INVESTIGATING THE CORRELATES AND PREDICTORS OF JOB SATISFACTION AMONG MALAYSIAN ACADEMIC LIBRARIANS

Noor Harun Abdul Karim
Department Library and Information Science,
Kulliyyah of Information and Communication Technology
International Islamic University, Kuala Lumpur, Malaysia
e-mail: noorharun@iiu.edu.my

Abstract
This study employs a global measure for job satisfaction on the following ten work and worker related variables: affective commitment, continuance commitment, job involvement, job autonomy, job feedback, role clarity, role conflict, age, organizational tenure and job tenure. A survey was conducted to investigate how much of the variance in job satisfaction can collectively be explained by these variables in a Malaysian academic library setting. The survey was administered on 279 academic librarians from eight university libraries in West Malaysia. Findings were based on the responses from 139 usable questionnaires. The findings revealed that only six of the ten work and worker related variables were significantly correlated with job satisfaction: affective commitment, job autonomy, job performance feedback, role conflict, role clarity and organizational tenure. Findings also revealed that of these six correlates, only two have predictive relationship with job satisfaction: affective commitment and organizational tenure. Collectively these two predictors explain about 26% of the variance in job satisfaction. Although this study did not examine all the possible correlates and predictors of job satisfaction that have been identified in the organizational behavior/psychology and management literature, it nevertheless provides an empirical glimpse of the job satisfaction phenomenon among Malaysian academic librarians.

Keywords: Allen and Meyer’s Organizational Commitment Scale; Academic libraries; Organizational commitment; Affective commitment; Job satisfaction

INTRODUCTION
Among the job related attitude topics that have received the most empirical attention in library and information science literature is job satisfaction. The vast majority of studies on job satisfaction however have been carried out in the West particularly among researchers in the United States of America. Very little empirical work on job satisfaction has been carried out in Malaysian libraries let alone among Malaysian academic librarians. This study represents an attempt to fill in the empirical gap.

Much of the empirical effort that has been carried out the among librarians in the West have concentrated mainly on the antecedents of job satisfaction such as the differences in job satisfaction among male and female librarians, the differences in
job satisfaction among librarians of the various units and divisions in the library. In addition, much of the studies have also focused on correlating librarians’ job satisfaction with their age, their working experience, their salary and promotional opportunities in the library. Very little effort if any, has examined the relationship between work and worker related variables with librarians’ job satisfaction.

Most of the studies have employed faceted scales rather than global scales for job satisfaction. We have employed a global measure for job satisfaction rather a faceted scale for this study. For this study, we have employed the following work and worker related variables: affective commitment, continuance commitment, job involvement, job autonomy, job feedback, role clarity, role conflict, age, organizational tenure and job tenure. We were interested to know how much of the variance in job satisfaction can collectively be explained by all the aforementioned work and worker related variables in a Malaysian academic library setting.

LITERATURE REVIEW
The review of the literature has been organized into three sections: a theoretical review of job satisfaction, an empirical review of work related literature and finally an empirical review of worker related literature.

Job Satisfaction
Job satisfaction has been given unidimensional as well as multi-dimensional definitions. A unidimensional definition provides an overall definition of job satisfaction resulting in measures which are referred to as global measures (Spector 1997). The multi-dimensional definition however provides a more elaborate type of definition resulting in several dimensions of the job satisfaction construct being conceptualized and operationalized as facets such as satisfaction with pay, promotion, co-workers, nature of work and communication (Spector 1997; 2000).

The two most popular types of global job satisfaction scales are the Job in General (JIG) Scale and the Michigan Organizational Assessment Questionnaire Satisfaction Scale (Spector 1997). The global job satisfaction scales are very seldom used in studies on job satisfaction among library professional and non-professional employees. It is used only when researcher is not interested in assessing the various facets of job satisfaction. Research on job satisfaction among library employees predominantly has employed the faceted scales rather than the global scales (Horenstein, 1993; Kem, 2000; Lynch and Verdin, 1987; Togia, Koustelios and Tsigilis, 2004; Voelck, 1995). Spector’s (1997) Job Satisfaction Survey for instance examines the following facets: pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, co-workers, nature of work and communication.
Smith, Kendall and Hulin’s (as cited in Cook et al. 1981) Job Descriptive Index assess only five facets: work, pay, promotion, supervision and co-workers. The Minnesota Satisfaction Questionnaire (as cited in Cook et al. 1981) covers twenty facets. The Minnesota Satisfaction Questionnaire is available in two forms: a 100-item version and a 20-item version. The long form contains five items per facet whereas the short form contains only one item per facet. Faceted job satisfaction scales have been extensively used in research on job satisfaction in libraries and among library employees: Minnesota Satisfaction Questionnaire (Rockman 1984; Kim 2000), Job Descriptive Index (Mirfakhrai 1991) and the Job Satisfaction survey (Welch 1995; Sierpe 1999).

