

The Relationship between Employee Perceptions of Equity and Job Satisfaction in the Egyptian Private Universities

Mohamed Hossam El-Din KHALIFA^{*}, Quang TRUONG^{**}

Abstract

The purpose of this study was to investigate the relationships between employee perception of equity and job satisfaction in the Egyptian private universities. Data were gathered using a face-to-face survey of 80 teaching staff members at three Egyptian universities. Findings revealed positive relationships between perceptions of equity, where a "motivator" was the outcome in the comparison, and job satisfaction. The study also revealed that there was no relationship between perceptions of equity and job satisfaction where a "hygiene factor" was the outcome in the comparison. This study is exploratory and findings are not conclusive. Its implications and limitations are discussed.

Keywords: Perception of Equity, Job Satisfaction, Herzberg's Theory, Motivation, Egypt

JEL Classification Codes: B31, J00, J50, J71

^{*}DBA Candidate, Maastricht School of Management, the Netherlands

^{**} Corresponding author, Professor of Organizational Behavior, Maastricht School of Management, the Netherlands, E-mail: truong@msm.nl

1. Introduction

Job satisfaction can be generally defined as an employee's attitude towards his job (Brief, 1998). Research has been reporting job satisfaction as an important predictor of several critical negative and positive work outcomes. Job satisfaction has negative relationships with negative work outcomes such as turnover (Alfonso & Andres, 2007; Chee & Haddad, 2007; Falkenburg & Schyns, 2007; Wagner, 2007) On the contrary, it has positive relationships with positive work outcomes such as productivity (Keller & Julian, 1996; Neff, 2003).

According to Herzberg (1959: 3), job satisfaction is caused by what he called "motivators". These motivators include: achievement, recognition, work itself, responsibility, advancement, and growth. On the contrary, dissatisfaction is caused by problems with factors that Herzberg called "hygiene factors". These factors include: company policy and administration, supervision, relationship with supervisor, work conditions, salary, relationships with peers, personal life, relationships with subordinates, status, and security. Herzberg also reported that the absence of motivators would not lead to dissatisfaction; it would only lead to no satisfaction. Job satisfaction cannot be improved by improving any of the hygiene factors, but by improving motivators.

Because of this importance of job satisfaction as a predictor of critical work outcomes, it has always been a variable of interest. Job satisfaction has been extensively studied as a function of many antecedents. Perhaps one of the extensively-covered antecedents of job satisfaction in research is an employee's perception of equity. According to Adams (1963), perception of equity is the extent to which an employee perceives he is treated fairly relative to comparable others inside and outside the organization. An employee's perception of equity is determined through comparing his inputs/outcomes ratio to that ratio of others inside and outside the employing organization. On the one hand, inputs here include all the contributions that the employee brings to the organization such as experience, time, effort, etc. On the other hand, outcomes include all the rewards/outputs that the employee receives from his organization in return to his contributions, and these include motivators and hygiene factors.

Most of the research that investigated the relationship between perception of equity and job satisfaction reported a positive relationship between the two variables (McIntyre, Bartle, Landis, & Dansby, 2002; Paik, Parboteeah, & Shim, 2007; Lambert, Hogan, & Griffin, 2007; Deconinck & Bachmann, 2007). When an employee perceives that he is treated fairly, it is logical that he consequently feels satisfied with the job. This can be spotted in the works of McIntyre et al., 2002; Rifai, 2005; Paik, Parboteeah, & Shim, 2007; Lambert, Hogan, & Griffin, 2007; Deconinck & Bachmann, 2007.

Although there has been sufficient research on job satisfaction as a function of perception of equity, there has not been sufficient research to investigate the relative importance of different facets of perception of equity in predicting job satisfaction. Also, neither the research supporting nor the research challenging Herzberg's Motivator-Hygiene theory is conclusive. Another gap of knowledge lays in the fact that Herzberg's Motivators-Hygiene theory has not been sufficiently tested for validity in Egypt. So far, little has been done about whether there is a genuine relationship between employee perceptions of equity and job satisfaction among employees in different organizations in Egypt.

