The Effects of Demographic, Internal and External University Environment Factors on Faculty Job Satisfaction in Vietnam

Minh-Quang Duong (Corresponding author) University of Social Sciences and Humanities Vietnam National University of Ho Chi Minh City 10-12 Dinh Tien Hoang Street, District 1, Ho Chi Minh City, Vietnam E-mail: duongminhquang@hcmussh.edu.vn

Received: September 9, 2016	Accepted: October 16, 2016	Published: October 18, 2016
doi:10.5296/jei.v2i2.9985	URL: http://dx.doi.org/10.5296/jei.v2i2.9985	

Abstract

University faculty members with higher job satisfaction are more productive, creative and positive attitude towards their job. Even less is known about university faculty job satisfaction in developing countries like Vietnam. This study examines the effects of demographic, internal and external university environment factors on faculty job satisfaction in Vietnamese higher education. The study investigated 200 faculty members working in the five member colleges of Vietnam National University of Ho Chi Minh City. The results showed that most respondents were satisfied with their jobs, and that faculty job satisfaction varied with age and discipline. The present study also found that job satisfaction was significantly influenced by demographic and internal and external university environment factors. The study's implications for university management are also discussed.

Keywords: Faculty job satisfaction, Demographic, Internal environment, External environment, Vietnamese higher education, Faculty member

1. Introduction

Teaching is one of the most stressful occupations (Veldman, Tartwijk, Brekelmans, & Wubbels, 2013). One quarter of teachers report that teaching is a very stressful job due to lack of support, workload, and classroom management issues (Johnson, Cooper, Cartwright, Donald, Taylor, & Millet, 2005). In many developing countries, the teaching force is mired in bureaucracies and centralized education systems that support neither the effective performance of teachers nor their career development (VSO, 2002). Moreover, the goals of



higher education are to provide in-depth knowledge, seek academic development, educate students, and coordinate national development demands (Johnes & Taylor, 1990). These goals cannot be accomplished efficiently and are barriers to skill utilization if faculty members are not satisfied with their profession; they will therefore not be able to increase their performance and will not contribute to education at higher institutions.

Job satisfaction is an important concept that needs to be understood by managers. Syed, Bhatti, Michael, Shaikh, and Shah (2012) recognize that faculty satisfaction is the most significant aspect in higher education and is important for the improvement, efficacy and effectiveness of the higher education system. Thus, most measures of school performance are significantly linked to employee satisfaction; schools with more satisfied teachers are more effective than those with less satisfied ones (Osrtroff, 1992). According to Chen, Yang, Shiau, and Wang (2006) quality in teaching and learning can only be enhanced if the faculty members are satisfied and content. Wood (1976) also observes that the health of an educational institution depend on the job satisfaction of its employees. Gunlu, Aksarayli, and Percin (2010) also found that job satisfaction contributes to efficient services and high performance, and will increase organizational productivity. Thus, job satisfaction is a key factor to retain and satisfy employees. It is therefore important to identify factors related to job satisfaction.

Although Cranny, Smith, and Stone (1992) estimate that over 5,000 articles and dissertations have examined the topic of job satisfaction, most of the studies have focused on business and industrial setting (Platsidou & Diamantopoulou, 2009). Very few studies have been done on the job satisfaction among university faculty members (Mangi et al., 2011). Tack and Patitu (1992) performed a count of the number of articles indexed within the research databases ERIC and PsycINFO during the period from 1970 to 1992 on the topic of job satisfaction in higher education, and toward that only 13.7 per cent of all articles were focused on faculty members in higher education in developed countries; unfortunately, evidence from developing countries is seriously lacking and is a gap which needs to be filled (Eyupoglu & Saner, 2009; Ssesanga & Garrett, 2005).

Garrett (1999) also believes that there is a need for more data to be gathered from developing countries, and for theories to be tested in different cultural contexts, professional, social, and economic environments. This study undertakes to fill this gap. It identifies and discusses factors in Vietnamese university faculty's job which contribute most to their satisfaction. The present study focuses on the following research questions: 1) What is the general level of faculty job satisfaction in Vietnamese universities? and 2) How is faculty job satisfaction affected by demographic, internal and external university environment characteristic?

2. Literature Review

2.1 Faculty Job Satisfaction and Measure Job Satisfaction

Although there is no universal definition of the concept, most of the definitions that exist in literature have a common theme. According to Spector (1997), job satisfaction can be



described as the degree to which employees like their jobs. In Weiss (2002), job satisfaction is regarded as the positive or negative evaluative judgments people make about their jobs. E. M. Skaalvik and S. Skaalvik (2010) define faculty job satisfaction as faculty's affective reactions to their work or to their teaching role. However, the most common definition of job satisfaction in organizational research is from Locke (1976), who described job satisfaction as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences. Job satisfaction is an attitude developed by an individual towards his or her job and job conditions. Thus, it is an emotional response to various dimensions of the job (Rastgar et al., 2012).

