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Keywords

employee, attitude, behavior, human resource, practices, firm, performance, HR, work, customer, satisfaction, job

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This paper has not undergone formal review or approval of the faculty of the ILR School. It is intended to make results of Center research available to others interested in preliminary form to encourage discussion and suggestions.

Abstract

This research examined organizational commitment as a mediator between HR practices and customer satisfaction of 35 job groups from 13 service firm business units. Both commitment level and consensus were predicted to influence customer satisfaction. Results found that commitment level mediated the relationship between HR practices and customer satisfaction.

HR Practices and Customer Satisfaction: The Mediating Link of Commitment

In the modern service economy, customer satisfaction is a key factor contributing to organizational success. The collective attitudes and behaviors of the workforce in a service organization have great potential to impact customer satisfaction because of their direct contact with customers. By managing the boundary between the customer and the firm, employees in service providing jobs influence competitive advantage by shaping customer loyalty and buying behavior (Heskett, Sasser, & Schlesinger, 1997). Thus it is critical to understand what management practices contribute to the creation of positive service interactions between employees and customers. Human resource practices have been found to positively relate to firm performance in recent studies (e.g. Huselid, 1995). However, much of this research has been conducted in manufacturing settings and we do not yet know the processes that may connect HR practices and customer satisfaction. The goal of the current study is to open this black box by proposing the importance of group commitment as a key mediating factor.

Interest in strategic human resource management (SHRM) has heightened as a result of a number of studies that found a relationship between HR systems variously labeled “high performance”, “commitment”, or “involvement” models and firm financial performance (e.g. Arthur, 1994; Huselid, 1995; MacDuffie, 1995; Ichniowski et. al, 1997). High performance HR systems are characterized by rigorous selection, investment in training, work designed so that employees have opportunities for participation and decision making, and rewards structures designed to recognize high performers and promote from within (Delery & Doty, 1996; Huselid, 1995; Macduffie, 1995). The underlying rationale of this stream research is that these are “best practices” that impact firm performance by enhancing the skill, motivation, and empowerment of the workforce (Delery, 1998; Delery, Gupta, & Shaw, 1997; Huselid & Becker, 1996).

Prior empirical evidence of a relationship between HR practices and firm performance is based almost entirely on manufacturing firms (e.g. Arthur, 1992; MacDuffie, 1995; Ichniowski et al, 1997; Snell & Dean, 1992; Youndt et al., 1996). However, more attention to service firms and

customer satisfaction, a key performance outcome, is warranted since services are a rapidly expanding part of the new economy employing growing numbers of employees. In fact, a study by Schneider and Bowen (1985) found significant relationships between HR practices and customer reports of service quality in a sample of banks. We argue that a positive relationship should also exist between high performance HR practices and customer satisfaction in a sample of business units within a single service firm.

H1: High performance work practices will be positively associated with customer satisfaction.

However, SHRM research has been criticized by numerous authors for its lack of theoretical and empirical work specifying the mediating processes by which HR practices lead to firm outcomes (McMahan et al, 1998; Dyer & Reeves 1995; Delery 1998). One promising potential mediating mechanism through which HR practices may influence firm performance is through fostering organizational commitment in its workforce. Organizational commitment represents an individual's identification and involvement with an organization (Porter, Steers, Mowday, & Boulin, 1974).

A large body of literature supports the notion that the work practices of an organization influence perceptions of commitment. Among these practices are those that involved open communication, employee specific investments in training, decision-making and empowerment, promotion opportunities, and the use of performance contingent rewards (Konovski & Cropanzo 1991; Meyer & Allen 1997).

However, all of these studies measured work practices and commitment perceptions at the individual level. This study will measure work place practices and commitment at the individual level and then aggregate to the job level. Feelings of commitment are expected to be widely shared within organizational units subjected to the same policies, practices, and procedures. This is the case because the stimuli being experienced by the members of the unit are assumed to be constant across individuals. Consistent with this reasoning, SHRM researchers have also advocated focusing on the HRM practices measured for particular

organizational populations (Delery, 1998). The large body of research on organizational commitment highlights the importance of work experiences that communicate that the organization is supportive of its employees, treats them fairly, and enhances their sense of personal importance and competence by appearing to value their contributions to the organization (Meyer & Allen, 1997). High performance HR systems should lead to the development of a climate signaling these values and thus lead to group commitment.