**Work related Variables**

One of the most frequently investigated correlate of job satisfaction is organizational commitment (Allen and Meyer, 1990; Meyer and Allen, 1991; Meyer and Allen, 1997). Organizational commitment has been conceptually defined in many ways by many different scholars and researchers. One of the most commonly used definitions is that by Mowday, Steers and Porter (1979). They have conceptually defined organizational commitment as a unidimensional construct resulting in a unidimensional operational definition of commitment in the form of the Organizational Commitment Questionnaire (OCQ). Meyer and Allen (1997) on the other hand have defined organizational commitment as a multidimensional construct comprising three components: affective, continuance and normative. We have decided to employ affective and continuance commitment as potential correlates and predictors of academic librarians’ job satisfaction since these two variables have been empirically validated among Malaysian academic librarians (Noor and Noor, 2006). A preponderance of empirical evidence in a meta-analytic review by Mathieu and Zajac (as cited in Meyer and Allen 1997) supported the notion that job satisfaction has an antecedent influence on organizational commitment. However, Bateman and Strasser (1984) in a longitudinal study on the antecedents of organizational commitment have argued that job satisfaction is a consequence or effect of organizational commitment. In other words, according to Bateman and Strasser (1984), the more committed an employee is towards his or her organization, the more satisfied he or she is likely to be with his or her job. Nauman (1993) in his study on organizational commitment among expatriate managers found a moderate and positive relationship between organizational commitment and job satisfaction, $r = 0.61, p < .01$. Kim (2001) in his study on organizational commitment among Malaysian employees in Korean multinational enterprises found a statistically significant positive but moderate relationship between affective organizational commitment and job satisfaction, $r = 0.61, p < .01$. Kim (2001), however, found a statistically significant positive but weak relationship between continuance organizational commitment and job satisfaction, $r = 0.17, p <$
.01. In another study on organizational commitment among Malaysian employees, Kamarul et al. (2003) found a statistically significant but weak relationship between organizational commitment and job satisfaction, $r = 0.24$, $p < .001$. In view of the above findings, we anticipated relationships to exist between affective and continuance commitment with job satisfaction.

Role variables such as role conflict and role clarity have been found to be statistically significant with job satisfaction. Role conflict has been conceptually defined as in terms of the degree to which demands are made on the employees in the workplace (Rizzo, House and Lirtzman, 1970). Such a situation often transpires when two supervisors make demands that conflicts or when employee has to do two tasks but has the time to carry out only one of them (Spector 1997). Nauman (1993) found a statistically significant negative relationship between role conflict and job satisfaction, $r = -0.29$, $p < .05$. Role clarity has been conceptually defined as by Rizzo, House and Lirtzman (1970) as the extent to which an employee knows what is expected of him or her for adequate performance of his job tasks and responsibilities. Jack and Schuler (as cited in Spector 2000) in a meta-analytic review found mean correlations of 0.30 and -0.31 for role clarity and role conflict respectively. In the light of the above findings, we expected statistically significant relationships to exist between role clarity and role conflict with global job satisfaction.

Job autonomy is another work related variable that has been found to have an antecedent influence on employees' global job satisfaction. Job autonomy has been conceptually defined as the degree to which employees are allowed freedom, independence and discretionary powers when performing their job tasks and responsibilities (Sims, Szilagy and McKemey 1976). The more autonomy an employee has, the greater will be his or her satisfaction with his or her job. Rockman (1984) found a statistically significant positive relationship between job autonomy and global job satisfaction, $r = 0.41$, $p < 01$. Nauman (1993) in his study on organizational commitment among expatriate managers also found a statistically significant relationship between job autonomy and job satisfaction, $r = 0.28$, $p < .01$. In a meta-analytic study, Fried and Ferris (as cited in Spector 2000) found a mean correlation of 0.34 between global job satisfaction and job autonomy. In the light of the above findings, we anticipated a statistically significant relationship to exist between job autonomy and job satisfaction.