Job satisfaction has been measured in several ways. Oshagbemi (1997) employed eight dimensions to measure satisfaction with respect to different components of university teachers' overall job satisfaction in the United Kingdom: teaching, research, administration and management, present pay, promotions, supervisor behavior; behavior of co-workers and working conditions. Kusku (2003) measured faculty job satisfaction in Turkey using the seven determinants: general satisfaction, management satisfaction, colleagues, other working group satisfaction, job satisfaction, work environment and salary satisfaction. Seesanga and Garrett (2005) measured university faculty job satisfaction in Uganda using nine general factors: teaching, research, governance, remuneration, opportunities for promotion, supervision, co-worker's behavior, working environment and overall conditions. Chen et al. (2006) measured faculty job satisfaction in a private university in China using six factors: organization vision, respect, result feedback and motivation, management system, pay and benefits and work environment. Luthans (2005) suggests that pay, promotion, work, supervision and fellow worker are the main determinants of job satisfaction.

Faculty job satisfaction is influenced by a number of variables. Telman and Unsal (2004) divide the factors affecting job satisfaction into internal, external, and personal. Internal factors include characteristics related to the basic nature of the job. External factors are conditions such as physical work, promotion possibility, relationships with superiors and co-workers, creativity, job security, and organizational structure and culture. Personal factors include factors such as demographic characteristics (gender, age, length of service, educational level etc.), personality traits, and knowledge and skills. The present study focuses on effects of these factors namely demographic, internal and external university environment factors on faculty job satisfaction in Vietnamese universities.

2.2 Job Satisfaction and Demographic Factors

The literature provides evidence for a strong relationship between job satisfaction and specific individual characteristics such as gender (Kaiser, 2002; Moguerou, 2002), age (Groot & van den Brink, 1999), education (Ward & Sloane, 2000), wages (Lydon & Chevalier, 2002), working hours (Drakopoulos & Theodossiou, 1997), and union status (Lillydahl & Singell, 1993). Locke (1976), Spector (1997) found that factors such as faculty rank, tenure status, family status, and work-family conflict can also affect job satisfaction.

Academic qualifications, marital status, and children can also impact faculty job satisfaction. The results of Eyupoglu and Saner (2009) report that faculty with doctorates displayed

Macrothink Institute™

significant higher levels of job satisfaction than their colleagues with a mater's or bachelor degree. Additionally, married faculty members were more satisfied with their jobs than those who were single (Clark et al., 1996). Finally, Carr and Ash (1998) showed that women with children were less satisfied with their jobs than man counterparts. No study has yet addressed the relationship between job satisfaction and national educated or discipline. The present study focuses on relations between faculty job satisfaction and demographic factors namely gender, age, national educated-country where highest degree attained, and discipline.

2.3 Job Satisfaction and University Environment Factors

Faculty job satisfaction has also been shown to be affected greatly by university environment variables, including school leadership, collegial and student relationship, and university climate and culture (Grunwald & Peterson, 2003; Hagedorn, 2000; Zhou & Volkwein, 2004). Finally, Blegen (1993), Glisson and Durick (1988) found that organizational characteristics are the factors affecting faculty job satisfaction.

Duncan (1972) distinguishes between an internal and external environment. The internal environment consists of physical and social factors within the boundaries of the organization such as teaching hours, research hours, community service hours, and private hours; while the external environment consists of physical and social factors outside the boundaries of the organization, including development aim of school, campus landscape, leadership style, and administration efficiency.

3. Research Method

3.1 Sample

Data analyzed in this study were drawn from faculty members to working full-time in the Vietnam National University of Ho Chi Minh City (VNU-HCM), in Vietnam. VNU-HCM was a national multi-disciplinary university, formed by the merger of existing universities in Ho Chi Minh City and has been to become Vietnam's premier institution of higher education, so as to better serve the country and its community (VNU-HCM, 2013). This high concentration one of most prestigious universities in Vietnam, and the level of faculty satisfaction play an important role in establishing successful school that it serves as a strong foundation for this study to analyze Vietnamese university faculty job satisfaction.

Questionnaire was distributed to 230 faculty members at the five member colleges of VNU-HCM in academic year 2013, and 200 questionnaires were returned for a 87% return rate which exceeded the 30% response rate to most researchers for analysis purpose (Dillman, 2000; Malaney, 2002). All data of respondents were self-reported information which was prevalently used in higher education research (Gonyea, 2005).

As a result, this study analyzed a sample of 200 faculty members in VNU-HCM. Broken down by gender, this sample included 72.5% males and 27.5% females. Faculty belongs to different age groups and the average age of respondents was approximately thirty-four years. Almost of 76% who highest degree attained from Asian countries and 24% were Western countries. Overall, 43% of the respondents taught in technology related area, 24.5% in social



sciences and humanities, and 32.5% in physical sciences.

3.2 Dependent and Independent Variables

University faculty job satisfaction identified as the dependent variable in this study. We performed two steps to select seventeen dimensions of four aspects which measured the respondent's satisfaction with various components of their current job. The first step, we analyzed thirty-three dimensions that choose seventeen dimensions representative of four aspects. We then tested a second step to compute for every aspect and analyzed four aspects again to represent faculty job satisfaction in this study. For each dimension, the respondents were asked to rate academic members' level of satisfaction on a four-point Likert's scale ranging from 1 = "very dissatisfaction" to 4 = "very satisfaction".

