

Different effect of Task Characteristics requirement on Job satisfaction: Gender analysis of teacher occupation on WDQ

Setyabudi Indartono
Department of Business Administration
National Central University
No. 300, Jungda Rd, Jhongli City
Taoyuan, Taiwan 320, ROC
Email : 964401605@cc.ncu.edu.tw

Abstract:

This study investigated the gender analysis on the complexity of teacher's job design and satisfaction. Work design concept of Morgesson (2006) that included knowledge, task, and social and work context characteristics was used. This study was focus on teacher's task characteristics of job design. Direct effect of task characteristic, and gender on teacher job satisfaction was proposed for basic hypothesis. Comparing the mean of characteristic on gender was conducted for basic evidences. Moderation effect of gender task characteristics related to job satisfaction was investigated for further hypothesis.

Confirmation on the model, structural equation modeling was used to test the instrument. Complexity dimension of task characteristics and work context was investigate using high-level confirmatory analysis (HCFA) and second order analysis to confirm their single construct of model variables. This study found satisfactory model and support the hypotheses. Single variable of each characteristic was used to represent all of their dimensions.

The result showed the direct effect of teacher's task characteristics ($\beta=.464$, $p<.01$), and gender ($\beta=.103$, $p<.01$) on teacher job satisfaction. Hypothesis result indicates that different of gender require task criteria ($t\text{-test}=-.5.886$, $p<.01$) of teacher work design differently. Effect of teacher's task characteristics ($\beta=.081$; F change=.134; $p>.05$) requirement on the teacher job satisfaction was not found differently between male and female. Moderation effect of gender on task (揀揀 $\beta=.081$, F change=.134, $p>.05$) was not effect teachers satisfaction differently.

Implication of the findings for organizations and suggestions for future research are discussed

Keywords: Gender, task characteristics, satisfaction

Biographical notes:

Setyabudi Indartono is a Doctoral Student in Department of Business Administration, National Central University, Taiwan. Lecturer of Management Department, Yogyakarta state University, Indonesia. His Major Field of research is Personal Fit, Servant Leadership, and Organizational Citizenship Behavior
Email: setyabudi_indartono@uny.ac.id

Introduction

Previous study of job design produced most popular programs such as TQM (Deming, 1986; Juran et al 1988; Waldman, 1994) and reengineering (Hammer et al, 1993), and human capital management (Lepak & Snell, 1999). In nature, these programs were designed to simplify employee task on works, manage social-interpersonal daily works, and help to achieve the goal of work, efficiently. Psychological objective of work design was aimed high task performance and satisfactions. Supporting the available individual psychological conditions was significantly effect to run the organization activities effectively. Previous study found that successful on designing of work task were implied positively on employee's behavior and attitudes such as performance, satisfaction, commitment, involvement, motivation, role perception of outcomes, anxiety and stress (Humphrey et al 2007).

However, the previous task design studies were found lack on their relationship to the outcomes, (Johns et al., 1992; Oldham, 1996). Some dimensions of its characteristics were found fully effects on outcomes than other ones (Campion & McClelland, 1993, Morgeson, 2006, Morgeson and Campion, 2003 and Humphrey 2007). It made the task characteristics effect on outcomes became un-equal. Some possible explanations needed to answer these conditions more clearly. Employees and organization's conditions might become possible explanations of these situations (Humphrey et al, 2007, MacKinnon, 2008). The different of organizational requirement might happen to deal up with business competitiveness and improve work effectiveness. Different requirement and capability of employee as individual background, might effect on the difference perception on their work outcomes (O'Reilly et al 1991, Chatman 1991, Edward 1996, Judge 1996, Saks 1997). Individual characteristics mostly used to provide explanations of different worker attitude and behavior.

Scholar used gender as one of individual characteristic on many studies to provide some explanations of different effect on outcomes. Gender found made a different effect in many contexts such as within interpersonal relationships into household decision-making (Qualls, 1987, Baghat et al, 2008). In example, female were known tend to be more expressive. Its expressive behavior was manifested in their socio-emotional behavior (Meyers-Levy and Maheswaran, 1991). Previous research (Haswell et al., 1999; Lysonski and Gaidis, 1991; Whipple and Swords, 1992) was also found that female more sensitive to ethical issues (Bernardi, 2008). Thus, sensitivities, expressive behaviors, and motivations of female worker would response work design differently from male.