To fill these voids in knowledge, the main objective of this study was to investigate the relationships between perceptions of equity, where a motivator is the outcome in the comparison, as independent variables and job satisfaction as a dependent variable among academic employees of the Egyptian private universities. The study also aimed at investigating the relationships between perceptions of equity, where a hygiene factor is the outcome in the comparison, as independent variables and job satisfaction as a dependent variable among academic employees of the Egyptian private universities. To do so, the study was designed to answer the two following research questions: (1) What are the relationships between perceptions of equity, where one of Herzberg's motivators is the outcome in the comparison, as independent variables and job satisfaction as a dependent variable among teaching staff at Egyptian private universities? and (2) What are the relationships between perceptions of equity, where one of Herzberg's hygiene factors is the outcome in the comparison, as independent variables and job satisfaction as a dependent variable among teaching staff at Egyptian private universities?

Where: The employee's perception of equity will be determined by comparing his perception of the ratio of the outcomes he receives from the organization to the inputs he contributes to the organization compared to the same ratio of comparable others' outcomes to their inputs in the same organization and other organizations.

The narrower the employee perceives the gap between his own outcomes/inputs ratio and the same ratio for others, the more his perception of equity will be.

And where, in the context of this study, outcomes include Herzberg's Hygiene Factors (work conditions, salary, status and security) and Herzberg's Motivators (recognition, advancement - which is promotion in this study's context - and growth - which is training in this study's context).

And where: Job satisfaction is defined as an employee's attitude towards his/her job (Brief, 1998).

This study would contribute to the knowledge of the relationship between perception of equity as an independent variable and job satisfaction as a dependent variable. The study intends to add more insight of the relationship into

the disciplines of Organizational behavior and Human resource management. The study would also either add to or lessen the validity of Herzberg's Motivator-Hygiene Theory especially in Egypt.

Thus, the study shall help managers of Egyptian private universities to reduce the negative consequences of low levels of job satisfaction such as turnover and increase positive work outcomes such as performance through increasing perception of equity. This requires that managers have a good understanding of the nature of the relationship between perception of equity and job satisfaction. The study shall help achieve this through clarifying which perceptions of equity are better predictors of job satisfaction; perception of equity when a Herzberg's motivator is the outcome or perception of equity when a Herzberg's hygiene factor is the outcome?

2. Theoretical Background and Study Hypotheses

2.1. Perception of Equity

According to Adams (1963), an employee will compare his ratio of the outcomes he gets from his employing organization to the inputs he contributes to the organization with the same ratio for others inside and outside the organization. The following equation illustrates the comparison that an individual employee will use to assess equity:

$$\frac{\text{Individual's Outcomes}}{\text{Individual's Inputs}} \quad \text{vs.} \quad \frac{\text{Comparison Person Outcomes}}{\text{Comparison Person Inputs}}$$

Adams (1963) also states that an employee will seek to maintain equity between the perceived inputs that he contributes to a job and the perceived outcomes that he receives from it against the perceived inputs and outcomes of others. The theory also states that a person will feel de-motivated if he feels unfair treatment compared to others inside or outside the organization that employs him.

Further, Adams (1963) states that an employee will perceive a case of equity if he perceives the ratio of his inputs to his outcomes to be equal to those inside and outside the organization he works for. The employee will accept it if a comparable employee receives more output if this comparable employee contributes more input. For instance, everything else equal, an employee would accept that another employee with more experience (more input) receives a higher salary (more output).

According to Walster, Traupmann, and Walster (1978), inputs here include all of a participant's contributions to the relational exchange and are viewed as "entitling him to rewards or costs". Inputs typically include time, effort, loyalty, qualifications, flexibility, tolerance, determination, enthusiasm, personal sacrifice and others.

Outputs include all of the consequences of a participant's relationship with the organization employing him. Typical outcomes include some hygiene factors and some motivators.

This comparison might result in one of the following three outcomes: (1) the employee perceives his ratio to be equal comparable others' ratios (Fairness), (2) the employee perceives his ratio to be higher than comparable others' ratios (Unfairness) or (3) the employee perceives his ratio to be lower than comparable others' ratios (Unfairness).

