

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/259714226>

Perceived Quality of Meal Service Provided by Organization and Job Performance of Employees

Article in *Applied Research in Quality of Life* · February 2015

DOI: 10.1007/s11482-014-9301-y

CITATIONS

6

READS

64

2 authors:



Ufuk Turen

39 PUBLICATIONS 50 CITATIONS

SEE PROFILE



Asil Çamoğlu

Kara Harp Okulu

3 PUBLICATIONS 8 CITATIONS

SEE PROFILE

Applied Research in Quality of Life

Perceived Quality of Meal Service Provided by Organization and Job Performance of Employees --Manuscript Draft--

| | |
|--|---|
| Manuscript Number: | ARIQ-D-13-00154R1 |
| Full Title: | Perceived Quality of Meal Service Provided by Organization and Job Performance of Employees |
| Article Type: | Original Research |
| Keywords: | quality of meals provided by organization; meal appeal; meal hygiene; job performance; multivariate statistics; Turkey; Security Companies |
| Corresponding Author: | UFUK TUREN, Ph.D. Turkish Military Academy Ankara, TURKEY |
| Corresponding Author Secondary Information: | |
| Corresponding Author's Institution: | Turkish Military Academy |
| Corresponding Author's Secondary Institution: | |
| First Author: | UFUK TUREN, Ph.D. |
| First Author Secondary Information: | |
| Order of Authors: | UFUK TUREN, Ph.D. Asil Camoglu |
| Order of Authors Secondary Information: | |
| Abstract: | Employers' efforts for satisfying employees are gaining importance in contemporary business life in which increasing competition is becoming commonplace. It is recurred to the mind that perceived quality of meals provided by organization to employees can be a measure in order to increase individual job performance. In this paper we explore the impact of perceived quality of meals on individual job performance based on the data collected from security companies in the eastern part of Turkey. Consequently, we find that individual job performance is positively sensitive to three emerging factors of perceived quality of meals namely appeal, hygiene and managerial issues. The paper will be of interest to the key stakeholders: the state owned or private organizations, labor organizations and the media. |
| Response to Reviewers: | Reviewer #2: We check the points Reviewer #2 suggested, and do corrections according to his/her report. Best regards. |

Perceived Quality of Meal Service Provided by Organization and Job Performance of Employees

Ufuk TÜREN*
uturen2011@gmail.com
Turkish Military Academy
Industrial Engineering Department
Ankara/TURKEY
Telephone #: 00905427216651
Fax #: 00905427216651

Asil ÇAMOĞLU
Turkish Military Academy
Industrial Engineering Department
Ankara/TURKEY

*Corresponding Author

Perceived Quality of Meal Service Provided by Organization and Job Performance of Employees

Abstract

Employers' efforts for satisfying employees are gaining importance in contemporary business life in which increasing competition is becoming commonplace. It is recurred to the mind that perceived quality of meals provided by organization to employees can be a measure in order to increase individual job performance. In this paper we explore the impact of perceived quality of meals on individual job performance based on the data collected from security companies in the eastern part of Turkey. Consequently, we find that individual job performance is positively sensitive to three emerging factors of perceived quality of meals namely appeal, hygiene and managerial issues. The paper will be of interest to the key stakeholders: the state owned or private organizations, labor organizations and the media.

Key Words: *quality of meals provided by organization, meal appeal, meal hygiene, job performance, multivariate statistics, Turkey; Security Companies*

1. Introduction

It's known that the practice of feeding employees or "food at work" is based on old traditions, especially shaped by feeding of the soldiers. Feeding at company becomes more important nowadays because of the bad effects of unbalanced or mal-nutrition to health. There has been academic research on this subject since 1930's. A book named "Feeding at Industry" was published in 1946 by International Work Organization (IWO) and it studied feeding of employees in big firms at Canada, England and USA. Since 1956, IWO has been trying to determine and disseminate the standards at canteens, cafeterias and mess halls by publishing guidelines for feeding at work. These applications begin with distributing variety of free foods that supply energy required for employees to do their job better. Afterwards they are extended by distributing free foods to families of employees to contribute collective healthiness in the long run especially in developing economies (Wanjek, 2005: 13).

These applications done by firms seem to be useful and encouraged by governments. Research studies show that that highest factor of utility cost rate is supporting of feeding (WHO, 2001: 52–55) and appropriate feeding increases international productivity level about 20% (WHO, 2003). Increase 1 % of calorie amount taken on unit time cause to increase of international productivity level about 2.27 % on macro level (Galenson & Pyatt, 1964). It's also known that the taste, serving style, ambiance of mess hall, hygiene are important as well as the nutritiousness of food that served by firms.

Taste is one of the most important sense mechanisms for human being's social life. People can taste bitter, sweet, sour, and salty and the mixture tastes of these through millions of taste cells over tongue. Moreover people can keep these tastes in the long term memory and retrieve. If the taste of consumed food is perceived well people qualifies that food delicious, otherwise insipid. Flavor is as important as nutrition facts of consumed food. People do not want to consume food that they do not like what ever their nutritional value is. Especially at

the organizations in which the same menu is served to group of employees, the taste of food and the quality of service becomes an important factor that affects all the beneficiaries.

The studies exploring the effects of food preferences basically focus on nutritional value and the ingredients which may become good or harmful to human health and individual physical performance (e.g. Wong, Enriquez & Barrera, 2001; Heywood, 2002; Williams, 2007; Kauffmann et al, 2011).

Many researchers have studied the quality of and satisfaction with foodservices in hospitals and restaurants, and addressed the key attributes of food and service quality that relate to customer satisfaction. Perceived food quality is considered an important factor for patient satisfaction with meals and foodservice (Dube, Trudeau & Belanger, 1994; Lau & Gregoire, 1998). Freshness is considered the most important food characteristic, followed by taste and nutrition (DeLuco & Cremer, 1990). Food variety, quality, nutrition, portion size, and price are found to be critical factors in determining hospital cafeteria performance (Johnston & Upton, 1991). Satisfaction with the presentation of meals is reported an important predictor of overall patients' satisfaction with foodservice in a continuing care hospital (O'Hara et al., 1997). The quality of foodservice staff, variety of menu choices and taste and temperature of food are emphasized as important factors for patient's overall satisfaction with the foodservice (Lau & Gregoire, 1998). However the effects of meal quality, service quality, hygiene, comfort and mess hall on job performance have not been noticed in the literature.