Few of studies have explored different effect of employee's characteristics on the effect of task design. Point to the previous explanation, we suggest to expand the study on gender-work design relationship and test the module of task design on outcomes based on gender. Thus, This study was aimed to investigate gender on task characteristics of work design and explain the different effect of gender work design on satisfaction.

Conceptual background and hypotheses

Gender on task characteristic of Work Design

Current research of work design provides explanation of the main characteristics was needed on the job (Humphrey et al, 2007). Morgeson (2006) suggested the characteristics included task characteristics of job design. Task characteristics were included job autonomy, task variety, task significant, task identity, and feedback from job. This characteristic influence jobs to be more satisfying for workers (Humphrey et al, 2007). The task characteristics was found significant effected on job satisfaction, motivation, and performance (Humphrey et al, 2007).

**Different effect of Task Characteristics requirement on Job satisfaction:
Gender analysis of teacher occupation on WDQ**

Previous researches have explained that organizational required specific criteria on the job. The criteria may require differently on the job, such as professional and non-professional job (Morgeson, 2006, Humprey et al, 2007). Different job position has different requirement in order to achieve that job objectives, such as task, knowledge, social and work context characteristics. However, few scholars investigated the different job requirement on various individual points of view. Different cohort, gender, tenure, and other demographics characteristics might effect on the job requirements, differently.

Gender of employee's was known as one of controlled variable in researches. Different effect of gender on employee attitudes and behavior, have been found in many studies. Acceptance of gender effect on outcomes was demonstrated i.e. on commitment (Bernardi, 2008, Baghat, 2008, William, 2008, Tanriverdi, 2009), satisfaction, involvement, and stress (Burke, et al, 2008, Jones et al, 2009). O'Neil et al (2008) indicated female tend to be more expressive (Meyers-Levy and Maheswaran, 1991), and sensitive (Haswell et al., 1999; Lysonski and Gaidis, 1991; Whipple and Swords, 1992, Bernardi, 2008). Female responses on work design differently from male. Thus, previous findings of gender related work attitude and behavior findings (Bernardi, 2008, Baghat, 2008, William, 2008, O'Neil et al 2008, Tanriverdi, 2009, Burke, et al, 2008, Jones et al, 2009) direct this study to propose basic evidence of gender effect on job design within predictions:

Hypothesis 1: different of gender required task criteria of work design differently

Task characteristic on job satisfaction

Even practical of organizational policy was seem inconsistent, the negative effect of these behaviors were anticipated as well. Often,

recruitment and placement process allowed employee who less competence from the requirements were accepted although certain job required competencies clearly. It was suggested by achievement process on the full requirements was gaining on the next training and empowering process. It was seem as an adjustment action of policy. In organization study, this activity was known as a political behavior on work (Judge, 2007). Therefore, practice on standardization of task on work, was sometimes percept as a political behavior. When these requirements were applied as a political behavior, these characteristics were predicted influence and percept negatively on the work outcomes (Ferris et al, 2002).

Recent study found that successful study of work design was implied on employee's behavior and attitudes such as performance, satisfaction, commitment, involvement, motivation, role perception of outcomes, anxiety, and stress (Humphrey et al 2007). Furthermore, task characteristics was found highly satisfied on various occupancies (Morgeson, 2006). Pervious evidences strengthen the basic predictions:

Hypothesis 2: task characteristics of work design were related and effect to the job satisfaction

Moderation effect of gender on the task characteristic - job satisfaction relationship

Gender, age, marital status, educational background, personality, and time spent at work can also be counted as variables that affect job satisfaction (Tanriverdi, 2008). Many research studies found statistically expressive relationships between gender and satisfaction, such as difference between men and women in terms of job satisfaction or dissatisfaction (Burke, et al, 2008, Jones et al, 2009).

