

Being Close or Being Happy? The Relative Impact of Work Relationship and Job Satisfaction on Service Quality

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Abstract

It is generally recognized that, to ensure high-quality services, service industries, especially the labour intensive ones, need to have satisfied customer-contact employees. However, an under-researched issue relating to the management of service operations concerns employee relationships. Close work relationships, in particular, those between frontline staff and their supervisors, are likely to positively influence employee attitudes during service delivery. This paper examines the relative impacts of leader-member exchange (LMX) and job satisfaction on service performance in labour-intensive, high-contact services. First, the relationships among empowerment, LMX, job satisfaction and service quality are modelled. Next, the moderating effects of employee-customer contact time on these relations are examined. The results show that, contrary to traditional wisdom, job satisfaction does not impact service quality, once LMX is included in the model. This suggests that, work relationships between employees and their supervisors impact service quality more directly than job satisfaction does. Leader-member relationships get enhanced and remain essentially stable under both high and low service contact times in empowered environments.

Keywords: empowerment; leader-member exchange; job satisfaction; service quality; empirical study

1. Introduction

It is generally recognised that customer-contact employees have a crucial role to play in service firms. This is particularly true when the firm is targeting services of superior quality. Customer-contact employees are the main, even the only, individuals who are specifically responsible for dealing with service operations that directly and significantly shape customer judgements on the services offered (e.g., Hartline & Ferrell, 1996; Roth & Menor, 2003). This is especially the case in labour-intensive, high-contact service firms where the frontline service employees and the customers interact directly and closely for a certain time period (Chase, 1981; Yee et al., 2008). Examples are salons, optical shops and fine-dining restaurants.

The conventional approach in operations management (OM) research advocates scientific approaches, like service standardization, process standardization and performance control, to manage service delivery systems (e.g., Chase & Apte, 2007; Menezes et al., 2015). However, many OM scholars agree that mere scientific approaches may not be that effective in service operations exhibiting a high degree of variation during direct employee-customer interaction (e.g., Tucker, 2007). Instead, they favour behavioural approaches (Boudreau et al., 2003; Chase & Apte, 2007; Yang et al., 2015). In this research, we explore employee-related factors influencing the efforts of customer-contact employees engaged in high labour intensity and high customer contact service operations. Since employee attributes are usually the central variables in studies on organizational behaviour (OB) and psychology, we take an inter-disciplinary approach by integrating concepts drawn from these two fields and OM.

Job satisfaction concerns a pleasurable or positive emotional state arising from employee's job or job experiences (Locke, 1976, p. 1300). The well-known concept of service-profit chain proposed by Heskett et al. (1994) suggests that, in a service enterprise, job satisfaction is the most fundamental employee-related work attribute driving the value of

services as perceived by the customers and, hence, organisational profits. Extensive empirical work inspired by this suggestion has demonstrated a positive linkage between job satisfaction and quality performance in service firms (e.g., Loveman, 1998; Silvestro & Cross, 2000; Yee et al., 2008). Following this line of research, we consider that ‘being happy’ (i.e., being satisfied) is of particular importance to service employees when offering high-quality services.

A recently growing stream of research in OB and psychology has investigated several relational constructs leading to employee attitude and behaviour (e.g., Sherony & Green, 2002; Love & Forret, 2008; Halbesleben & Wheeler, 2011). A construct that has received increasing research attention is leader-member exchange (LMX). LMX concerns the quality of the relationship between the leader and the member (Graen & Uhl-Bien, 1995). To our knowledge, the role of direct work relationships between the leaders (the supervisors) and the followers (the employees) has generally been overlooked in OM research. We view LMX as an employee-related construct that has a remarkable influence on how well employees perform tasks involving direct customer contact. In the context of services, ‘being close’ in the work relationship with the supervisor positively affects the performance of customer-contact employees during service delivery.

Empowerment is often identified as a critical prerequisite for assuring that customer-contact employees deliver excellent services (e.g., Hartline & Ferrell, 1996; Chebat & Kollias, 2000). It aims to assure the flexibility employees need while making decisions related to their job-related tasks (Hartline & Ferrell, 1996; Chebat & Kollias, 2000). Such flexibility is particularly important to them since frontline service employees are frequently forced to customize services by themselves in response to individual customers’ needs. In line with previous research, we regard empowerment as a prerequisite for enhancing employee-related factors such as job satisfaction and LMX in a service context.

In this research we firstly investigate the relationships among empowerment, LMX, job satisfaction and service quality. In developing these relationships, we adopt social exchange theory (SET) that has been well recognized as a powerful conceptual paradigm facilitating the understanding of work relationships, such as employer-employee relationship (e.g., Shore et al., 2004) and LMX (e.g., Liden et al., 1997). Specifically, it delineates the norm of reciprocity underlying the exchange of benefits and obligations between the parties involved in work relationships (e.g., Gouldner, 1960; Blau, 1964). Such a kind of exchange between benefits and obligations arises commonly in the relationship between supervisors and their service employees in a service setting. Next, we examine how employee-customer contact time moderates such associations. Our empirical investigation focuses on service industries characterized by high labour intensity and high customer contact. Our data were collected from three sources – managers, customer-contact employees and customers – in a selection of service firms operating in Hong Kong. We analysed the data so collected by applying structural equation modelling. This paper seeks to make a contribution to service operations literature and practice by offering strategic guidelines with a focus on enhancing the quality of services provided by frontline service employees in highly labour-intensive and high-contact service firms.

