29)	*p*=0.52
Good salary [Physiological need] (n=78; 63)	2.00 (+/- 0.13)	2	1.76 (+/- 0.10)	2	0.24 (+/- 0.16)	*p*=0.49
Security of employment [Safety need] (n=78; 64)	2.60 (+/- 0.19)	3	2.14 (+/- 0.13)	3	0.46 (+/- 0.23)	*p*=0.27
Doing work which is personally satisfying [Esteem need] (n=78; 64)	1.90 (+/- 0.15)	1	1.67 (+/- 0.13)	1	0.23 (+/- 0.20)	*p*=0.34
Flexible working hours (n=78; 64)	2.71 (+/- 0. 18)	4	2.95 (+/- 0.22)	6	0.25 (+/- 0.29)	*p*=0.58

Scale values: 1 = most important; 6 = least important); *P*-values from the Mann-Whitney test

Issues relating to age, gender and race at work

Using 6-point Likert scales, the *presence* and *importance* of factors relating to gender and race, with respect to age, in influencing feelings of job satisfaction were determined and are shown in Tables 9 and 10, respectively. These tables provide the means and standard errors for the whole sample as well as for the two age groupings, and associated *p*-values. Table 11 summarises the responses of the two groups regarding issues relating to gender and race at work. Means are given for Likert scale questions and proportions for categorical responses. Standard errors for the difference in proportions are not calculated under the assumption that the proportions are equal; *p*-values are from either the Fisher's exact text or the Mann-Whitney test. The issues covered encompass perceived male dominance at work, participation in decision-making, degree of perceived supervision, promotion on the basis of PDI status, the importance of professional status and gender and race representivity as means of combating discrimination in the workplace, the importance of respecting individual diversity at work, and whether or not respondents had experienced gender or race-based discrimination or harassment at work.

Table 9: *Presence* of the factors relating to gender and race by age in influencing feelings of job satisfaction

Factors relating to gender and race	*Presence* of factor (mean scores +/- std error)				
	Sample	Age			
		Age: < 45 years	Age: ≥ 45 years	Difference	*P*-value
Remunerated at a level below equivalent colleagues due to gender (n = 74; 58)	2.35 (+/- 0.13)	2.34 (+/- 0.17)	2.36 (+/- 0.19)	0.02 (+/- 0.26)	*P*=0.81
Remunerated at a level below equivalent colleagues due to race (n = 73; 60)	3.17 (+/- 0.16)	2.95 (+/- 0.21)	3.43 (+/- 0.23)	0.49 (+/- 0.31)	*p*=0.13
Employer permits flex ble working hours for parents to facilitate absences from work during normal working hours (n = 67; 58)	2.18 (+/- 0.11)	2.16 (+/- 0.14)	2.19 (+/- 0.17)	0.03 (+/- 0.23)	*p*=0.86
Adherence by the employer to statutory minima in respect of maternity and paternity entitlements (n = 65; 53)	2.06 (+/- 0.10)	2.22 (+/- 0.17)	1.87 (+/- 0.11)	0.35 (+/- 0.20)	*p*=0.35
Recognition by employer of achievements regardless of gender (n = 74; 55)	2.05 (+/- 0.10)	2.03 (+/- 0.13)	2.07 (+/- 0.15)	0.05 (+/- 0.20)	*p*=0.83
Recognition by employer of achievements regardless of race (n = 72; 58)	2.41 (+/- 0.13)	2.39 (+/- 0.17)	2.43 (+/- 0.19)	0.04 (+/- 0.25)	*p*=0.85
Provision of secure physical environments at work for staff (n = 75; 60)	2.88 (+/- 0.15)	2.84 (+/- 0.21)	2.93 (+/- 0.23)	0.09 (+/- 0.31)	*p*=0.63

Scale values: 1 = Strongly agree; 6 = Strongly disagree; *p*-values are from the Mann-Whitney test

Table 10: *Importance* of the factors relating to gender and race by age in influencing feelings of job satisfaction

