

ARTÍCULOS DE INVESTIGACIÓN

Meta-analytic of the relationship between employee job satisfaction and customer satisfaction

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Resumen

Un meta-análisis de la relación entre la satisfacción laboral de los empleados y la satisfacción de los clientes se llevó a cabo arrojando una correlación estadísticamente significativa para esta relación. Los resultados sugieren que el contexto de servicio es un moderador de la relación entre la satisfacción en el trabajo y la satisfacción de los clientes. Algunas implicaciones para el futuro se presentan investigación.

Abstract

A meta-analysis of the relationship between employee job satisfaction and customer satisfaction was conducted. This analysis produced statistically significant correlation for this relationship. Results suggest that the service context is a moderator of the employee job satisfaction - customer satisfaction relationship in a way that in personal services this correlation is stronger than in non-personal services. Some implications for future research are presented.

Introduction

Over the past decades, a growing body of literature (especially in the fields of applied psychology and management) indicates that managerial practices and a climate that focuses on service are crucial antecedents of positive customer perception of service quality (Borucki & Burke, 1999). High quality exchanges with sales employees often result in customer satisfaction regardless of problems with other aspects of service provision, whereas dissatisfying experiences with employees possibly can ruin other pleasant service encounters.

According to Magi (2003) and Schneider and Bowen (1995) sales employees or service providers often are the organization in customers' perception, and their attitudes may leave a lasting impression that affects satisfaction, repeat buying, and financial performance. Due to the relevance of these issues, researchers have dedicated huge effort on investigating the relationship between employee job satisfaction and customer satisfaction. Previous research includes findings of a positive, negative, and non-significant relationship, which result in doubt the issues of its strength and substantive significance (Payne & Webber, 2006; Silvestro & Cross, 2000; Brown & Mitchell, 1993). Through this research we expect assess the strength of the relationships linking employee job satisfaction to customer satisfaction in a meta-analysis of previous studies that correlate employee job satisfaction with customer satisfaction.

Meta-analysis is particularly useful when empirical findings produce diverging results. At first place, by estimating the mean values and range of effects for relationships, meta-analysis provides empirical generalizations across multiple studies (Hunter & Schmidt, 2004). In this way, it allows scholars to estimate true relationships between variables in study. Besides, meta-analysis can be used to detect moderating effects (Ostroff & Harrison, 1999).

This analysis will also point out how the relationship between employees and customer differs across service context, emphasizing conditions in which customer responses are more susceptible to employee satisfaction. These findings should provide a support for managers in the creation of human resource policy and managing the sales employees in a way corresponding with customer relationship objectives in different business settings (Kumar & Shah, 2004).

The purpose of this study is, through a meta-analytic procedure (1) test the hypothesized relationship between employee job satisfaction and customer satisfaction, and (2) explore the moderation effect of the service context in the employee satisfaction - customer satisfaction relationship. Through this study we will try to answer the following research questions: (1) It is possible to determine whether existing studies converge on a population parameter? (2) Is the service context a moderator of this relationship? (3) Which is the nature of this moderation?

Theoretical framework and hypotheses

Employee job satisfaction - customer satisfaction relationship

Employee job satisfaction has been characterized as "a pleasurable or positive emotional state resulting from the

appraisal of one's job or job experiences" (Locke, 1976, p. 1300). In other words, employee job satisfaction is an attitude that results from an evaluative process, where some comparison standard about the work environment is compared with the actually perceived work environment (Homburg & Stock, 2004, p. 146). Working on this concept, Hulin and Judge (2003) distinguished that job satisfaction comprises multidimensional psychological responses to one's job, and that such responses have cognitive (evaluative), affective (or emotional), and behavioral components.

Most researchers accept that job satisfaction is a universal concept that is comprised of, or indicated by, various facets. According to Smith, Kendall, and Hulin (1969) five facets of job satisfaction are considered: pay, promotions, coworkers, supervision, and the work itself. Locke (1976) adds other facets such as: recognition, working conditions, and company and management. For the purpose of this work, we will consider the following facets: supervision, characteristics of the work, and working conditions. Previous research has correlates job satisfaction with customer-perceived service quality or customer satisfaction (Chi & Gursoy, 2009; Homburg & Stock, 2004).