2. Theoretical background and hypothesis development

2.1 Theoretical background

The delivery of high-quality or superior quality services in highly labour-intensive and high customer-contact service sectors poses a great challenge with respect to two key features arising from different customer preferences: uncertainty and complexity. Due to the inherent nature of high customer contact, boundary-spanning service employees encounter a high

degree of uncertainty in dealing with service delivery. The needs and expectations from services can vary dramatically across customers. Such variability is generally regarded as a defining characteristic of a service setting (Bowen & Schneider, 1988; Fitzsimmons & Fitzsimmons, 2001). Customer variability induces uncertainty among customer-contact employees as they implement service operations. For example, in a hair salon, there is often uncertainty about understanding the exact needs of individual customers with regard to the preferred hairstyles and identifying the best ways of fulfilling individual customer desires. Moreover, the fact that a customer usually changes his/her requests in the course of service delivery leads to even greater uncertainty.

Boundary-spanning employees face high levels of complexity while delivering high-contact services. High customer-contact service operations are characterised typically by heterogeneous and unpredictable customer requirements that are often better addressed by the employees' extra-role work behaviour, rather than simply following operating routine practices formally written down in their job descriptions (Gilson et al., 2005; Raub & Liao, 2012). This means that each customer-contact employee has to exhibit initiative while taking on the tasks required for his/her extra-role work behaviour. Such extra-role tasks are usually complex because the associated procedures may not have been written down formally – possibly because they are not regular and, hence could not be standardized.

To address the challenges of uncertainty and complexity faced by customer-contact employees, we explore employee-related factors backing their efforts towards offering highly labour-intensive and high-contact service operations. Specifically, we propose that LMX and job satisfaction are particularly effective factors determining the pursuit of excellent service quality by boundary-spanning service employees. LMX and job satisfaction help meet the challenges associated with attaining high-quality services of highly labour-intensive, high-

contact nature. In addition, we consider empowerment as a salient factor leading to LMX and job satisfaction.

The relation postulated in this study can be best understood by SET, which helps explain work relationships in organizations. Reciprocal exchange is widely recognized as one form of social exchange (Emerson, 1976). It is generally concerned with dyadic exchange relationships through which each party reciprocates another party based on what one receives (Blau, 1964; Emerson, 1976). The nature of reciprocal exchange in work relationships leads to enhanced work performance and organizational performance (e.g., Blau, 1964; Flynn, 2003). Specifically, in a service setting, reciprocal exchanges towards frontline employees act as a platform for acquiring benefits, like trust and favourable work conditions, from their supervisors. On the other hand, to supervisors, reciprocal exchange offers a means where they receive favourable return from their employees, e.g., additional work effort, strong willingness to work and taking up extra-role task — enhance the performance of service delivery. Such favourable return is rendered because of their employees' felt obligation to reciprocate on the basis of the benefits they obtain from their supervisors.

2.2 Development of hypotheses

2.2.1 Hypotheses on main factors

Empowerment, leader-member exchange and service quality

We expect empowerment to influence LMX, which in turn affects service quality. Empowerment is defined as the situation in which the supervisor offers employees the discretion to make daily decisions as needed while performing job-related activities (Conger & Kanungo, 1988). Scholars in marketing (e.g., Hartline & Ferrell, 1996) and service management (e.g., Chebat & Kollias, 2000) have consistently considered that, in service organizations, empowerment of boundary-spanning employees is particularly effective in

creating conditions for heightened employee motivation. The rationale is that, in the service context, frontline employees require a high degree of flexibility in making on-the-spot decisions to satisfy customers (Hartline & Ferrell, 1996; Chebat & Kollias, 2000; Hartline et al., 2000). Empirical studies have shown that empowerment has positive effects on service employees' work-related attributes, such as autonomy, self-efficacy and job satisfaction (Hartline & Ferrell, 1996; Chebat & Kollias, 2000).

LMX is a dyadic relationship developed over time from instrumentally transactional exchanges to more social exchanges among the leader and the follower (e.g., Graen & Uhl-Bien, 1995; Liden & Maslyn, 1998). As such, a leader forms a unique relationship with each of his/her individual subordinates (Gerstner & Day, 1997; Janssen & Van Yperen, 2004). Accordingly, the quality of the leader-member relationships ranges from low to high. Low-quality exchange relationships typically involve role-defined interactions that are predominantly contractual obligations based on respective employment agreements (Janssen & Van Yperen, 2004). By contrast, high-quality exchange relationships are governed by mutual influence and dependence; therefore, they are distinguished by high degrees of trust, support, loyalty, respect and mutual obligations affecting how the leader and the follower feel about each other (Liden & Maslyn, 1998). Research has demonstrated that high-quality LMX is predictive of employee job performance and attitudes, e.g., in-role job performance and job satisfaction (Basu & Green, 1997; Janssen & Van Yperen, 2004).

To our knowledge, no previous researcher has examined the association between empowerment, LMX and service quality. The norm of reciprocity in SET implies that, when a person is given some kind of social benefit which is inequitably more than what he/she expects, this person will generate a sense of gratitude and felt obligations as reciprocation to the benefactor (Gouldner, 1960). Grounded in the context of SET and referring to the highly labour-intensive and high-contact service setting, when supervisors empower their service

employees with decision latitudes and flexibility with respect to job-related tasks, the employees will perceive a work environment favourable to initiating, controlling and carrying out their tasks effectively without undue constraints. In return, employees reciprocate by working harder and undertaking the extra tasks needed for performance improvement. They will willingly implement the unsolicited or even the untried tasks required for their extra-role behaviours, i.e., those going beyond contractual expectations (Wayne et al., 1997). In such a situation, the exchange relationship among supervisors (leaders) and their employees (followers) is more likely to progress to a higher level. A higher level of exchange relationship means that supervisors and employees can count on each other better through an exchange process dominated by mutual trust, respect, liking and obligation (Liden & Maslyn, 1998). Moreover, in accordance with the norm of reciprocity, employees perceiving high levels of LMX tend to make extra efforts to offer high-quality services as a return to their supervisor on the basis of what they are benefited. In time, all this leads to a higher level of quality in services. Thus, we hypothesize as follows.