Further, Adams (1963, 1965) suggests that employees will always seek fair (equitable) treatment. If the employee perceives that his ratio is less than the comparison person's ratio, he will feel distress in the form of anger or a feeling of humiliation. Conversely, if the employee perceives that his ratio is higher than the ratio of the comparison person, he will feel distress in the form of a sense of guilt. The perceived inequity and the distress the employee will feel are positively related. Thus, the greater the inequity perceived, the more distress the employee will feel and the more he will try to restore equity (Walster et al., 1978) either by distorting inputs and/or outcomes in his own mind "cognitive distortion", directly altering inputs and/or outcomes, or leaving the organization (Carrell & Dittrich, 1978).

2.2. Job Satisfaction

Job satisfaction can be generally defined as the employee's feelings towards his/her job. Job satisfaction has been defined as a pleasurable emotional state resulting from the appraisal of one's job (Locke, 1976) and as an attitudinal variable that can be a diagnostic indicator for the degree to which people like their job (Spector, 1997).

Several scales have been developed to measure job satisfaction; the Likert-scale of Rensis Likert, the Job Descriptive Index (JDI) of Smith, Kendall, and Hulin (1969); the Job in General Index, the Minnesota Satisfaction Questionnaire (MSQ), the Job Satisfaction Survey (JSS), and the Faces Scale.

On the one hand, research has been reporting job satisfaction as a useful predictor of several critical negative and positive work outcomes. Job satisfaction has negative relationships with negative work outcomes such as turnover (Alfonso & Andres, 2007; Chee & Haddad, 2007; Falkenburg & Schyns, 2007; Wagner, 2007). On the other hand, it has positive relationships with positive work outcomes such as productivity (Keller & Julian, 1996; Neff, 2003).

Alfonso and Andres (2007) analyzed the effect of job satisfaction on labor turnover under the moderation role of gender. Using data from the first two waves of the Swiss Household Panel (1999 and 2000), they reported that job satisfaction was a useful predictor of future quits. They also reported a significant effect of gender as

a moderating variable of the relationship between job satisfaction and turnover intentions.

Chee and Haddad (2007) examined the usage of 9 human resource management practices among 46 hotels in the United States. Their findings revealed that attitudes such as job satisfaction were significantly related to turnover intentions. In a similar study, Falkenburg and Schyns (2007) reported that organizational commitment has a moderating effect on turnover in a study that was investigating the effect of work satisfaction and organizational commitment on withdrawal behaviors among Dutch and Slovakian employees.

In an attempt to compare the relative usefulness of organizational commitment against job satisfaction in predicting turnover, Wagner (2007) reported that both job satisfaction and organizational commitment are useful predictors of turnover among nurses.

Keller and Julian (1996) examined the importance of work climate and job satisfaction as predictors of research and development (R&D) employees' productivity. Job satisfaction was found to be an important predictor of productivity of R&D workers. Also, Neff (2003) examined the importance of employee motivation and job satisfaction as tools to increase productivity and build stronger relationships with customers. He reported a significant positive relationship between the 2 variables.

2.3. Research on the Relationship between Perception of Equity and Job Satisfaction

The literature about the relationship between perception of equity and job satisfaction is rich. Equity in research has had more than one form: pay equity, procedural and distributive justice, job security and complexity, pay administration equity, pay level equity, promotion opportunities equity, evaluation criteria equity, etc (Roberts, Cooper, & Lawrence, 1999).

The relationship between perception of equity and job satisfaction has been investigated by several researchers (McIntyre et al., 2002; Rifai, 2005; Paik, Parboteeah, & Shim, 2007; Lambert, Hogan, & Griffin, 2007; Deconinck & Bachmann, 2007).

McIntyre et al. (2002) examined a causal hypothesis relating the USA military personnel attitudes toward equal opportunity (EO)-related fairness to job satisfaction, organization commitment, and perceptions of work group efficacy. McIntyre et al reported that the 5000 respondents' perceptions of work group EO fairness had positive relationships with their job satisfaction, organizational commitment, and perceived work group efficacy.

In a similar study, Rifai (2005) examined the factors that influence organizational citizenship behaviors. The findings of Rifai's study concluded that there are significant positive relationships between procedural justice and distributive justice as independent variables and job satisfaction as a dependent variable.