Factor analysis and internal consistency analysis (Cronbach's α) were conducted to assess the validity and reliability of this constructed measurement for faculty job satisfaction in VNU-HCM. Table 1 presents that factor analysis revealed that all four aspects (0.734-0.887) and seventeen competences of four aspects (0.618-0.910) had factor loading values greater than the threshold level of 0.5 (Hair et al., 2006), showing that the seventeen competences of four aspects were all suitable for constructing job satisfaction. The internal consistency analysis yielded Cronbach's α coefficient 0.824 in this study higher than the threshold level of 0.7 (Nunnally, 1978), indicating satisfactory reliability for this job satisfaction measurement.



Table 1. Factor analysis of seventeen dimensions of four aspects of faculty job satisfaction in VNU-HCM

Factor	Item	Factor loadings	Total variance explained (%)	Cronbach's α	
	Research room space	0.868			
Equipment	Laboratory space	0.845			
	Teaching support equipment0.841		67.641	0.877	
	Teaching internet	0.777			
	Library (e-journals)	0.776			
	Quantity and quality of teacher	0.910		0.851	
Human resource	Quantity and quality of technical staff	0.881	77.422		
	Quantity and quality of administration staff	0.847			
Regulation	In-service teaching training	0.851			
	In-service research training	0.805			
	Salary	0.618 62.451		0.844	
	Bonus and welfare 0.834				
	Curriculum reform and evaluation 0.820				
Organizational culture	Efficacy of department meetings	epartment meetings 0.797			
	Teaching load	0.872	(5.205	0.910	
	Research pressure	0.783 65.295		0.810	
	Administration load	0.776			

Note. Data were analyzed with principle component analysis.

The independent variables of this study were selected and organized into three blocks. The first block was demographic factors, including gender, age, national educated, and discipline. The second block included internal university environment factors, namely spend time of teaching, research, community service, and private. Vroom (1964) found that hours of work were determinants of job satisfaction. The proportion of time spent conducting research and teaching were key factors in faculty job satisfaction (Hagedorn, 2000; Olsen et al., 1995). The



third block consisted of external university environment factors, including development aim of school, leadership style, campus landscape, administration efficiency.

Table 2. Coding schemes, proportions, means, and standard deviations of the independent variables in this study

Independent variables
Block 1: Demographic characteristics
≻ Gender: 1 = male (72.5%); 0 = female (27.5%)
≻ Age: 1 = under 30 years (27%); 2 = 31 to 40 years (61%); 3 = over 40 years (12%)
National educated: 1 = Asian countries (76%); 2 = Western countries (24%)
Discipline: 1 = technology (43%); 2 = social sciences and humanities (24.5%); 3 = physical science (32.5%)
Block 2: Internal university environment
Time spent teaching: 2 = 5 to 10 hours (35%); 3 = 11 to 15 hours (40.5%); 4 = 16 to 20 hours (14%); 5 = over 20 hours (10.5%)
➤ Time spent research: 1 = under 5 hours (23.5%); 2 = 5 to 10 hours (68%); 3 = 11 to 15 hours (8.5%)
Time spent community service: 1 = under 5 hours (44.5%); 2 = 5 to 10 hours (51.5%); 3 = 11 to 15 hours (4.0%)
➤ Time spent private: 1 = under 5 hours (15%); 2 = 5 to 10 hours (80%); 3 = 11 to 15 hours (5.0%)
Block 3: External university environment
> Development aim: measure level of external environment satisfaction on a 4-point scale, $1 = \text{very}$ dissatisfaction; $2 = \text{dissatisfaction}$; $3 = \text{satisfaction}$; $4 = \text{very satisfaction}$ ($M = 3.19$, $SD = .67$)
\blacktriangleright Leadership style: same as above ($M = 3.07, SD = .70$)
Campus landscape: same as above ($M = 3.00, SD = .89$)
Administration efficiency: same as above ($M = 2.95$, $SD = 1.07$)

3.3 Data Analyses

This study employed statistical methods of descriptive analyses and multiple regressions to analyze the data. Descriptive analyses were computed to understand the general level of job satisfaction of academic members. To study the key factors of university environment as well as demographic which significantly affect job satisfaction, multiple regression analysis was



used for this study.

4. Results

4.1 The Level of Job Satisfaction of Faculty Members in VNU-HCM

Table 3 presents the results statistical means (*M*) and standard deviations (*SD*) of the level as well as four aspect of faculty job satisfaction in VNU-HCM. Results indicate that most faculty members were satisfied with their university jobs (M = 2.86, SD = 0.60).

With respect to faculty job satisfaction in VNU-HCMC, the findings of Table 3 also show that faculty members were most satisfied with aspects of human resources (M = 2.99, SD = 0.70), organizational culture (M = 2.94, SD = 0.71), equipments (M = 2.84, SD = 0.79). University faculty were least satisfied with aspect of regulations (M = 2.65, SD = 0.75).