Hypothesis 1 (H1): Empowerment has a positive effect on leader-member exchange.

Hypothesis 2 (H2): Leader-member exchange has a positive effect on service quality.

Empowerment, job satisfaction and service quality

Empowerment is also considered to lead to job satisfaction that, in turn, impacts service quality. As noted earlier, the degree of job satisfaction felt by an employee is closely related to his/her emotional state in the work context. Job satisfaction is promoted through favourable perceptions of job characteristics in the work setting (e.g., Russell et al., 2004; Rich et al., 2010). Favourable evaluations of whatever the organization is providing to its

employees generate positive feelings arising from high job satisfaction. Employees with positive feelings are likely to be more willing to engage in behaviours dictated primarily by their job-related tasks, thus contributing to organizational effectiveness (Eagly & Chaiken, 1993; Rich et al., 2010). Empirical studies related to OB, OM and social psychology have consistently confirmed that job satisfaction has a positive linkage with work performance (e.g., Ostroff, 1992; Silvestro & Cross, 2000; Janssen, 2004).

Previous research findings show that empowerment is correlated significantly and positively with job satisfaction (Chebat & Kollias, 2000). As noted earlier, in a service setting, empowerment facilitates an environment exhibiting flexibility, adaptability and discretion to motivate employees to perform tasks for service delivery. In turn, empowered employees perceive and appraise the job context favourably; this leads to higher job satisfaction on the part of the employees. According to SET, when an employer ensures favourable working conditions to employees by empowering them to perform better in their jobs, the latter are more satisfied with their jobs. In return, satisfied employees are likely to put in additional efforts to fulfil customers' diverse requests, so service quality gets enhanced. Hence, we make the following hypotheses:

Hypothesis 3 (H3): Empowerment has a positive effect on job satisfaction.

Hypothesis 4 (H4): Job satisfaction has a positive effect on service quality.

Leader-member exchange and job satisfaction

We contend that LMX has an influence on job satisfaction. Some researchers in social psychology have demonstrated that LMX positively affects job satisfaction (Gerstner & Day, 1997; Erdogan & Enders, 2007). Under a high-quality exchange relationship, leaders provide intangible benefits, including trust-based relationships with employees (Bauer & Green, 1996) and fair treatment (Scandura, 1999), to their employees. In a highly labour-intensive service

setting, a supervisor endowed with a high-quality exchange relationship with his/her service employee is more likely to provide employees with intangible benefits. In such a setting, the latter will tend to generate a favourable perception of the work context on the basis of the benefits accorded by, which in turn leads to improved job satisfaction.

In the context of SET, when the exchange relationship between the supervisor and his/her employee is at a high level of quality embedded with intangible benefits, the employee will interpret it as a signal that his/her supervisor is going to grant favourable treatment to him/her. Following the norm of reciprocity in social exchanges (Gouldner, 1960), the employee will be motivated to return the favour by developing a stronger emotional state towards their work, i.e., job satisfaction. Therefore, we posit the following hypothesis.

Hypothesis 5 (H5): Leader-member exchange has a positive effect on job satisfaction.

2.2.2 Hypotheses on moderating factors

Contacts between service employees and customers have long been a core attribute of services (e.g., Bell, 1981; Chase, 1981; Bowen & Bowen, 1986; Bowen, 1990). A number of classification models have proposed with respect to contacts associated with services. For example, Chase's (1981) contact model categorizes service firms into those engaged in pure services, mixed services and quasi-manufacturing. Bowen (1990) refers to the level of employee-customer contact in services to distinguish between high-contact and moderate-contact services. Most classification models of services share the belief that customer contact is a defining feature of services. Yet, with regard to the attribute of contact, they explicitly state that not all services are created equal. Thus, it becomes important to examine how the degree of contact between service employees and customers affects the robustness of our research model. Contact time, referred as the time spent in direct contact between the

frontline service employee and the customer within a single transaction, has been recommended by service scholars to operationalize contact (Kellogg & Chase, 1995; Soteriou & Chase, 1998; Yee et al., 2010). In line with this suggestion, we argue that, for the purpose of gaining more detailed understanding about service operations involving simultaneous participation of employees and customers, their direct contact time may interact individually with LMX and job satisfaction which in turn affects customers' perceptions of service quality.

We expect that employee-customer contact time moderates the relation of LMX to service quality. In a service environment characterised by a high level of labour intensity, frontline employees are the most important. As a result, high-LMX employees would be more able to exert a stronger influence on the quality level of services. The longer the contact time, the more is the time the customer has for clearly expressing his/her needs and expectations and the employee has for acquiring certain understanding about the customer's exact requirements. In accordance with the norm of reciprocity, a high-LMX employee, who acquires support and trust from his/her supervisor, is likely to be more willing and committed to putting in extra effort to satisfy the customer's requests, thus yielding higher-quality services perceived by the customer. Accordingly, we postulate:

Hypothesis 6 (H6): Contact time moderates the association between leader-member exchange and service quality; the longer the contact time, the stronger the association.