Job performance feedback is another work related variable that has been found to have a significant influence on job satisfaction. Sims, Szilagy and McKemey (1970) have conceptually defined job performance feedback as the extent to which employees receive information that reveals how well they are performing on the job.
The Correlates and Predictors of Job Satisfaction among Malaysian Academic Librarians

Hackman and Oldham (1975) have dichotomized feedback into two categories: feedback from the job itself and feedback from agents. Feedback from the job itself is the degree to which performing the job tasks and responsibilities required by the job results in employee obtaining information about his or her performance. Feedback from agents is the degree to which employees receive direct and clear information about his or her performance from supervisors and co-workers. Nauman (1993) found a statistically significant but weak positive relationship between job performance feedback and job satisfaction, $r = 0.27$, $p < .01$. Fried and Ferris (as cited in Spector 2000) in a meta-analytic study found a mean correlation of 0.29 between job performance feedback and global job satisfaction. In the light of these findings, we anticipated a statistically significant relationship to exist between job performance feedback and job satisfaction.

Job involvement is another work related variable which is suspected to correlate significantly as well as have a predictive relationship with job satisfaction. Job involvement has been conceptually defined by Lodahl and Kejner (as cited in Cook et al. 1981) in terms of the extent to which employees personally identify with their work. Buchko, Weinzimmer and Sergeyev (1998) found job involvement to be significantly correlated with promotion satisfaction ($r = 0.45$, $p < .001$), supervisor satisfaction ($r = 0.35$, $p < .001$) and co-worker satisfaction ($r = 0.23$, $p < .01$). In the light of the above findings, we anticipated job involvement to be significantly correlated with global job satisfaction.

Worker Related Variable
Age, organizational tenure and job tenure have been found to be significantly correlated with job satisfaction. Age has been conceptually defined as the as the employee’s biological age. Brush, Moch and Poyan (as cited in Spector 1997) in a meta-analytic review of 19 studies found a mean correlation of 0.22 between age and job satisfaction. Nauman (1993) also found a statistically significant but weak positive relationship between age and job satisfaction, $r = 0.23$, $p < .01$. In addition, Kamarul et al. (2003) also found a statistically positive but weak relationship between age and job satisfaction, $r = 0.20$, $p < .001$. In the light of the above findings, we anticipated that a statistically significant relationship would be found between age and job satisfaction.

Organizational tenure is another worker related variable that has been found to have significantly correlated with job satisfaction. We have conceptually defined organizational tenure as the number of years an employee has been working in the present organization (i.e. the library). Mifakhrai (1991) found a statistically significant weak and negative relationship between organizational tenure and job satisfaction, $r = -0.35$, $p < .001$. Nauman (1993) however found a statistically
significant but weak positive relationship between organizational tenure and job satisfaction, \( r = 0.20, p < .05 \). In the light of the above findings, we expected a statistically significant relationship to exist between organizational tenure and job satisfaction.

Finally, another worker related variable that has been found to be a significant correlate of job satisfaction is job tenure. We have conceptually defined job tenure as the number of years in which an employee has taken up the first job position as a professionally trained librarian. Nauman (1993) found a statistically significant but weak relationship between job tenure and job satisfaction, \( r = 0.33, p < .05 \). Mirfakhrai (1991) also found a statistically significant but weak negative relationship between job tenure and job satisfaction, \( r = -0.37, p < .001 \). In addition, Kamarul, et al. (2003) also found a statistically significant but weak positive relationship between job tenure and job satisfaction. In the light of these findings, we expected a statistically significant relationship to exist between job tenure and job satisfaction.

HYPOTHESES
In the light of the above findings from previous studies, we formulated the following non-directional hypotheses:

(a) There is a statistically significant relationship between affective commitment and job satisfaction
(b) There is a statistically significant relationship between continuance commitment and job satisfaction
(c) There is a statistically significant relationship between role conflict and job satisfaction
(d) There is a statistically significant relationship between role clarity and job satisfaction
(e) There is a statistically significant relationship between job involvement and job satisfaction
(f) There is a statistically significant relationship between job autonomy and job satisfaction
(g) There is a statistically significant relationship between job performance feedback and job satisfaction
(h) There is a statistically significant relationship between age and job satisfaction
(i) There is a statistically significant relationship between organizational tenure and job satisfaction
(j) There is a statistically significant relationship between job tenure and job satisfaction

METHOD
The target population for this study was academic librarians (professionally trained employees) in all the nine university libraries in West Malaysia. Of the nine university libraries that were invited to participate in this study, only one refused to participate since they were engaged in some kind of administrative work at the time the study was being carried out. The remaining eight university libraries agreed to participate by giving the researchers a full list of their academic librarians who were currently available at that time. This provided the researchers with their sampling frame which enabled them to randomly and proportionately select a sample from the total population of 279 academic librarians in all the eight university libraries in West Malaysia.