Paik et al. (2007) used the Equity Theory to examine the effects of perception of compensation equity between host country workers and expatriates on job satisfaction and job performance. Based on field surveys and in-depth interviews of Korean expatriates and Mexican workers, the researchers found equity gaps. They also reported a significant negative effect of perceived compensation gaps on job satisfaction.

Lambert et al. (2007) studied the effects of distributive and procedural justice on job stress, job satisfaction and organizational commitment among correctional staff. Procedural justice, but not distributive justice was reported to have a significant impact on job satisfaction.

Deconinck and Bachmann (2007) analyzed the relationship among perceived pay fairness, job satisfaction, organizational commitment, and turnover intentions among marketing managerial personnel. Perception of pay fairness was reported to have a great impact on organizational outcomes such as job satisfaction (positive relationship). Marketing managers who perceived that rewards were allocated equitably reported higher levels of job satisfaction which in turn positively affected organizational commitment and negatively affected intention to leave.

Apparently, most of the researches that were conducted to test the relationship between perception of equity and job satisfaction reported a positive relationship between the two variables.

Adams (1963) claimed that if the employee perceives that his ratio is less than the comparison person's ratio, he will feel distress in the form of anger or a feeling of resentment or humiliation. On the other hand, if the employee perceives that his ratio is higher than the ratio of the comparison person, he will feel distress in the form of a sense of guilt. The greater the inequity, the more distress the employee will feel and the more he will try to restore equity (Walster et al., 1978). Distress in turn will decrease job dissatisfaction (Jain & Lall, 1996).

2.4. Herzberg's Motivator-Hygiene Theory

"The opposite of job satisfaction is not job dissatisfaction but, rather, no job satisfaction; and similarly, the opposite of job dissatisfaction is not job satisfaction, but no job dissatisfaction" (Herzberg, 1959: 2). In a survey of 200 accountants and engineers, Herzberg asked the respondents to describe situations where they felt exceptionally good or exceptionally bad. Herzberg reported that job satisfaction was caused by factors different from those that caused dissatisfaction.

According to Herzberg (1959), satisfaction was caused by what he called "motivators". These factors included achievement, recognition, work itself, responsibility, advancement, and growth. On the contrary, dissatisfaction was caused by problems with factors that Herzberg called "hygiene factors". These factors included company policy and administration, supervision, relationship with supervisor, work conditions, salary, relationships with peers, personal life, relationships with subordinates, status, and security.

Herzberg also reported that the absence of motivators will not lead to dissatisfaction, it would only lead to no satisfaction. On the other hand, job satisfaction can't be improved by improving any of the hygiene factors, but by improving motivators.

The findings of Herzberg were criticized by a number of researchers for his research respondents' narrow range of jobs and using only one measure of job attitudes (Ewen, 1966; Brenner, Camrack, & Weinstein, 1971; Gordon, Pryor, & Harris, 1977; Gardener, 1977). Conversely, other researchers supported the theory. Research that supported Herzberg's theory were summarized in his book *Work & the Nature of Man* (1966). Also recent research supported Herzberg (Maidani, 1991; Smerek & Peterson, 2006).

Apparently, Herzberg's Motivator-Hygiene theory has caused a great controversy in the fields of psychology and organizational behavior. This study aimed at testing Herzberg's theory in another context. Since Herzberg (1959) found out that improvement in hygiene factors would not lead to improvement in job satisfaction, then it is logical to expect that perceptions of equity will not have significant relationships with job satisfaction when the outcome in the comparison is one of what Herzberg called "hygiene factors". On the contrary, considering the findings of researches on the relationship between perception of equity and job satisfaction (positive relationship) and considering Herzberg's findings of the effect of improving "motivators" on job satisfaction (positive effect), one should expect a positive relationship between perceptions of equity and job satisfaction when the outcome in the comparison is one of what Herzberg called "motivators".