Regarding the seventeen dimensions of four aspects, three dimensions were moderately related to faculty job satisfaction, namely laboratory space (M = 2.75, SD = 1.09), library (M = 2.70, SD = 0.86), research room space and equipment (M = 2.68, SD = 1.04). University faculty was dissatisfied with their salary (M = 2.16, SD = 0.76).

	М	SD		
Average of Faculty job satisfaction	2.86	0.60		
Four aspects of job satisfaction				
1. Equipments	2.84	0.79		
2. Human resources	2.99	0.70		
3. Regulations	2.65	0.75		
4. Organizational culture	2.94	0.71		

Table 3. Means (M) and standard deviations (SD) of the job satisfaction level and four aspects of faculty members in VNU-HCMC

4.2 Effects of Demographic, Internal and External University Environment Factors on Faculty Job Satisfaction in VNU-HCM

Table 4 shows seven models of multiple regressions which analyze the effects of demographic and university environment characteristics on faculty job satisfaction in Vietnam National University of Ho Chi Minh City. Models 1 through 3 present the separate effects of these factors on faculty job satisfaction, and Models 4 through 7 present the combined effects. Regression model proposed by this study explained 52.4 per cent of faculty job satisfaction in VNU-HCM ($R^2 = .524$). In addition, the different regression models had



different explanations for faculty job satisfaction across different characteristics.

As shown in Table 4, Model 1 suggests that both demographic characteristics of age (β = -0.214, p < 0.05) had and discipline (β = -0.223, p < 0.05) demonstrated negative relationship with faculty job satisfaction. Both age (F = 3.193, p < 0.05) and discipline (F = 5.842, p < 0.05) were statistically significant difference on job satisfaction of faculty. However, the results of post-hoc comparisons find that faculty of under 30 years old group (M = 3.01, SD = 0.57) were more satisfied than over 40 years old group (M = 2.67, SD = 0.34). These results also show that faculty taught in technology and social sciences and humanities related areas (M = 2.97, 2.93 and SD = 0.66, 065, respectively) had more satisfied than physical science (M = 2.65, SD = 0.40).

Internal university environment in Model 2 show that almost factors had no significant influence on faculty job satisfaction in VNU-HCM. On the contrary, all four factors of external university environment in Model 3 yielded significant relationship with faculty job satisfaction. Leadership style ($\beta = 0.144$, p < 0.05), campus landscape ($\beta = 0.209$, p < 0.01), and administration efficiency ($\beta = 0.659$, p < 0.001) were positively associated with job satisfaction of university faculty; but, development aim item ($\beta = -0.317$, p < 0.001) indicated a significantly negative impact on faculty job satisfaction. Overall, external university environment factors of faculty yielded the largest explanatory power ($\mathbb{R}^2 = .467$) in job satisfaction which compared with faculty demographic and internal university environment characteristics ($\mathbb{R}^2 = .096$ and .006, respectively).

In the combined Models 4 through 7, the findings of Table 4 also demonstrate that faculty demographic characteristics of age and discipline robustly persisted with significant effects on job satisfaction, even after accounting for the effects of faculty external university environment characteristics. The significant effect levels of age and discipline faculty remained rather steady across models ($\beta = -0.241$ to -0.172 for age, $\beta = -0.226$ to -0.130 for discipline). The regression between faculty job satisfaction and national educated had found in the both Models 5 and 7 ($\beta = 0.115$ and 0.125, p < 0.001). University faculty internal university environment showed that virtually none of the internal university environment factors significantly affected on job satisfaction. Only time spent private item persisted significantly position effect throughout Model 6 ($\beta = 0.121$, p < 0.05). Most external university environment factors remained rather steady across models, except for leadership style. Both campus landscape and administration efficiency item remained to be positively associated with faculty job satisfaction; it was negatively impact by development aim item from Model 5 to Model 7.



Table 4. Effects of demographic, internal and external university environment factors on faculty job satisfaction in VNU-HCM

Variables	M1	M2	M3	M4	M5	M6	M7
Demographic characteristics							
Gender	.023			.043	.008		.025
Age	214*			241**	172**		175**
National educated	.110			.120	.115*		.125*
Discipline	223*			226**	150**		130*
Internal university environment							
Time spent teaching		018		028		066	068
Time spent research		016		039		.000	020
Time spent community service		.042		.140		.006	.064
Time spent private		.069		.026		.121*	.090
External university environment							
Development aim			317***		305***	314***	309***
Leadership style			.144*		.084	.153*	.098
Campus landscape			.209**		.173*	.216**	.190**
Administration efficiency			.659***		.666***	.659***	.657***
R square (R ²)	.096	.006	.467	.110	.517	.478	.524

Note. * *p* < .05, ** *p* < .01, *** *p* < .001.