Allowing for a plus and minus five percent error rate, a sample size of two hundred and twenty two was derived. Using the Statistical Product Services and Solutions (SPSS) software, the authors randomly and proportionately selected the participants from each of the eight university libraries. A response rate of sixty three percent (63%) was achieved resulting in one hundred and thirty nine (139) usable questionnaires. The findings for this study were based on the analyses of the responses from the one hundred and thirty nine (139) usable questionnaires that were returned.

Measures
(a) Affective Commitment
Eight items from Meyer and Allen’s (1997) affective commitment scale were employed to measure affective organizational commitment (see Appendix 1). These items have been adapted to suit the library setting. The word organization has been replaced by the word library.

(b) Continuance Commitment
Nine items from Meyer and Allen’s (1997) continuance organizational commitment scale were employed to measure continuance commitment (see appendix 1). These items have been adapted to suit the library setting. The word organization has been replaced by the word library.

(c) Job Satisfaction
A 3-item scale from the Michigan Organizational Assessment Questionnaire was employed to measure overall or global job satisfaction (Cammann et al. 1979). The items are listed in Appendix 1.

(d) Job Involvement
A 3-item scale derived from Lodahl and Kejner’s (as cited in Cook et al. 1981) measure of job involvement was employed for this study (see Appendix 1).
(e) Job Autonomy
A 4-item scale adapted from Hackman and Oldham’s (1975) Job Diagnostic Survey was used to measure job autonomy (see Appendix 1)

(f) Job Performance Feedback
A 4-item scale derived from Hackman and Oldham’s (1975) Job Diagnostic Survey was employed to measure job performance feedback (see Appendix 1)

(g) Role Conflict
A 5-item scale from Rizzo, House and Lirtzman (1970) was employed to measure role conflict (see appendix 1)

(h) Role Clarity
A 5-item scale from Rizzo, House and Lirtzman (1970) was employed to measure role clarity (see Appendix 1)

RESULTS
Construct Validation and Internal Reliability Assessments
All the measures and scales used were factor analyzed to establish construct validity for newly computed variables. Exploratory Factor Analyses using Maximum Likelihood analyses and internal reliability assessments using Cronbach’s alpha reliability coefficients were employed on all scale variables used in this study.

(a) Affective Commitment Scale
A visual inspection of Table 1 shows that of the eight items used to measure affective organizational commitment, only one item (item number 4) fail to load on the affective commitment measure; the rest of the seven items loaded on the affective commitment measure and were therefore used to create the variable affective organizational commitment. In addition, all the seven items were subjected to an internal reliability assessment using Cronbach’s alpha reliability coefficient. Collectively all the seven items explained 16.39% of the variance. The results of running a reliability assessment analysis yielded an alpha reliability coefficient value of 0.81 which is above the recommended value of 0.70 as recommended by Nunnally (1978).
Table 1: Construct Validity and Internal Reliability for Affective Commitment

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>Factor Loadings</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>AffectCommt1</td>
<td>0.70</td>
<td>0.81</td>
</tr>
<tr>
<td>AffectCommt2</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>AffectCommt3</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>AffectCommt5</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>AffectCommt6</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>AffectCommt7</td>
<td>0.53</td>
<td></td>
</tr>
<tr>
<td>AffectCommt8</td>
<td>0.63</td>
<td></td>
</tr>
</tbody>
</table>

Note: Percent of variance explained (16.39%)

(b) Continuance Commitment
A visual inspection of Table 2 shows that of the nine items that were supposed to measure continuance commitment, only two items failed to load on the continuance commitment measure. The remaining seven loaded on the continuance commitment scale and were used to compute a scale variable called continuance organizational commitment. The results of running an internal reliability analysis using all these seven items resulted in a Cronbach’s reliability coefficient value of 0.78 which is above the value as recommended by Nunnally (1978).

Table 2: Construct Validity and Internal Reliability for Continuance Commitment

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>Factor Loadings</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>ContCommt1</td>
<td>0.61</td>
<td>0.78</td>
</tr>
<tr>
<td>ContCommt2</td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td>ContCommt3</td>
<td>0.49</td>
<td></td>
</tr>
<tr>
<td>ContCommt4</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>ContCommt5</td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>ContCommt6</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>ContCommt7</td>
<td>0.39</td>
<td></td>
</tr>
</tbody>
</table>

Note: Percent of variance Explained 16.22%
Item descriptions are found in Appendix 1

(c) Job Satisfaction Scale
A visual inspection of Table 3 shows that all the three (3) items that were employed to measure job satisfaction were loaded onto a single discrete factor. The three (3)
items explain 50.4% of the variance in the scale. The results of assessing the internal reliability of the scale using Cronbach’s alpha yielded a value of 0.50 which is below the 0.70 value as recommended by Nunnally (1978).

