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## Measurement of organizational investments in social capital: The service employee perspective

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## ABSTRACT

This paper describes the development and validation of a measure of organizational investments in social capital (OISC). The scale development process is carried out over three stages (item generation, scale purification, scale validation), with two separate data collection phases involving a total of 735 working adults from multiple and diverse service-related workplace settings. As such, the data provide evidence for the face, content, discriminant, convergent and nomological validity, dimensionality and reliability of the OISC measure. The OISC measure is a concise, unidimensional scale that has the potential for significant usage in the development and testing of theory, as well as practical application in retail and other service provision contexts.

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### 1. Introduction

The development and maintenance of stronger connections between managers and employees – or “employee treatment” (Lusch et al., 2007) – is an increasingly important issue for retailers and other service provider organizations (Alexandrov et al., 2007; Marinova et al., 2008). Firms continue to lose customers primarily because of poor or indifferent service (Schultz, 2002; Zeithaml et al., 1996). Yet, studies indicate that customer service is heavily influenced by managerial interactions with service employees (Elmadag et al., 2008; Hartline and Ferrell, 1996). A current example of the influence of managerial behavior on retail employee service is that Home Depot’s once celebrated customer service is currently ranked last among peer organizations by the American Customer Satisfaction Index after the previous CEO “alienated staff with a command-and-control style that focused on cutting costs over encouraging employees.” (McGregor, 2009, p.54). However, retail and services marketing research continues to focus more on organizational and service

employee interactions with customers than on manager–service employee relations (Rust, 2004).

The focus of the current research is on manager–service employee relations. A major foundational premise of service-dominant logic (Vargo and Lusch, 2004, 2008) is that the creation of customer value is highly dependent on masterful operant resources (Madhavaram and Hunt, 2008), or more specifically, on synergy between human and organizational capitals. In this way, the knowledge and skills of the employees that directly serve the firm’s customers are complemented and reinforced by organizational culture and the implementation of behavioral norms that enhance both employee and organizational performances (Ellinger et al., 2008; Menguc and Auh, 2006). Madhavaram and Hunt’s (2008) conceptualization of masterful operant resources is consistent with social capital theory and the notion of organizational investments in social capital – the focus of this study.

The essence of social capital theory is that inter-personal relationships are the key to success, and that fostering stronger connections within social networks by creating environments that promote trust, rapport and goodwill yields positive outcomes (Adler and Kwon, 2002; Nahapiet and Ghoshal, 1998; Putnam, 2000). Research studies consistently suggest that social capital plays a central role in the creation of workplaces conducive to employee development and retention (Dess and Shaw, 2001; Leana and van Buren, 1999; Seibert et al., 2001). However, although social capital is believed to favorably influence workplace environments, behavioral norms and values for effecting

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such transformations require additional examination and measurement (Merlo et al., 2006; Oh et al., 2006). As stated by Prusak and Cohen (2001, p. 87), “knowing that healthy relationships help an organization thrive is one thing; making those relationships happen is quite another.”

In their conceptual representation of organizational investments in social capital, Cohen and Prusak (2001, p. 3) describe social capital as the “relationships that make organizations work effectively.” The authors contend that every managerial decision and action represents an opportunity for social capital investment or loss, and that investing in social capital by promoting trustworthiness, a sense of community, and stronger connections between managers and employees benefits firms by yielding returns similar to other, more tangible, forms of capital. Accordingly, the notion of organizational investments in social capital represents a relevant and potentially fruitful conduit for the development and maintenance of productive relationships between managers and employees in retail and other service provider industries.

On this basis, building on Cohen and Prusak's (2001) conceptual work, a new measure identified as organizational investments in social capital (OISC) is proposed. This study provides a brief discussion of social capital as an organizational resource, summarizes Cohen and Prusak's (2001) conceptualization of OISC, and then reports the results of the development and validation of a quantitative measure that extends Cohen and Prusak's earlier conceptual work. The nomological validity of the new OISC scale is also assessed. Correlations between employees' perceptions of their organizations' investments in social capital and critical work-related outcome variables are examined. Finally, suggestions for applying the new OISC measure in retail and other service provision contexts are offered.