We also suggest that employee-customer contact time moderates the association between job satisfaction and service quality. A satisfied employee with a long contact time with the customer is likely to transfer his/her positive emotion to the customer. The customer is therefore more likely to be positively infected by the satisfied employee's positive emotion and use his/her changed emotion while evaluating the service encounter (Pugh, 2001; Barger

& Grandey, 2006). The positive mood in the customer leads to a favourable appraisal, yielding in turn, a higher level of quality in services. Empirical organizational and psychology studies have shown that boundary-spanning employees who are satisfied with their jobs display positive emotional expressions during service encounters; resulting in higher ratings of service quality from customers (Pugh, 2001; Homburg & Stock, 2004). The longer the contact time between the satisfied service employee and the customer, the more effective is the transfer of positive emotion from the satisfied employee to the customer, the more positive are the results of the appraisal, that the customer evaluates the services acquired. Thus, we posit:

Hypothesis 7 (H7): Contact time moderates the association between job satisfaction and service quality; the longer the contact time, the stronger the association.

3. Methodology

3.1 Sample

To test the above hypotheses, we conducted a large-scale, multiple-respondent survey in service shops spread across major shopping malls of Hong Kong. We controlled firm size by selecting small-sized shops that have three to eight service employees. In view of increasing the generalizability of the present study, the survey covered a variety of service shops but excluded shops with low degrees of customer contact, e.g., convenient stores; see Table 1.

3.2 Data collection procedures

We started with a pilot study in seven service companies. The purpose was two-fold. The first was to investigate the relevance of each indicator to its corresponding construct while the

other was to assure that the items in the questionnaires were readable and understandable to potential respondents.

With a view to minimizing biases that could arise from the use of data drawn from a single source, we adopted the multiple informant approach. Specifically, we collected data from three sources in each sampled service shop - from the shop-in-charge person, the frontline service employees and the customers. Accordingly, we developed three separate survey packages respectively consisting of the “shop-in-charge” person questionnaire, three “customer-contact employee” questionnaires and five “customer” questionnaires for each service company sampled. As far as the degree of empowerment is concerned, the persons in charge of the shops were considered the most appropriate informants. The shop-in-charge persons or shop managers were responsible for facilitating the atmosphere of the shops where their employees work. Because they had direct interactions with their individual supervisors and the job context offered by their corresponding companies, customer-contact employees were asked to respond to questions on the quality of LMX and job satisfaction. Customers are the most knowledgeable informants on contact time and their perception on service quality as they had direct experience with the services and conducted evaluative judgements on the services.

We deployed a project team, including one of the present authors as the project leader, to solicit the participation of companies in this survey. In the first phase of the survey, the team administrated the questionnaires to managers as well as service employees. The questionnaire-administration process was conducted through on-site visits. We visited each shop to explicitly explain in person the survey requirements to potential respondents. We guaranteed confidentiality and anonymity to each potential respondent. We also promised to reward each respondent with a cash coupon of HK\$50 (about US\$6.5). Upon collection of filled questionnaires, we contacted each respondent in person and rewarded him/her with the

cash coupon promised. In order to facilitate a high response rate, we further approached those participants who had promised to return the questionnaire but had not returned it by the due date.

In the second phase of the survey, we randomly selected five customers from each shop sampled in the previous phase to acquire data concerning contact time and service quality. We approached individual customers to complete the questionnaire after the service transaction had been completed (i.e., after purchase). By using assigned identification codes, we matched the responses with our data on the views of the manager, the employees and the customers.

Our research team visited 350 service firms in total. Initially, 263 shops agreed to be involved in our survey. However, 30 dropped out at a later stage. In the case of five firms we were not able to re-confirm the job responsibility of the person who had filled in “shop-in-charge” questionnaire. In the responses from another three firms, certain parts of the questionnaires were left blank. The eight questionnaires were removed from our finalized database. In the end, we had 225 complete sets of data from 2,025 individual participants, including 225 shop managers, 675 customer-contact employees and 1,125 customers. The distribution across all the sampled firms is displayed in Table 1.

(----- Table 1 about here -----)

3.3 Instrument development

The measures to be employed in our study were drawn mainly from well-developed instruments in OM, OB and marketing. All items were assessed based on a seven-point Likert-type scale ranging from 1 (*totally disagree*) to 7 (*totally agree*). The questionnaires are shown in the Appendix.

Empowerment: We assessed the degree of empowerment using the eight items in the LBDQ XII developed by Cook et al. (1981) and used in prior research (e.g., Hartline & Ferrell, 1996; Chebat & Kollias, 2000; Hartline et al., 2000).

Quality of leader-member exchange association: We measured the quality of LMX using six items out of the seven items based on member versions of the scale developed and used in previous research (e.g., Wayne et al., 1997; Janssen & Van Yperen, 2004). The item, “defend and justify the decision of my supervisor”, was deleted because the respondents in the pilot study had commented that this item was not appropriate in small work contexts characterized by simple organizational structures such as in the small service shops sampled in this study. The selected items and data have been adopted by Yee et al. (2014).

Job satisfaction: We assessed satisfaction on the job using items from the Job Descriptive Index (JDI) (Smith et al., 1969) that has been widely adopted in studies of OB (e.g., Van Preen & Janssen, 2002) and organizational psychology (e.g., Kinicki et al., 2002). The JDI covers five dimensions: satisfaction with pay, work, promotion, supervisor and co-workers.