2.5. Study Hypotheses

Summarizing all of the discussions above, perception of equity was reported to have a positive relationship with job satisfaction. Additionally, Herzberg (1959) and others reported that job satisfaction can be improved by only improving motivating factors, but it can't be improved by improving hygiene factors. Thus, the following hypotheses were tested:

H1: Among the academic employees of the Egyptian private universities, there are positive relationships between perceptions of equity and job satisfaction when the

outcome in the comparison is one of Herzberg's motivators (recognition, advancement and growth).

H2: Among the academic employees of the Egyptian private universities, there are no significant relationships between perceptions of equity and job satisfaction when the outcome is one of Herzberg's hygiene factors (working conditions, status, security and salary).

3. Research Methods

3.1. Measures

The Data that were needed to test the hypotheses of this study included demographic data of the respondents, the respondents' perceptions of Herzberg's motivators equity, the respondents' perceptions of Herzberg's hygiene factors equity and finally the respondents' job satisfaction.

3.1.1. The perception of equity questionnaire (independent measures)

Each of the perceptions of Herzberg's motivators equity and perceptions of Herzberg's hygiene factors equity was measured using one item. The perceptions of Herzberg's motivators equity included: perception of recognition equity, perception of advancement equity, and perception of growth equity. The perceptions of Herzberg's Hygiene Factors equity that were used in this study included: perception of work conditions equity, perception of salary equity, perception of status equity and perception of security equity. Motivators and hygiene factors that were omitted were omitted because of their non-outcome nature or because of the difficulty to measure the employees' sense of equity regarding them.

An example item is "compared to coworkers and outside employees who are similar to me regarding qualifications, the recognition I get from my employer is fair." Employees' responses to each item were obtained on a 5-point response scale where 1 = Strongly disagree and 5 = Strongly agree. The reliabilities of the measures were assessed through calculating Cronbach's alphas (All exceeded 0.7).

3.1.2. The job satisfaction questionnaire (dependent measures)

Job satisfaction was measured using a modified version of Smith, Kendall, and Hulin's Job Descriptive Index questionnaire (1969). Respondents were asked to rate their satisfaction with 10 job facets using 5-point Likert scales where 1 = Not at all Satisfied and 5 = Very Satisfied. Satisfaction with each job facet was measured using 2 items for which scores were averaged to compute the respondent's satisfaction with the facet. Then the averages were averaged to compute the respondent's overall job satisfaction that was used as the dependent variable in this study.

The job facets included: length of working hours, vacations, pay-level, job security, safety and health, welfare, supervision, coworkers, opportunities for promotion, and the job in general. An example item is "What is your degree of satisfaction with the pay-level in your organization?"

The reliabilities of the job satisfaction and the perceptions of equity have been assessed through calculating Cronbach's alphas. Table 1 shows the descriptive statistics and Cronbach's alphas for the measures of job satisfaction, perceptions of Herzberg's motivators equity and perceptions of Herzberg's hygiene factors equity.

Table 1. Descriptive Statistics and Cronbach's Alphas for the Study Variables

	Job Satisfaction	Perception of Recognition Equity	Perception of Advancement Equity	Perception of Growth Equity	Perception of Working Conditions Equity	Perception of Status Equity	Perception of Security Equity	Perception of Salary Equity
Cronbach's Alphas	0.75	0.88	0.83	0.75	0.78	0.75	0.80	0.70
Mean	2.78	2.65	2.538	2.73	2.79	2.83	2.84	2.8
Standard Deviation	0.8	0.92	1.018	0.86	0.63	0.63	0.66	0.7
Kurtosis	0.63	-0.08	-1.02	0.85	1.01	0.97	0.91	1.1
Skewness	-0.35	-0.46	-0.44	-0.53	-0.54	-0.39	-0.40	-0.49
Count	80	80	80	80	80	80	80	80

3.2. Sampling and Data Collection

The population of this study included all of the teaching staff at the Egyptian private universities. Information needed for this study has been obtained through a direct survey in which the study's questionnaire was administered to 105 randomly-chosen teaching employees at three Egyptian private universities. Eighty of the targeted respondents returned completely filled usable questionnaires at a response rate of 76.2%.

Almost 72.5% of the respondents were males and 27.5% were females. The respondents' academic ranks ranged from teaching assistants to professors. Age ranged from 21 years old to 60 years old. Table 2 shows the demographic characteristics of the respondents.