**Different effect of Task Characteristics requirement on Job satisfaction:
Gender analysis of teacher occupation on WDQ**

Previous study found that worker satisfaction on the job has various antecedents. Job satisfaction is explained as positive feelings about one's job based on one's evaluation of the characteristics of the job (Robbins & Judge, 2007). Different job design dimension was found related to job satisfaction vary (Morgeson, 2006). It is imperative to understand the concept of job satisfaction and dissatisfaction and its related factors (Ghazawwi, 2008). Understanding why and how some people satisfied more on the job than others, was becomes a complex issue. There is no one single solution to satisfy all people in the workplace. One of the most important determinants of job satisfaction is the work situation itself as an organizational point of view. How interesting, challenging or boring the tasks a person performs are, depends on factors like the physical work environment, the quality of interaction with coworkers and customers, and the way an organization treats its employees (Brief, 1998; George & Jones, 2008, Ghazawwi, 2008). Few study has investigate the individual background point out the interaction effect of work design on job satisfaction. Point of the explanations and previous grounded findings, this study suspected gender as another factor that effect of task characteristics on the satisfaction on the job (Humphrey et al 2007), on further moderation effect predictions:

Hypothesis 3: interaction on task characteristic and gender will effect
job satisfaction differently

Method

Participants

Participants were 842 teachers from various schools. They were approximately 35.16 years old, 351 (41.7%) were married, and 357 (42.4%) were men. From the participants 55 (5.6%) graduate from college, 283

(33.6%) held a graduate degree, 198 (23.5%) held a master degree and 67 (8.0%) held a doctorate degree.

Procedures

Correlation, regressions and structural equation model (SEM) was used on this procedure. Confirmatory factor analysis (CFA) and high level of CFA (HCFA) was used to confirm the model of work design characteristics in a whole and each gender. CFA was used to confirm each construct model after investigate the traditional factor loading of SPSS. Single variable of task characteristics was investigated using HCFA. Correlations analysis was used to figure out the work design characteristics - job satisfaction relationship. Multiple regressions, including the interaction of gender and each work characteristics were used to investigate the moderation effect of gender on work design characteristics - job satisfaction relationship.

Measure Development Strategy

Items were written by the authors or obtained from previous research. After review of wording, content, and so forth, 37 item sets for total items were retained for inclusion in the instrument. Responses were made on a 5-point Likert-type scale with scale anchors ranging from 1 (strongly disagree) to 5 (strongly agree).

Task characteristics were measured using 24 items taken from Morgeson & Humphrey's (2006) WDQ. Participants were asked i.e., "The job allows me to make my own decisions about how to schedule my work". The knowledge characteristics 5 dimensions included Work scheduling autonomy (M=3.946, Cronbach's $\alpha=0.819$), decision-making autonomy (M=3.74, Cronbach's $\alpha=0.833$), work-method autonomy (M=3.89, Cronbach's $\alpha=0.872$), task variety (M=3.79, Cronbach's $\alpha=0.897$),

**Different effect of Task Characteristics requirement on Job satisfaction:
Gender analysis of teacher occupation on WDQ**

task significant (M=3.73, Cronbach's α =0.831), task identity (M=3.97, Cronbach's α =0.791) and feedback from job (M=3.73, Cronbach's α =0.846).

Satisfactions were measured using 13 items developed based on Tanriverdi et al (2008) WDQ. Participants were asked i.e., "I am very satisfied with my current employed by a company or organization". Satisfaction dimensions included satisfied to the job (M=3.698, Cronbach's α =0.864), satisfied to pay (M=3.165, Cronbach's α =0.848), and satisfied on work (M=3.549, Cronbach's α =0.759).

Result

Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) for task characteristics of work design, and job satisfaction were used to confirm the measurement allowed to the previous research.

