# CERIAS Tech Report 2002-50 Measuring Customer Service Orientation Using a Measure of Interpersonal Skills

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## MEASURING CUSTOMER SERVICE ORIENTATION USING A MEASURE OF INTERPERSONAL SKILLS: A PRELIMINARY TEST IN A PUBLIC SERVICE ORGANIZATION

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ABSTRACT: Organizations are placing increased emphasis on identifying individuals with customer service orientation. In the present investigation we test whether interpersonal skills, as measured through Holland and Baird's (1968) Interpersonal Competence Scale, provides a narrow, yet valid, measure of customer service orientation. Data were collected from a sample of bus transit operators. Interpersonal skills was positively related to operator self-reported performance, but was not related to supervisor ratings or objective measures of performance. Implications for the study and use of broad versus narrowly defined personality constructs in organizational settings are discussed.

**KEY WORDS:** customer service orientation; interpersonal skills; job performance; personality.

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Customer service has become a critical success factor for many organizations today (Phillips, 1990; Schneider & Bowen, 1985). Indeed, industrial service data suggests that 90% of rebuy decisions are heavily influenced by the quality of services received (Oliva & Lancioni, 1996). The realized importance of customer service has led to a great deal of research, especially in the marketing area. Most research focuses on the different types of services, the organizational dynamics of the service sector (Bowen, Siehl, & Schneider, 1989; Schneider & Bowen, 1985), marketing aspects of customer service design, or design and delivery systems (Klaus, 1985). Poor customer service is attributed to many factors, but solutions for improving customer service often focus on selection.

Cran (1994, p. 36) defines customer service orientation as a "set of basic individual predispositions and an inclination to provide service, to be courteous and helpful in dealing with customers and associates." It is suggested that the selection of customer service oriented employees is a key factor in establishing customer service—a potential source of sustained competitive advantage. As such, organizations that rely on customer service are beginning to recognize the importance of having employees with a customer service orientation. Yet, the measurement of customer service orientation has created more confusion that definitive answers.

The difficulty of measuring customer service orientation stems from the ongoing debate in the industrial/organizational psychology literature on the use of broad versus narrow measures of personality. Some researchers argue that the measurement of broad personality traits is preferable to narrow personality traits because they are more predictive of overall job performance (e.g., Ones & Viswesvaran, 1996). Advocates for the broad perspective favor summing many different behavioral indicators across situations, building broad, "basic" personality constructs, such as the Big Five personality traits (e.g., Barrick & Mount, 1991).

The argument for a more narrow approach suggests that a construct-oriented approach of personality research provides a better measure of job performance because it requires the specification of the relationship of the personality traits with multiple dimensions of job performance. Schneider, Hough, and Dunnette (1996, p. 647) suggest that the "use of narrower traits on both the predictor and the criterion side helps to ensure that a) as much of the variance in the predictors as possible is valid for the criteria to be predicted, and b) the criteria to be predicted are the criteria that matter most for the job." As a result, a narrow approach to customer service orientation is preferred over the broad approach since these traits are better able to retain specific variance that can enhance criterion-related validity.

The current study adds value to the existing literature in two ways. First, this study attempts to redefine the customer service orientation

construct space. We suggest that a measure of interpersonal skills provides a narrow, yet, strong indicator of customer service orientation. *Interpersonal skills* refers to "acquired ability for effective interaction" (Holland & Baird, 1968, p. 503), and research has demonstrated that the selection of employees based on interpersonal skills, for some occupations, is a valid predictor of performance. For example, in a validation study of a large assessment battery, it was found that various predictors, including measures of interpersonal skills were valid predictors of performance (Hakstian, Woolsey, & Schroeder, 1987). Moreover, the marketing literature indicates that an employee's interpersonal skills positively impacts customer satisfaction (Humphreys, 1996). Managers in service-oriented environments, when selecting employees, often look for applicants with strong interpersonal skills (Oliva & Lancioni, 1996).