5. Discussion and Conclusion

In this study, we investigated the effects of demographic and university environment characteristics on faculty members job satisfaction in Vietnamese universities. Results of the study show that for faculty members in VNU-HCM, factors of age, national educated, discipline, development aim, campus landscape, and administration efficiency are significant effecting their job satisfaction. Almost internal university environment characteristics did not show significant effects. In addition, the present study also finds that most respondents were satisfied with their university jobs, mirroring the results of the studies by Castillo and Cano



(2004), Eyupoglu and Sanner (2009), Ghazi et al. (2010), Malik (2011), Mehboob et al. (2012), Noordin and Jusoff (2009), and Syed et al. (2012). However, most respondents were dissatisfied with their salary. Salary is very primary factor of satisfaction for almost every type of employee in each organization. This study appears to align with previous studies that salary is important factor which help both personal attain their basic need and instrumental in providing upper level needs satisfaction (Bassett, 1994; Grace & Khalsa, 2003; Luthans, 1992). On the other hand, proving good physical working conditions enables faculty to carry out their jobs easily, comfortably, and efficiency. The studies of Newsham et al. (2009) and Kinzl et al. (2005) have shown a link between working conditions and job satisfaction. However, this study found no strong relation between working conditions and faculty job satisfaction. One implication of this study is that university administrators should pay more attention to enhancing faculty working conditions as well as job satisfaction in higher education institutions. Unfortunately, there is yet no empirical research done about the faculty job satisfaction in Vietnamese higher education. The results of this study, therefore, could only discussed throughout the results of studies outside Vietnam.

In terms of demographic characteristics, findings show faculty of age, national educated and discipline to be significant associated with job satisfaction. As for faculty of age, previous research has found that it found strong relation between age and job satisfaction (Ssesanga & Garrett, 2005; Malik, 2011). According to Gautam, Mandal, and Dalal (2006), Wong and Heng (2009), older faculty to be less satisfied with their jobs than their younger colleagues because of the novelty of their situation (Paul & Phua, 2011). A significant relationship between faculty job satisfaction and discipline were also discovered in this study and supported by the studies of Terpstra and Honoree (2004), Sabharwal and Corley (2009). There are several researches to discuss about the relationship between faculty job satisfaction and discipline based on different aspects. For example, Ward and Sloane (2000) find that female faculty of engineers express highest level of over job satisfaction and social science express lowest levels. Furthermore, male faculty of social sciences and engineering fields had higher level of satisfaction than male faculty of sciences (Sabharwal & Corley, 2009). Finally, Noordin and Jusoff (2009) report that there are no significant different between Asian and Western educated respondent with regard to general satisfaction; but, this study showed a significant effect on faculty job satisfaction. Very few studies have been done university faculty job satisfaction and country where highest degree attainted. The findings of this study, therefore, contribute to fill in the literature gap of faculty job satisfaction in higher education.

Almost time spent of teaching, research, community service and private analyzed in this study do not affect on faculty members job satisfaction in VNU-HCM. Research, teaching, and community service are different dimensions of faculty work that often compete for faculty members' time and commitment and are in conflict with one another (Fairweather, 2005; Hattie & Marsh, 1996). This result is supported by several previous studies that there teaching, community service (Bameka, 1996), and research (Ssesanga & Garrett, 2005) had no significant impact on faculty job satisfaction. Olsen et al. (1995) shows that faculty expressed greater satisfaction with teaching are less likely to receive support and recognition from their peer in their department. Faculty members spend a greater percentage of time on



teaching express greater dissatisfaction with their work; and faculty in the natural and engineering were more likely to spend time conducting research than teaching (Lui, 2000). The studies of Fox (1992), Marsh and Hattie (2002) indicate that increased time spent on research positively impacts on faculty job satisfaction.

This study also suggests that mutually beneficial causation exist between external university environment and faculty job satisfaction. However, only development aim factor had significant negative impact on faculty job satisfaction. In order to avoid or reduce impact of this factor on faculty job satisfaction, university administrators must provide faculty members with the opportunities to contribute in the decision-making process, especially aspects that have a direct influence on their satisfaction levels. Rice and Austin (1988) recognize that morale is highest when faculty members participate in governance and decision making. More importantly, both campus landscape and administration efficiency had significant positive effect on faculty job satisfaction. The studies of Judge and Church (2000), Maghrabi (1999) show that faculty members job satisfaction may affect on their perceptions of the university effectiveness. Unfortunately, the studies of the relationship between faculty job satisfaction and campus landscape as well as administration efficiency is very few in order to discuss with the results of this study. The above results indicate that university managers and policy makers should invest more resource to not only transform the landscape in VNU-HCM campus, but also improve the efficiency of administrative apparatus. If they must decide a universal intervention to enhance faculty of satisfaction, they should be notably concerned about both these factors.

University faculty job satisfaction is important for improvement, efficiency and effectiveness in higher education. It is clear that very little research on job satisfaction of academic members has come from developing countries like Vietnam. Gruneberg (1979) find that most individuals spend a large part of their lives at work. Therefore, a detailed understanding of job satisfaction is the key to improving the well-being of a large number of working individual. It is hoped that the barrier to the job satisfaction of faculty members are found in this study may be useful for university management to develop work environment and culture that would allow higher levels of faculty job satisfaction and can contribute to a great extent to improve the level of faculty members in developing countries in general and Vietnamese higher education in particular.