Confirmatory Factor Analysis of task characteristics

Table 1
CFA of task characteristics

	Factor						
	1	2	3	4	5	6	7
The job allows me to make my own decisions about how to schedule my work	.510						
The job allows me to decide on the order in which things are done on the job.	.407						
The job allows me to plan how I do my work.	.507						
The job gives me a chance to use my personal initiative or judgment in carrying out the work	.648						
The job allows me to make a lot of decisions on my own	.775						
The job provides me with significant autonomy in making decisions.	.773						
The job allows me to make decisions about what methods I use to complete my work	.758						
The job gives me considerable opportunity for independence and freedom in how I do the work	.775						
The job allows me to decide on my own how to go about doing my work.	.773						
The job involves a great deal of task variety.		.667					
The job involves doing a number of different things		.821					
The job requires the performance of a wide range of tasks.		.885					
The job involves performing a variety of tasks.		.849					
The results of my work are likely to significantly affect the lives of other people			.493				

The job itself is very significant and important in the broader scheme of things	.519
The job has a large impact on people outside the organization.	.872
The work performed on the job has a significant impact on people outside the organization.	.900
The job involves completing a piece of work that has an obvious beginning and end	.490
The job is arranged so that I can do an entire piece of work from beginning to end	.728
The job provides me the chance to completely finish the pieces of work I begin	.648
The job allows me to complete work I start	.629
The work activities themselves provide direct and clear information about the effectiveness (e.g., quality and quantity) of my job performance	.497
The job itself provides feedback on my performance.	.827
The job itself provides me with information about my performance.	.926

Exploratory Factor Analysis of Satisfaction

Table 3
CFA of satisfaction

	Factor		
	1	2	3
I am very satisfied with my current employed by a company or organization	.668		
I am very satisfied with the current work of the departments	.857		
I am very satisfied with my current job as the	.688		
I am very satisfied with my colleagues and interpersonal interaction	.698		
I am very satisfied with my work by the physical space and operating environment	.557		
I am very satisfied with the 083 companies or organizations with the resources provided by the equipment	.473		
I am very satisfied with the present salary or income			.968
I am very satisfied with the present work to obtain welfare and other harvest			.620
I am very satisfied with my personal performance		.953	
I am very satisfied with my owned by the knowledge I can be played		.979	
I am now happy to stay in the organization or company		.734	
I am now happy to stay in the work place	.518		
I am very satisfied with the work of my own personal performance	.433		

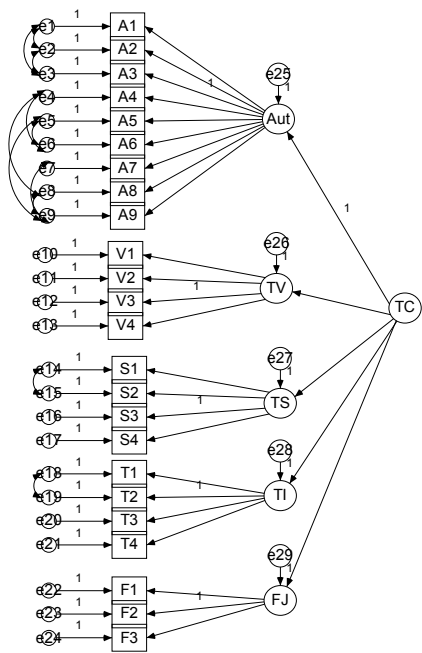
Confirmatory analysis using the traditional factor loading of SPSS generated the formulation of each construct. Initial solution with KMO and Bartlett's test of sphericity, maximum likelihood extraction method, and varimax rotation was used in this CFA. The result suggested combining the work scheduling autonomy, decision-making autonomy, and work-method autonomy into one single dimension "autonomy". Satisfaction variable was also divided into job satisfaction, pay satisfaction

**Different effect of Task Characteristics requirement on Job satisfaction:
Gender analysis of teacher occupation on WDQ**

and work satisfaction.

Model fit

To test the model of fit on within the dimensions, order analysis of HCFA was used to confirm single variable of work design characteristics and High-level EFA to job satisfaction. This study confirmed that the task characteristics and satisfaction model were satisfactory fit.