Table 3: Construct Validity and Internal reliability for Job Satisfaction Scale

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>Factor Loadings</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>JobSat1</td>
<td>0.72</td>
<td>0.50</td>
</tr>
<tr>
<td>JobSat2</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>JobSat3</td>
<td>0.86</td>
<td></td>
</tr>
</tbody>
</table>

Note: Percent of Variance Explained (50.4%)
Item descriptions are found in Appendix 1

(d) Job Involvement Scale
A visual inspection of Table 4 shows that all the three (3) items that were employed to measure job involvement were loaded onto a single discrete factor. The three items explain 63.7% of the variance in the scale. The results of assessing the internal reliability of the scale using Cronbach’s alpha yielded a value of 0.70 which meets the value as recommended by Nunnally (1978).

Table 4: Construct Validity and Internal reliability for Job Involvement

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>Factor Loadings</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jis1</td>
<td>0.72</td>
<td>0.70</td>
</tr>
<tr>
<td>Jis2</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>Jis3</td>
<td>0.86</td>
<td></td>
</tr>
</tbody>
</table>

Note: Percent of variance Explained (63.75)
Item Descriptions can be found in Appendix 1

(e) Job Autonomy Scale
A visual examination of Table 5 shows that all the four (4) items that were employed to measure job autonomy were loaded onto a single discrete factor. All the four (4) items explained about 68.5% of the variance in the scale. The results of assessing the internal reliability of the scale using Cronbach’s alpha yielded a value of 0.85 which is above the value recommended by Nunnally (1978),
Table 5: Construct validity and Internal Reliability of the Job Autonomy Scale

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>Factor Loadings</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobauton1</td>
<td>0.72</td>
<td>0.85</td>
</tr>
<tr>
<td>Jobauton2</td>
<td>0.85</td>
<td></td>
</tr>
<tr>
<td>Jobauton3</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>Jobauton4</td>
<td>0.87</td>
<td></td>
</tr>
</tbody>
</table>

Note: Percent of Variance Explained (68.5%)
Item Description can be found in Appendix 1

(f) Job Performance Feedback
A visual inspection of Table 6 shows that all the four (4) items that were employed to measure job performance feedback are loaded onto a single discrete factor. The four items measuring job performance feedback explain about 52.9% of the variance in the scale. The results of assessing the internal reliability of the scale using Cronbach’s alpha yielded a value of 0.70 which met the value recommended by Nunnally (1978).

Table 6: Construct Validity and Internal Reliability for Job Performance Feedback

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>Factor Loadings</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfee1</td>
<td>0.60</td>
<td>0.70</td>
</tr>
<tr>
<td>Perfee2</td>
<td>0.75</td>
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</tr>
<tr>
<td>Perfee3</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>Perfee4</td>
<td>0.80</td>
<td></td>
</tr>
</tbody>
</table>

Note: Percent of Variance Explained (52.9%)
Item descriptions are found in Appendix 1

(g) Role Conflict Scale
A visual inspection of Table 7 shows that all the five (5) items that were employed to measure role conflict were loaded onto a single discrete factor. All the five items explain about 57.4% of the variance in the scale. The results of assessing the internal reliability of the scale using Cronbach’s alpha yielded a value of 0.70 which met the value as recommended by Nunnally (1978)
Table 7: Construct Validity and Internal Reliability for Role Conflict

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>Factor Loadings</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rolcon1</td>
<td>0.80</td>
<td>0.70</td>
</tr>
<tr>
<td>Rolcon2</td>
<td>0.43</td>
<td></td>
</tr>
<tr>
<td>Rolcon3</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>Rolcon4</td>
<td>0.78</td>
<td></td>
</tr>
<tr>
<td>Rolcon5</td>
<td>0.85</td>
<td></td>
</tr>
</tbody>
</table>

Note: Percent of variance Explained (57.4%)
Item descriptions can be found in Appendix 1

(h) Role Clarity Scale
A visual inspection of Table 8 shows that all the five items that were employed to measure role clarity were loaded onto a single discrete factor. All these five items explain about 66.3% of the variance in the scale. The results of assessing the internal reliability of the scale using Cronbach’s alpha yielded a value of 0.87 which is above the value recommended by Nunnally (1978).