References

Bameka, P. (1996). *Factors affecting academic staff productivity at Makerere University* (Unpublished master's dissertation, Makerere University).

Bassett, G. (1994). The case against job satisfaction. *Business Horizons*, *37*(3), 61-68. http://dx.doi.org/10.1016/0007-6813(94)90007-8

Blegen, M. A. (1993). Nurses' job satisfaction: A meta-analysis of related variables. *Nursing Research*, 42(1), 36-41.

Castillo, J. X., & Cano, J. (2004). Factors explaining job satisfaction among faculty. *Journal of Agriculture Education*, 45(3), 65-74. http://dx.doi.org/10.5032/jae.2004.03065



Chen, S. H., Yang, C. C., Shiau, J. Y., & Wang, H. H. (2006). The development of an employee satisfaction model for higher education. *TQM Magazine*, *1*(5), 484-500. http://dx.doi.org/10.1108/09544780610685467

Clark, A., Oswald, A., & Warr, P. (1996). Is job satisfaction U-shaped in age? *Journal of Occupational and Organizational Psychology*, *69*, 57-81. http://dx.doi.org/10.1111/j.2044. 8325.1996.tb00600.x

Cranny, C. J., Smith, P. C., & Stone, E. F. (1992). Job Satisfaction: How People Feel About Their Jobs and How It Affects Their Performance. New York: Lexington Books.

Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method*. New York; John Wiley and Son.

Drakopoulos, S., & Theodossiou, I. (1997). Job satisfaction and target earnings. *Journal of Economic Psychology*, 18, 694-704.

Duncan, R. B. (1972). Characteristics of organizational environments and perceived environmental uncertainly. *Administrative Science Quarterly*, *17*(3), 313-327. http://dx.doi.org/10.1177/014920639101700408

Eyupoglu, S. Z., & Saner, T. (2009). *The relationship between job satisfaction and academic rank: A study of academicians in Northern Cyprus*. Paper presented at the World Conference on Educational Sciences, North Cyprus, February 4-7.

Fairweather, J. S. (2005). Beyond the rhetoric: Trends in the relative value of teaching and research in faculty salaries. *The Journal of Higher Education*, 76(4), 401-422. http://dx.doi.org/10.1353/jhe.2005.0027

Fox, M. F. (1992). Research, teaching, and publication productivity: Mutuality versus competition in academia. *Sociology of Education*, *65*(4), 293-305. http://dx.doi.org/10.2307/2112772

Garrett, M. R. (1999). Teacher job satisfaction in developing countries. *Educational research supplemental series*. ERIC Document Reproduction Service No. ED 459 150.

Gautam, M., Mandal, K., & Dalal, R. S. (2006). Job satisfaction of faculty members of veterinary sciences: an analysis. *Livestock Research for Rural development*, 18(6).

Ghazi, S. R., Ali, R., Shahzada, G., & Israr, M. (2010). University teachers' job satisfaction in the North West Frontier province of Pakistan. *Asian Social Science*, *6*(11), 188-192.

Glisson, C., & Durick, M. (1988). Predictors of job satisfaction and organizational commitment in human service organizations. *Administrative Science Quarterly*, *33*(1), 61-81. http://dx.doi.org/10.2307/2392855

Gonyea, R. M. (2005). Self-reported data in institutional research: Review and recommendations. In P. D. Umbach (Ed.), *Servey research: Emerging issues* (pp. 73-89). San Francisco, CA: Jossey-Bass.



Grace, D. H., & Khalsa, S. A. (2003). Re-recruiting faculty and staff: The antidote to today's high attrition. *Independent School*, *62*(3), 20-27.

Groot, W., & van den Brink, H. M. (1999). Job satisfaction of older workers. *International Journal of Manpower*, 20(6), 343-360.

Gruneberg, M. M. (1979). Understanding job satisfaction. London: The Macmillan Press Ltd.

Grunwald, H., & Peterson, M. W. (2003). Factors that promote faculty involvement in and satisfaction with institutional and classroom student assessment. *Research in Higher Education*, 44, 173-204. http://dx.doi.org/10.1023/A:1022051728874

Gunlu, E., Aksarayli, M., & Percin, N. S. (2010). Job satisfaction and organizational commitment of hotel managers in Turkey. *International Journal of Contemporary Hospitality Management*, 22(5), 693-717. http://dx.doi.org/10.1108/09596111011053819

Hagedorn, L. S. (2000). Conceptualizing faculty job satisfaction: Components, theories, and outcomes. *New Directions for Institutional Research*, *105*, 5-20. http://dx.doi.org/10.1002/ ir.10501

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2006). *Multivariate data analysis*. New Jersey: Prentice Hall.

Hattie, J., & Marsh, H. W. (1996). The relationship between research and teaching: A meta-analysis. *Review of Educational Research*, 66(4), 507-542. http://dx.doi.org/10.3102/00346543066004507

Hoppock, R. (1935). Job satisfaction. New York: Harper and Brothers.

Johnes, J., & Taylor, J. (1990).*Performance Indicators in Higher Education: Buckingham*. The Society for Research into Higher Education and Open University Press.