## 2. Background

### 2.1. Social capital as an organizational resource

Social capital is “a set of informal values or norms shared among members of a group that permits cooperation among them” (Fukuyama, 1995, p.16). Social capital is an asset that provides opportunities for employees and groups to access information, knowledge, and resources extant in their social networks (Maurer and Ebers, 2006). The concept is examined in multiple contexts including national (Fukuyama, 1995), community (Putnam, 2000), organizational (Cohen and Prusak, 2001), and even between employees in retail store environments (Merlo et al., 2006). Recent studies that assess the strategic utility of social capital are attracting considerable attention as firms increasingly recognize that leveraging human capital (Hitt and Ireland, 2002; Huselid, 1995) and people management (Luthans and Youssef, 2004; Pfeffer and Veiga, 1999) can be significant sources of competitive advantage.

Drawing upon the resource-based view, Hitt and Ireland (2002) argue that *investing* in organizational members' social capital is equivalent to developing a strategic resource. From the standpoint of efficiency, social capital reduces transaction costs because trust mitigates the role of monitoring (Leana and van Buren, 1999). A recent empirical study shows that retail employee customer service orientation and store creativity are positively influenced by social capital (Merlo et al., 2006). These findings are consistent with those reported by other researchers that variously describe the work-related benefits that accrue to firms that focus on helping employees to forge productive work-related relationships (e.g., Dess and Shaw, 2001; Seibert et al., 2001). In summary, the extant literature indicates that social capital is inextricably linked to enhanced employee productivity and therefore, behavioral norms that promote social capital in the workplace are expected to contribute to firm competitiveness.

### 2.2. Organizational investments in social capital

Cohen and Prusak's (2001) representation of organizational investments in social capital represents perhaps the first discussion

of specific managerial behavioral norms and values that promote social capital in business organizations. Their conceptual work develops a series of illustrative proscriptive steps associated with the notion of making investments in social capital. The authors argue that social capital is a rare and endangered resource that can contribute to every facet of organizational life and that its development should therefore be a top priority for organizational leaders. Thus, investing in social capital creates an environment where mutually beneficial relationships between employees and their organizations are nurtured. However, managers cannot engineer or mandate social capital. Rather, social capital must be enabled by the “kind of intervention that encourages natural development, that orients rather than orders, that provides nourishment rather than blueprints” (Prusak and Cohen, 2001, p. 93).

Cohen and Prusak's conceptual representation of the notion of making investments in social capital is based on extensive observations conducted over 15 years in multiple organizations including, the World Bank, Aventis Pharma, Alcoa, Russell Reynolds and the United States Postal Service. From these observations emerge a set of behavioral norms and values that represent “incremental, day-to-day investments in social capital” (Prusak and Cohen, 2001, p. 88).

Cohen and Prusak (2001) classify investments in social capital into three interrelated categories: making connections; enabling trust; and, fostering cooperation. *Making connections* encompasses behavioral norms and values that deepen collegial relationships, and create a strong sense of community. *Enabling trust* involves behavioral norms and values that give employees reasons to have confidence in the organization, instead of giving them reasons to respond to the organization and its representatives defensively. *Fostering cooperation* entails behavioral norms and values that encourage and reward collaborative, rather than individualistic efforts. Although Cohen and Prusak (2001) articulate three categories, they also point out that these categories are conceptually interdependent dimensions of investments in social capital, and therefore do not represent orthogonal domains of organizational or managerial activity.

## 3. Overview of scale development and validation process

The methodology used in the development and validation of the OISC scale reported in this study follows guidelines established by Churchill (1979) and Campbell and Fiske (1959). The scale development process was carried out over three distinct stages, with two separate data collection phases, involving a total of 735 respondents (327: calibration sample and 408: validation sample). The respondent pools were comprised of samples of full-time working adults from multiple organizations in a wide range of predominantly service industries.