The aim of this article is to investigate the relationship between perceived qualities of meals served by organization and employee's job performance.

2. Conceptual Framework

2.1 Flavor and Appetite of Food

Flavor preferences change based on tastes of each individual person. Individuals' flavor preferences are formed very early in life and effected by their genetic characteristics and

eating habits of the early ages. These formed flavor preferences hardly change later in life and they affect individuals' feeding habits (Mikkila, 2005). The flavor preferences determine how an individual would enjoy a food item. There are common flavor preferences all over the world even amongst different individuals from different races and nations. But as a general rule individual would prefer food that fits to their flavor preferences, and would avoid from the ones that do not fit if possible. Here it will be useful to mention the factors that make food enjoyable or not.

Flavor preferences of an individual begin from family life. Family's nutrition habits would affect individual's nutrition habits for their lifetime. The second major factor is the region in which individual grown up. Besides, the taste of a food previously consumed, the quality of ingredients, and personal affinity to these ingredients affect individuals' preferences. Availability of different food items in different regions causes to shape regional preferences as well. On the other hand in modern times, access to regional food items has been much improved, and even the rarest items have become readily available worldwide.

As the means of transportation and information has been progressed, people are now more interested in tasting food from other regions and nations. At the same time, as people move more freely and farther from their homeland for work and education, they have a chance to taste food from their new locations, and introduce their regional food at these new locations. These movements and mix of regional flavors reduce the differences among regional flavors significantly. Particularly necessity of presenting food to a large group of people from different origins in organizations requires producing food that can be generally enjoyable and fit for varying flavor profiles.

Presentation of the food is as important as the taste of the food. The presentation reflects the attitude of the cook and service personnel towards the food prepared and the customer or guests. In such an environment the customers feel themselves outstanding and precious, and

they perceive the food served as special and more delicious. Many high end restaurants have special rooms for private parties. In these rooms, even the utensils would be of higher value than the ones used in the main room. This special presentation would result in a higher perceived taste to the food even if it is the same food served in the main room. Food served at the organization can similarly be perceived as more tasteful and higher quality with the improved presentation, hence resulting in an increase in individual job performance.

Relationship between taste and smell is apparent. Subjects whose noses were blocked eat slices of potatoes, and apples and cannot differentiate the taste of apple and potato. In order to taste properly, after chewing the food people need to receive the scent molecules in the back of the nose through mouth. The loss of taste when suffering from flu is caused by the disturbance of this mechanism. At organizations, good and intense aromas of the food would help employees to perceive it more delicious.

At workplaces the ingredients of meals often are procured in bulk to reduce costs and receive volume discounts. If the food is not properly stored, it will get stale and lose flavor as well as nutrition value. Similarly, the kitchen staff may have limited abilities and knowledge. The meal plans, and balanced nutrition issues may be ignored in food preparations. This may result in employees eating repetitive meals, and would cause boredom and monotonicity even if the food is enjoyed at first. This boredom would cause food to be perceived less tasteful over time. Also, having uneducated or insufficient number of personnel, insufficient or unsuitable dining halls may cause problems in perceived service quality such as not servicing the meal at proper temperature negatively impacting the perceived appeal of the meals.

The cleanliness of the dining halls is also crucially important for the employees. In their social life people pay attention to the outside and inside view of a restaurant, the cleanliness of the hall and the personnel's clothing. After entering a restaurant, they pay attention to the presentation of the food. They often make their food choices based on external appearance

and presentation of the food. After sitting at the table, the cleanliness of the table and condiments become important. If the all of the above points are provided in a satisfactory level, then people may perceive the food much more flavorful and tasteful. In order to assure customers about the cleanliness and propriety of their meal preparations and cooking procedures and environment many restaurants make their kitchen open to customers' inspection.

2.2 Importance of Flavor in Balanced Nutrition

Even though there are experts and executives who focus on taste of food and view it as a competitive advantage, in the literature of human factors engineering, ergonomics and human resource management, there hasn't been any research about the impact of the taste of food provided by organizations on job performance or workplace productivity. Ergonomics and nutrition literature deal with the effects of nutrients consumed by human metabolism and the individual work performance under different working conditions, and consider the relationship between healthy living and job performance (e.g. Lukaski, 2004; Lehto & Buck, 2008: 86-87; Lowden vd., 2010). In sports science, research studies focus on the relationship between nutrition, development and performance of athletes (e.g. Epstein & Armstrong, 1999; Kreider et al., 2003; Jackson, 2009). Basically, research findings support that balanced nutrition is very important for all the vital functions and for the development and performance of human.

A balanced diet is one of the most critical factors in terms of the sustainability of human metabolism. Living organisms can survive as long as they fed. Feeding alone is not enough to sustain a healthy life. They have to consume foods containing required organic and inorganic substances. A proper diet should contain the necessary quantity of the each needed nutrients. If this condition does not occur, the balance of metabolism is disrupted. If measures are not

taken, obesity or weakness, functional disorders in various organs even death may occur in the long term. Naturally, a balanced diet is very important for the performance of the employees at work. Balanced fed individuals are more agile, more careful and happier than those fed unbalanced. This situation may have a positive influence on individual job performance.

Taste preferences affect nutrition habits of individuals (Duffy et al., 2007). According to a study carried out on Japanese people, there is a relationship between individuals' flavor preferences and weight gain tendencies. In this study, those who prefer rich, heavy flavor and sweet tastes are reported to have tendency to gain more weight (Matsushita et al., 2009). For a balanced human metabolism, foods containing protein, carbohydrates, minerals, salts and fibers are needed (Lehto & Buck, 2008: 84) but suitable presentation and appeal of meals are also very important for people. It is a well-known fact that in many organizations in which diet programs are made by professional dietician with the help of scientific methods, some meals are consumed very little and or thrown away due to problems arising from the bad flavor or improper service. The worldwide famous cookbook author Barbara Kafka thinks that consuming various foods heartily with the pleasure of flavor is a significant predecessor of a balanced and healthy diet. Most of the people accept that the taste is the most attractive factor shaping their food selection. In a survey conducted in 1998 on U.S. consumers by The U.S. Food Marketing Institute, the nutrient is found to be the second most important reason while flavor of the food is found to be the most important reason for food selection. U.S. Dietary Association's Nutrition Trends Survey in 1997 discovers that consumers are sensitive to the realities about meals, but they think that a healthy diet means to give up delicious foods. According to nutrition experts it is possible to say that the food can be both healthy and tasty (IFIC, 1999).