Service quality: In view of capturing customers’ overall perception on service quality, we followed past studies (e.g., De Jong et al., 2005; Yee et al., 2013) to employ a single SERVQUAL item for each of the five theorized dimensions, instead of using all the 22 items in the SERVQUAL scale developed by Parasuraman et al. (1988). Typically, the chosen items reflected service employee-related facets of service quality. Such chosen items and data have been adopted by Yee et al. (2013).

Contact time: Contact time refers to the time that the boundary-spanning employee and the customer remain in direct interaction with each other within one service encounter.

We assessed contact time on the basis of the estimated average time spent on acquiring services within a transaction.

3.4 Data aggregation

Since the unit of analysis in our study was the shop, we aggregated all individual responses from frontline employees and customers across the shops surveyed. As for employee constructs of LMX and job satisfaction and the customer construct of service quality, we statistically justified aggregation to higher levels of analysis by examining within-shop interrater agreement (r_{wg}) and intra-class correlation coefficients, i.e., ICC(1) and ICC(2). Statistic testing estimates for interrater agreement (r_{wg}) were 0.920 for LMX and 0.975 for service quality. All values were well above the cut-off point of 0.7 (James et al., 1993). Across all employee and customer variables, the ICC(1) was 0.334 for service quality and 0.407 for job satisfaction. Note that these values far exceed the commonly suggested lowest acceptable value of 0.12 (James, 1982). Across all the employee and customer constructs in our study, the ICC(2) values were 0.607 for LMX and 0.715 for service quality. Note that the values exceed the cut-off criterion of 0.6 recommended by Glick (1985).

3.5 Common method variance

Although we had collected data from three different sources (i.e., managers, employees and customers), common method variance might still be a concern with respect to one linkage postulated in our theoretical model: the link between employee perception of LMX and employee job satisfaction. To rule out such a bias, we firstly separated the measurement items of LMX and of job satisfaction in the questionnaire. We then followed Podsakoff and Organ's (1986) suggestion to employ Harman's one-factor analysis to determine the effect of common method variance on the collected data of LMX and job satisfaction. The results

generated two explicit constructs for LMX and job satisfaction. This suggested that common method variance was not a matter of important concern in the current study.

4. Data analysis and results

We employed structural equation modelling (SEM) for data analysis using LISREL and evaluated the goodness of fit of the model using absolute and relative indices. In conformance with relevant research (Ojha et al., 2014; Shin et al., 2015; Sin et al., 2015), we followed Anderson and Gerbing's (1988) two-step approach that before the estimation of the structural model, a measurement model is estimated. In the following, we present the results of our measurement model analysis, structural model analysis, testing of hypothesis and the associated moderating effects.

4.1 Measurement model results

To assess convergent validity and discriminant validity of all measures related to managers, employees and customers, we subjected each of them to a confirmatory factor analysis. We evaluated convergent validity by construct reliability (Bagozzi & Yi, 1988) and average variance extracted (AVE) (Fornell & Larcker, 1981). Our results of construct reliability are in the range between 0.888 for service quality and 0.932 for LMX. Note that all the AVE values are higher than the recommended cut-off point of 0.5 (Fornell & Larcker, 1981) with a coverage from 0.584 for empowerment to 0.727 for job satisfaction.

To further evaluate the discriminant validity of our scales, we followed the procedures recommended by Fornell and Larcker (1981), which necessitate that discriminant validity is demonstrated if the values of AVE for the two constructs exceed the squared correlation

among the constructs. Results confirmed that all constructs examined had sufficient discriminant validity.

The resulting measurement model provided an adequate fit with our data ($\chi^2 = 417.016$; $\chi^2/df = 1.700$; GFI = 0.867; RMSEA = 0.055; NFI = 0.953; TLI = 0.978; CFI = 0.956; AGFI = 0.822). Taken together, the above results explicitly indicate that our data possessed adequate convergent validity as well as discriminant validity for further use in hypothesis testing.

4.2 Structural model results and hypotheses testing

In the wake of confirming the good fit of our measurement model, we examined the hypothesized model. We found that the hypothesized model fits the data well ($\chi^2 = 417.812$; $\chi^2/df = 1.692$; GFI = 0.867, RMSEA = 0.055; NFI = 0.953; TLI = 0.978; CFI = 0.980; AGFI = 0.839). Overall, the results supported several, but not all the hypotheses made in this study. Hypothesis 1 was supported by the significant association between empowerment and LMX ($P = 0.320$, $t = 4.146$, $p < 0.001$). The estimate of the standardized path coefficient indicated that LMX influenced service quality significantly, supporting H2 ($P = 0.277$, $t = 2.454$, $p < 0.05$). However, contrary to our expectation, we did not find a significant association between empowerment and job satisfaction; therefore, Hypothesis 3 is not supported. Likewise, contradicting Hypothesis 4, job satisfaction did not affect service quality. The linkage between LMX and job satisfaction was significant ($P = 0.723$, $t = 7.570$, $p < 0.001$), thus supporting Hypothesis 5. Figure 1 shows the hypothesized model and its path estimates.

(----- Figure 1 about here -----)

4.3 Results of moderating effect testing

We performed multiple-group analysis using SEM to assess the moderating effect of contact time among the customer-contact employee and the customer in transactions on the associations described in the previous section. Following suggestions from Homburg and Giering (2001) concerning multiple-group analysis, we firstly made median splits on employee-customer contact times (i.e., the moderator variable) in our samples. Next, we compared the group exhibiting high contact times against the one with low contact times.