In Stage 1 (item generation), an initial pool of items representing organizational investments in social capital (OISC) was generated for inclusion in the proposed measure. Subject matter experts (SMEs) reviewed a list of these items to assess their content and face validity. In Stage 2 (scale purification), an initial scale was administered to the calibration sample of 327 working adults via questionnaire. Their responses to the scale items were randomly split into two groups for replication purposes. Exploratory factor analysis (EFA) was conducted with the data from the first group of responses to evaluate the structural character of the pool of items. The data from the second group of responses was used to replicate the initial EFA, and to perform an initial confirmatory factor analysis (CFA). Based on the results from these analyses, a reduction of the item pool was undertaken. In Stage 3 (validation), a final version of the proposed measure was administered to a second group of 408 working adult respondents, and CFA was conducted to establish the reliability of the proposed measure. Finally, the convergent, discriminant, and nomological validities of the proposed OISC measure were assessed.

## 4. Analysis and results

### 4.1. Stage 1: item generation

#### 4.1.1. Method

The two principal researchers independently reviewed Cohen and Prusak's (2001) text to identify managerial behavioral norms and values corresponding to organizational investments in social capital. An initial pool of 43 items was generated intended to capture the conceptual domain of the organizational investments in social capital construct. Next, the initial pool of items was reviewed by three SMEs – one academician, one graduate student, and one full-time practitioner manager. The SMEs were given a detailed overview of Cohen and Prusak's (2001) conceptualization, and were asked to assess the general face validity of the items generated in Stage 1. Based on the feedback provided by the SMEs, 11 items that pertained to social capital between employees (rather than to organizational investments in social capital), were dropped and 19 of the remaining 32 items were rewritten to bolster their face validity and to establish consistency across the items with respect to their content, temporal, and frame-of-reference characteristics. Table 1 presents the pool of 32 items identified for further analysis in Stage 2.

### 4.2. Stage 2: scale purification

#### 4.2.1. Method

A survey instrument was designed to collect data to evaluate the dimensionality of the items identified and carried forward from Stage 1. The questionnaire utilized a 7-point Likert scale (1 – strongly disagree to 7 – strongly agree). Each of the 32 items was presented as a declarative statement (e.g., “New hires are offered an effective

orientation program”). Participants in the survey were asked to evaluate each of the declarative statements using their professional experience with their current organization as the frame-of-reference for responding to the item.

Consistent with the methodology employed in previous empirical research (e.g., Bitner et al., 1990), undergraduate students in a marketing research survey class were recruited and trained as data collectors for the calibration sample in Stage 2. A convenience sample of six hundred fifty full-time service employees over 21 years of age in a university town in a south-eastern state of the U.S. was identified. Prospective respondents were contacted face-to-face or via telephone, and were given paper copies of the self-administered questionnaire. A total of 327 questionnaires were returned for a response rate of approximately 50%. Of the 327 usable questionnaires, 119 (36.4%) were completed by women, 63% of the respondents were between the ages of 41 and 70, and the average organizational tenure of the calibration sample was 10.70 years ( $SD = 9.55$ ). One of the principal researchers made random follow-up calls to approximately 10% of the sample to confirm respondents' demographic information, and to verify participation. No problems were detected using this methodology.

The calibration sample ( $n = 327$ ) was randomly split into two groups for replication purposes. The first group of responses ( $n = 167$ ) was used to perform reliability analysis, with particular attention given to corrected item-to-total correlations, and the results from exploratory factor analysis. In order to remain consistent with scale development protocol reported in prior research (e.g., Flynn and Percy, 2001), these two procedures were executed simultaneously. The second group of responses ( $n = 160$ ) was used to replicate the reliability and EFA from sample 1. Confirmatory factor analysis was then performed.