2.3. Perceived Quality of Meals and the Employee's Job Performance

Job performance is a concept about employees' attitudes towards work that has been attributed to them (Borman & Motowidlo, 1993: 73). Rousseau and McLean (1993) defined work performance as an effort related to the tasks that have to be done in exchange for direct or indirect wages paid to employees. According to Sackett (2002), the business performance is based on employees' attitudes and behaviors related to organizational output at work environment. In general and at the micro level, researchers define work performance as activities and behaviors of employees that contribute in achieving the objectives of the organizations (Campbell, 1990; Murphy, 1989).

Companies want to ensure the sustainability of their competitiveness. To make it happen, employees are required to keep work performance at the high level. Therefore, many researchers have tried to measure work performance of employees and have tried to reveal the variables that affect work performance (e.g. Wherry & Bartlett, 1982; Landy & Farr, 1983; Podsakoff & MacKenzie, 1989; Campbell, 1990; McEnery & Blanchard, 1999; Motowidlo, 2003; Grant, 2008). According to the activation theory, employees' job performance is a result of the interaction of job demands and the motivation level fed from different sources (see Yerkes & Dodson, 1908; Berlyne, 1949; 1967; Duffy, 1962; Scott, 1966) Besides, equity theory advise that employees consider the exchange relationships with the firms in terms of a ratio between rewards received and effort spent at work (see Adams, 1965 Carrell & Dittrich, 1978; Janssen, 2001).

A well balanced diet is very important for the human metabolism balance and sustainability. It has been known that each nutrient, which basically serves in the body as a basic building block and fuel, fulfill important tasks. The failure of not getting or inadequate intake of these substances may lead to many diseases. In case of unbalanced nutrition experienced from early ages, people may face growth disorders. Regardless of what they do in work, employees need a balanced diet to be able to work effectively and efficiently (Porter,

Claycomb & Kraft, 2008). Also if we consider the fact that the employees with unbalanced nutrition may get sick more often than others with balanced nutrition, a balanced diet can be thought to be an important predecessor for job performance.

Among the human senses, taste is the one which may be called the most effective on mood and psychological state of the individual. In case of a hungry person faces with nice food scents and delicious food, it is pretty impossible to say that the level of a person's motivation is not affected by this scene. Therefore, an individual facing with delicious food at each meal probably develops a positive attitude towards the providing organization. Through this mechanism, by the way of positively influencing the employee motivation and attitude towards the organization, job performance of individual may be progressed. Besides, stress on the individual caused by an unbalanced diet, may be a possible negative impact on job performance (Porter, Claycomb & Kraft, 2008). Appreciation of meal service offered by the company considered to be a positive impact on employees' level of motivation. In both developed and developing countries, free meal or a meal ticket practices are reported to have positive impact on individuals' attitudes towards work (Wanjek, 2005: 72, 160, 291).

3. Hypotheses

Based on abovementioned facts, tastiness of food supports balanced diet. Delicious food can have a positive effect on individual motivation. Employees who are highly motivated and fed with well-balanced nutrition can show higher job performance. Besides appropriateness of dining halls physical conditions and services in the dining halls are considered to be important in terms of individual job performance. Thus, we propose the hypotheses below.

H: Perceived quality of meals service provided by organization affects employee's job performance positively and significantly.

H1: Perceived appeal of meal service provided by organization affects employee's job performance positively and significantly.

H2: Perceived hygiene of meal service provided by organization affects employee's job performance positively and significantly.

H3: Perceived quality of managerial aspects concerning meal service provided by organization affects employee's job performance positively and significantly.

4. Method

4.1. Sample and Data

Our sample is comprised of individuals working in the field of the security industry. Although these people are from different parts of Turkey, they all employed in security companies actively in Eastern Anatolia Region of Turkey. These security staff working in the field is provided morning, midday and evening meals by the company they work for or other companies they contract for meal. In general, provided meal service is not a take your pick type service, it's mostly fixed menu which food lists mostly prepared professional dieticians. Since there are vey few female employees in the industry we cannot be able to convince them to participate in the research. Thus, all participants are male. Table 1 and Table 2 show the demographic situation of participants.

Table 1 ABOUT HERE

Table 2 ABOUT HERE

Our questionnaire form containing the statements in order to measure concepts of our hypotheses statistical analysis is applied to 246 security sector employees face to face. When the obtained questionnaire result controlled, it's decided that 238 out of 246 can be usable (%96). Employee job performance instrument is conducted to their immediate supervisors

through visits to security employees' work places. Eight supervisors rejected our request because of several reasons. In the end four months of effort in the field we begin statistical analyses with 229 employees' data. Meal service quality perception is based on data obtained from the employees and individual job performance data is retrieved from the immediate supervisors. There is no possibility of common method bias (Meade, Watson & Kroustalis, 2007).

4.2. Scales

4.2.1. Perceived Quality of Meal Service Provided by Organization Scale (QUMPOS)

Scales measuring customers' perceptions of meal services have been extensively used in the restaurant business including the airport food service (Heung, Wong, & Qu, 2000), fine dining restaurants (Knutson, Steven, & Patton, 1995), casual dining restaurants (Knutson, Stevens, & Patton, 1995; Kim, McCahon & Miller, 2000; Wu, Hoover, & Williams, 2000), mid-price Chinese restaurant (Wu, Goh, Lin, & Poynter, 1999), quick service restaurants (Knutson, Steven, & Patton, 1995; Huang, 2000), assisted living facilities (Patnaude & Graves, 2000), care retirement communities (Seo & Shanklin, 2006), and patients in hospitals (Dube, Trudeau & Belanger, 1994; O'Hara, 1997)

Since most of these scales are developed for restaurant industry we exclude some of the items which are irrelevant for meal services provided by organization to employees and we add some items relevant to process that we investigate. Thus, we develop Quality of Meal Service Provided by Organization Scale (QUMPOS). We perform exploratory factor analysis (EFA) and Cronbach's Alpha test to demonstrate the validity and reliability of QUMPOS consisting of 5 dimensions and 26 items. 12 items which violate the structural validity have been exported from the scale, the remaining 14 items has become operational as passing through the construct validity and reliability testing with three different factors namely taste

of meals, hygiene and managerial issues. Exploratory Factor Analysis (EFA) and Cronbach's results investigating the validity and reliability aspects respectively can be seen in Table 3.

