

## THE SERVICE LEADERSHIP SCALE: A SUBSTANTIVE VALIDITY TEST

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### Abstract

The authors report results from preliminary stages of the development and validation of a scale of service leadership. Firstly, items generated from qualitative interviews are discussed and the conceptual dimensions of the service leadership scale are formulated. Following this, results from the application of Anderson and Gerbing's (1991) substantive validity test are examined and interpreted, giving indication of further scale development issues. Finally, conclusions and future research directions are presented.

## **Introduction**

Over the past 30 years the service sector has seen rapid growth, becoming a source of job creation and wealth (Gray and Hooley 2002) and accounting for approximately 64 percent of the US gross domestic product (Chung and Schneider 2002). Noticeably, organisations are moving away from a selling focus towards a service focus in an attempt to satisfy the needs of customers more efficiently and effectively (Anderson 1996). In this context, service quality is recognised as a means of achieving differentiation, customer value, and satisfaction (Ozment and Morash 1994; Schlesinger and Heskett 1991). Service quality enhancement thus remains “one of the most important problems facing management today” (Cronin and Taylor 1992, p. 55).

Much of the current literature available on the topic of service quality deals with its measurement or outcome rather than the process by which the service is delivered (Souchon and Farrell 1998), even though the process of service delivery is sometimes rated as more important than its outcome (Chenet, Tynan, and Money 1999). Nevertheless, a limited number of studies have attempted to identify means of improving service quality delivery (e.g., Hartline and Ferrell 1996). In particular, the role of service leadership has been advocated (e.g., Zeithaml and Bitner 1996). However, despite the fact that a lack of service leadership appears to be a major cause of “service malaise” (Stutts 1999), the field of literature dealing with the issue of service leadership (e.g., Lovelock, Vendermerwe, and Lewis 1999; Zeithaml and Bitner 1996) lacks any specific empirical content. Thus, although service leadership has been deemed crucial to the provision of higher levels of service quality (Zeithaml and Bitner 1996), the lack of any psychometric scales or empirically tested relationships means that the question of how service managers should lead still remains. Thus, the proposed study seeks to build upon current knowledge of service quality by introducing the influence of leadership styles as an antecedent to service staff performance. The phase of the study to which this paper relates aims to reconceptualise and operationalise leadership styles in a services management context.

## **Conceptualisation**

The first issue to be dealt with is the distinction between leadership and management. According to Yukl (1999) leading and management are two mutually exclusive processes employing different skills and personality traits of authority figures. However, Hersey, Blanchard and Johnson (2001) argue that management is a special kind of leadership. They concur with Tanda (2000) that both leadership and management have a focus upon people; management, however, has a lesser focus upon people, concentrating instead upon the use of resources, planning, organising, and budgeting (Tanda 2000). Amongst service managers, there will be those who choose to lead and those who do not (c.f., Bass 1997). Those managers who do not lead will be less concerned with employee development and will tend to offer less supervisory input to staff (Dubinsky, Yammarino, Jolson, and Spangler 1995). Therefore, it seems as though the distinction between leadership and management at this stage is that leadership is concerned with employee development while management is concerned with organisational performance or wellbeing.

Previously, Bass (1997) noted that by dissecting leadership into various styles, the effectiveness of different types of leaders could be better understood. Hence, the effectiveness of service managers (leaders) can be better understood through study of the effects of

leadership within a service setting. This concurs with Yammarino's (1997, p. 43) reasoning that "the particular leadership style or behavior endorsed by the manager can enhance, neutralize, or inhibit such job-related outcomes and responses of sales subordinates as job satisfaction, motivation, effectiveness, and performance." Hence, bearing in mind the importance of service leadership in achieving successful service delivery, any study of service leadership would benefit from the integration of leadership styles into a conceptualisation of service leadership.