*Results:* Principal components factor analysis with varimax rotation was conducted to maximize variance. This analysis resulted in eight-factors. One factor, comprised of 7 items with an eigenvalue of 12.20, explained just under 40% of the variance in organizational investments in social capital. Seven smaller factors, with eigenvalues ranging from 1.03 to 1.88, with explaining variance ranging from 3.15% to 5.89% were also identified. The seven smaller factors encompassed the remaining 25 items in the pool, many of which exhibited loadings less than .4, and cross-loadings greater than .4.

Next, using the entire set of 32 items, a series of analyses was conducted to further assess the dimensionality of the proposed OISC scale. Initially, a scree plot was used to examine the factor structure of the items. The slope between the first and the second factors was flat (the eigenvalues were 12.22 and 1.88 respectively). This pattern suggested that the inclusion of the additional seven factors does little to increase the explanatory power of the proposed scale. Further, the homogeneity indices for the 32 items indicated an optimal level of homogeneity (Briggs and Cheek, 1986, p. 115) with mean intercorrelation among the 32 items of 0.32 ( $SD = 0.18$ ), suggesting a unidimensional factor structure. All attempts to identify an oblique three-factor solution (consistent with the three categories of investments in Cohen and Prusak's conceptualization) failed to achieve a replicable simple structure (i.e., items loaded predominantly on one factor, some factors had only one item and thus failed to capture underlying, conceptually distinct dimensions, some items had high cross-loadings, etc.).

Therefore, an iterative process was employed to identify those items exhibiting loadings less than .4, cross-loadings of greater than .4, and items that exhibited item-to-total correlations less than .50 (Zaichkowsky, 1985). None of the items above met these criteria. Thus, the results from the first set of analyses suggested that the OISC construct most likely has a unidimensional factor structure since it is substantively captured with 7 items from the original pool, which explain almost 40% of its variance, with factor loadings ranging from .62 to .89, and an internal consistency of .93.

**Table 1**

32-item pool for the OISC scale.

1. Managers are consistent and direct in their communications with employees
2. Quality of work is valued over speed
3. There is flexibility in employees' work schedules
4. Employee training is usually carried out by people who work for the company
5. Human and electronic interaction between employees is well-balanced
6. Employees have frequent opportunities to work on a variety of projects
7. Employees are encouraged to personally express themselves
8. Managers are good role models and set a positive tone
9. Managers and employees spend quality time together
10. Employees are regularly made aware of company goals
11. Informal communication between employees is encouraged by the organization
12. Employees are encouraged to generate new ideas and try new techniques
13. Employees have opportunities to discuss work problems and provide solutions
14. Bonuses are primarily based on group or firm performance rather than individual
15. Employees are encouraged to share their particular areas of expertise/skill sets with fellow employees
16. New hires are offered an effective orientation program
17. Employees are well-informed about company issues
18. Employees are provided with up-to-date equipment and resources to help them get their jobs done
19. New hires are usually a good fit
20. The facilities are clean and well-maintained
21. There are minimal physical divisions between managers and employees
22. Managers are fair and provide equitable opportunities
23. Workspaces are open and easily accessible to others
24. The majority of communication between employees is electronic
25. Intangible rewards are more customary than tangible rewards
26. Promises made to employees by management are kept
27. The hiring process is conducted in a methodical and effective manner
28. Management shows respect for employees
29. Strong efforts are made to maintain good working relationships with other firms
30. Most employees own stock in the company
31. Managers frequently offer encouragement to employees
32. The importance of treating other departments as customers is emphasized by management



In order to further assess the utility of the OISC scale, the same iterative process described above was applied to the data collected from the second group of participants ( $N = 160$ ) in the calibration sample. An identical single factor structure was obtained, explaining just under 31% of the variance (eigenvalue of 9.89), with a second factor explaining less than 7% (eigenvalue of 2.09). The exploratory factor analysis performed on the 7 items from group 1 was replicated with group 2. This analysis produced a unidimensional factor structure explaining 30.93% of the variance in investments, with factor loadings ranging from .66 to .87, and an internal consistency of .91. Additionally, the mean intercorrelation among the 32 items was 0.25 ( $SD = 0.16$ ), again suggestive of a unidimensional structure. The factor loadings for the 7 items obtained from samples 1 and 2 are presented in Table 2.