Johnson, S., Cooper, C. L., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. *Journal of Managerial Psychology, 20*, 179-187. http://dx.doi.org/10.1108/02683940510579803

Judge, T. A., & Church, A. H. (2000). Job satisfaction: Research and practice. In C. L. Cooper & E. A. Locke (Eds.), *Industrial and organization psychology: Linking theory with practice* (pp.166-198). Oxford, UK: Blackwell.

Kaiser, L. (2002). Job satisfaction: a comparison of standard, non-standard and self employed patterns across Europe with a special note to the gender/job paradox. EPAG Working Paper 27, Colchester: University of Essex.

Kelly, J. D. (1989). Gender, pay, and job satisfaction of faculty in journalism. *Journalism Quarterly*, 66(2), 446-452. http://dx.doi.org/10.1177/107769908906600226

Kinzl, J. F., Knotzer, H., Traweger, C., Lederer, W., Heidegger, T., & Benzer, A. (2005). Influence of working conditions on job satisfaction in anesthetists. *British Journal of Anesthesia*, 94(2), 211-215. http://dx.doi.org/10.1093/bja/aei035



Kusku, F. (2003). Employee satisfaction in higher education: the case of academic and administrative staff in Turkey. *Career Development International*, 8(7), 347-356. http://dx.doi.org/10.1108/13620430310505304

Lillydahl, J. H., & Singell, L. D. (1993). Job satisfaction, salaries and unions: The determination of university faculty compensation. *Economics of Education Review*, *12*(3), 233-243. http://dx.doi.org/10.1016/0272-7757(93)90006-3

Liu, M. C. (2001). *The adaptation and experience of foreign-born faculty members in the United States* (Unpublished Ph.D Thesis, Claremont Graduate University).

Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1349). Chicago: Rand McNally.

Luthans, F. (1992). Organizational behavior (6th ed.). New York: McGraw-Hill.

Luthans, F. (2005). Organizational behavior. McGraw-Hills International Edition.

Lydon, R., & Chevalier, A. (2002). *Estimates of the effect of wages on job satisfaction*. Centre for Economic Performance, London School of Economics Discussion Papers 0531, CEP, London.

Maghrabi, A. (1999). Assessing the effect of job satisfaction on managers. International Journal of Value-Based Management, 12, 1-12. http://dx.doi.org/10.1023/A:1007741607794

Malaney, G. D. (2002). You still need high response rates with web-based surveys. *Student* Affairs On-Line, 3(1).

Malik, N. (2011). Study on job satisfaction factors of faculty members at university of Balochistan. *International Journal of Academic Research*, 3(1), 267-272. http://dx.doi.org/ 10.7763/JOEBM.2015.V3.295

Mangi, R. A., Soomro, H. J., Ghumro, I., Abidi, A. R., & Jalbani, A. A. (2011). A study of job satisfaction among non Ph.D faculty in universities. *Australian Journal of Business and Management Research*, 1(7), 83-90.

Marsh, H. W., & Hattie, J. (2002). The relation between research productivity and teaching effectiveness: Complementary, antagonistic, or independent constructs? *The Journal of Higher Education*, 73(5), 603-641. http://dx.doi.org/10.1353/jhe.2002.0047

Mehboob, F., Sarwar, M. A., & Bhutto, N. A. (2012). Factors affecting job satisfaction among faculty members. *Asian Journal of Business and Management Sciences*, *1*(12), 1-9

Mehboob, F., Sarwar, M. A., & Bhutto, N. A. (2012). Factors affecting job satisfaction among faculty members. *Asian Journal of Business and Management Sciences*, *1*(12), 1-9.

Moguerou, P. (2002). Job satisfaction among US Ph.D. graduates: The effects of gender and employment sector. *Labor and Demography*, 0204002, EconWPA.

Newsham, G., JayBrand, C. D., Veitch, J., Aries, M., & Charles, K. (2009). Linking Indoor



Environment Conditions to Job Satisfaction. *Building Research and Information*, 37(2), 129-147.

Nguyen, N. C. Nguyen, V. D., Hoang, H. T., & Nguyen, T. K. N. (2013). Factors affecting job satisfaction of teachers of Hue university in Vietnam. *Journal of Research in International Business and Management*, *3*(35), 169-174.

Noordin, F., & Jusoff, K. (2009). Levels of job satisfaction amongst Malaysian academic staff. *Asian Social Science*, *5*(5), 122-128. http://dx.doi.org/10.5539/ass.v5n5p122

Nunnally, J. C. (1978). Psychometric theory (2rd ed.). New York: McGraw-Hill.

Olsen, D., Maple, S. A., & Stage, F. K. (1995). Women and minority faculty job satisfaction: Professional role interests, professional satisfactions, and institutional fit. *The Journal of Higher Education*, *66*(3), 267-293. http://dx.doi.org/10.2307/2943892

Oshagbemi, T. (1997). The influence of rank on the job satisfaction of organizational members. *Journal Managerial Psychology*, *12*(8), 511-519. http://dx.doi.org/10.1016/j.sbspro.2009.01.120

Osrtroff, C. (1992). The relationship between satisfaction attitudes and performance. *An Organizational Level Analysis*, 77, 962-974.