Leadership has been described in the past as "the ability of a superior to influence the behavior of subordinates and persuade them to willingly follow a desired course of action" (Jolson et al. 1993, p. 95). Though leadership has been extensively studied in psychology (e.g., Yammarino and Dubinsky 1994; Hater and Bass, 1988), human resources (e.g., Little 1998; Lombard and Eichinger 1997), and sales management literature (e.g., Bass 1997; Yammarino 1997; Dubinsky et al. 1995), to the authors' best knowledge, no study has been conducted on leadership within a services marketing context. However, given the reliance upon people and work groups in a service provision environment (Zeithaml and Bitner 1996), managerial effects upon the performance of service staff are profound (Souchon and Farrell 1998). In this context, leadership may well play a crucial role in the improvement of service staff performance, and ultimate service quality. Indeed, according to Hersey, Blanchard, and Johnson (2001, p. 400) "the role of leadership is particularly important in implementing quality." To date, the construct of service leadership has been delineated through a review and amalgamation of the services marketing and leadership literature. For the purposes of this study, service leadership is defined as:

*"the instillation by service managers of an organisational customer focus amongst customer-contact employees aimed at inspiring and sustaining a continual commitment towards achieving a level of service that customers want and for which they are willing to pay."* (c.f., Stutts 1999; Zeithaml and Bitner 1996)

### **Empirical Phase**

Following definition of the service leadership construct, a service leadership scale was developed using qualitative enquiry. Recently, lines between qualitative epistemologies have become blurred (Miles and Huberman 1994) and it is now increasingly difficult to define qualitative study as adopting one particular research philosophy (Tesch 1990). However, despite some confusion with regards to the particular epistemology adopted, the fact remains that the research seeks to build upon the purely literature-based theory of service leadership by drawing upon phenomenological, postpositivist, conversation analysis, transcendental realist, and constructivist philosophies.

In-depth interviews were selected as the most viable form of data collection given the nature of the work undertaken. Interviews were conducted with employees selected from the UK-based hotel population. Interviews followed a semi-structured format with questions generally focussing upon what respondents felt characterised service leadership. Interviews continued until the amount of new information gained from an interview was deemed to be identical to that of previous interviews. In total, nine interviews were conducted.

Once interviews were completed, a pool of 68 items relating to service leadership had been generated. Following within-case and cross-case analysis items were grouped into a priori

dimensions for a scale of service leadership. This service leadership scale includes the constructs of approachability, empathy/caring, flexibility, friendliness, humility, informality, and professionalism. An illustration of the seven dimensions of the service leadership scale, together with sample scale items, is presented in Table 1 below.

**Table 1**  
**A Summary of the Service Leadership Scale Dimensions:**

<b>Dimension</b>	<b>Operational Definition</b>	<b>Item Example</b>
Approachability	The ease with which employees can approach or talk to the leader	<i>“My manager has an open door policy”</i>
Empathy / Caring	How closely the leader identifies mentally with employees and displays compassion towards employees	<i>“My manager is supportive”</i>
Flexibility	The flexibility of leader’s behaviours in terms of adjusting the service system to meet employees’ special needs or requests	<i>“My manager adjusts his or her behaviours to suit the situation”</i>
Friendliness	The amicability of the leader in terms of being well-disposed and kindly towards employees	<i>“My manager is always smiling”</i>
Humility	The extent to which the leader demonstrates a low sense of their own self-importance	<i>“My manager is not afraid to swallow his or her pride”</i>
Informality	The degree to which the leader interacts with staff and considers there to be no formal measures in place to keep separation	<i>“My manager has a relaxed approach to employees”</i>
Professionalism	The extent to which the leader demonstrates that they possess the skills and qualities relevant to the conduct of their job at a high level of competence	<i>“My manager has an excellent knowledge of the hotel”</i>

As can be seen in Table 1 the majority of constructs relate to dealings with employees, rather than issues of organisational performance. This is in line with the earlier (p. 2) discussion of leadership vs. management. It could also be suggested from Table 1 that the constructs appear to be more ‘attitudinal’ in nature, as opposed to directly behavioural. This may suggest that further distinction can be drawn between leadership and management based upon the notion of whether a person has the ‘correct attitude’ for service leadership.