To conduct multiple-group analysis using SEM, it requires comparing the general model with a restricted model. In theory, there is one less degree of freedom in the general model than in the restricted one, so the general model has a lower chi-square value than the restricted model. Moving from the restricted model to the general one, if there is a significant increase in chi-square value, it points to the situation that distinctive impacts of the moderator on the association exist in the two sub-sample groups. This offers statistical evidence for the hypothesis on the moderation effect. As a standard, such procedures are commonly adopted in previous research (see, e.g., Yee et al., 2010).

Table 2 shows the findings of the multiple-group analyses. Contrary to our prediction, we did not find statistical support for the associations hypothesized. The chi-square difference ($\Delta\chi^2 = 2.652, p < 0.001$) did not display a significant moderating effect of employee-customer contact time on the relation of LMX to service quality (since $\Delta\chi^2 < 3.841$). This means that Hypothesis 6 has not been supported. Likewise, the moderating effect of employee-customer contact time on the link of job satisfaction to service quality was not significant ($\Delta\chi^2 = 1.205, p < 0.001$). This indicates that Hypothesis 7 has not been supported.

(----- Table 2 about here -----)

5. Discussion and conclusion

This research has examined several employee-related factors associated with performance benefits in service operations exhibiting high labour intensity and high customer contact. We have adopted an inter-disciplinary approach to study what is mainly an OM problem concerning service operations through the lenses of OB and psychology (Bendoly & Hur, 2007), thereby filling a notable gap in service OM research. Building on well-established theories concerning the importance of customer-contact employees in service firms, we have conceptually developed and empirically investigated a model incorporating empowerment, LMX, job satisfaction and service quality. The service firms studied were operating clearly in contexts requiring high levels of employee engagement in response to the uncertainty and complexity associated with their service operations. Our methodological approach has maintained rigor by employing a multiple informant approach while collecting data from three sources: managers, customer-contact service employees and customers. Previous research has indicated that, in service OM research, it is very important to simultaneously relate the service aspects to firm, employee and customer variables (e.g., Kassinis & Soteriou, 2003; Payne & Webber, 2006). We have tested the hypotheses underpinning our research model using data collected from 225 service shops, including 225 shop managers, 675 customer-contact employees and 1,125 customers associated with highly labour-intensive, high-contact service firms. The findings have shown that service quality is affected by LMX, but not job satisfaction whereas empowerment impacts LMX, but not job satisfaction. We have also found that employee-customer contact time does not moderate the association between LMX and service quality or between job satisfaction and service quality. This demonstrates that the importance of LMX in the pursuit of superior service quality can be taken to be universal.

The notion of service-profit chain contends that satisfied employees are expected to perform better in service delivery (Heskett et al., 1994). The premise is that when frontline employees feel satisfied with their job, they tend to become more involved in their job-related tasks in service delivery and more dedicated to offering services, thereby resulting in services of higher quality. This premise has received considerable support from service scholars (e.g., Heskett et al., 1994; Loveman, 1998; Silvestro & Cross, 2000). Previous empirical research has also demonstrated that job satisfaction yields improved service quality (e.g., Hartline & Ferrell, 1996; Silvestro & Cross, 2000; Malhotra & Mukherjee, 2004; Yee et al., 2008). However, past research on the relationship between job satisfaction and quality performance had not considered work associations simultaneously within one single research model. As far as work associations, particularly associations between leaders (supervisors) and followers (customer-contact employees) are concerned, this study has demonstrated that the impact of job satisfaction is minimal or even insignificant. In other words, our findings clearly demonstrate that LMX, but not job satisfaction, has a significant influence on the quality level of services. It cannot be denied however that, to a certain extent, there are some conceptual overlap between job satisfaction and LMX. More specifically, work associations constitute just one facet of job satisfaction. Nevertheless, the two constructs are by no means identical. LMX emphasizes mutual support, liking, respect, trust and obligation based on the dyadic association between supervisors and their employees (e.g., Liden & Maslyn, 1998), whereas job satisfaction is a more general perception of the job that takes into account the job-related issues, like salary, promotion chance and job nature (e.g., Smith et al., 1969). Our research shows that, rather than a general feeling of satisfaction with the job, it is the specific association dimension concerning supervisors and employees that matters in enhancing service quality in service firms. Previous research has confirmed the importance of such work associations in OB and social psychology studies. LMX is the basic factor influencing work-

related outcomes, such as job performance (e.g., Lam et al., 2007; Zhang et al., 2012), affective organizational commitment (Eisenberger et al., 2008), creativity (Ieva & Claudia, 2013) and organizational citizenship behaviour (Wang et al., 2005). We have extended this body of literature on service OM by empirically showing that working associations, particularly the employees' work association with supervisor, support efforts towards attaining high-quality services in highly labour-intensive, high-contact service industries.

Our findings demonstrate that empowerment leads to LMX, but not to job satisfaction. Why would empowerment lead to better work relationships between employees and supervisors while not necessarily making the employees more satisfied? Again, we believe that job satisfaction is a general perception of the job that is influenced by a wider range of factors, such as salary, chance for promotion and job nature, which cannot be improved through empowerment. In addition, empowerment implies more informal job responsibilities on the part of frontline service employees and greater decision latitudes. This could entail confusion or job pressure in some frontline employees when they undertake the tasks associated with service encounters. On the other hand, as indicated by our results, empowerment and LMX are highly related. We believe that, under an empowered environment where customer-contact employees are motivated to work with more flexibility, freedom and discretion given by their supervisors, their potentials are better recognized and their suggestions for quality improvement are more valued by their supervisors. This results in higher-quality supervisor-employee associations. Moreover, an empowered environment places less work restrictions on frontline employees, thereby enhancing mutual trust, respect and understanding between supervisors and their employees.