Factors relating to gender and race	*Importance* of factor (mean scores +/- std error)				
	Sample	Age			
		Age: < 45 years	Age: ≥ 45 years	Difference	*P*-value
Remuneration being fair and equitable regardless of gender and race (n = 77; 64)	1.44 (+/- 0.07)	1.49 (+/- 0.10)	1.38 (+/- 0.10)	0.12 (+/ 0.14)	*p*=0.38
Flex ble working hours for parents to facilitate absences from work during normal working hours (n = 77; 64)	1.97 (+/- 0.08)	1.94 (+/- 0.10)	2.02 (+/- 0.14)	0.08 (+/- 0.17)	*p*=0.91
Provision by the employer of maternity and paternity entitlements above the statutory minimum (n = 70; 58)	**3.07 (+/- 0.14)**	**2.59 (+/- 0.16)**	**3.66 (+/- 0.22)**	**1.07 (+/- 0.27)**	***p*<0.01**
Equality in recognition by employer regardless of gender and race (n = 75; 63)	1.47 (+/- 0.07)	1.43 (+/- 0.09)	1.52 (+/- 0.11)	0.10 (+/- 0.14)	*p*=0.46
Provision of secure physical environments at work for staff (n = 77; 63)	1.64 (+/- 0.06)	1.65 (+/- 0.09)	1.62 (+/- 0.08)	0.03 (+/- 0.12)	*P*=0.92

Scale values: 1 = Very important; 6 = Unimportant; *p*-values are from the Mann-Whitney test

Table 11: Factors relating to gender and race in the workplace by age

Factors relating to gender and race	Importance / Prevalence of factor: mean scores or proportions (+/- std error)				
	Sample	Age			
		Age: < 45 years	Age: ≥ 45 years	Difference	*P*-value
Male management actively blocks female advancement to managerial ranks (n = 9; 2)	9% (3%)	13% (4%)	4% (3%)	9% (5%)	*p*=0.11
Not allowed to contr bute meaningfully to the decision-making process (n = 11; 4)	14% (3%)	17% (5%)	9% (5%)	8% (7%)	*p*=0.26
Allowed to participation in decision making (n = 77; 63)	1.72 (+/- 0.07)	1.73 (+/- 0.10)	1.71 (+/- 0.09)	0.01 (+/- 0.13)	*p*=0.71
Subjected to a high degree of supervision because of gender (n = 73; 54)	5.23 (+/- 0.10)	5.14 (+/- 0.13)	5.35 (+/- 0.15)	0.22 (+/- 0.20)	*p*=0.16
Subjected to a high degree of supervision because of race (n = 73; 55)	5.12 (+/- 0.11)	5.03 (+/- 0.15)	5.24 (+/- 0.15)	0.21 (+/- 0.21)	*p*=0.39
Promotion on the basis of "PDI" status is acceptable (n = 76; 63)	6% (2%)	7% (3%)	5% (3%)	2% (4%)	*p*=0.65
Professional status is important in combating perceptions of discrimination in the work place (n = 75; 59)	2.27 (+/- 0.10)	2.16 (+/- 0.12)	2.41 (+/- 0.17)	0.25 (+/- 0.21)	*p*=0.42
Race representativity in the QS profession is important in combating discrimination in the work place (n= 75; 63)	3.55 (+/- 0.13)	3.41 (+/- 0.18)	3.71 (+/- 0.20)	0.30 (+/- 0.27)	*p*=0.29
Gender representativity in the QS profession is important in combating discrimination in the work place (n= 75; 63)	**3.54 (+/- 0.13)**	**3.29 (+/- 0.18)**	**3.83 (+/- 0.19)**	**0.53 (+/- 0.26)**	***p*=0.05**
I consider respect for individual diversity within the workplace to be important (n = 77; 64)	**1.67 (+/- 0.07)**	**1.53 (+/- 0.08)**	**1.84 (+/- 0.12)**	**0.31 (+/- 0.15)**	***p*<0.05**

Means are given for Likert scale questions (scale values: 1 = Very important; 6 = Unimportant) and proportions for categorical responses; std errors for the difference in proportions are not calculated under the assumption that the proportions are equal ; *p*-values are from either Fisher's exact text or the Mann-Whitney test

The gender profiles of management in the respondents' practices are shown in Table 12. Table 13 depicts the perceptions of those quantity surveyors whose firms are 'predominantly male' regarding promotion and participation in decision-making in relation to gender (by age).