One instrument, developed by Holland and Baird (1968), that holds particular promise as a narrow measure of interpersonal skills is the Interpersonal Competence Scale (ICS). In validating the scale, Holland and Baird report positive correlations with social self-confidence, speaking ability, cheerfulness, sensitivity to others needs, social competency, and leadership. Yet, the ICS is a narrow measure that does not rely on composites. However, the ICS has yet to be tested as a measure of interpersonal skills in a customer service environment. This study is an attempt to fill this void.

Holland and Baird's work provides construct validity evidence for the ICS as a measure of interpersonal skills. To further establish construct validity we relate Holland and Baird's measure to extroversion (a broad measure of personality) and general disposition to provide additional evidence of convergent and discriminant validity respectively. We offer:

*Hypothesis 1*: Extroversion, is strongly, positively related to interpersonal skills.

*Hypothesis 2*: General disposition is moderately, but, positively related to interpersonal skills.

The second way that this study adds value is by its incorporation of multiple measures of customer service performance in attempting to establish concurrent validity. Including both subjective and objective performance measures is beneficial from a customer service orientation perspective, since it provides a measurement of differences regarding the performance factors that a measure of interpersonal skills impacts. We expect that interpersonal skills will positively impact both subjective and objective measures of performance. Indeed, dyadic interaction between customer service providers and customers is an important determinant

of a customer's overall satisfaction with service (Solomon, Surprenant, Czepiel, & Gutman, 1985). Hogan, Hogan, and Busch (1994) demonstrated that customer service orientation, a composite of several dimensions of the HPI, positively impacted performance.

*Hypothesis* 3: Interpersonal skills will positively impact both subjective and objective measures of customer service performance.

Because interpersonal skills provides a more narrow focus, it is expected that it will better correlate with specific measures of service performance than broader measures such as extroversion or general disposition. Moreover, we expect any relationship between broad measures and performance will be insignificant after controlling for a narrow measure of interpersonal skills. Thus, it is expected that:

Hypothesis 4: Controlling for interpersonal skills, extroversion and general disposition will not explain additional variance in customer service performance.

### **METHOD**

Participants and Organization Background

Participants were bus transit operators for a large Midwestern metropolitan transit authority. The transit authority was unionized and there has been a long history of labor-management conflicts. Of the approximately 400 drivers employed, a total of 115 operators provided self-report data. Eighty-two percent of the sample was male. Fifty-five percent of the sample was non-white. The average length of employment in this organization was 8 years.

Bus transit operators interact with customers on a daily basis and customer service is a critical dimension of their performance. The organization had been using a video-based selection instrument, the MSVT (see Smiderle, Perry, & Cronshaw, 1994). However, the video-based instrument had demonstrated adverse impact against minorities and failed to predict operator performance. As such, the organization was looking for a simpler, cheaper, and more valid alternative to the video-based instrument.

### Design and Data Collection Procedures

A concurrent validity study was conducted. Operators completed a self-report questionnaire assessing extroversion, general disposition, in-

terpersonal skills, and self-assessed performance. Supervisors provided additional performance ratings on overall performance and interpersonal skills. In addition, archival data were provided by the human resources department and included the following information: objective performance data including commendations and complaints, gender and minority status, and tenure.

#### Measures

The following measures of interpersonal skills, extroversion, and general disposition are based on 5-point Likert scales ranging from 1 (Strongly Disagree) to 3 (Neither Agree Nor Disagree) to 5 (Strongly Agree).

Interpersonal Skills. Interpersonal skills was measured using the 20-item Interpersonal Competence Scale (ICS) developed by Holland and Baird (1968). It is based on earlier work by Foote and Cottrell (1955) who suggested that interpersonal competence consisted of (1) health, (2) intelligence, (3) empathy, (4) autonomy, (5) judgment, and (6) creativity. Holland and Baird report an estimated internal consistency (K-R 20) reliability of .69 for men and .67 for women. An example item is, "I have a reputation for being able to cope with difficult people."

*Extroversion*. Extroversion was measured using a five-item short scale based on research from McCrae and Costa (1987). An example item is "I like to join others in activities."

General Disposition. General disposition was measured using a modification of Weitz's (1952) gripe scale (see also Judge, 1993). The scale is designed to measure the level an individual is predisposed to be satisfied. A sample item is "I am satisfied with myself." Judge (1993) reported an estimated alpha of .78.