Based on these results, the next step in the analysis was undertaken. Lisrel 8.54 with maximum likelihood estimation was used to perform CFA on the 7 items identified above. Results from these analyses indicated an adequate fit of the model to the data ( $\chi^2 = 31.79$  with 14 df,  $p = .004$ ,  $RMSEA = .08$ ,  $CFI = .97$ ,  $NFI = .96$ ,  $IFI = .97$ ). The average variance extracted in the items by the construct was also assessed (Anderson and Gerbing, 1988). As shown in Table 2, the average variance estimate for the 7 items was 61%, with composite reliability of .93.

The results from this purification analysis collectively suggest that a 7-item, single factor solution (as shown in Table 2) most effectively captures the organizational investments in social capital construct. Therefore, the validation stage of the scale development process was initiated.

### 4.3. Stage 3: validation

#### 4.3.1. Method

The 7-item scale identified above was incorporated into a second survey instrument that was administered to another convenience sample of full-time working adults in the same southeastern university location. As before, potential participants were identified and invited to participate in the validation stage of this process by undergraduate students in an introductory marketing survey course. Participants were given the URL to an online survey. A total of 415 surveys were completed (approximately 58% of those invited to participate). Seven questionnaires were unusable, leaving a total of 408 respondents for the validation process. Two hundred and fourteen of the 408 respondents were female (52%), the average age was approximately 44 ( $SD = 10.87$ ). Respondents' mean organizational tenure was 11.2 years ( $SD = 10.03$ ). As before, full-time

working adult respondents over the age of 21 in the validation sample came from multiple organizations in predominantly service industries. The most frequently represented service industries were: 74 (18%) retail, 56 (14%) healthcare, 52 (13%) banking and financial services, 27 (7%) education, 24 (7%) state and government, 22 (5%) utility and telecom services, and 15 (4%) real estate. EFA and CFA were conducted to confirm the dimensionality, reliability, and discriminant validities of the proposed measure.

#### 4.3.2. Results

The results from exploratory factor analysis performed on the validation sample data again support the unidimensionality of the proposed OISC scale. More than 74% of the variance in the construct was accounted for by the 7-item measure, with factor loadings ranging from .75 to .91. These results were consistent with those reported for the calibration sample in Stage 2; all loadings were significantly above .50, the average inter-item correlation was .70, and the reliability coefficient was .94.

Results from the CFA also generally indicated adequate model fit ( $\chi^2 = 159.110$  with 14 df,  $p < .001$ ,  $RMSEA = .160$ ,  $CFI = .94$ ,  $NFI = .94$ ,  $SRMR = .041$ ). As shown in Table 2, composite reliability is quite high (.94), and the average extracted variance (.70) is consistent with conventional criteria. Modification indices (MI) with a threshold of 10 revealed five highly correlated error terms (item pairs 31–8, 31–26, 26–1, 8–26, and 28–1). Since two indicators from the same construct may share variance because they are measured by a common method (Kenny et al., 1998), these five correlated measurement errors were set free to improve fit. A new model indicated a better fit but still with a high RMSEA: ( $\chi^2 = 46.60$  with 9 degrees of freedom and  $p < .001$ ,  $RMSEA = .101$ ,  $CFI = .99$ ,  $NFI = .98$ ,  $SRMR = .028$ ,  $AGFI = .90$ ,  $\Delta \chi^2 = 112.51$   $\Delta$  df = 5,  $p < .001$ ). Although this step was taken, one pair of highly correlated error terms remained (item pair 9–1 with MI = 17.791). This constraint was therefore set free to further improve fit. The final model presents a much better fit ( $\chi^2 = 27.935$  with 8 degrees of freedom and  $p < .001$ ,  $RMSEA = .078$ ,  $CFI = .99$ ,  $NFI = .99$ ,  $SRMR = .018$ ,  $AGFI = .93$ ,  $\Delta \chi^2 = 18.665$   $\Delta$  df = 1,  $p < .001$ ).