Table 12: Gender profile of the management of quantity surveying practices (n=139) by age

Gender profile of management	Frequency	
	Age: < 45 years (n=76)	Age: ≥ 45 years (n=63)
Predominantly male	88%	73%
Predominantly female	7%	2%
Balanced profile	5%	25%

Fisher's exact test: ***p*-value<0.01**

Table 13: Promotion and participation in organisations where management is predominantly male by age

Managerial actions within the organisation relating to:	Frequency		*P*-value
	Age: < 45 years	Age: ≥ 45 years	
(a) Promotion			
Management actively blocks female advancement to managerial ranks (n = 9; 2)	13%	4%	*P*=0.20
Management does not discriminate on the grounds of gender in promotions to managerial ranks (n = 60; 45)	87%	96%	
(b) Participation in decision-making			
Not allowed to contribute meaningfully to the decision-making process (n = 11; 4)	17%	9%	*p*=0.40
Allowed to contribute meaningfully to the decision-making process (n = 54; 39)	83%	91%	

P-values from Fisher's exact test

Age, harassment and discrimination at work

The results relating to perceptions of harassment and discrimination at work are shown in Tables 14 and 15, respectively. In general the small sample sizes preclude definitive inferences, suffice it to say that instances of harassment and discrimination are present in the quantity surveying workplace.

Table 14: Extent to which harassment has been personally experienced at work by age

Form of harassment	Frequency ('yes')		*P*-values
	Age: < 45 years	Age: ≥ 45 years	
Sexual harassment	5% (n=4)	3% (n=2)	*p*=0.69
Racial harassment	17% (n=13)	9% (n=6)	*p*=0.22
On the basis of sexual orientation	1% (n=1)	0% (n=0)	*p*=1.00
On the basis of religious affiliation	3% (n=2)	3% (n=2)	*p*=1.00
On the basis of gender	9% (n=7)	3% (n=2)	*P*=0.18

P-values from Fisher's exact test

Table 15: Extent to which discrimination has been personally experienced at work by age

Form of discrimination	Frequency ('yes')		P-value
	Age: < 45 years	Age: ≥ 45 years	
On the basis of educational background	10% (n=8)	3% (n=2)	*p*=0.11
On the basis of race / ethnicity	30% (n=23)	43% (n=28)	*p*=0.12
On the basis of sexual orientation	1% (n=1)	2% (n=1)	*p*=1.00
On the basis of religious affiliation	5% (n=4)	3% (n=2)	*p*=0.69
On the basis of physical disabilities	1% (n=1)	0% (n=0)	*p*=1.00
On the basis of gender	15% (n=12)	9% (n=6)	*P*=0.32

P-values from Fisher's exact test

Finally, respondents' opinions concerning the importance of respect for individual diversity within the work place were tested using a 6-point Likert scale (1 = very important; 6 = unimportant).

DISCUSSION OF THE RESULTS

The findings indicate that the majority of the respondents may be considered to be less than 45 years old, 'White', males, South Africa citizens, senior professionals, with considerable experience. Most consider themselves to be paid an average, to above average, salary. Although differences are apparent between the two age groupings with respect to the demographic variables, these are only significant in the cases of race ($p<0.01$), marital status ($p<0.01$), being a parent ($p<0.01$), years of professional experience ($p<0.01$), number of years with the present organization ($p<0.01$), and number of years under the present line manager ($p=0.01$). Insofar as salary as a motivating factor is concerned, a majority of both age groups