Literature on LMX generally asserts that high-LMX employees are more willing and devoted to achieve high performance at work (e.g., Basu & Green, 1997; Janssen & Van

Yperen, 2004). In line with this research and in view of the customer contact perspective (Chase, 1981), it appears reasonable to hypothesize that the contact times between customer-contact employees and the customers moderate the association among LMX and service quality. This would mean that with more contact time in service encounters, customers can express their requests to employees more explicitly while employees can understand customer needs more exactly. However, this conjecture is not supported in our study. A plausible reason is the homogeneity with respect to the degree of employee-customer contact in their encounter. Our sampled companies were drawn from a high-contact service setting, rather than low-contact service one, which is out of the scope of the present study. For this situation, we surmise that the association of LMX to service quality would be affected among low-contact service firms.

The notion of service-profit chain suggests that employee job satisfaction is the underlying predictor of quality performance in service firms (Heskett et al., 1997). Following this line of thought and taking the customer contact perspective (Chase, 1981), it appears logical to put forward that the time of employee-customer contact has a moderating effect on the relation of job satisfaction to service quality. In service encounters with a long contact time, satisfied employees will have more time to transfer their positive emotions to the customers. Further, customers will have more time to resonate with the positive emotion conveyed. In such a scenario, customers would be prone to evaluate services more positively. Nevertheless, our study did not support this argument. There are two possible reasons. One reason is that the shops sampled were quite homogeneous and were operating with high contact times associated with employee-customer encounters. It is plausible that the relation between job satisfaction and service quality would be affected if low-contact service companies are also included in the investigation. However, we had not targeted this issue in our study. Another plausible reason lies in the insignificant linkage of job satisfaction to

service quality, as demonstrated by the statistical result of the hypothesized model. This indicates that satisfied employees may not necessarily offer higher quality services in the studied context. This may also imply that contextual factors, like contact time, does not exert a moderating effect on such insignificant relation.

A practical implication of our findings is that, as traditionally considered in service companies, in highly labour-intensive service firms, improvement in service quality may not be necessarily influenced by employees' job satisfaction. Our results show that, in contrast to traditional wisdom, job satisfaction actually does not have an impact on the quality level of highly labour-intensive service operations provided that LMX has also been considered simultaneously (as in the case of our model). Our findings also reinforce the perception that the importance of LMX is universal, i.e., LMX is important irrespective of whether contact times during service delivery are high or low. This means that managers pursuing high-quality services in highly labour-intensive service firms need to understand that work associations, rather than job satisfaction *per se*, constitute a more important facilitating factor. In short, work associations between managers and customer-contact employees become much more important than hitherto appreciated in influencing the quality level of services in highly labour-intensive service firms. Rather than simply making the latter happier with their jobs, nurturing a close association between the supervisor and his/her frontline employees is likely to have a more persisting positive impact on improving service quality.

Limitations and future research

As with any research endeavour, there are some limitations to our work. The limitations however provide pointers for future researchers. One limitation is the potential conceptual overlap between job satisfaction and LMX. As mentioned earlier, the association between supervisors and employees is just a facet of the job. Nevertheless, our statistical analysis has

shown that these two constructs are clearly distinguishable; job satisfaction is the general perception of a job while LMX is related to mutual trust and understanding between leaders and their followers. There may be some conceptual overlap, but that is so limited that it does not significantly affect the validity of our findings. Indeed, most constructs related to employee motivation share certain levels of conceptual similarity. Another limitation is that, because of the cross-sectional nature of our study, we have been unable to draw a firm conclusion about causation. Work associations between managers and employees need time to form and cultivate. In this regard, the effect of LMX on the quality performance of service operations is not likely to appear instantly. Similarly, employee satisfaction may not translate immediately into improved service performance. Future researchers will do well to consider a longitudinal research design to strengthen conclusions about the effects of LMX and job satisfaction on quality performance. Moreover, the focus of this research has been on highly labour-intensive, high-contact service sectors; we did not have comparable data from other types of service industries, such as professional services. Further research examining the relative impacts of LMX and job satisfaction in other service contexts should be useful. Lastly, we have examined just one moderating effect: that of employee-customer contact time in service encounters. Future researchers could explore other moderating effects that are particularly relevant in the context of service encounters (e.g., contact frequency, service production complexity and service adaptability).