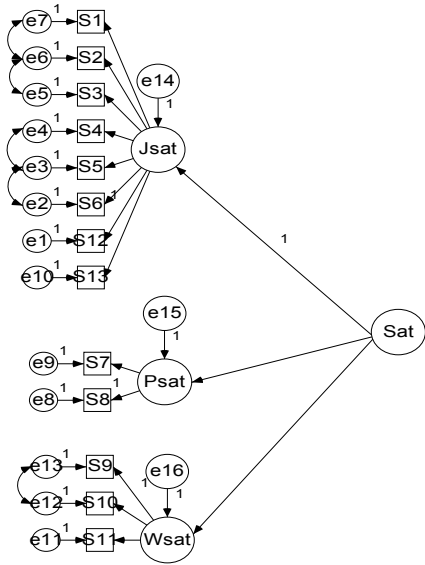
Baseline Comparisons

CFI	NFI	RFI	IFI	TLI
.931	.913	.899	.931	.919

RMSEA

Model	RMSEA
Default model	.065

Figure 1
HCFA of Task Characteristics



Baseline Comparisons

CFI	NFI	RFI	IFI	TLI
.954	.944	.923	.954	.937

RMSEA

Model	RMSEA
Default model	.077

GFI	AGFI	RMR
.949	.915	.039

Figure 3
HCFA Satisfaction

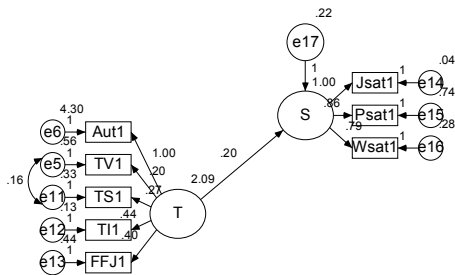


Figure 4
Model of task characteristics work design effect on satisfaction

Evaluate the adequacy of the overall model of fit, the index of fit shows Goodness of fit with value of GFI=.961, AGFI=.923, RMR=.053, CFI=.950, NFI=.933, IFI=.950 and RMSEA=.080

Table 4
Correlation, and cronbach's α of each dimensions

	1	2	3	4	5	6	7	8	9	10	11	12
1. gender	-											
2. education	-.066	-										
3. married	.122**	-.417**	-									
4. leader	.129**	-.254**	.286**	-								
5. Autonomy	.025	.180**	-.040	.019	.866							
6. Task variety	.119**	.153**	-.137**	.026	.257**	.911						
7. Task significant	.122**	.067	.004	.177**	.261**	.623**	.848					
8. Task identity	.093*	.019	.100**	.143**	.420**	.294**	.463**	.800				
9. Feedback from Job	.079*	.026	.146**	.071	.342**	.182**	.317**	.502**	.846			
10. Job Satisfaction	.096**	.091*	.017	-.007	.340**	.157**	.197**	.335**	.382**	.875		
11. Pay Satisfaction	.067	.089*	.065	-.042	.208**	.066	.114**	.117**	.247**	.530**	.850	
12. Work Satisfaction	.107**	.117**	.023	-.004	.259**	.215**	.247**	.329**	.348**	.646**	.359**	.750

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Diagonal value is cronbach's α .

Hypothesis testing

Hypotheses of this study were tested by, model fit, simple correlation and multiple regressions. Model fit was used to compare the fit between male and female teacher data to prove the adequacy of construct and its dimensions. It indicated the strength of interaction within models. Correlations analysis was used to figure out the relationship between work design characteristics and gender with job satisfaction. Multiple regressions, including the interaction of gender and task characteristics were used to investigate the moderation effect of gender on work design characteristics - job satisfaction relationship.

Table 5
Overall of fit on HCFA task characteristics of work design and satisfaction

	GFI	AGFI	RMR	CFI	NFI	IFI	RMSEA
<i>Model 1: Task characteristics of work design</i>							
Male				.902	.865	.903	.079
Female				.907	.879	.907	.078
<i>Model 2 : Satisfaction</i>							
Male				.928	.908	.928	.092
Female				.952	.934	.952	.070
<i>Model 3: Model included full dimensions</i>							
Male	.960	.920	.067	.958	.938	.959	.078
Female	.961	.923	.053	.950	.933	.950	.080

Table 5 present different models fit on HCFA task characteristics of work design. Their HCFA model showed adequate fit on male and female teacher model. Female teacher model of task characteristics was found better of fit. It was indicate that female teacher was more task oriented on work. Hypothesis 1 predicted different of gender required task criteria of work design differently was strongly indicated.