Operator Performance. We collected both subjective and objective measures of performance. Subjective measures of performance included driver self-report ratings, and supervisor ratings of interpersonal skills and overall performance. For the self-report assessment, a single item asked each operator to rate his or her customer service performance relative to the other operators against one of five possible responses ranging from "I am in the top 10%" to "I am below the top 50%."

Two supervisors who had direct contact with operators provided ratings of interpersonal skills and overall performance. One supervisor was asked to rate each operator in terms of their interpersonal skills. Specifically, on a five-point scale ranging from 1 (*Well Below Average*) to 5 (*Well Above Average*), the supervisor was asked, "Overall, rate the interpersonal skills of this driver relative to other drivers." A different supervisor

was asked to rate each driver using a similar scale, but rather than provide a rating of interpersonal skills, was asked to provide a rating of overall job performance. Specifically, this supervisor was asked, "Overall, rate the job performance of this driver relative to the other drivers." Inter-rater agreement for the two supervisor ratings was r=.45, p<.001 and the alpha reliability between these two items was .62. These two items were combined to form an overall supervisor rating of performance. Notably, these ratings were specific to the study and were not a part of a formal rating system.

Objective measures of job performance were obtained from computerized records of incident reports. The transit authority maintained a database of positive and negative performance incidents for each operator. The total number of positive incidence and the total number of negative incidence were tabulated and treated as separate variables. Additionally, the net objective performance was calculated by subtracting the total frequency of negative behaviors from the total frequency of positive behaviors.

#### RESULTS

The mean, standard deviation, and intercorrelations between the variables of interest to this study are reported in Table 1. Scale reliabilities ranged from .79 to .82.

The first two hypotheses address construct validity issues. Hypothesis 1 is supported as indicated by the strong positive correlation between interpersonal skills and extroversion, r=.65, p<.01, thereby providing some evidence of convergent validity. Hypothesis 2 is supported as indicated by the moderately positive correlation between interpersonal skills and general disposition, r=.31, p<.01, thereby providing some evidence of discriminant validity for the ICS.

Hypotheses 3 and 4 address concurrent validity issues. Hypothesis 3 receives partial support. Interpersonal skills is significantly related to self-assessed performance, r = .31, p < .01. Further, interpersonal skills is related to the composite measure of overall performance, r = .18, p < .05. However, neither supervisory ratings nor the various measures of objective performance were significantly positively related to interpersonal skills as hypothesized meriting only partial support for Hypothesis 3. Finally, Hypothesis 4 is conditionally supported. It is supported in that controlling for the effect of interpersonal skills on performance, neither extroversion nor general disposition explained additional variance on any measure of performance. However, because interpersonal skills only explained significant variance for self-assessed operator performance ( $R^2 = .09$ , p < .01), support for Hypothesis 4 is qualified. That is,

Intercorrelation Matrix, Means, and SDs, for Variables in this Study<sup>a</sup> Table 1

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Variable	1	2	3	4	5	9	7	8	6	10
1. Interpersonal Skills	1.00	$(.85)^{b}$								
2. Extroversion	.65**	1.00	(.82)							
3. General Disposition	.39**	.48**	1.00	(.79)						
4. Self-Rated Operator Performance	.31**	.18*	.14	1.00						
5. Supervisor Ratings	20	04	15	20	1.00					
6. Net Objective Performance	05	04	08	09	.29**	1.00				
7. Frequency Positive Incidence	.05	01	15*	04	14	.20**	1.00			
8. Frequency Negative Incident										
(multiplied by -1)	08	04	.02	07	.35**	.84**	37**	1.00		
9. Composite Performance	.18*	.15	.03	.55**	.82**	.71**	00.	**29.	1.00	
10. Tenure (months)	.01	08	02	.02	.02	.13*	90.	60.	.11	1.00
Mean	3.82	3.95	3.51	4.16	2.98	-1.19	1.46	-2.65	01	93.6
SD	.49	.67	.50	1.08	99.	2.92	1.73	3.08	.72	85.4

<sup>a</sup>Sample size, N=115, except for correlations involving supervisor ratings where n=43. Scale reliabilities are in parentheses on diagonal. \*p<.05, \*\*p<.01.

we expected that interpersonal skills would explain significant variance for all performance measures.