Table 3 ABOUT HERE

The EFA results in three QUMPOS factors together explain 60.23 per cent of the total variance. Initially, the validity of data for factor analysis has been examined with the help of the Kaiser-Meyer-Ohlin (KMO) measure of sampling adequacy and the Bartlett's test of sphericity, the acceptance criterion of KMO measure and Bartlett's test of sphericity (0.5) and the significance of chi-square less than or equal to 5 per cent level (Fabrigar, Maccallum, Wegner & Strahan, 1999). Since data for factor analysis has been found to be valid the EFA have been executed. The items having a factor loading of less than 0.5 in all extracted factors and items having higher factor loadings in more than one factor have been excluded from EFA. The factor which has a lower eigen value (1.0) is also excluded from the extracted factors (Blankson, 2008). The convergent validity of the construct, namely overall service quality has been confirmed since the standardized factor loading of the variables are greater than 0.50 and significant at $p < 0.001$. The internal reliability is also confirmed since the Cronbach's alpha is greater than 0.7 (Nunnally, 1978).

Further, Confirmatory Factor Analysis (CFA) is conducted to secure fitness of Qumpos. Table 4 shows the results of our analysis.

Table 4 About Here

All index values are found to acceptable in excellent or satisfactory fit threshold. The factor scores of the variables which are produced in EFA procedure for each dimension of QUMPOS is used in causality analysis.

4.2.2. Job Performance

To evaluate individual job performance, one of the most appropriate data sources is immediate supervisor of the employees. Generally, the supervisor, standing next to employee all along the working hours, is responsible for overseeing the quality and quantity of the work done by employee. Supervisor is a manager who most closely oversees work-related problems, unfruitful and successful behavior of employee. With the opportunity of being in constant visual and verbal communication with employee, supervisors can be regarded as being the authority of an objective job performance evaluator for employee. In this study, a five-item job performance scale developed by Podsakoff and MacKenzie (1989) is conducted to supervisors to measure the performance of those who work under his/her authority. This scale, also used (Cronbach's Alpha = 0.85) by Janssen (2001) is translated into Turkish as well as reliability and validity analysis is carried out (Table 5).

Table 5 ABOUT HERE

The internal reliability is also confirmed since the Cronbach's Alpha is greater than 0.7 (Nunnally, 1978). Additionally, CFA is done to see the fitness of job performance scale. Table 6 shows the results of the analysis

Table 6 ABOUT HERE

All fit index values are found to be in excellent of satisfactory fit thresholds except RMSEA (0.115). Hu and Bentler (1999) found that in small samples the RMSEA overrejected the true model, i.e. the value was too large. Because of this problem, this index may be less preferable with small samples (e.g. $N \leq 250$) (Tabachnick & Fidell, 2007: 717). Ullman

(2001) claims that RMSEA value should not be considered in testing the validity of proposed model in research having sample size less than 250. Thus, we conclude that there is no fitness problem in using this scale on our sample.

The factor scores of the variables which are produced in EFA procedure for job performance variable is used in causality analysis.

5 Analysis and Findings

In order to see the effect of the independent variables on dependent variables collectively, multiple regression analysis was found appropriate to apply. Prior to multi variable regression analysis, concerning the available data, some assumptions are to be tested. The first of them is normality assumption testing whether the variables comply with normal distribution or not. Kolmogorov-Smirnov Z test is applied and we decide that these variables are distributed normally at 95% confidence level. One of the basic assumptions of regression is the constant variance (homoscedasticity) assumption. This assumption based on the hypothesis is that while changing the unit values of independent variables, variance of unit values of the dependent variables remain constant (Gujarati, 2004: 387). In order to test the presence of heteroscedasticity, we conduct “White Heteroscedasticity Test” and find that there is no heteroscedasticity problem in the model. Consequently, the assumption is fulfilled and model and data can be used in regression analysis with multiple variables. Since we deal with a cross-sectional data set testing these two assumptions are considered ample. Multivariate regression analysis results are presented in Table 7, 8 and 9.

Table 7 ABOUT HERE

In Table 7 we can realize that the independent variables explain 49.1% of the variance in the dependent variable. Variance analysis tests the model whether it is statistically significant given in Table 8. Here we see that regression model -as a whole- is statistically significant in positive direction.

Table 8 ABOUT HERE

$H_0: \beta_0 = \beta_1 = \beta_2 = \beta_3 = 0$ (Model is not significant)

$H_s: \text{At least one } \beta_i \neq 0$ (Model is significant)

H_0 is rejected since $p=0,000 < \alpha=0,05$. Here we see that regression model -as a whole- is statistically significant in positive direction at 95% confidence level. Then the effects of independent variables on dependent variable in terms of direction and significance, and presence of multicollinearity are scrutinized. Results are presented in Table 9.

Table 9 ABOUT HERE

Through hypothesis testing the significance of the coefficients are investigated for all dependent variables.

$H_0: \beta_i = 0$ (Coefficients are not significant)

$H_s: \beta_i \neq 0$ (Coefficients are significant)

H_0 is rejected because $p=0.000 < \alpha=0.05$ for all independent variables' coefficients. But H_0 related to β_0 is not rejected. It means that β_0 is insignificant. Theil (1971; 176) says that "From an economic point of view, a constant term usually has little or no explanatory virtues". He also advises that if the constant is zero (H_0 accepted), the slope coefficient may be estimated with far greater precision than with the constant term in model (Theil, 1978:76).

In the respect of independent variables' coefficients, it can be decided that all independent variables are significantly required to be included in the model at 95% confidence level. It is also checked if there is multicollinearity in the model we conclude that there is no collinearity problem since none of the VIF values are found to be greater than 5. Equation 1 shows equation of the established model which based on these findings.

$$\widehat{PRF}_i = -1.48 \times 10^{-16} + 0.560 APPEAL_i + 0.295 HYGIENE_i + 0.333 MANAGERIAL_i \quad (1)$$

| | | | |
|------------------------|----------------|----------------|----------------|
| 0.000 | 12.006 | 6.327 | 7.145 |
| (0.000) | (0.000) | (0.000) | (0.000) |
| R ² = 0.505 | | | F = 78.414 |

From Equation 1 we can understand that the coefficients of all the factors, which are included in the model to describe the change in the job performance, are statistically significant. In addition, all the factors' signs are proper with theoretical expectations. It can be said that a change at appeal factor about 1 unit results a change at job performance about 0.560 unit in the same direction at % 1 significance level under ceteris paribus conditions. Moreover, a change occurred in hygiene factor about 1 unit can cause a change about 0.295 unit at job performance, and 1 unit change in managerial factor causes about 0.333 unit change at job performance in the same direction at % 1 significance level under the conditions of other variables are constant. Effect directions and magnitudes of independent variables on the dependent variable are shown in Figure 1.