Table 8: Construct Validity and Internal Reliability for Role Clarity

<table>
<thead>
<tr>
<th>Scale Items</th>
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</tr>
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<tr>
<td>Rolcla1</td>
<td>0.74</td>
<td>0.87</td>
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<td>Rolcla2</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>Rolcla 3</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>Rolcla 4</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>Rolcla 5</td>
<td>0.82</td>
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</tr>
</tbody>
</table>

Notes: Percent of Variance explained (66.3%)
Item Descriptions can be found in Appendix 1

Testing of Hypotheses
We hypothesized that affective commitment, continuance commitment, job involvement, job autonomy, job performance feedback, role conflict, role clarity, age, organizational tenure and job tenure to correlate significantly with global job satisfaction. In testing these hypotheses, we ran Pearson Product Moment Correlation analyses. Further, we regressed all the significant correlates on job satisfaction to determined how much of the variance in job satisfaction could be collectively explained by all the significant correlates of job satisfaction.
Correlation Analysis of Work and Worker Related variables with Job Satisfaction

The results of running a Pearson Product Moment Correlation analysis between work and worker related variables with job satisfaction are presented in Table 9. The results show that of the ten (10) variables that we hypothesized to correlate significantly with job satisfaction, only six were found to be statistically significant with job satisfaction: affective commitment ($r = 0.42$, $p < .01$), job autonomy ($r = 0.23$, $p < .01$), job feedback ($r = 0.27$, $p < .01$), role conflict ($r = -0.23$, $p < .01$) role clarity ($r = 0.32$, $p < .01$) and organizational tenure ($r = -0.17$, $p < .05$). Hence, of the six work related variables only two did not correlate significantly with job satisfaction: continuance commitment ($r = 0.06$, $p > .05$) and job involvement ($r = 0.14$, $p > .05$). And of the three worker related variables, only organizational tenure correlated significantly but negatively with job satisfaction, $r = -0.17$, $p < .05$. The other two worker related variables were not significantly correlated with job satisfaction: age ($r = -0.08$, $p > .05$) and job tenure ($r = -0.11$, $p > .05$).

Table 9: Correlation Analysis between Work and Worker related Variables with Job Satisfaction

<table>
<thead>
<tr>
<th>Correlates</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Commitment</td>
<td>0.42 **</td>
</tr>
<tr>
<td>Continuance Commitment</td>
<td>0.06 n.s</td>
</tr>
<tr>
<td>Job Involvement</td>
<td>0.14 n.s</td>
</tr>
<tr>
<td>Job Autonomy</td>
<td>0.23 **</td>
</tr>
<tr>
<td>Job Performance feedback</td>
<td>0.27 **</td>
</tr>
<tr>
<td>Role Conflict</td>
<td>-0.23 **</td>
</tr>
<tr>
<td>Role Clarity</td>
<td>0.32 **</td>
</tr>
<tr>
<td>Age</td>
<td>-0.08 n.s</td>
</tr>
<tr>
<td>Job Tenure</td>
<td>-0.11 n.s</td>
</tr>
<tr>
<td>Organizational Tenure</td>
<td>0.17 **</td>
</tr>
</tbody>
</table>

** Correlation is significant at $p < .01$
* Correlation is significant at $p < .05$

n.s. not statistically significant

Stepwise Multiple Linear Regression Analysis

Regressing all the six significant correlates on job satisfaction resulted in only two of the correlates having predictive relationships with job satisfaction: affective commitment (Beta = 0.43, $p < .01$) and organizational tenure (Beta = -0.19, $p < .01$). Collectively these two predictors explain about 26% of the variance in job satisfaction.
Table 10: Stepwise Multiple Regression of Work and Worker related variables on Job Satisfaction

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Commitment</td>
<td>0.31</td>
<td>0.001</td>
</tr>
<tr>
<td>Organizational Tenure</td>
<td>-0.19</td>
<td>0.01</td>
</tr>
<tr>
<td>R Square: 0.26</td>
<td></td>
<td></td>
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</tbody>
</table>

**DISCUSSION**

The results of running a Pearson Product Moment Correlation analysis between job autonomy, job performance feedback, job involvement, role conflict, role clarity, affective commitment and continuance commitment are mostly consistent with previous findings. However, the results of running a Pearson Product Moment Correlation analysis between age, job tenure and organizational tenure and job satisfaction are quite surprising since the findings are mostly inconsistent with previous findings.

Job autonomy was found to have correlated significantly and positively with job satisfaction, $r = 0.23, p < .01$. This finding is consistent with that of Rockman (1984) who found a statistically significant positive relationship between job autonomy and job satisfaction, $r = 0.41, p < .01$. This finding also supports that of the meta-analytic findings of Fried and Ferris (as cited in Spector 2000) who found a mean correlation of 0.34 between job autonomy and job satisfaction. Hence, the more autonomy an employee has, the more satisfied he or she will be with his or her job.