Customer-perceived service quality has been described theoretically as customers' perceptions of the difference between prior expectations and delivered service on different aspects of the service experience (Gronroos, 1982; Parasuraman, Zeithaml, & Berry, 1988). By the other hand, customer satisfaction denotes a satisfaction response that involves a valuation that a product or service provides a "pleasurable level of consumption-related fulfillment" (Oliver, 1997). According to previous research, customer satisfaction represents an affective state that is the emotional response to an experience or a sequence of experiences with a supplier. It is produced by the customer's assessment of the degree to which a supplier's performance is perceived to have met or exceeded some comparison standard. (Cadotte, Woodruff, & Jenkins, 1987; Spreng, MacKenzie, & Olshavsky, 1996)

Customer-perceived service quality and customer satisfaction represent different but intimately related constructs, where customer-perceived service quality symbolize a cognitive representation of service delivered and customer satisfaction representing the resulting affective response (Brady, Knight, Cronin, Hult, & Keillor, 2005). The idea that employee satisfaction positively affects service quality and customer satisfaction is based on some conceptual models, among others: the service-profit chain, and service climate.

The service-profit chain framework considers that satisfied employees are more productive and provide better service quality and value than less satisfied employees, leading to higher customer satisfaction (Schlesinger & Zornitsky, 1991; Ulrich, 1992). The service climate framework holds that employee perceptions of management support and facilitation of service performance leads to favorable customer reactions. According to Towler, Lezotte, and Burke (2011) service climate is defined as shared employee perceptions of those practices, procedures, and behaviors that are expected, supported, and rewarded with regard to customer service and customer service quality. This point of view is similar to the service-profit chain,

but is clearer about how specific employee perceptions of managerial policies and the organizational environment promote positive customer responses.

Consistent with the service-profit chain and service climate perspectives, the first hypothesis is as follow:

H1: Employee satisfaction is positively correlated with customer satisfaction.

The employee satisfaction - customer satisfaction relationship across services contexts.

The characteristic of interactions between employees and customers varies across service contexts. Lovelock (1983) offers a useful classification of services; whether a service is performed on a person (e.g. medical services, educational services) or on possessions (e.g. computer repair) constitutes a major distinction. Personnel services implicate closely interactions between employees and customers, in this case the employee and the customer are involve in close interpersonal contact in each encounter, which provides opportunity for affective cues to be communicated. In contrast, when service is performed on possessions, personal contact between employee and customer is more limited in scope and duration. Under these circumstances, employees may be able to hide true emotions that are counter-normative for the situation through emotional labor (Hochschild, 1983).

By the other hand, in personal services, customers can observe the processes and outcomes of service delivery, while in services performed on possessions the complete processes frequently take place in a manner that is invisible to the customer, whereas customer interactions occur in a front office, separate from the place where the service is performed. Based on the previous discussion, we propose the following hypothesis:

H2: The relationship between employee satisfaction and customer satisfaction is stronger in personal services than in non-personal services.

The proposed theoretical model is presented in figure 1 below these lines:

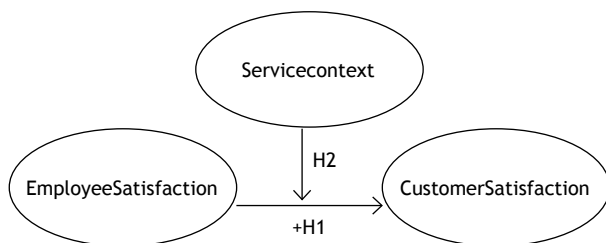


Figure 1: Proposed theoretical model.

Method

Database Development and Inclusion Criteria

To develop the database we considered journals that typically publish studies of employee job satisfaction and customer satisfaction, and focus on general management issues. We acquired published empirical studies of service climate and service-profit chain through a variety of sources. First, we searched the ABI/INFORM, EBSCO, JSTOR, and Science Direct databases for studies on this topic published between 1995 and 2010, using multiple keywords to identify relevant articles. Second, we manually searched abstracts from the set of journals. Finally, we examined the references from the articles identified in these previous steps to locate additional studies that the other searches were unable to capture.