Figure 1 Causality Path Diagram

6. Discussion and Conclusion

Quality of meals provided by organization may have an increasing impact on employee's loyalty to organization. Perceived appeal of meals is found to be biggest factor influencing the

job performance of employee. This factor includes perceived tastiness and flavor meals, quality of raw materials used in preparation and cooking meals, quality of staff working in kitchen and diversity of meals. Factor concerning managerial issues is found to be second important in the regression model. The quality of service personnel, setting of dining tables and dining hall, time period given to employee for eating meals, serving meals at appropriate temperature are the factors meaningfully gathered under this factor. Hygiene factor is the third important factor influencing employee's job performance. Hygiene factor embraces perceived hygiene appropriateness of kitchen personnel and environment, and food servings, spoons, forks, etc. on the dining tables.

It is seen that some top level firms in the world provide employees with high quality meal services suitable for different taste preferences. These applications are recognized as a competitive advantage of human resource strategies of those firms. For example Google provides its employees with various meals from different cultures and kitchens. Since 2005 it employs highly qualified gourmet chefs in kitchens (DiRomualdo, 2005; Steel, 2012). Through this competitive advantage firms may chase the opportunity of enlisting highly qualified employees in order to foster its competitive power all around the world (CNN, 2007). This advantage offered by firms may be considered by job seeking individual as one of the decision variables such as salary, status and other benefits.

Since human resource departments are responsible for employees' motivation and performance, any decision having the probability of affecting business performance positively or negatively should be considered as a risk for human resource management departments. Thus, it is advised that supplier selection process for meal services if the process is outsourced or recruiting kitchen and service personnel should be performed with the contribution of human resource management departments. Selection officials should not focused on only price criterion, they should also consider the quality aspects. But if the process is abandoned

to purchasing departments the risk of focusing in price criterion may invade the other aspects concerning the quality (Daştan, 2012).

Additionally, meals provided by organizations are subsidized by many governments in the world (Wanjek, 2005). Organizations should be aware of the subsidy details and never attempt to transfer these resources in the fields other than meal services. Firms may consider employing high quality cooks and service personnel or training the existing crew in order to increase quality of meal service. They also foster employees' participation in menu selection process. Participation probably will affect employees' perceptions positively. Moreover, participation of top management in dining hall and having same meals in the same environment with employees may increase perceived quality of meals and consequently the job performance of employees.

The main contribution of this paper is that perceived quality of meal service provided by organization to employees has three dimensions namely appeal, hygiene and managerial issues, they altogether have a positive association with employee's job performance.

This research has limitations. All participants are male because of the nature of the population of this research. Females should be included in future works. Data are cross-sectional, and causality and temporal sequences should be cautiously generalized. For future work we can suggest that the association among these concepts to be studied on some other samples from different industries, cultures and nations. Longitudinal work may be helpful in order to see the reaction of job performance of employees as result of change in quality of meal services provided by organizations.

References

- Adams, J.S., (1965). Inequity in social exchange. *Advances in Experimental Social Psychology*. 62, 335-343.
- Berlyne D.E. (1967). Arousal and reinforcement. In D. Levine (Ed.), *Nebraska Symposium on Motivation*, 1967. Lincoln, Nebraska: University of Nebraska Press, 1-116.
- Berlyne, D.E., (1949). Interest' as a psychological concept. *British Journal of Psychology*, 39, 186-195.
- Blankson, C., (2008). Measuring college student's choice criteria of credit cards: Scale development and validation, *Journal of Marketing Management*, 24(3&4), 317-344.
- Bollen, K. A. (1989). *Structural equations with latent variables*. NY: Wiley.
- Borman, W.C., & Motowidlo, S.J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W.C. Borman and Associates (Eds.), *Personnel selection in organizations* (pp. 71-98). San Francisco, CA: Jossey-Bass Publishers.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newsbury Park, CA: Sage.
- Byrne, B. M. (1994). *Structural equation modeling with EQS and EQS/Windows*. Thousand Oaks, CA: Sage Publications.
- Campbell, J.P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette and L. M. Hough (Eds.), Handbook of industrial and organizational psychology (Vol. 1, p. 687-732). Palo Alto, CA: Consulting Psychologists Press.

Carrell, M.R. & Dittrich, J.E., (1978). Equity Theory: The Recent Literature, Methodological Considerations, and New Directions. *The Academy of Management Review*. 3 (2), 202-210.

CNN, (2007). 100 Best Companies to Work For

http://money.cnn.com/galleries/2007/fortune/0701/gallery.Google_food/index.html,
12.12.2012.

Daşdan, S., 2007. Personeliniz Kendini Degersiz Hissetmesin,

http://foodinlife.com.tr/haber/16444/Keyveni_Catering_Insan_Kaynaklari_Yoneticisi_Sevcan_Dasdan_Personeliniz_Kendini_Degersiz_Hissetmesin, 18.09.2012

DeLuco, A., & Cremer, M., (1990). Consumers' perceptions of hospital food and dietary services. *Journal of American Dietetic Association*, 90, 1711-1715.

DiRomualdo T., 2005 Next Generation Workplace Is Google's cafeteria a competitive weapon?, WTN News, <http://wtnews.com/articles/2190/>, 02.12.2012.

Dube, L., Trudeau, E. & Belanger, M., (1994). Determining the complexity of patient satisfaction with foodservices. *Journal of American Dietetic Association*, 94, 394-398.

Duffy VB, Lanier SA, Hutchins HL, Pescatello LS, Johnson MK, Bartoshuk LM., (2007). Food preference questionnaire as a screening tool for assessing dietary risk of cardiovascular disease within health risk appraisals. *Journal of American Dietetic Association*, 107: 237-245.

Duffy, E. (1962). *Activation and Behavior*, New York: Wiley.

Epstein, Y. & Armstrong, L.E, (1999). Fluid-electrolyte balance during labor and exercise: concepts and misconceptions. *International Journal of Sport Nutrition*. 9(1):1-12

Fabrigar, L.R., Maccallum, R.C., Wegner, D.T. and Strahan, E.J., (1999), Evaluating the use of Exploratory Factors Analysis in Psychology Research, *Psychological Methods*, 4 (3), 272-299.