The results of running a Pearson Product Moment Correlation analysis between job performance feedback and job satisfaction shows that a statistically significant relationship existed between job performance feedback and job satisfaction, $r = 0.27, p < .01$. This finding is consistent with that of Nauman (1993) who found a weak positive correlation between job performance feedback and job satisfaction, $r = 0.27, p < .01$. This finding also supports that of Fried and Ferris (as cited in Spector 2000) who found a mean correlation of 0.29 between job performance feedback and job satisfaction. Hence, the more feedback an employee is given, the more satisfied he or she will be with his or her job.

Job involvement, however, did not correlate significantly with job satisfaction, $r = 0.14, p > .05$. The findings from previous studies have shown job involvement to be correlated significantly with various facets of job satisfaction (Buchko, Weinzierler and Sergeyev 1998). Buchko, Weinzierler and Sergeyev (1998) found job involvement to be significantly correlated with the following facets: promotion
satisfaction \((r = 0.41, p < .001)\), supervisor satisfaction \((r = 0.35, p < .001)\) and co-worker satisfaction \((r = 0.23, p < .01)\). It would appear that a variation in the amount of academic librarians’ job involvement would not significantly affect their level of job satisfaction.

Role conflict was found to have correlated significantly and negatively with job satisfaction, \(r = -0.23, p < .01\). This finding is consistent with previous findings in which role conflict was found to have correlated significantly and negatively with job satisfaction. Jack and Schuler (as cited in Spector 2000) found mean correlation of \(-0.31\) between role conflict and job satisfaction. In addition, Nauman (1993) also found a statistically significant relationship between role conflict and job satisfaction, \(r = -0.29, p < .05\). Role clarity was also found to have been correlated significantly with job satisfaction, \(r = 0.32, p < .01\). This finding also supports that of meta-analytic findings by Jack and Schuler (as cited in Spector 2000) who found a mean correlation of 0.30 between role clarity and job satisfaction. Hence, the more conflicting their roles are the lesser will be academic librarians’ job satisfaction; the less conflict their roles, the more would be their satisfaction with their jobs. The clearer their roles are, the more satisfied academic librarians will be with their jobs and vice versa.

Affective commitment was found to correlate significantly and positively with job satisfaction, \(r = 0.42, p < .01\). However, continuance commitment did not correlate significantly with job satisfaction, \(r = 0.06, p > .05\). The findings on both these two work related variables are somewhat inconsistent with the findings from previous studies. Kim (2001) found statistically significant relationships between affective commitment and continuance commitment with job satisfaction. The present study and Kim’s (2001) study are similar in the sense that both investigated Malaysian employees. The only different is that in this study the participants are academic librarians in Malaysia whilst in Kim’s (2001) study the participants are Malaysian workers in Korean multinational enterprises. It is possible that continuance commitment has no effect on academic librarians’ level of job satisfaction.

Of the three worker related variables that were hypothesized to correlate with job satisfaction, only organizational tenure was found to correlate significantly but negatively with job satisfaction, \(r = -0.17, p < .05\). This finding supports that a previous finding which found organizational tenure to be negatively correlated with job satisfaction, \(r = -0.35, p < .001\) (Mirmakhrai 1991). However, this finding conflicts with that of Nauman (1993) who found organizational tenure to be positively correlated with job satisfaction, \(r = 0.20, p < .05\). It is possible that as academic librarians remain longer in their current workplace, the less satisfied they become with their jobs.
Job tenure is another worker related variable that has been empirically identified to correlate significantly with job satisfaction. However, in this study, job tenure did not correlate significantly with job satisfaction, $r = -0.11$, $p > .05$. This finding is inconsistent with that of Nauman (1993) who found statistically significant but weak relationship between job tenure and job satisfaction, $r = -0.33$, $p < .05$. This finding also conflicts with that of Mirfakhrai (1991) who found job tenure to be significantly and negatively correlated with job satisfaction, $r = -0.37$, $p < .001$. It would appear that job tenure has no effect on Malaysian academic librarians’ level of job satisfaction.

Age did not correlate significantly with job satisfaction, $r = -0.08$, $p > .05$. This finding conflicts with that of previous studies particularly the meta-analytic findings of Brush, Moch and Poyan (as cited in Spector 1997) who found a mean correlation of 0.22 between age and job satisfaction. This finding is also inconsistent with that of Nauman (1993) who found age to be correlated significantly and positively with job satisfaction, $r = 0.23$, $p < .01$. This finding is also inconsistent with that of Kamarul et al. (2003) who found a significant but weak positive relationship between age and job satisfaction, $r = 0.20$, $p < .001$. It is possible that age has no effect on Malaysian academic librarians’ level of job satisfaction.