Correlation and simple regression analysis showed that gender correlated and effected to task ($r=.143$, $\beta=.143$, $p<.01$) characteristics significantly. Test of difference using independent sample t test found

**Different effect of Task Characteristics requirement on Job satisfaction:
Gender analysis of teacher occupation on WDQ**

that male and female teachers have different requirement task criteria (t-test=-4.183, $p < .01$). Thus, hypothesis 1 was supported.

Prediction of satisfaction on the job between gender were different was indicated by correlation and simple regression analysis. Model fit indicate that female teachers seem satisfied more than males. Correlation and simple regression analysis showed that gender correlated and effected to satisfaction ($r = .103$, $\beta = .103$, $p < .01$) significantly. Test of difference using independent sample t test found that male and female teachers have different satisfaction on the job (t-test=-3.016, $p < .01$). Thus, preliminary prediction of different satisfactions on gender was allowed.

Table 6
Correlation and compare mean of gender

	1	3	4	T	p
1. gender	-				
2. Task	.186**	-		-5.486	.000
3. satisfaction	.103**	.360**	-	-3.016	.003

** significant at the 0.01 level

Investigation on hypothesis 3 and 4 used model fit, correlation, and simple regressions analysis. Model fit used to indicate the fitness model of each relationship. Overall model of fit indicate that both task characteristics has a strong effect to satisfaction. These model of fit showed that female teachers have better result than male. It was indicated that effect of task characteristics on satisfaction was different between female and male teachers. Table-6 indicated that task characteristics ($r = .360$, $\beta = .360$, $p < .01$) has a significant relationship on satisfaction. Thus, hypothesis 3 predicted task characteristics of teachers work design were related and effect to the teachers job satisfaction, was supported.

Further investigation on why and how the task characteristic has different effect on teachers satisfaction was used the moderation effect of

gender. Hypothesis-5 predicted task characteristic interaction, will effect differently. Simple regression analysis of task characteristics to satisfaction showed that female teacher has higher effect of task ($\beta=.438$, $R^2=.233$; $F=146.593$; $p<.01$) than male ($\beta=.431$, $R^2=.186$; $F=80.900$; $p<.01$). These result indicated that gender was explained on how and why these relationship was different.

Table 7
Moderation effect of gender on the task characteristics-satisfaction relationship

	satisfaction		
	R	β in regression	
		Step 1	Step2
Task Characteristics (TC)	.464**	.459**	.447**
Gender (G)	.103**	.038**	-.040**
TC*G			.081**
R ²		.216**	.217**
F		231.016**	77.520**
ΔR^2		.216**	.000**
F change			.134**

* $p < .05$. ; ** $p < .01$.

Multiple regressions were used to test weather the effect of task on satisfaction in the first step and included gender interaction in the next step. The Result of multiple regressions showed that interaction of gender on task ($\beta=.081$, F change=.134, $p>.05$) was not effect teachers satisfaction differently. Thus, hypothesis 3 is not supported.

Conclusion

Discussion

This study investigates the individual factor related to task criteria of job, and explained why and how effected to the satisfaction on teacher occupation. Gender was used to explain the different effect of teacher job criteria on satisfaction. Preliminary analysis of the hypotheses testing was

**Different effect of Task Characteristics requirement on Job satisfaction:
Gender analysis of teacher occupation on WDQ**

used to investigate the useable measurement and indication of the findings. Confirmatory factor analysis using loading factor of measurements were applied to check the adequate from its original. Adjustments were done on each variable such as integrating the autonomy dimensions and splitting satisfaction variable. Evaluating on the model fit was applied to investigate the adequate model used. The nature of the model was found adequate of fit. While gender model of each variable and model interaction was also found adequate within various male-female differences. This gender model of fit was used to indicate the hypothesis results. Thus, these preliminary investigations provided the evidences of usable measurement, and were able to indicate the hypotheses.