- Galenson, W. & Pyatt, G., (1964). The quality of labour and economic development in certain countries, ILO Studies and Reports, New Series, No. 68 (Geneva).
- Grant A.M., (2008). The Significance of Task Significance: Job Performance Effects, Relational Mechanisms, and Boundary Conditions. *Journal of Applied Psychology*, 93(1), 108–124.
- Gujarati, D.N., (2004). *Basic Econometrics*, Fourth Edition, The McGraw–Hill Companies, New York City.
- Heung, V.C.S., Wong, M.Y. & Qu, H. (2000). Airport-restaurant Service Quality in Hong Kong : An Application of SERVQUAL. *Cornell Hotel & Restaurant Administration Quarterly*, 41 (3), 86-96.
- Heywood, V., (2002). *Advanced fitness assessment and exercise prescription*. Champaign, IL: Human Kineticspub Europe Ltd.
- Hu, L. T., & Bentler, P. M. (1995). Evaluating model fit. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 76-99). Thousand Oaks, CA: Sage.
- Hu, L.T. & Bentler, P.M., (1995). Evaluating model fit. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 76-99). Thousand Oaks, CA: Sage.
- Huang, C.H., (2000). Relationship between service quality, consuming patterns and customer satisfactions on the quick service restaurant franchises. *Proceedings of the Fifth Annual Graduate Education and Graduate Students Research Conference in Hospitality & Tourism*, 315-317. (January 6-8, 2000)
- IFIC (International Food Information Council Foundation), (1999). Taste Matters, *Food Insight: Current Topics in Food Safety and Nutrition*, July-August: 1, 4.

- Jackson, C., (2009). Top 5 Nutrition Tips for Maximum Performance. *Volleyball*, 20(9): 18-20.
- Janssen, O., (2001). Fairness Perceptions as a Moderator in the Curvilinear Relationships between Job Demands, and Job Performance and Job Satisfaction. *Academy of Management Journal*, 44(5), 1039-1050.
- Kauffman, R. M., Hayes, R. M., Jenkins, J. M., Norris, P. R., Diaz, J. J., May, A. K., & Collier, B.R., (2011). Provision of balanced nutrition protects against hypoglycemia in the critically ill surgical patient. *Journal of Parenteral and Enteral Nutrition*, 35(6), 686-694.
- Knutson, B., Steven, P. & Patton, M. (1995) DINESERV: measuring service quality in quick service, casual and theme, and fine dining restaurants. *International Journal of Hospitality Management*, 14 (3/4), 293–310.
- Kreider, R.B., Almada, A.L., Antonio, J., Broeder, C., Earnest, C., Greenwood, L., Greenwood, M., Incledon, T., Kalman, D.S., Kerksick, C.; Kleiner, S.M.; Leutholtz, B., Lowery, L.M., Mendel, R., Rasmussen, C.J., Stout, J.R., Weir, J.P., Willoughby, D.S., Ziegenfuss, T.N., (2003). Exercise and Sport Nutrition: A Balanced Perspective for Exercise Physiologists. *Professionalization of Exercise Physiology*, 6(10): 13.
- Landy, F.J. & Farr, J.L., (1983). *The Measurement of Work Performance*. Orlando, FL: Academic Pres,
- Lau, C. & Gregoire, M.B., (1998). Quality ratings of a hospital foodservice department by inpatients and postdischarge patients. *Journal of the American Dietetic Association*, 98, 1303-1307.
- Lehto, M.R. & BUCK, J.R., (2008). *Introduction to Human Factors and Ergonomics for Engineers*, Lawrence Erlbaum Associates, Taylor & Francis Group, Newyork.

- Lowden, A., Moreno, C., Holmbäck, U., Lennernäs, M. & Tucker, P., (2010). Eating and shift work - effects on habits, metabolism, and performance. *Scandinavian Journal of Work, Environment & Health*. 36(2):150-162
- Lukaski, H.C., (2004). Vitamin and mineral status: effects on physical performance. *Nutrition*. 20(e7/8): 632-644.
- Marsh, H.W. & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First- and higher-order factor models and their invariance across groups. *Psychological Bulletin*, 97, 562–582.
- Matsushita Y, Mizoue, T., Takahashi, Y., Isogawa, A., Kato, M., Inoue, M., Noda, M. & Tsugane, S., (2009). Taste preferences and body weight change in Japanese adults: the JPHC Study, *International Journal of Obesity*, 33, 1191-1197.
- McEnery, J.M., & Blanchard, P.N., (1999). Validity of multiple ratings of business student performance in a management situation. *Human Resource Development Quarterly*, 10, 155-172.
- Meade, A.W., Watson, A.M. & Kroustalis, C.M., (2007). Assessing Common Methods Bias in Organizational Research. Paper presented at the 22nd Annual Meeting of the Society for Industrial and Organizational Psychology, New York.
- Mikkila, V., Rasanen, L., Raitakari, O.T., Pietinen, P., Viikari, J., (2005). Consistent dietary patterns identified from childhood to adulthood: the cardiovascular risk in Young Finns Study. *British Journal of Nutrition*, 93: 923–931.
- Motowidlo, S.J., (2003). Job performance. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology: Vol. 12. Industrial and organizational psychology* (pp. 39–53). Hoboken, NJ: Wiley
- Murphy, K.R. (1989). Dimensions of job performance. In Dillon R, Pellingrino J (Eds.), *Testing: Applied and theoretical perspectives* (p. 218-247). New York: Praeger.