In the next phase of these analyses, discriminant validity for the new OISC measure was evaluated using measures of two conceptually distinct but interrelated constructs: cooperation and coordination, and supportive leadership. Conceptually, cooperation and coordination captures employees working together to achieve mutually agreed upon goals. Supportive leadership describes expressions of concern for, and taking account of employees' needs and preferences when making decisions that directly and indirectly affect them. These two constructs

**Table 2**  
Results of exploratory and confirmatory factor analyses.

	Calibration sample <sup>a</sup>		Calibration sample	Validation sample <sup>b</sup>	
	EFA		CFA	EFA	
	Group 1	Group 2	Standardized loadings	Standardized loadings	
22. Managers are fair and provide equitable opportunities	.84 <sup>c</sup>	.76	.73	.90	.89
28. Management shows respect for employees	.82	.87	.89	.91	.88
31. Managers frequently offer encouragement to employees	.76	.78	.85	.89	.91
8. Managers are good role models and set a positive tone	.76	.79	.77	.90	.92
26. Promises made to employees by management are kept	.71	.76	.75	.85	.84
9. Managers and employees spend quality time together	.62	.66	.82	.75	.67
1. Managers are consistent and direct in their communications with employees	.72	.79	.62	.84	.74
Average variance extracted			.61	.74	.70
Cronbach's alpha			.93	.94	.94

Note: EFA – exploratory factor analysis; CFA – confirmatory factor analysis.

Fit statistics for calibration sample  $n = 408$ : CFA – ( $\chi^2 = 31.79$ ,  $df = 14$ ,  $p = .004$ ,  $RMSEA = .08$ ,  $CFI = .97$ ,  $NFI = .96$ ,  $IFI = .97$ ).

<sup>a</sup> Group 1  $n = 167$ , Group 2  $n = 160$ .

<sup>b</sup>  $n = 408$ .

<sup>c</sup> Standardized factor loadings.

**Table 3**  
Results of discriminant validity analysis (n = 408).

	Unstd loading	Std loading	t value	AVE	CR	Alpha
OISC				.70	.94	.94
22. Managers are fair and provide equitable opportunities	1.00	.89	–			
28. Management shows respect for employees	.95	.90	27.71			
31. Managers frequently offer encouragement to employees	1.00	.88	25.83			
8. Managers are good role models and set a positive tone	1.03	.90	27.12			
26. Promises made to employees by management are kept	.94	.83	22.93			
9. Managers and employees spend quality time together	.81	.69	16.84			
communications with employees						
1. Managers are consistent and direct in their	.81	.76	19.43			
Cooperation and coordination				.75	.92	.92
Achieve goals collectively	1.00	.82	–			
Have a mutual understanding of responsibilities	.97	.86	20.72			
Share ideas, information, and/or resources	1.02	.91	22.42			
Work together as a team	1.02	.87	21.03			
Supportive leadership				.78	.91	.91
Find time to listen to employees	1.00	.91	–			
Look out for the personal welfare of employees	1.06	.88	25.85			
Do little things to make it pleasant to be a member of the company	.99	.86	24.92			

Note: AVE: average variance extracted; CR: composite reliability; Unstd: unstandardized; Std: standardized.

were measured using the 7-point response format described earlier. Cooperation and coordination was evaluated using [Hartline and Ferrell's \(1996\)](#) scale. Supportive leadership was evaluated using [House's \(1971\)](#) scale. Previous research indicates acceptable levels of reliability for both scales. As shown in [Table 3](#), the internal consistency of these measures in the current study is acceptable.