(<45: 73%; ≥ 45: 68%) claim that salary is 'important' to 'very important'. A function of professional life is the requirement to sometimes undertake overtime (paid or unpaid) to meet the work demands of the organization. Overtime is invariably done at the expense of leisure and family time. Very few quantity surveyors in either age category view being required to do paid overtime as a source of job dissatisfaction (see Table 5). Having to do unpaid overtime is a source of job dissatisfaction to nearly 23% of those less than 45 years old and to 14% of their older colleagues, with no significant differences between the two groups (p=0.36). Overwhelmingly (<45: 91%; ≥ 45: 80%), participants see access to their leisure time as being very important in influencing feelings of job satisfaction (p=0.09). Clearly, Quantity surveyors value their leisure time and unpaid overtime, whether voluntary or involuntary, is a source of job dissatisfaction for many.

Factors influencing feelings of job satisfaction

Table 1(a) reveals that the three most *important* factors (amongst the 11) influencing the job satisfaction of both age groupings are: personal satisfaction and accomplishment, a low degree of supervision and being encouraged to take the initiative, and being part of a team and participating in decision-making. Thereafter, slight age differences of opinion become apparent, with the younger group favouring challenging and creative work above receiving recognition for achievements over and above normal responsibilities. The older age group see feedback on past performance as being more important, and doing challenging and creative work as less important, than their younger colleagues. Differences in the mean rankings of the two groups are evident, but are not significant (p>0.20) - with the (marginal) exception of the importance of social interaction at work (p=0.06).

Issues of social interaction (close friendships at work), job promotion prospects, and salary are ranked as being of the least importance by both groups. When the factors of *importance* are grouped in terms of Maslow's Hierarchy of Needs (see Table 1(b)), the pre-eminence of those factors relating to the 'need for self-actualisation' becomes apparent; being deemed to be the most important as a group by both the younger and older respondent groupings. The 'need for esteem' grouping is ranked second, followed by the 'need for safety'. Money, a 'physiological need' and an extrinsic reward, is ranked last. No significant differences exist between the two groups of respondents ($p \geq 0.13$). Quantity surveying firms need to appreciate the role of 'self-actualisation' factors as motivators of both male and female professional staff.

The above results differ slightly from the findings of Asad and Dainty's (2005) study of job motivational factors for disparate occupational groups (n=38) (construction management, quantity surveying and supervisory) within the UK construction sector.

Their study found that professionals, whilst demonstrating a significant desire for intrinsic rewards, also desired money and job security; these two factors being ranked first and fourth, respectively. In that study job security was rated as being of equal importance to feelings of accomplishment. The bias of construction managers (n = 23) and supervisors (n = 8) in their sample, or possibly cultural differences between the industries, may be responsible for the differences.

The findings relating to undertaking challenging and creative work with autonomy and receiving recognition within the organisation accord with those of Asad and Dainty (2005) and Dollard *et al* (2000). The latter study found that a lack of autonomy and support can result in frustration, job strain and burn-out. Being part of a team, participating in the decision-making process, and being allowed to use one's initiative, relate to the employees' need for empowerment. This finding is consistent with previous research (Hammuda & Dulaimi 1997) where empowerment was found to be a powerful motivating factor. Empowerment has also been associated with higher morale, improved teamwork, and greater enthusiasm towards work (Umiker 1992). Effective teams and teamwork have been associated with increased output, greater creativity, increased work quality and higher morale amongst team members (Schermerhorn *et al* 1993). In contrast to the findings of Asad and Dainty (2005), job security and job promotion were not ranked highly as motivating factors by both younger and older respondents (see Table 1(a)).

The *presence* in the workplace of factors influencing job satisfaction (see Table 2(a)), when combined with the perceived *importance* of those same factors (Table 1(a)), yields a *job satisfaction rating score* for each factor (see Table 2(b)) (Smithers and Walker 2000). No significant differences arise from the *presence* of the motivating factors, although in the case of salary it is marginal with respect to age (p=0.07). Consideration of the job satisfaction scores indicates that low levels of supervision, coupled with being encouraged to show initiative, high feelings of personal satisfaction and accomplishment, participating in an effective team, and being given the opportunity to do challenging work, are currently the main drivers of job satisfaction amongst both age groups of quantity surveyors. No statistically significant differences exist between the two groupings ($p \geq 0.14$). Differences between the *importance* and the *presence* of factors (where the presence of a factor does not match its importance) is most acute for both groups in the instances of recognition for work done over and above normal duties, and receiving regular feedback from seniors on performance. Quantity surveying practices need to adopt a more empowering style of management in this regard.