Table 2. Sample Characteristics

Description	Frequency	Percent
Age		
21 – 30	50	62.5
31 – 40	11	13.75
41 – 50	14	17.5
More than 50	5	6.25
Academic Rank		
Tutors	40	50
Lecturers	22	27.5
Assistant Professors	7	8.75
Associate Professors	6	7.5
Professors	5	6.25
Gender		
Male	58	72.5
Female	22	27.5

3.3. Data Analysis and Results

Two separate multiple regression analyses were conducted to test the study hypotheses. The first hypothesis was tested using multiple regression analysis with job satisfaction as the dependent variable and perceptions of Herzberg's motivators equity as the independent variables. The second hypothesis was also tested using multiple regression analysis with job satisfaction as the dependent variable and perceptions of Herzberg's hygiene factors equity as the independent variables. See Table 3 for the matrix of correlations among the study's variables.

Table 3. Matrix of Correlations

	Job Satisfaction	Perception of Recognition Equity	Perception of Advancement Equity	Perception of Growth equity	Perception of Working Conditions Equity	Perception of Status Equity	Perception of Security Equity	Perception of Salary Equity
Job Satisfaction	1							
Perception of Recognition Equity	0.57	1						
Perception of Advancement Equity	0.48	0.31	1					
Perception of Growth equity	0.41	0.23	0.33	1				
Perception of Working Conditions Equity	0.59	0.42	0.44	0.36	1			
Perception of Status Equity	0.6	0.4	0.42	0.33	0.82	1		
Perception of Security Equity	0.58	0.38	0.41	0.32	0.84	0.84	1	
Perception of Salary Equity	0.54	0.3	0.31	0.24	0.56	0.58	0.5	1

All correlations significant at P<0.05

As shown in Table 4, Hypothesis 1 was supported. Perceptions of Herzberg's motivators equity were all positively related to job satisfaction. Almost 45% of the variance in job satisfaction could be explained by perceptions of Herzberg's motivators equity. These findings partially support the findings of research that reported positive a relationship between perception of equity and job satisfaction (McIntyre et al., 2002; Rifai, 2005; Paik at al., 2007; Lambert at al., 2007; Deconinck & Bachmann, 2007). The most important perception of equity in predicting job satisfaction here was perception of recognition equity. The least important perception of equity in predicting job satisfaction here was perception of growth equity.

Table 4. Regression Results

Independent Variables: Perceptions of Motivators Equity

Dependent Variable: Job Satisfaction

	Coeff.	t Stat	Adjusted R-squared	F
			0.446	22.23 ¹
Intercept	0.69	2.51 ²		
Perception of Recognition Equity	0.38	4.90 ¹		
Perception of Advancement Equity	0.21	2.96 ¹		
Perception of Growth Equity	0.20	2.41 ²		

¹ P < 0.01 ; ² P < 0.05 ; ³ P < 0.10

As shown in Table 5, Hypothesis 2 was supported; none of the partial regression coefficients for perceptions of Herzberg's hygiene factors equity were significantly different from zero. The t-stat values for perceptions of hygiene factors equity do not exceed the t-critical values at the 0.05 significance levels. Although using them would add a bit of predictivity, they are still not statistically significant predictors of job satisfaction. However, the partial regression coefficient of perception of salary equity was significant at P < 0.1. This reveals that perception of salary equity is the most important perception of hygiene factors equity in predicting job satisfaction – which partially supports researches that reported a positive relationship between perceived pay fairness and job satisfaction. These findings provide indirect support to Herzberg's findings that improving hygiene factors would not lead to improvement in employee's job satisfaction.

Table 5. Regression Results

Independent Variables: Perceptions of Hygiene Factors Equity

Dependent Variable: Job Satisfaction

	Coeff.	t Stat	Adjusted R-squared	F
			0.392	13.73 ¹
Intercept	0.26	0.75		
Perception of Working Conditions Equity	0.30	0.95		
Perception of Status Equity	0.67	0.72		
Perception of Security Equity	-0.34	-0.36		
Perception of Salary equity	0.27	1.67 ³		

¹ P < 0.01 ; ² P < 0.05 ; ³ P < 0.10

4. Study Limitations and Recommendations for Further Research

One of the limitations of this study was its cross-sectional nature. Due to the difficulty of maintaining contact with the study respondents for a long period of time, longitudinal design could not be used in this study. According to King (2001), the inability to directly assess intra-individual change and the restriction of inferences to group averages are significant disadvantages of cross-sectional studies designed to study developmental issues.