Using the validation sample described above, the discriminant validity of the OISC measure was assessed using the procedures recommended by [Fornell and Larcker \(1981\)](#). The first step in the analysis was to evaluate the factor structure, reliability, and discriminant validity of all constructs using CFA. Construct reliability was evaluated using Cronbach's alpha and average shared variance estimates. As indicated in [Table 3](#), Cronbach's alpha internal consistency reliability estimates for the cooperation and coordination and supportive leadership constructs were above [Nunnally's \(1978\)](#) recommended level of .70. [Fornell and Larcker's \(1981\)](#) index of the average amount of variance from each latent factor accounted for by its indicators ( $\rho_{vc(\eta)}$ ) also exceeded the recommended level of .50 for all constructs.

The overall fit for the three-factor confirmatory model to the data was good, even though the  $\chi^2$  (df) was 202.57 (68). [Bentler's \(1990\)](#) Comparative Fit Index (CFI) was .98, the Normed Fit Index (NFI) was .96; the Incremental Fit Index (IFI) was .98, the root mean square error of approximation (RMSEA) was .07, and the Adjusted Goodness of Fit (AGFI) was .90. In addition, as shown in [Table 3](#), each of the hypothesized factor loadings was statistically significant at the  $p < .01$  level, and all of the standardized factor loadings were higher than .65. The variance extracted for each construct was compared to the square of each off-diagonal value within the phi matrix for that construct. This comparison indicated that each set of items represent a distinct construct. In all cases, the variance extracted exceeded the phi estimates. Further evidence for discriminant validity comes from the fact that all the construct intercorrelations were significantly ( $p < .05$ ) less than 1.00, and the shared variance among any two constructs (i.e., the square of intercorrelation) was less than the average variance explained in the items ( $\rho_{vc(\eta)}$ ) by the construct. Thus, taken together, the  $\alpha$ s,  $\rho_{vc(\eta)}$ s, and tests of the construct intercorrelations provide strong evidence of the discriminant validity of the new OISC construct.

#### 4.4. Assessment of nomological validity

The importance of establishing nomological validity is well documented in the literature (e.g., [Cronbach and Meehl, 1955](#)).

Support for a construct's nomological validity is indicated by evidence of distinct conceptual antecedents, consequences, and/or modifying conditions ([Iacobucci et al., 1995](#)). Since a key theme within [Cohen and Prusak's \(2001\)](#) conceptualization is that organizational investments in social capital have positive “effects” on work-related outcomes, the nomological validity of the new OISC measure was assessed by evaluating its correlations with five work-related outcomes that have previously been utilized for empirical research in service-related workplace contexts.

Commitment to service quality is the “relative propensity of a service employee to engage in continuous improvement and exert effort on the job for the benefit of customers,” ([Peccei and Rosenthal, 1997](#), p. 69). Employee commitment to service quality was measured with 5 items from [Hartline and Ferrell's \(1996\)](#) measure. Research consistently demonstrates that employee commitment to service quality is highly influenced by managerial behaviors (e.g., [Crozier, 1964; Parkington and Schneider, 1979](#)). Thus, OISC was expected to be positively correlated with commitment to service quality. Similar correlations were also anticipated between OISC and two constructs often used as attitudinal outcome measures in tests of multiple behavioral theories (e.g., [Tett and Meyer, 1993](#)) – job satisfaction and organizational commitment. Job satisfaction, defined as feelings of contentment with multiple aspects of the work experience, was evaluated with 4 items from [Dubinsky, Howell, Ingham and Bellenger's \(1986\)](#) measure. Organizational commitment, defined as the desire to remain associated in the long term with the employing organization, was measured with 5 items from [Mowday, Steers and Porter's \(1979\)](#) measure.

Positive correlations between OISC and two performance-related outcome measures were also predicted. Job-related performance, defined as performance of contractually obligated work-related activities, was measured with 5 items from [Babin and Boles's \(1996\)](#) measure. Organizational citizenship behavior, defined as behaviors that support the social and psychological contexts that support task performance, was measured using 5 items from [Settoon and Mossholder's \(2002\)](#) scale. The same 7-point response format was used to measure these constructs.