Studies were included in the meta-analysis if they met the following criteria: (1) We included in the meta-analysis only studies that reported the r-family of effects, such as correlation coefficients (Rosenthal, 1991). Several studies could not be included because their results only included multivariate models. (2) We included only the articles that analyzed the employee satisfaction - customer satisfaction relationship at the organizational level of analysis so that results from research with incomparable goals were not aggregated (Hunter & Schmidt, 2004). To address the problem of conceptual replication, we ascertained that studies were independent and had no overlapping samples. If multiple studies were based on the same dataset with the same variables, we included only the effect size of one study. If datasets were the same but variables differed, we maintained the effect sizes separately. Total cumulative sample size across all studies amounted to 1,483 firms. Each of the studies used in this meta-analysis was read and coded by the author for interdependence, sample size, reliabilities of independent and dependent variables, level of analysis, and effect sizes. Sample sizes were directly taken from the method and results sections of the articles included. Classification of the study variables was based on the descriptions of the measures. For most of the variables of interest, we followed widely accepted definitions described in past research.

The variables used in this study were the following:

Employee job satisfaction: measured as feeling or affective responses toward components of the work situation, satisfaction with the job, satisfaction with physical environment and management style, or satisfaction with customer relationship day to day activities, as independent variable. These categories of the employee job satisfaction are related to the facets that we mentioned before: supervision, characteristics of the work, and working conditions

Customer satisfaction: measured as satisfaction with the company's service, products, and the company, satisfaction with the service relative to the customer expectations, and customer perception of service quality, as dependent variable.

Service Context: categorical variable used for analyze the moderation effect. This variable could take the following values: personal, or on possessions (non-personal).

In addition to correlation coefficients, information on the moderator was coded for each study; studies were not forced into moderator categories. The moderator used was service context, and its categories: personal or on possessions.

Data analysis procedure

Raju, Burke, Normand, and Langlois' (1991) meta-analytic procedure (RBNL) was used to conduct tests of the hypotheses. This procedure uses sample statistics including available information on sample-based artifacts (e.g., dependent variable reliabilities) to estimate individually corrected effects with standard errors for the individually corrected effects. Subsequently, this meta-analytic procedure computes sample-size weighted estimates of the mean and variance of corrected effects. In contrast, most other meta-analytic procedures rely on distributions of hypothetical artifact values (as discussed in more detail in (Raju, Pappas, & Williams, 1989)) for estimating the mean and variance of corrected effects. Noteworthy, the RBNL meta-analytic procedure permits the construction of a confidence interval around the estimated mean corrected effect.

For using the RBNL meta-analytic procedure, all study effect sizes were first converted to Pearson correlations because this procedure is easily applied to correlational data corrected for unreliability. Consequently, all results are reported in terms of correlations. Also, these meta-analyses only involved corrections for sampling error and, where available, criterion unreliability. The average criterion reliability from available studies was substituted for missing criterion reliability values.

Results

Table 1 shows the meta-analytic results for the correlation between employee job satisfaction (independent variable) and the dependent variable customer satisfaction. Table 2 presents meta-analytic results for the influence of the service context as moderator of the relationship between employee job satisfaction and customer satisfaction. We used a 95% confidence interval to determine the significance of the employee job satisfaction - customer satisfaction relationship, considering as statistically significant correlation if the interval does not include zero.

Hypothesis 1: Employee job satisfaction - Customer satisfaction relationship

For this hypothesis, it was expected a positive and significant correlation between employee job satisfaction and customer satisfaction. There was support for this hypothesis, which means that 95% confidence interval for the mean correlation of all studies did not include zero. For this relationship, through this meta-analytic procedure it was obtained a positive and significant mean correlation ($r = 0,287$), which indicates that higher employee satisfaction will lead to more satisfied customers.