### **Application of the Substantive Validity Test**

As part of the pretest for the service leadership scale, a substantive validity test was applied to the items of interest. The substantive validity of a measure can be defined as the extent to which that measure is judged to be reflective of, or theoretically linked to, a construct under study (Holden and Jackson 1979), in this case the dimensions of the service leadership construct. Its particular strength lies in the fact that “the small-sample nature of substantive validity assessments make them particularly well suited to pretest settings, in contrast with assessments involving correlations, which suffer from the obfuscating effects of sampling errors in small samples” (Anderson and Gerbing 1991, p. 732).

The substantive validity assessment was carried out using an item sort task performed by 10 academics, to represent ‘expert opinion’ holders. The academics were people published in the fields of services marketing and/or scale development and were selected from a pool of researchers known to the authors. The participants were provided with a list of the 68 service leadership items and operational definitions for service leadership and its seven dimensions:

approachability, empathy / caring, flexibility, friendliness, humility, informality, and professionalism (c.f. Table 1). The respondents were asked to read each item and assign it to the construct that, in their judgement, the item best reflected. This information was then analysed using two indices of substantive validity, proposed by Anderson and Gerbing (1991).

The first of these indices is the *proportion of substantive agreement*,  $P_{sa}$ , which is defined as “the proportion of respondents who assign an item to its intended construct” (Anderson and Gerbing 1991, p. 734). The equation for this calculation is:  $P_{sa} = n_c / N$  where  $n_c$  represents the number of people assigning an item to its posited construct and  $N$  represents the total number of respondents. The range of values for  $P_{sa}$  is between 0.0 to 1.0 with larger values indicating greater substantive validity of the item.

The second index is the *substantive-validity coefficient*,  $C_{sv}$ , and it represents the extent to which respondents assign an item to its posited construct more than to any other construct (Anderson and Gerbing 1991). The formula for this index is:  $C_{sv} = (n_c - n_o) / N$ , where  $n_c$  and  $N$  are defined as before and  $n_o$  indicates the higher number of assignments of the item to any other construct. The values for this index range from -1.0 to 1.0 and, once again, larger values indicate greater substantial validity. A recommended threshold for the  $C_{sv}$  index is 0.5 (Anderson and Gerbing 1991). Once the  $P_{sa}$  and  $C_{sv}$  scores had been calculated for each item, they were then calculated for each dimension of service leadership under review. These results are classed as Test 1 results for the purposes of subsequent discussion.

It should also be noted that large negative values indicate that the item does have high substantive validity, but for a construct other than the one theorised by the researcher. In the case of this study, respondents sometimes gave indication that they felt items belonged to a dimension other than the one to which the item had been theoretically assigned prior to testing. This is shown by a negative value of  $C_{sv}$  being calculated for the item. Items that were deemed by respondents to belong to a different dimension of service leadership than theoretically posited were reassigned, and the  $P_{sa}$  and  $C_{sv}$  scores for the items were recalculated, along with the average  $P_{sa}$  and  $C_{sv}$  scores for the service leadership dimensions. These results are classed as the Test 2 results for the purposes of subsequent discussion. Aggregated results for each dimension of service leadership, using the average of item responses for Test 1 and Test 2, are presented in Table 2.

As noted previously, a negative value of  $C_{sv}$  indicates substantive validity, but for a dimension other than the one originally posited for an item. A  $C_{sv}$  of 0, however, means that there is considerable ambiguity among respondents regarding the dimension the item best describes. For an item to provide a  $C_{sv}$  value of 0, respondents must have assigned it a similar number of times to two or more dimensions. For example, the item “Doesn’t have an authoritarian attitude,” which was theoretically posited to be part of the informality dimension of service leadership, was assigned three times to approachability, three times to humility, and three times to informality. This item was one of the items dropped from the analysis between Test 1 and Test 2.

Items classed as ambiguous warrant further theoretical investigation and should be closely examined via, for example, exploratory factor analysis, during later data analysis. However, for the purposes of the substantive validity test, items returning a value of 0 were excluded from the Test 2 calculations in an attempt to increase the validity of the items under review. As a result, the Test 2 calculations were conducted using only 64 of the original 68 items.