The results from the test of nomological validity are reported in [Table 4](#). Cronbach's internal consistency coefficients are shown in the diagonal. As can be seen, all correlations between the OISC measure and the work-related outcome measures described above are significant and positive ( $p < .01$ ). These findings provide initial support for the nomological validity of the new OISC measure by indicating

**Table 4**  
Latent variable intercorrelations in the OISC nomological network.

	1	2	3	4	5	6
Organizational investments in social capital	(.94) <sup>a</sup>					
Commitment to service quality	.47	(.95) <sup>a</sup>				
Job satisfaction	.59	.67	(.93) <sup>a</sup>			
Commitment to the firm	.56	.76	.85	(.95) <sup>a</sup>		
Job performance	.44	.73	.53	.56	(.90) <sup>a</sup>	
Organizational citizenship behavior	.51	.50	.41	.46	.49	(.96) <sup>a</sup>

All correlations are significant at  $p < .01$ .

<sup>a</sup> Cronbach's alpha.

that employees' perceptions of their organizations' investments in social capital are significantly positively correlated with affective and behavioral outcome measures.

## 5. Discussion, implications, and future research

In accordance with the research objectives of this study, the development and validation process undertaken for the OISC measure result in a parsimonious, unidimensional scale that, over a series of separate studies, demonstrate acceptable levels of reliability, convergent and discriminant validity. An additional strength of the proposed measure is that it is developed using disparate samples of working adult respondents in multiple service industries. Since respondents' demographic characteristics vary considerably in terms of gender, age, job description, and industry, the scale should have relatively broad, generalized applicability. The brevity of the OISC scale is also potentially useful since it can easily be employed as an efficient means of assessing organizational investments in social capital in future empirical studies.

Several limitations and suggestions for future research merit discussion. First, additional examinations are required to further replicate the results obtained in this study and to evaluate statistical norms for the new measure. Furthermore, assessments such as test-retest reliability should be conducted in future studies to assess the stability of employees' perceptions of their organizations' investments in social capital over time. Finally, it is conceivable that employees may be unwilling to volunteer negative perceptions of their firms. Therefore, future research should evaluate the extent that social desirability biases may affect employees' reports of their organizations' investments in social capital. If social desirability turns out to be a problem, it may need to be controlled in future studies.

Beyond additional tests of the measure itself, there are several intriguing avenues for future research that could be conducted using the new OISC measure. From a theoretical perspective, researchers might examine the antecedents of organizational investments in social capital as well as the evolution of, or stages in, the "investment" process. Further, circumstances where organizational investments in social capital are successful and circumstances where they are not should be identified to develop a better understanding of when to invest in social capital, and when such resource commitments may not be worthwhile.

Future research might also examine the consistency between employees' and managers' perceptions of their organizations' investments in social capital. The literature suggests that congruence between employee and organizational perceptions and values may lead to a wide range of positive work-related outcomes (e.g., Ostroff et al., 2005). Correspondent organizational and employee perceptions generate clearer roles and expectations that arise from common aspects of cognitive processing, resulting in less role ambiguity and friction and higher levels of job satisfaction and commitment to the firm (Fisher and Gitelson, 1983). In contrast, perceptual inconsistencies may have the

opposite effect, with disparate evaluations of internal or situational conditions resulting in employees failing to achieve goals or experiencing job-related dissatisfaction and distress (Bagozzi, 1992).

Thus, from a more applied perspective, the new OISC measure may be insightful to retailers and other service provider organizations that are currently spending millions of dollars on developmental approaches to improve customer service. The OISC can be used as a diagnostic instrument for identifying potential employee relations problems. Discrepancies between employee and managerial perceptions would serve to highlight problem areas and opportunities for improvement. For example, if store employees rate their organizations low on the OISC scale, retailers could take actions to encourage and increase behaviors that represent organizational investments in social capital. Such actions might include additional training programs for store managers to help them develop healthier relationships with store employees, store management reward systems that are at least partly contingent on employee evaluations and feedback, and the provision of more opportunities for managers and store employees to dialogue and spend quality time together.

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