Acceptance of the first hypothesis provided some notes. It was explained that gender was significant individual attachments effect on teacher job requirements. To satisfy their job, female teacher found likely more accept for higher task characteristics on the job and more satisfied on the job. Expressiveness of female (O'Neil et al, 2008) indicated their satisfaction on the job. However, their sensitive (Haswell et al., 1999; Bernardi, 2008) able to inhibited their effort to have significant effect on satisfaction differences than male. Thus, there are not different effects of task characteristics of teacher occupation related to satisfaction for male and female teachers. Un-supported hypothesis 5 indicated gender was not able to explain the various effects of task characteristics on satisfaction clearly.

Managerial Implication

Specific character of gender was in still important for the evidence on developing the job requirement, even it was found not significant different on the effect to outcomes. Therefore, the findings of different gender

effect on task characteristic indicated that the acceptance of different job requirement was allowed to female teachers. School leader have to pay attention more on the different task characteristics and satisfaction feedback from different gender of teachers. Equal interaction of task characteristics and satisfaction on the job for male and female teachers, required the school leader to develop different intervention gaining optimum performance on the teaching process.

Limitation and Future Research Direction

Notwithstanding these contributions, this study also has several limitations. The sampling data collected was adequate to improve on the group level analysis (HLM). This study also investigate the individual assessment on the job, whereas team assessment was become fad.

Even, the findings supported the single variable of various dimensions. It was opened for further questions. Different characteristics of each dimensions on task was directed to the different feedback for outcomes. Different finding of preliminary indication and supporting hypothesis testing have not interpreted in detail yet. It may influence on the methodologies approach on the future investigation. Experimental or quasi-experimental research designs are needed to help rule out potential alternative explanations for these results (Morgeson, 2006).

References

- Baghat, Parimal S. , Williams , Jerome D. 2008, Understanding gender differences in professional service relationships, **Journal of Consumer Marketing**, 25/1, 16–22
- Bernardi, Richard A., Guptil , Steven T., 2008, Social Desirability Response Bias, Gender, and Factors Influencing Organizational Commitment: An International Study, *Journal of Business Ethics*, 81:797–809
- Brief, A.P., 1998, *Attitudes In and Around Organizations*, Thousand Oaks, CA: Sage Publications
- Burke, Ronald J., Koyuncu, Mustafa, Fiksenbaum, Lisa, 2008, “Work experiences, satisfactions and psychological well-being of female and male managers in the

**Different effect of Task Characteristics requirement on Job satisfaction:
Gender analysis of teacher occupation on WDQ**