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Tables and Figure

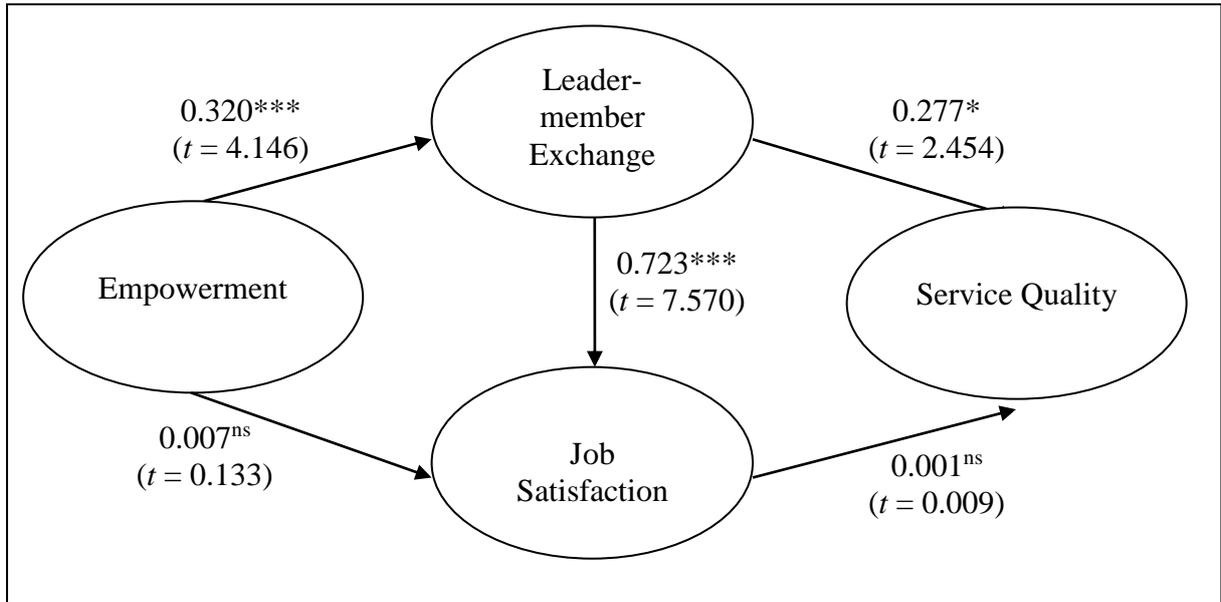
Table 1 Distribution of sampled shops

Service Sector	Number of Shops
Agency service (e.g., estate agencies and travel agencies)	17
Beauty care services (e.g., salons and beauty shops)	35
Catering (e.g., steakhouses and fine-dining restaurants)	73
Fashion retailing (e.g., dress shops and shoes shops)	37
Optical services (e.g., optometry shops and optical shops)	10
Retailing of instruments (e.g., musical instruments shops)	9
Retailing of health care products (e.g., cosmetic shops)	12
Retailing of valuable products (e.g., jewellery shops)	13
Others	19
Total	225

Table 2 Results of multiple-group analyses

Association	Low value of employee-customer contact time	High value of employee-customer contact time	Chi-square difference ($\Delta df = 1$)
Leader-member exchange to service quality	0.060 ^{ns} ($t = 0.436$)	0.504* ($t = 1.982$)	2.652 (= 736.707–734.055)
Job satisfaction to service quality	0.203 ^{ns} ($t = 1.196$)	-0.045 ^{ns} ($t = -0.305$)	1.205 (= 735.260–734.055)

* $p < 0.05$, ** $p < 0.01$, and *** $p < 0.001$



p < 0.05, ** *p* < 0.01, and *** *p* < 0.001

Figure 1 Hypothesized model and its path estimates

The Appendix: Questionnaires and their measurement properties

(a) Shop-in-charge person questionnaire

Responses to the following questions range from 1 = “Totally disagree” to 7 = “Totally agree”.

Empowerment [Cronbach’s $\alpha = 0.918$, AVE = 0.584, Construct reliability = 0.918]

- EP1 I allow service employees complete freedom in their work.
- EP2 I permit service employees to use their own judgment while solving problems.
- EP3 I encourage initiative in my service employees.
- EP4 I let service employees undertake their work the way they think best.
- EP5 I assign the task and then let the service employee handle it.
- EP6 I turn service employees loose on a job and let them have a go at it.
- EP7 I allow service employees a high degree of initiative.
- EP8 I trust service employees to exercise good judgment.

(b) Customer-contact employee questionnaire

Responses to the following questions range from 1 = “Totally disagree” to 7 = “Totally agree”.

Leader-member exchange [Cronbach’s $\alpha = 0.925$, $r_{wg} = 0.920$, ICC(1) = 0.339, ICC(2) = 0.607, AVE = 0.699, Construct reliability = 0.932]

- LM1 My supervisor and I are suited to each other.
- LM2 My supervisor understands my job problems and needs.
- LM3 My supervisor recognizes my potential.
- LM4 My supervisor is personally inclined to help me solve problems in my work.
- LM5 My supervisor considers my suggestions for change.
- LM6 My work relationship with my supervisor is effective.

Job satisfaction [Cronbach’s $\alpha = 0.929$, $r_{wg} = 0.932$, ICC(1) = 0.407, ICC(2) = 0.673, AVE = 0.727, Construct reliability = 0.930]

I am satisfied with

- JS1 the salary of this company.
- JS2 the promotion chances.
- JS3 the job nature.
- JS4 the association with my colleagues.
- JS5 the association with my supervisor.

(c) Customer questionnaire

Responses to the following questions range from 1 = “Totally disagree” to 7 = “Totally agree”.

Service quality [Cronbach’s $\alpha = 0.882$, $r_{wg} = 0.975$, ICC(1) = 0.334, ICC(2) = 0.715, AVE = 0.616, Construct reliability = 0.888]

- SQ1 The service employees are neat and appropriate.
- SQ2 The service employees keep my records accurately.
- SQ3 The service employees provide prompt services to me.
- SQ4 The service employees get adequate support to do their jobs well.

SQ5 The service employees do not give personal care to me. (reverse coding)

Responses to the following question by estimation.

Employee-customer contact time

The total time in the transaction you were just involved in this company (i.e., time spent on direct contact and communication with the service employee):

_____ hour(s)___ minutes