Using the Rosenthal's formula (1979, p. 639) to calculate the number of studies averaging null results that must be in the file drawers before the overall probability of a Type I error brought to any desired level of significance (in this case $p=0,05$), we obtained a Fail-Safe N of 171 studies, in other words it would be necessary to include 171 unknown or unpublished studies of the same relationship with a true $r_c=0$

to obtain a 95% confidence interval enough to include zero. It is important to mention that in this meta-analysis the obtained value of Fail-Safe N is enough bigger than the number of studies that we used, which is why it can be considered that we can have confidence in the meta-analytic conclusions reached on the basis of the published evidence (Leon & Olkin, 1991). Additionally, the 90% lower credibility value of the mean of rho is 0,108; which in this case is bigger than 0 indicating that the credibility interval does not include zero which is a support for the generalization of this results, or in other words this value proves the robustness of the obtained results (Ashworth, Osburn, Callender, & Boyle, 1992).

Table 1: Results for test Hypothesis 1

| k | N | M_r | M_p | SE_p | 95% confidence Interval | | Fail-Safe N | 90% Lower Credibility Value |
|---|------|-------|-------|--------|-------------------------|-------|-------------|-----------------------------|
| | | | | | L | U | | |
| 9 | 1483 | 0,287 | 0,365 | 0,073 | 0,222 | 0,507 | 171 | 0,108 |

Hypothesis 2: Moderation effect of the service context

This hypothesis predicted that the relationship between employee satisfaction and customer satisfaction will be stronger in personal services than in non-personal services (on possessions). There was support for this hypothesis, which means that 95% confidence interval for the mean correlation of divided samples did not include zero, and did not overlap each other. For test the moderation effect, we divided the studies according the service context, which results in two sub-samples one for personal services and the other for services on possessions. We computed the mean correlation and the 95% confidence interval for each sub-sample and we obtained the following: (1) the mean correlation of the employee job satisfaction - customer satisfaction relationship in personal services was 0,597 and the random standard error of the mean of rho was 0,07. (2) The mean correlation of the employee job satisfaction - customer satisfaction relationship in non-personal (on possessions) services was 0,159 and the random standard error of the mean of rho was 0,017, which indicates that in personal services the level of employee job satisfaction has a higher impact on the customer satisfaction when comparing with non-personal services.

Table 2: Results for test Moderation Effect of the service context

| k | Total N | Service Context | M_r | M_p | SE_p | 95% confidence interval for M_r | |
|---|---------|-----------------|-------|-------|--------|-----------------------------------|-------|
| | | | | | | L | U |
| 5 | 732 | Personal | 0,439 | 0,597 | 0,07 | 0,461 | 0,734 |
| 4 | 751 | OnPossessions | 0,140 | 0,159 | 0,017 | 0,125 | 0,193 |

Conclusions

This meta-analysis gathered and summarized the outputs of empirical research on the relationship between employee job satisfaction and customer satisfaction in order to provide information for theory development and future research in this area. Results indicate that theory accumulation and theory building in this field is possible and that more elaborate research toward developing reliable theories should be conducted.

The meta-analysis indicates that significant positive effects support the hypothesis of the relationship between employee job satisfaction and customer satisfaction. The analysis also shows significant variability in the strength of this relationship over service context, which support hypothesis 2.

The results suggest that managers would be advised to take actions that are likely to increase from the job satisfaction of customer contact personnel. Doing so appears likely to increase from customer satisfaction and perceptions of service quality. Many types of managerial procedures can potentially enhance employee satisfaction and workforce morale (Huselid, 1995; Pfeffer, 1998). Managerial policies and actions that clearly explain role expectations and provide material and psychological support for employees are of primary importance. Promoting an organizational environment in which service quality and customer satisfaction are primary goals, and in which employee efforts to provide solutions for customers are supported, recognized, and rewarded is important (Schneider & Bowen, 1995).

Limitations and implications for future research

The number of studies included in the meta-analysis is reduced, which could diminish the power of the results even when they are representative studies in the literature and have been cited by many authors.

We only considered two types of service context: personal or on possessions, but other typologies exist. Results could be significantly different also for other types of organizations, which open a window for a future research.

The present study revealed that the relationship between employee job satisfaction and customer satisfaction is not equal in personal and on possessions services, it could be necessary to develop specific theory that takes into consideration the differences between the service contexts.

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