Another problem is the fact that all the measures come from the same source, which can contribute to common-method variance. Additionally, the answers of respondents about their perceptions of equity and job satisfaction might have been slightly affected by their willingness to compliment their organizations (tendency to use socially-desirable responses). It would not have been possible to convince the respondents that their responses would be treated with 100% confidentiality.

Further, survey results might be biased since the majority of the respondents are young male tutors and thus belong to low-end career group. One other limitation to the study is that Egypt is unique in terms of socio-economic conditions (population groups, religion, competitiveness, etc.), thus survey findings cannot be generalized.

A recommendation for further research is that researchers should study the relationship between perception of equity and job satisfaction under the moderation effect of gender. Researchers have been reporting differences between males and females. Gender has been considered as a variable that affects several job attitudes such as job satisfaction, perception of equity and commitment (Lefkowitz, 1994). Another recommendation is to investigate the relative importance of each facet of perception of equity in predicting each facet of job satisfaction especially those that were reported as significant predictors of job satisfaction in this study.

5. Conclusion

This study aimed at investigating the relationships between employee perceptions of equity and job satisfaction in the Egyptian private universities. The study hypothesized that there would be positive relationships between perceptions of equity and job satisfaction when the outcome in the equity comparison is one of Herzberg's motivators (recognition, advancement and growth). The study also hypothesized that there would be no significant relationships between perception of equity and job satisfaction when the outcome is one of Herzberg's hygiene factors (working conditions, status, security and salary).

Hypothesis 1 was supported. Perceptions of Herzberg's motivators equity were positively related to job satisfaction. Almost 45% of the variance in job satisfaction could be explained by perceptions of Herzberg's motivators equity. These findings partially support the findings of researches that reported a positive relationship between perception of equity and job satisfaction (McIntyre et al., 2002; Rifai, 2005; Paik et al., 2007; Lambert et al., 2007; Deconinck & Bachmann, 2007). The most important perception of equity in predicting job satisfaction was found to be perception of recognition equity, while the least important one was perception of growth equity.

Since there is a positive relationship between perceptions of motivators equity and job satisfaction, then managers should ensure that their employees will always perceive fair treatment when they compare themselves to employees inside and outside their organization with motivators as outcomes in the comparisons made by the employees. This can be achieved by ensuring that employees will know the exact inputs (such as job effort and performance) that other employees contribute to the organization, so that they will not overestimate or underestimate them, which might result in an incorrect perception of inequity. Also, managers of Egyptian private universities should regularly monitor the competitors' policies regarding "motivators".

Also, Performance appraisal should be regularly conducted. The results of the appraisal of all employees should be communicated to everyone in the organization so that every employee will know the real inputs contributed by his/her peers to avoid incorrect perceptions of inequity.

Hypothesis 2 was also supported. None of the partial regression coefficients for perceptions of Herzberg's hygiene factors equity were significantly different from zero. The t-stat values for perceptions of hygiene factors equity do not exceed the t-critical values neither at the 0.05 nor the 0.1 significance levels except for salary ($P < 0.1$). Therefore, there is no statistically significant relationship between perceptions of hygiene factors equity and job satisfaction among the academic employees of the Egyptian private universities.

The findings of this study provide a kind of an indirect support to Herzberg's findings that improving hygiene factors would not lead to improvement in employee's job satisfaction. Therefore; managers should not rely on communication of these factors equity to improve job satisfaction. However, they might be related to other important work outcomes such as dissatisfaction, stress and organizational commitment. However, one should note that the study findings should be generalized. As most of the sample respondents were young, males and belong to the lower end of the career line. One other limitation to the study is that Egypt is unique in terms of socio-economic conditions (population groups, religion, competitiveness, etc.), thus survey findings cannot be generalized.

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