- Nunnally, J., (1978). *Psychometric Theory*, 2nd Edition, New York: MC Graw, Hill
- O'Hara, C.B., Harper, D.W., Kangas, M., Dubeau, J., Borsutzky, C. & Lemire, N., (1997). Taste, temperature, and presentation predict satisfaction with foodservices in a Canadian continuing-care hospital. *Journal of the American Dietetic Association*, 97, 401-405.
- Patnaude, K. & Graves, N., (2000). Perceptions of senior preferences regarding décor, service and menu in four assisted living facilities in Houston Texas. *Proceedings of Fifth Annual Graduate Education and Graduate Students Research Conference in Hospitality & Tourism*, 347-349. (January 6-8, 2000)
- Podsakoff, P.M. & MacKenzie, S.B., (1989) A second generation measure of organizational citizenship behaviour. *Working paper*, Indiana University.
- Porter, S.S., Claycomb, C. & Kraft F.B., (2008). Salesperson Wellness Lifestyle: A Measurement Perspective. *Journal of Personal Selling & Sales Management*, 28(1),53-66.
- Rousseau, D.M. & Mclean P.J. (1993). The Contracts of Individuals and Organizations. *Research on Organizational Behavior*, 15, 1-47.
- Sackett, P.R., (2002). The Structure of Counterproductive Work Behaviors: Dimensionality and Relationships with Facets of Job Performance. *International Journal of Selection and Assessment*, 10(1/2), 5-11.
- Schumacker, R. E., & Lomax, R. G. (2004). A beginner's guide to structural equation modeling, Second edition. Mahwah, NJ: Lawrence Erlbaum Associates.
- Scott, W.E., (1966). Activation theory and task design. *Organizational Behavior and Human Performance*, 1, 3-30.
- Seo, S. & Shanklin, C.W., (2006). Important food and service quality attributes of dining service in continuing care retirement communities. *Journal of Foodservice Business Research*, 8 (4), 69-86.

- Steel, T., (2012). Inside Google's Kitchens, *Gourmet Live* 03.07.12, <http://www.gourmet.com/food/gourmetlive/2012/030712/inside-googles-kitchens>, 02.12.2012)
- Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioural Research*, 25, 173-180.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics: 5th Edition*. Pearson.
- Theil, H., (1971). *Principles of Econometrics*. New York: John Wiley.
- Theil, H., (1978). *Introduction to Econometrics*, Prentice Hall, Englewood Cliffs, N.J.
- Ullman, J. B. (2001). Structural equation modeling. In B. G. Tabachnick & L. S. Fidell (2001). *Using Multivariate Statistics* (4th ed; pp 653- 771). Needham Heights, MA: Allyn & Bacon.
- Wanjek C., (2005). *Food at Work: Workplace Solutions for Malnutrition, Obesity and Chronic Diseases*. International Labour Organization, International Labour Office, Geneva
- Wherry, R.J. & Bartlett, C. J., (1982). The control of bias in ratings: A theory of ratings. *Personnel Psychology*, 35, 521-551.
- WHO (World Health Organization), (2001). Iron deficiency anaemia: Assessment, prevention and control. A guide for programme managers, Document WHO/NHD/01.3 (Geneva, WHO).
- WHO (World Health Organization), (2003a). *Battling iron deficiency anaemia*, <http://www.who.int/nut/ida.htm>, 15.12.2012.
- Williams, M. H., (2007). *Nutrition for Health, Fitness, & Sport*. McGraw-Hill Higher Education; 8th edition
- Wong, P.W., Enriquez, A., & Barrera, R. (2001). Nutritional support in critically ill patients with cancer. *Critical care clinics*, 17(3), 743-767.

- Wu, C.K., Goh, B.Y., Lin, K., & Chen P., (1999) Measuring service quality in restaurant operations: an application of the Dineserv instrument. *Proceedings of the conference on Graduate Education and Graduate Students Research*, 626-634. (January 4-6,1999)
- Wu, K., Hoover, L. & Williams, C., (2000). Measuring customer satisfaction level in a casual dining restaurant. *Proceedings of Fifth Annual Graduate Education and Graduate Students Research Conference in Hospitality & Tourism*, 269-272. (January 6-8, 2000)
- Yerkes, R.M. & Dodson, J.D., (1908) The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology*, 18, 459-48.

Table 1. Age and tenure

| | f | Mean | Median | S.D. | Var | Range |
|----------------|-----|--------|--------|-------|--------|-------|
| Age (years) | | | | | | |
| Employee | 229 | 21.428 | 21 | 2.298 | 5.281 | 19 |
| Supervisor | 37 | 37.108 | 36 | 6.891 | 47.48 | 26 |
| Tenure (years) | | | | | | |
| Employee | 229 | 4.170 | 4 | 1.868 | 3.493 | 6 |
| Supervisor | 37 | 10.135 | 9 | 5.245 | 27.509 | 19 |

Table 2. Education levels

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------|-------------------|---------|---------------|--------------------|
| Employees | Literate | 3 | 1.3 | 1.3 |
| | Primary School | 30 | 13.1 | 14.4 |
| | Elementary School | 117 | 51.1 | 65.5 |
| | High School | 54 | 23.6 | 89.1 |
| | Higher Education | 25 | 10.9 | 100.0 |
| | Total | 229 | 100.0 | 100.0 |
| Supervisors | High School | 9 | 24.3 | 24.3 |
| | Higher Education | 22 | 59.5 | 83.8 |
| | Masters | 6 | 16.2 | 100.0 |
| | Total | | 100.0 | 100.0 |

Table 3. Reliability and Validity Analysis Results of QUMPOS

| Total Variance Explained: % 68.873 | | Bartlett's Test of Sphericity: | Approx. Chi-Square: 1988.47 p: 0,000 | Kaiser-Meyer-Olkin Measure of Sampling Adequacy. : 0.890 | Factor Loadings | | |
|--|--|---------------------------------------|---|---|------------------------|-------|-------|
| Code | Items | | | | 1 | 2 | 3 |
| APL_1 | I like the scent of the meals | | | | 0.890 | | |
| APL_2 | I think the foods offered in the menu are delicious | | | | 0.827 | | |
| APL_3 | I think the meals are made of high quality materials | | | | 0.821 | | |
| APL_4 | Meals are prepared and cooked by the qualified kitchen staff. | | | | 0.823 | | |
| APL_5 | I like the appearance of the meals served. | | | | 0.826 | | |
| APL_6 | I know that material used in food preparation and cooking are fresh and stored at appropriate conditions | | | | 0.764 | | |
| APL_7 | Quite different types of meals are served at menus. | | | | 0.697 | | |
| HYJ_1 | I think the cleanliness food servings, spoons, forks etc. is satisfactory. | | | | | 0.848 | |
| HYJ_2 | I think the staffs involved in preparing, cooking and servicing meals are in compliance with the hygiene rules | | | | | 0.789 | |
| HYJ_3 | I think the kitchen is satisfactory in terms of hygiene rules. | | | | | 0.729 | |
| MNG_1 | Time period given for eating meals is enough. | | | | | | 0.77 |
| MNG_2 | I am satisfied with the dining hall service personnel. | | | | | | 0.69 |
| MNG_2 | Meals that needs to be eaten hot and cold are served at appropriate temperature | | | | | | 0.67 |
| MNG_4 | I think that setting of dining tables and dining hall is satisfactory. | | | | | | 0.75 |
| Cronbach's Alfa: | | | | | 0.931 | 0.807 | 0.751 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Total Cronbach's Alfa: 0.908