Because the relationship between interpersonal skills and self-reported operator performance may be attributable to common-method bias, follow-up analyses were conducted. To test this possibility, we obtained additional data in the form of operator scores on a situational video-based test. The transit authority was currently using the videobased test in its selection process, but its administration was expensive. The test, consisting of 64 video vignettes, was designed as a measure of interpersonal skills of public transit workers. A more detailed description of this instrument is provided by Smiderle et al., 1994. First, we had two raters qualitatively develop categories for each of the video segments. A total of three categories emerged and included: 1) customer service, 2) judgment/job knowledge, and 3) conflict resolution. Two separate raters, using these three categories, separately assigned a rating to each video segment. The two raters were in agreement on 66% of the items. In fifteen of the 64 items, both raters assigned the customer service category. This subset of items formed a customer service index of performance. The correlation between self-reported operator performance and customer service scores as indicated by individual scores on the fifteen customer service items was marginally significant, r = .24, p<.07, n = 41. Further, neither supervisor ratings or objective performance was related to employee scores on this customer service index. These results increase our confidence that the relationship between interpersonal skills and self-reported performance is not attributable to common method bias.

#### DISCUSSION

Currently, there is a debate over the merits of narrow versus broad measures of individual traits in predicting performance (cf. Ones & Viswesvaran, 1996; Schneider et al., 1996). The present investigation was an attempt to contribute to this debate, by demonstrating the usefulness of a narrow measure of interpersonal skills, as measured by Holland and Baird's (1968) Interpersonal Competence Scale, in predicting customer service performance. Results from the present study provide only weak support for the merits of the ICS. Interpersonal skills, as measured by the ICS, was strongly related to extroversion and moderately related to general disposition as predicted, providing some evidence of construct validity. However, the ICS predicted only one of several measures of customer service performance.

The ICS was significantly positively related to operator self-reported customer service performance. However, the ICS failed to explain any variance in supervisor performance. Moreover, the ICS was not related to objective performance data. One explanation for the lack of relationships between the ICS and performance ratings may stem from the fact that customer service is but one dimension of performance at the transit authority. Technical driving skills as indicated by a safe driving record and being on schedule are additional performance indicators beyond providing positive interpersonal interaction and customer service to passengers. It may be the case that these other dimensions of performance were reflected in the ratings, confounding any true relationship between interpersonal skills and customer service. Rucci, Kirn, and Quinn (1998) point out that organizations do a poor job of recognizing what their customers and employees actually think and do. If true, our measures of performance may not validly capture the customer service dimension. If supervisor ratings, for example, were biased to include technical driving record, this might explain the lack of relationships.

Thus far we have suggested that lack of findings may be the result of invalid performance criterion, i.e. criterion that fails to accurately capture the customer service dimension of performance. However, it may also be the case that the ICS as a narrow measure of interpersonal skills is not a valid predictor of operator performance. However, although the ICS failed to explain variance in supervisor and objective performance, it remains that the ICS was positively related driver self-reported performance. Because both of these measures were based on operator self-report, common method bias may account for this relationship. Follow-up testing indicated that the self-report measure of customer service performance was marginally related to an independently rated customer service dimension of a video-based operator test, increasing our confidence in the criterion measure of customer service performance. However, common-method bias cannot be completely ruled out.

Customer service organizations should continue to assess the merits of narrow-based personality measures as an alternative to broad personality traits such as the Big Five. Although partial support was found for the relationship of interpersonal skills, as measured by the ICS, and performance, this support rests on the strength of a single item measure of driver self-reported performance. Based on the findings of the present study, it is premature at this point to conclude that interpersonal skills as measured by the Interpersonal Competence Scale is a valid predictor of customer service performance. However, given the preliminary construct validity evidence in this study coupled with the theoretical rationale linking interpersonal skills to customer service performance, further research testing the relationships of narrow measures of interpersonal skills to customer service performance is warranted. Not only will further testing of narrow measures such as the ICS add to our knowledge of customer service orientation, but it will also help provide further evidence in the debate about the measurement of narrow versus broad personality constructs.

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