Overall levels of job satisfaction

Although the vast majority of participating quantity surveyors appear to like the work they undertake, differences do exist between the two groups of respondents, albeit not significant (p=0.13). Forty six percent of those under the age of 45 years report that they 'like it very much' or 'love it', compared to 37% of the older group (see Table 3). These results coincide with those of Oshagbemi (2003). Comparatively few quantity surveyors from both groups experience high levels of job dissatisfaction at all times; certain aspects of the work obviously giving rise to job dissatisfaction to a greater or lesser degree – most notably the measurement of builders' work, the preparation of final accounts, and project administration (see Table 4). The differences between the groups are not significant (p=0.26). Reasons cited by both groups under 'Other' included: perceived incompetence of other professionals; poor documentation from, and lack of faith in, designers; bureaucracy; dealing with government officials (political interference); contractual disputes; professional appointments made on the basis of affirmative action; and dealing with 'incompetent' emerging contractors. A female respondent reported disparaging attitudes displayed towards 'White' women by 'Black' male clients.

Choice of career

Regarding reasons for choosing a career in quantity surveying (see Table 6), many respondents (<45: 32%; ≥ 45: 27%) report 'drifting' into the career. Salary, despite its comparative lack of perceived importance as a factor influencing job satisfaction, is cited as a main driver (<45: 26%; ≥ 45: 32%) for having chosen a career in quantity surveying. 'Other' reasons included: a liking for working outdoors; a love of buildings and architecture; an interest in the construction sector; an interest in property and property development; an aptitude for figures; and as a result of an aptitude test. The perceived status of the profession had the least influence of all (<45%: 3%;≥ 45: 1%). The differences between the two groups are not significant (p=0.47).

With the benefit of hindsight, 50% of the younger and 47% of the older quantity surveyors indicated that they were either 'probably' or 'definitely' well informed about their choice of intended career (see Table 7). The differences between the two groups are not significant (p=0.84). Most respondents (<45: 83%;≥ 45: 87%) claim to have 'probably' or 'definitely' experienced fulfilment with regard to their career expectations (whether informed or not), with no significant difference between the groups (p=0.97) When asked if they would choose the same career again, significant differences do not exist between the two groups (p=0.44) with 73% of the younger group and 64% of the older group stating that they would. Again, these results

coincide with those of Oshagbemi (2003). Approximately half of both groups said that they would 'probably' or 'definitely' consider moving into a different field of employment within the built environment, with no significant difference between groups (p=0.53). Finally, when asked whether or not they would recommend a career in quantity surveying to others, no significant difference is apparent between the two groups (p=0.22). More specifically, whilst a clear majority of the younger respondents (79%) and their older colleagues (70%) said they would 'probably' or 'definitely' do so, far more of the younger group (29%) than the older respondents (15%) were emphatic. Over a fifth of both groups said they were unlikely to recommend the career to others. Clearly, not all quantity surveyors are experiencing sustained levels of job satisfaction. These findings broadly correspond with the results pertaining to overall levels of job satisfaction.

The importance, when choosing a career, of doing work that is personally satisfying (esteem need) and of being paid a good salary (physiological need) are confirmed (see Table 8). These two attributes were given the highest rankings and their standard errors confirm a significant difference between these two factors and the rest. In contradiction with the findings relating to the importance of factors giving rise to job satisfaction (see Table 1(a)), physiological needs (salary) is ranked as comparatively important (no difference between the groups with p=0.49). It would seem that the importance of this factor changes over time with increased maturity and self confidence in one's worth. Interestingly, no significant difference between the groups is apparent regarding the importance of flexible working hours when deciding upon a career (p=0.58). This finding with respect to age, unlike a gender-based perspective, does not support the results of Sommerville *et al* (1993).