Table 4. Confirmatory Factor Analysis Results for QUMPOS

| Parameters | Abbreviation | Value | Excellent Fit Threshold Value | Satisfactory Fit Threshold Value |
|--|----------------------------|----------------|-------------------------------|----------------------------------|
| Goodness of Fit Index | GFI | 0.930 | $\geq 0.95^*$ | $0.90 \leq GFI \leq 0.95^*$ |
| Adjusted Goodness of Fit Index | AGFI | 0.888 | $\geq 0.90^*$ | $0.85 \leq AGFI \leq 0.90^*$ |
| Comparative Goodness of Fit Index | CFI | 0.970 | $\geq 0.97^{\circ}$ | $0.95 \leq CFI \leq 0.97^*$ |
| Fitness Indexes Non-normal Fit Index | NNFI | 0.958 | $\geq 0.90^*$ | $0.90 \leq NNFI \leq 1.00^*$ |
| Normalized Fit Index | NFI | 0.939 | $\geq 0.95^{II}$ | $0.90 \leq NFI \leq 0.95^*$ |
| Root Mean Square Error of Approximation | RMSEA | 0.063 | $\leq 0.05^*$ | $0.05 \leq RMSEA \leq 0.10^*$ |
| Minimum Discrepancy | CMIN/DF | 1.894 | $\leq 2^*$ | $2 \leq CMIN/DF \leq 5^*$ |
| χ^2 Test Sample Size | N | 229 | | |
| Degree of Freedom | DF | 66 | | |
| χ^2 | χ^2 | 124.992 | | |
| Probability Level | p | 0,000 | $\leq 0,05$ | |

(^o): Byrne (1994), (^{II}): Schumacker & Lomax (2004), (*): Hu & Bentler (1999), (*): Steiger (1990), (*): Marsh & Hocevar (1985), Ullman (2001), (*): Schermelleh, Moosbrugger & Müller (2003)

Table 5. Reliability and Validity Analysis Results of Job Performance Scale

| Total Variance Explained: % 92.521 | Bartlett's Test of Sphericity: | Approx. Chi-Square: 2026.25 p: 0.000 | Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.801 | Factor Loadings |
|---------------------------------------|--|---|--|-----------------|
| Code | Items | | | |
| JPRF_1 | This worker always completes the duties specified in his/her job description | | | 0.956 |
| JPRF_2 | This worker fulfills all responsibilities required by his/her job. | | | 0.964 |
| JPRF_3 | This worker often fails to perform essential duties (reverse) | | | 0.967 |
| JPRF_4 | This worker never neglects aspects of the job that he/she is obligated to perform. | | | 0.961 |
| JPRF_5 | This worker meets all the formal performance requirements of the job. | | | 0.960 |
| JPRF : | Abbreviation of the factor | | Cronbach's Alfa : | 0.980 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Table 6.Confirmatory Factor Analysis Results for Job Performance Scale

| Parameters | Abbreviation | Value | Excellent Fit Threshold Value | Satisfactory Fit Threshold Value |
|--|----------------|--------------|-------------------------------|----------------------------------|
| Goodness of Fit Index | GFI | 0,986 | $\geq 0.95^*$ | $0.90 \leq GFI \leq 0.95^*$ |
| Adjusted Goodness of Fit Index | AGFI | 0.898 | $\geq 0.90^*$ | $0.85 \leq AGFI \leq 0.90^*$ |
| Comparative Goodness of Fit Index | CFI | 0.997 | $\geq 0.97^{\text{e}}$ | $0.95 \leq CFI \leq 0.97^*$ |
| Fitness Indexes Non-normal Fit Index | NNFI | 0.985 | $\geq 0.90^*$ | $0.90 \leq NNFI \leq 1.00^*$ |
| Normalized Fit Index | NFI | 0.996 | $\geq 0.95^{\text{II}}$ | $0.90 \leq NFI \leq 0.95^*$ |
| Root Mean Square Error of Approximation | RMSEA | 0.115 | $\leq 0.05^{\text{v}}$ | $0.05 \leq RMSEA \leq 0.10^*$ |
| Minimum Discrepancy | CMIN/DF | 3.999 | $\leq 2^*$ | $2 \leq \text{CMIN/DF} \leq 5^*$ |
| Sample Size | N | 229 | | |
| Degree of Freedom | DF | 2 | | |
| χ^2 Test | χ^2 | 7.998 | | |
| Probability Level | p | 0.018 | $\leq 0,05$ | |

(^e): Byrne (1994), (^{II}): Schumacker & Lomax (2004), (*): Hu & Bentler (1999), (^v): Steiger (1990), (^{*}): Marsh & Hocevar (1985), Ullman (2001), (^{*}): Schermelleh, Moosbrugger & Müller (2003)

Table 7. Model Summary

| R | R ² | Adjusted R ² | Std. Error of the Estimate |
|--------------------|----------------|-------------------------|----------------------------|
| 0.715 ^a | 0.511 | 0.505 | 0.70384867 |

a. Predictors: (Constant), MANAGEMENT, HYGIENE, APPEAL

b. Dependent Variable: JOB PERFORMANCE

Table 8. ANOVA

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|-----|-------------|--------|--------------------|
| 1 Regression | 116.534 | 3 | 38.845 | 78.410 | 0.000 ^a |
| Residual | 111.466 | 225 | 0.495 | | |
| Total | 228.000 | 228 | | | |

a. Predictors: (Constant), MANAGEMENT, HYGIENE, APPEAL

b. Dependent Variable: JOB PERFORMANCE

Table 9. Coefficients

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|--------------|-----------------------------|------------|---------------------------|--------|-------|-------------------------|-------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 (Constant) | -1.48E-16 | 0.047 | | 0.000 | 1.000 | | |
| APPEAL | 0.560 | 0.047 | 0.560 | 12.006 | 0.000 | 1.000 | 1.000 |
| HYGIENE | 0.295 | 0.047 | 0.295 | 6.327 | 0.000 | 1.000 | 1.000 |
| MANAGEMENT | 0.333 | 0.047 | 0.333 | 7.145 | 0.000 | 1.000 | 1.000 |

a. Dependent Variable: JOB PERFORMANCE