- hospitality sector in Turkey”, **Equal Opportunities International** Vol. 27 No. 6, pp. 505-518
- Campion M. A., & McClelland, C. L. (1993). Follow-up and extension of the interdisciplinary costs and benefits of enlarged jobs. **Journal of Applied Psychology**, 78, 339-351.
- Chatman, J.A., (1991, matching people and organizations: selection and socialization in public accounting firms, **Administrative science quarterly**, 36 pp. 459-484
- Deci, E.L. and Ryan, R.M., 1985, *Intrinsic Motivation and Self-determination in Human Behavior*, Plenum Press, New York, NY
- Deming. W. E. 1986. *Out of the crisis*. Cambridge: Massachusetts Institute of Technology, Center for Advanced Engineering Study
- Edward, JR. (1996), An examination of competing versions of the person-environment fit approach to stress. **Academy of Management Journal**, 39(2), 292-339.
- Ferris, GR, Adams, G, Kolodinsky, RW, 2002, Perceptions of organizational politics: Theory and research directions, *Research in multi issues*, Vol. 1 pg. 179-254
- George, J.M., & Jones, G.R., 2008, *Understanding and managing Organizational Behavior* (Fifth Edition) Upper Saddle River: New Jersey, Pearson Prentice Hall
- Ghazawwi, Issam, 2008, Job Satisfaction Antecedents and Consequences: A New Conceptual Framework and Research Agenda, *The Business Review*, Vol. 11, Num. 2
- Hackman J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Hammer, Michael and Champy, James 1993, *Reengineering the corporation A Manifesto For Business Revolution*
- Haswell, S., P. Jubb and B. Wearing: 1999, 'Accounting Students and Cheating: A Comparative Study for Australia, South Africa and the UK', *Teaching Business Ethics* 3(3), 211-239.
- humprey, Stephen E., Nahrgang, Jennifer D., Morgeson Frederick P., 2007, "Integrating motivational, social, and contextual work design features: A meta analytic summary and theoretical extention of the work design literature, **Journal of Applied Psychology**, vol 92., No. 5, pg. 1332-1356
- Judge Timothy A, Robins P Stephen, 2007, *Organizational Behavior - 12th edition*, Pearson international edition
- Judge, T.A., Cable, D.M. (1996), person organization fit, job choice decision and organizational entry. **Organizational behavior and Human decision processes** 67 pp 294-311
- Juran, JM, 1988, *Planning for quality*, Free press New York
- Lepak & Snell, (1999). in Samuel Ngunia, Peter Slegersb, and Eddie Denessen, (2006), Transformational and Transactional Leadership Effects on Teachers' Job Satisfaction, Organizational Commitment, and Organizational Citizenship Behavior in Primary Schools: The Tanzanian case, *School Effectiveness and School Improvement*, Vol. 17, No. 2, June (2006), pp. 145 - 177
- Lysonski, S. and W. Gaidis: 1991, 'A Cross-Cultural Comparison of the Ethics of Business Students', *Journal of Business Ethics* 10(2), 141-150.
- MacKinnon, David P., 2008, *Introduction to statistical mediation analysis*, Lawrence Erlbaum Associates NY
- Meyers-Levy, J. and Maheswaran, D. (1991), "Exploring differences in males' and females' processing strategies", *Journal of Consumer Research*, Vol. 18, June, pp. 63-70
- Morgeson F. P., & Campion, M. A. (2003). Work design. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski Eds.), **Handbook of psychology: Industrial and organizational psychology** Vol. 12, pp. 423-452). Hoboken, NJ: Wiley.

- Morgeson Frederick P. and Stephen E. Humphrey, (2006), The Work Design Questionnaire (WDQ): Developing and Validating a Comprehensive Measure for Assessing Job Design and the Nature of Work, **Journal of Applied Psychology** (2006), Vol. 91, No. 6, 1321-1339, Copyright (2006) by the American Psychological Association
- O'Neil, Deborah A, Hopkins, Margaret M, Bilimoria, Diana , 2008, Women's Careers at the Start of the 21st Century: Patterns and Paradoxes *Journal of Business Ethics*, Vol. 80, Iss. 4; p. 727
- O'Reilly III, C.C., Chatman, J., and Caldwell, D.F., (1991), people and organizational culture: A profile comparison approach to assessing person-organization fit, **Academy of management journal**, pp. 487-516
- Qualls, W.J., 1987, "Household decision behavior: the impact of husbands' and wives' sex role orientation", *Journal of Consumer Research*, Vol. 14, pp. 264-79
- Saks, A.M., and Ashfort, B.E., (1997). A longitudinal investigation of the relationships between job information source, applicant perceptions of fit, and work outcomes., **personnel psychology**, 50, pp. 395-426
- Smith, Elizabeth A, 2005, Communities of Competence: new resources in the workplace, **Journal of Workplace Learning**, Vol. 17, Iss. 1/2; p. 7
- Tanriverdi, Haluk 2008, Workers' Job Satisfaction and Organizational Commitment: Mediator Variable Relationships of Organizational Commitment Factors, **Journal of American Academy of Business**, Vol. 14, Iss. 1; p. 152 (12 pages)
- Whipple, T. W. and D. S. Swords: 1992, 'Business Ethics Judgments: A Cross-Cultural Comparison', *Journal of Business Ethics* 11(9), 671-678.
- William, H. Sumrall, David W. Cox, D. Adrian Doss, and Don W. Jones, 2008, Participative Decisions and Organizational Commitment: A Quantitative Analysis, *Southern Business Review*, 39-52