Paul, E. P., & Phua, S. K. (2011). Lecturers' job satisfaction in a public tertiary institution in Singapore: ambivalent and non-ambivalent relationships between job satisfaction and demographic variables. *Journal of Higher Education Policy and Management, 33*(2), 141-151. http://dx.doi.org/10.1080/1360080X.2011.550087

Platsidou, M., & Diamantopoulou, G. (2009). Job satisfaction of Greek university professors: Is it affected by demographic factors, academic rank and problem of higher education? In G. K. Zarifis (Eds.), *Educating the AdultEducators: Quality Provision and Assessment in Europe*, *Conference Proceedings* (pp. 535-545). ESREA-ReNAdET. Thessaloniki: Grafima Publications.

Rastgar, A. A., Davoudi, S. M. M., Oraji, S., & Fartash, K. (2012). Illustrate the important linkage between perception of justice and job satisfaction. *Asian Journal of Research in Social Sciences and Humanities*, 2(5), 270-288.

Rice, E. R., & Austin, A. E. (1988). Faculty morale: What exemplary colleges do right. *Change*, 20(2), 51-58.

Sabharwal, M., & Corley, E. A. (2009). Faculty job satisfaction across gender and discipline. *The Social Science Journal, 46*, 539-556. http://dx.doi.org/10.1016/j.soscij.2009.04.015

Santhapparaj, A. S., & Alam, S. S. (2005). Job satisfaction among academic staff in private universities in Malaysia. *Journal of Social Sciences*, *1*(2).

Sharma, R. D., & Jyoti, J. (2010). Job satisfaction among school teachers. *IIMB Management Review*, *18*(4), 349-363.



Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relation. *Teaching and Teacher Education, 26*, 1059-1069. http://dx.doi.org/10.1016/j.tate.20 14.07.007

Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences.* Thousand Oaks, CA: Sage.

Sseganga, K., & Garrett, R. M. (2005). Job satisfaction of university academics: Perspectives from Uganda. *Higher Education*, *50*, 33-56. http://dx.doi.org/10.1007/s10734-004-6346-0

Syed, A. A. S. G., Bhatti, N., Michael, S., Shaikh, F. M., & Shah, H. (2012). Job satisfaction of faculty members of university in Pakistan: A case study of university of Sindh-Jamshoro. *Modern Applied Science*, *6*(7), 89-95. http://dx.doi.org/10.5539/mas.v6n7p89

Tack, M. W., & Patitu, C. L. (1992). Faculty job satisfaction; Women and minorities in peril. *ASHE-ERIC Higher Education Report No. 4*. Washington, DC: Association for the study of higher education.

Telman, N., & Unsal, P. (2004). Calisan Memnuniyeti. Epsilon Publishing, Istanbul.

Terpstra, D. E., & Honoree, A. L. (2004). Job satisfaction and pay satisfaction levels of university faculty by discipline type and by geographic region. *Education*, *124*(3), 528-539.

Veldman, I., Tartwijk, J. V., Brekelmans, M., & Wubbels, T. (2013). Job satisfaction and teacher-student relationships across the teaching career: Four case studies. *Teaching and Teacher Education*, *32*, 55-65.

VNU-HCM (Vietnam National University of Ho Chi Minh City). (2013). *Home of Vietnam National University of Ho Chi Minh City*. Retrieved from http://en.vnuhcm.edu.vn

Vroom, V. H. (1964). Work and motivation. New York: John Wiley and Son.

VSO (Voluntary Service Oversea). (2002). What makes teachers tick: A policy research report on teachers' motivation in developing countries. London, VSO.

Ward, M. E., & Sloane, P. J. (2000). Non-pecuniary advantages versus pecuniary disadvantages: Job satisfaction among male and female academics in Scottish universities. *Scottish Journal of Political Economy*, 47(3), 273-303. http://dx.doi.org/10.1111/1467-94 85.00163

Weiss, H. M. (2002). Deconstructing job satisfaction: Separating evaluation, beliefs and affective experiences. *Human Resource Management Review*, *12*(2), 173-194. http://dx.doi.org/10.1016/S1053-4822(02)00045-1

Wong, E. S. K., & Heng, T. N. (2009). Case study of factors influencing job satisfaction in two Malaysian universities. *International Business Research*, *2*(2), 86-98. http://dx.doi.org/ 10.5539/ibr.v2n2p86

Wood, O. R. (1976). A research project: Measuring job satisfaction of the community college staff. *Community College Review*, *3*(3), 56-64. http://dx.doi.org/10.1177/00915521760030



0309

Zhou, Y., & Volkwein, J. F. (2004). Examining the influences on faculty departure intentions: A comparison of tenured versus non-tentured faculty at research universities using NSOPF-99. *Research in Higher Education, 45*, 139-176. http://dx.doi.org/10.1023/B:RIHE. 0000015693.38603.4c

Copyright Disclaimer

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/3.0/).