**CONCLUSION**

The findings revealed that only six of the ten work and worker related variables were significantly correlated with job satisfaction: affective commitment, job autonomy, job performance feedback, role conflict, role clarity and organizational tenure. The findings also revealed that of these six correlates, only two have predictive relationship with job satisfaction: affective commitment and organizational tenure. Collectively these two predictors explain about 26% of the variance in job satisfaction.

Although this study did not examine all the possible correlates and predictors of job satisfaction that have been identified in the organizational behavior/psychology and management literature, it nevertheless provides an empirical glimpse of the job satisfaction phenomenon among Malaysian academic librarians.

The findings from this study should be viewed cautiously due to several methodological limitations. As with all types of data collection technique, the self-reported or self-administered questionnaire too has a number of limitations. One of the problems facing survey researchers is that of social desirability. Some respondents have a tendency to exaggerate or are given to impression management resulting in inaccurate and inflated scores for a particular variable. Secondly, practically every variable in this study has multiple conceptualizations and
operationalizations. The use of conceptual definitions and operational definitions other than the ones employed in this study could have yield somewhat different findings. This could result in changes in the direction of the relationship between variables as well as in the strengths of the relationships between them.. Finally, the use of proportionate stratified random sampling can sometime result in over-representation of respondents in certain strata and this could affect the true estimation of the population. As a result, the issue of representativeness of the sample could be compromised resulting in bias during the data collection phase of the research process.

Additional research is warranted to examine in greater depth the correlates and predictors of job satisfaction among academic librarians in Malaysia. The use of other conceptualizations and operationalizations of the job satisfaction variable as well as for the correlates and predictors should also be considered in an effort to better understand the variance in job satisfaction among Malaysian academic librarians.

REFERENCES
APPENDIX 1

Full Item Description for Measures Used

**Affective Continuance Commitment**
1. I would be very happy to spend the rest of my career in this library
2. I enjoy discussing my library with people outside it
3. I really feel as if this library’s problems are my own
4. I think I could easily become as attached to another library as I am to this one (R)
5. I do not feel like a member of the family at this library (R)
6. I do not feel “emotionally attached” to this library (R)
7. This library has a great deal of personal meaning for me
8. I do not feel a strong sense of belonging to this library

**Continuance Organizational Commitment**
1. I am not afraid of what might happen if I quit my job at this library without having another one lined up (R)
2. It would be very hard for me to leave my job at this library right now even if I wanted to.
3. Too much of my life would be disrupted if I decided to leave my job at this library right now
4. It wouldn’t be too costly for me to leave my job at this library in the near future (R)
5. Right now, staying with my job at this library is a matter of necessity as much as desire
6. I believe that I have too few options to consider should I decide to leave my job at this library
7. One of the few negative consequences of leaving my job at this library, would be the scarcity of available alternatives elsewhere
8. One of the major reasons I continue to work for this library is that leaving would require considerable personal sacrifice; another place may not match overall benefits I have here
9. If I had not already put so much of myself into this organization, I might consider working elsewhere

**Job Involvement Scale**
1. I am very much involved in my job
2. I live, eat and breathe my job
3. The most important things which happen to me involve my job

**Job Satisfaction Scale**
1. All in all I am satisfied with my job
2. In general, I don’t like my job (R)
3. In general, I like working here
Noor H.A.K

Job Autonomy Scale
1. I have a lot of say over what happens on my job
2. I have enough authority to do my best when carrying out my job
3. My job allows me to make a lot of decisions on my own
4. I have enough freedom as to how I should do my job

Job Performance Feedback Scale
1. The nature of my job provides me with very few clues to figure out whether I am performing or not (R)
2. The nature of my job provides me with plenty of clues to figure out whether I am performing or not
3. My immediate superiors and co-workers on this job almost never give any feedback as to how well I am performing (R)
4. My immediate superiors and co-workers on this job often provide me with feedback as to how well I am performing

Role Clarity Scale
1. I feel certain about how much authority I have been given to do my job
2. There are clear planned goals and objectives for my job
3. I know exactly what is expected of me
4. I have been given clear explanations of what is expected of me

Role Conflict Scale
1. I often find myself in situations in which there are conflicting requirements
2. I am often asked to do work that are against my better judgment
3. I often have to break a rule or policy in order to carry out a job assignment
4. I often receive incompatible requests from two or more individuals in the workplace
5. I am often asked to do things that are unnecessary