Issues relating to age, gender and race at work

Earlier work by Gale (1991) and Gilbert and Walker (2001) investigated whether men and women perceive the same issues (variables) at work to be motivating and de-motivating. The relatively low numbers of women in the industry is said to be related, directly or indirectly, to perceived male 'domination' at work. This dominance is said to have led to male orientation of the industry (Court & Moralee 1995), and a lack of promotion prospects, maternity leave, child care facilities and flexible working hours (Sommerville *et al* 1993). In South Africa, women, together with 'Non-white' persons, are classified as PDIs for the purposes of affirmative action. It was decided not to restrict the issue of gender to women. Rather, gender differences in questions were ignored because, for example, men might conceivably view flexible working hours for paternal duties as extremely important. Thus, in exploring the *presence* and *importance* of the factors relating to gender or race in influencing feelings of job

satisfaction, relevant questions were gender 'neutral'. Data concerning the presence and importance of the factors relating to gender in influencing feelings of job satisfaction are shown in Tables 9 and 10, respectively.

The majority of quantity surveyors (<45: 90%; ≥ 45: 95%) rate highly the *principle* of remuneration being fair and equitable regardless of gender and race, and there was no significant difference between the two age groups (p=0.38). When the *reality* of the situation is examined, whilst a majority of respondents from both age groups stated that they are not discriminated against in terms of salary with respect to either gender or race, some of their colleagues claim that they are. Specific details of such discrimination are: gender (<45: 11%;≥ 45: 12%) and race (<45: 25%;≥ 45: 38%), respectively. The extent of the perceived discrimination on the basis of *race* is particularly noteworthy. The difference between the age groups is not significant in respect of either gender (p=0.81) or race (p=0.13). Both age groups (>90%) consider equality in recognition of achievements by employers to be important (p=0.46). There are no significant differences between the two age groups regarding the *presence* of equality of recognition in the workplace by employers regardless of gender (p=0.83) or race (p=0.85), being reported by over 75% and 65% of both groups in each case, respectively.

There is considerable support from both age groups (>74%) for flexible working hours, a practice reportedly supported by a clear majority of employers (>72%). Differences by age in respect of both the importance (p=0.91) and presence (p=0.86) of this factor are not significant. A clear majority of both age groups (>75%) report that their organisations adhere to the statutory minimums with respect to maternity and paternity leave (p=0.35). Interestingly, a significant difference (p<0.01) of opinion exists between the two age groups regarding the *importance* of such entitlements being above the statutory minima, with more of the younger respondents (50%) than their older colleagues (26%) seeing entitlements *above* the minimum as 'important' or 'very important'.

Whilst a secure working environment [safety needs] is deemed important by the vast majority (90%) of all quantity surveyors (<45: 88%;≥ 45: 92%), nearly 30% of them (<45: 31%;≥ 45: 28%) claim not to work in a safe and secure environment. There was no significant difference between the way the two age groups responded to the presence (p=0.63), or importance (p=0.92), of a secure working environment. Given current crime levels in South Africa, security is an important consideration.

Table 11 summarises results with respect to issues of *gender and race in the workplace* by age, with few differences clearly significant. A minority of both age

groupings (<45: 13%; ≥ 45: 4%) feel that female advancement is actively blocked within organisations perceived to be dominated by male management (see also Table 13). Differences between the two age groups in this regard are not significant (p=0.11). What is significant, however, is the difference in opinion between the two age groups regarding the extent to which firms are perceived to be male dominated (p<0.01), with 88% of the younger respondents compared to 73% of the older group claiming this to be the case (see Table 12).