Further investigation of the validity of the four highly ambiguous items is better suited to more powerful data analysis tools (e.g., confirmatory factor analysis using, for example, LISREL) at a later stage.

**Table 2**  
**Service Leadership Substantive Validity Pretest Results**

	Test 1			Test 2		
	<i>Items</i>	<i>P<sub>sa</sub></i>	<i>C<sub>sv</sub></i>	<i>Items</i>	<i>P<sub>sa</sub></i>	<i>C<sub>sv</sub></i>
Approachability	6	0.367	-0.117	4	0.650	0.400
Empathy / Caring	15	0.533	0.280	11	0.700	0.538
Flexibility	3	0.867	0.800	4	0.775	0.650
Friendliness	7	0.586	0.329	10	0.670	0.430
Humility	8	0.769	0.629	8	0.769	0.629
Informality	10	0.282	-0.286	7	0.529	0.325
Professionalism	19	0.858	0.747	20	0.895	0.795
<b>Totals / Averages</b>	<b>68</b>	<b>0.609</b>	<b>0.340</b>	<b>64</b>	<b>0.713</b>	<b>0.538</b>

As can be seen in Table 2, the Test 1 results saw three of the seven dimensions of service leadership with an aggregated  $C_{sv}$  of above 0.5; flexibility, humility, and professionalism. Four of the remaining dimensions fall below this threshold; approachability, empathy / caring, friendliness, and informality. For the Test 2 results, four of the dimensions are above the threshold; empathy / caring, flexibility, humility, and professionalism. The remaining dimensions (approachability, friendliness, and informality) are closer to the threshold than in Test 1, indicating that item reassignment has improved the overall substantive validity of the service leadership scale. This is further shown by the total  $C_{sv}$  scores for the service leadership scale which was 0.340 in Test 1 and rose to 0.538 in Test 2. One point that should be noted is that the  $C_{sv}$  score for flexibility fell between Test 1 and Test 2 from 0.800 to 0.650. This is as a result of an extra item being assigned to the flexibility dimension of the service leadership scale based upon the recommendations of the expert opinion holders. An item assigned a priori to the empathy dimension of service leadership was considered by respondents to be representative of flexibility.

### Conclusions and Future Research Directions

This paper presented the results of a substantive validity test for a new scale designed to measure service leadership in a hospitality context. It shows the value of conducting all available pretesting procedures in order to fully maximise the validity of measures to be employed during research practice. In particular, the substantive validity test highlighted differences between conceptual item allocations and expert opinion item allocations. It highlighted items that had low substantive validity and may cause concern during later stages of measure development and validation.

The next phase of the research project is to collect data containing employees' and customers' perceptions of managers' behaviours and hotels' services. A triadic data set will be amassed via telephone interviews with hotel managers and a mail survey of hotel employees and customers. Currently pretesting is underway on a sample of 100 UK hotels. The measure development results of this pretest will be available in November 2003. Following questionnaire and scale revisions, a full mail survey will be carried out on a sample of 1900 UK hotels. The purpose of data collection is to:

- 1) Develop and validate measures of service leadership; and
- 2) Test frameworks of linkages between service leadership and service quality.

Pre-testing, pre-notification and follow-up procedures will be employed during data collection firstly so that the researchers can maximise the response rate to the survey. Once data has been collected, the researchers will seek to rigorously validate the service leadership measure through the use of relevant statistical techniques (e.g., internal consistency, exploratory factor analysis, confirmatory factor analysis, construct and nomological validity as per Specter 1992). Following this measure development stage, the effects of leadership styles upon the service-related behaviours of subordinates (i.e., front-line customer-contact staff members) will be examined. This will be accomplished through testing of a pre-developed conceptual framework depicting the influences of leadership within services marketing. The effects of employee behaviours upon customers' perceptions of service quality are included in the model to provide an outcome measure for the overall study. This is imperative as an outcome measure lends strong practitioner as well as academic relevance to the work undertaken. Service quality provides a good outcome measure as prior studies have linked the construct positively to firm performance (Schlesinger and Heskett 1991; Zeithaml et al. 1988).

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