Whilst the majority (84%) of all respondents see promotion on the basis of one's PDI status rather than on ability as *unacceptable*, minorities of both the younger group (7%) and the older group (5%) see the practice as acceptable, with no significant difference between the two age groups (p=0.65). A majority of both age groups do not see themselves as being subjected to a high degree of supervision because of their gender (<45: 85%; ≥ 45: 91%) or race (<45: 81%; ≥ 45: 87%), with no significant differences between the two groups in respect of either gender (p=0.16) or race (p=0.39). There is also no significant difference between the two age groups regarding not being allowed to contribute meaningfully to the decision-making process (p=0.26), with 17% of the younger group (compared to 9% of the older group) claiming this to be the case (see also Table 13). Most respondents (<45: 83%; ≥ 45: 91%) report being allowed to participate in decision-making, with no significant difference between the groups (p=0.71).

Regarding whether or not professional status is important in combating perceptions of discrimination in the workplace, slightly more of the younger group (73%) than the older group (71%) state that it is (p=0.42). When similarly questioned regarding gender and race representivity, the difference in responses between the groups is significant (p=0.05) for *gender* representivity alone; with 35% of the younger respondents compared to 24% of their older colleagues stating that it is important. For race representivity, the comparable figures are 31% and 27%, respectively (p=0.29).

Age and harassment and discrimination at work

Details relating to the extent to which harassment and discrimination have personally been experienced at work are shown in Tables 14 and 15, respectively. Whilst incidences of *harassment* do occur, their frequency is comparatively low with younger respondents experiencing proportionately more sexual (5%), racial (17%), and gender (9%) harassment than their older colleagues. No statistically significant differences between the two groups occur with regard to any of the aforementioned forms of harassment, with p=0.69, p=0.22, and p=0.18, respectively. Clearly, any

form of harassment is unacceptable and management needs to be alert to these practices and implement remedial and supportive action where necessary.

Perceived *discrimination* in the workplace appears to be more widespread, particularly with regard to race, gender, and educational background. Racial discrimination appears to be the most widespread, being reported by more than a third of total respondents (<45: 30%; ≥ 45: 43%). Despite older respondents reporting more incidents of racial discrimination at work than younger colleagues, differences between the two groups are not significant (p=0.12). It is not clear whether the incidences of racial discrimination are 'active' rather than in a 'passive' form associated with affirmative action. These results tend to agree with those of Ellison (2001). There is no statistically significant association between age and discrimination on the basis of gender (p=0.32), educational background (p=0.11), sexual orientation (p=1.00), physical disabilities (p=1.00), and religious affiliation (p=0.05). Age was *not* listed by any respondent as the basis for instances of harassment or discrimination at work. Management needs to be aware of the presence of harassment and discrimination in the workplace.

Interestingly, close to a majority of female respondents (48%) report having experienced gender discrimination at work, whilst gender and sexual harassment at work is reported by 30% and 17% of women, respectively. These results agree with those of Gurjao (2006). Again management needs to be sensitive to these issues.

Finally, whilst an overwhelming majority of both respondent age groups regard respect for individual diversity in the workplace to be important, there is a significant difference between the younger and older groupings (p<0.05), with more younger (56%) than older respondents (41%) citing it as being 'very important'. Such intolerance is contrary to the provisions of the South African Constitution (RSA 1996).

CONCLUSIONS

The focus of this paper has been a comparison of the opinions, on the basis of age, of quantity surveyors in South Africa regarding job satisfaction. The research centred on a number of issues, namely: how satisfied are younger and older quantity surveyors with their jobs; what influences their job satisfaction; how did they choose a career in quantity surveying; what issues relating to age affect job satisfaction; and to what extent do younger and older quantity surveyors experience harassment and discrimination at work?

Although differences of opinion exist between the younger and older respondent groups of quantity surveyors, *very few* are significant. *Notable differences* of opinion exist as follows: older quantity surveyors value more highly the importance of social interaction and friendships at work; younger respondents report the greater presence of salary as a motivating factor; whilst older respondents are not as precious about access to their leisure time as their younger colleagues. *Significant differences* of opinion exist as follows: younger quantity surveyors see the provision of maternity and paternity leave above statutory minima to be more important than their older colleagues; the younger group sees the management of firms to be more male dominated than older quantity surveyors; younger surveyors see as more important than the older group the importance of gender representivity at work as a means of combating discrimination; and the younger group see as more important the need to respect individual diversity within the workplace.

Instances of *harassment* and *discrimination* at work are not uncommon, although age *per se* is not a causative factor. Generally, the younger respondents have experienced harassment to a greater extent than older colleagues, the most prevalent being racial harassment. Differences between the groups, however, are not significant. Similarly, younger quantity surveyors generally report higher incidences of discrimination at work, particularly on the basis of gender and educational background. Interestingly, whilst the younger group report greater incidences of racial harassment at work (see above), more respondents from the older grouping report actual discrimination on the basis of race. Again, differences between groups are not significant.

BIBLIOGRAPHY

ASAD S. AND DAINTY A.R.J. 2005. Job motivational factors fro disparate occupational groups within the UK construction sector: a comparative analysis. *Journal of Construction Research*, 6(2):223-236.

BOWEN P.A., CATTELL K.S., DISTILLER G. & EDWARDS P.J 2008a. Job satisfaction of SA quantity surveyors: an empirical study. *Construction Management and Economics*, 26(7):765-780.

BOWEN P.A., CATTELL K.S. & DISTILLER G. 2008b. Job satisfaction of South African quantity surveyors: a racial analysis. *Journal of Contemporary Management*, 4:86-115.

COURT G. AND MORALEE J. 1995. *Balancing the Building Team: Gender Issues in the Building Profession*. Institute of Employment Studies, Brighton, UK.

DOLLARD M.F., WINEFIELD H.R., WINEFIELD A.H. & DE JONGE J. 2000. Psychosocial job strain and productivity in human service workers: a test of demand-control-support model. *Journal of Occupational and Organizational Psychology*, 73(4):501-510.

ELLISON L. 2001. Senior management in chartered surveying: where are the women? *Women in Management Review*, 16(6):264-278.

ESKILDSEN J.K, KRISTENSEN K. & WESTLUND A. 2003. Work motivation and job satisfaction in the Nordic countries. *Employee Relations*, 26(2):122-136.

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.

GILBERT G.L. & WALKER H.T. 2001. Motivation of Australian white-collar construction employees: a gender issue? *Engineering, Construction and Architectural Management*, 8(1):59-66.

GURJAO S. 2006. *Inclusivity: The Changing Role of Women in the Construction Workforce*. Report, Chartered Institute of Building, UK.

HAMMUDA I. & 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*, 15(5):289-296.

MOYES G.D., WILLIAMS P.A & 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*, 21(5):536-561.

OKPARA J.O. 2004. Personal characteristics as predictors of job satisfaction. *Information Technology & People*, 17(3):327-338.

OPPENHEIM A.N. 1992. *Questionnaire Design, Interviewing and Attitude Measurement*. Pinter Publishers, London.

OSHAGBEMI T. 2003. Personal correlates of job satisfaction: empirical evidence from UK universities. *International Journal of Social Economics*, 30(12):1210-1232.

REPUBLIC OF SOUTH AFRICA. 1996. *Constitution of the Republic of South Africa (Act 108 of 1996)*. Available from http://www.polity.org.za/html/govdocs/constitution/saconst.html, accessed 10th July 2007.

SARKER S.J., CROSSMAN A. & CHINMETEEPITUCK P. 2003. The relationships of age and length of service with job satisfaction: an examination of hotel employees in Thailand. *Journal of Managerial Psychology*, 18(7):745-758.

SCHERMERHORN J.R., HUNT J.G. & OSBORN R.N. 1993. *Managing Organizational Behavior*. Fifth Edition, John Wiley and Sons, New Jersey.

SMITHERS G.L. & WALKER D.H.T. 2000. The effect of the workplace on motivation and demotivation of construction professionals. *Construction Management and Economics*, 18:833-841.

SOMMERVILLE J., KENNEDY P. & ORR L. 1993. Women in the UK construction industry. *Construction Management and Economics*, 11(4):285-291.

UMIKER W.D. 1992. Empowerment: The latest motivational strategy. *Health Care Supervisor*, 11(2):11-16.

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*, 19(3):184-194.