A meta-analysis has found mixed evidence for the relationship between commitment and performance (Mathieu & Zajac, 1990). Recent studies have found stronger support for positive relationships between organizational commitment and performance (Meyer & Allen, 1997). A recent related study suggests that job satisfaction may be a better predictor of performance when the employee has greater control over the nature of his/her work (Judge, Thoresen, Bono, & Patton, 1998). Similarly, research also suggests that the level of control an employee has over a particular work outcome determines the degree to which performance can be influenced by commitment (Meyer & Allen, 1997). Thus in high performance work systems in which employees have greater levels of participation and discretion, commitment is likely to have a stronger relationship to performance than in work systems based on low skill requirements and narrowly defined jobs.

Organizational commitment has further been shown to have a consistent relationship with organizational citizenship behavior (OCB), or behavior that is above and beyond the call of duty (Smith, Organ, & Near, 1983). These types of behaviors include helping others, spreading goodwill, and making constructive suggestions. These extra-role behaviors may play a larger role on the effectiveness of employees in service settings with direct customer contact and thus may propel their performance more than for other types of employees. Additionally, when commitment is high, it means that an employee's values are aligned with the organization and that she or he wants to do what is best for the organization (Mowday, Porter, & Steers, 1982). Group commitment is hypothesized to have a direct effect on performance through the shaping of employee role and extra-role behavior (Schuler & Jackson, 1987). Because many employees

in service organizations have direct contact with customers and thus have an ability to make an impact based on this proximity, in-role as well as extra-role behaviors stemming from value alignment may have a significant impact on their overall effectiveness. All of the previous research cited above has been conducted at the individual level of analysis. When these attitudes and behaviors are shared and aggregated, theoretically they should shape group level outcomes of customer satisfaction.

Some supportive evidence that attitudes should mediate the relationship between HR practices and customer satisfaction have been suggested by previous research on attitudes and customer satisfaction. Job satisfaction has been found to predict employee perceptions of service quality (Schesinger & Zornitsky, 1991). Schmitt and Allscheid (1995) found that employees' climate perceptions of management, supervisor, monetary and service support were related to employee affect. These climate perceptions should be shaped by high performance HR practices. Further, these researchers found that affect was related to employee service intentions, which was related to customer service. Thus, theory and research support the proposition that employee attitudes are linked to customer satisfaction, and that HR practices are a critical influence on employee attitudes. The following mediation hypothesis is thus proposed.

H2: Organizational commitment will mediate the relationship between HR practices and customer satisfaction.

High performance HR practices are theorized to impact performance through the creation of a strong organizational context or climate (MacDuffie, 1995). Arguably, it is the effectiveness of those practices in conveying the organization's goals and the value it places in its employees that matter rather than the mere existence of particular practices. Thus how well these practices are aligned with the culture of an organization, how effectively they are implemented and communicated, and how employees' interpret these practices determine the effectiveness of high performance work systems in creating a strong organizational context (Ostroff & Bowen, 2000). The strength of the organizational climate affects employee work

attitudes and serves to direct employee behaviors (Kopelman, Brief, & Guzzo, 1990). Strong climates shape the attitudes and behavior of people and lessen the effects of individual differences such as personality (Kenrick & Funder, 1988).

Shared commitment should be stronger when the HRM process is clear and practices effectively convey the importance of employees to the organization. A successfully implemented and communicated system of HR practices should create a climate emphasizing employee contribution, empowerment, and value to the organization more strongly than a weakly communicated system. A weakly communicated or implemented system is more likely to result in greater variability in perceptions of employment relationship contracts within an organization (Ostroff & Bowen, 2000).

At the job level of analysis, the level of shared understanding of HR practices should be reflected in the level of shared commitment. Variation in commitment across members of an organization will affect the similarity of employee behavior and quality of their interpersonal relations with each other and with customers (Zander, 1994). The degree to which commitment is widely shared is likely to influence the consistency of service that is provided. Thus the successful implementation of HR practices should result in shared perceptions of both HR practices in the organizational unit and shared commitment. The following hypotheses are thus proposed:

H3: Consensus on high performance HR practices will be positively related to consistency of customer satisfaction ratings.

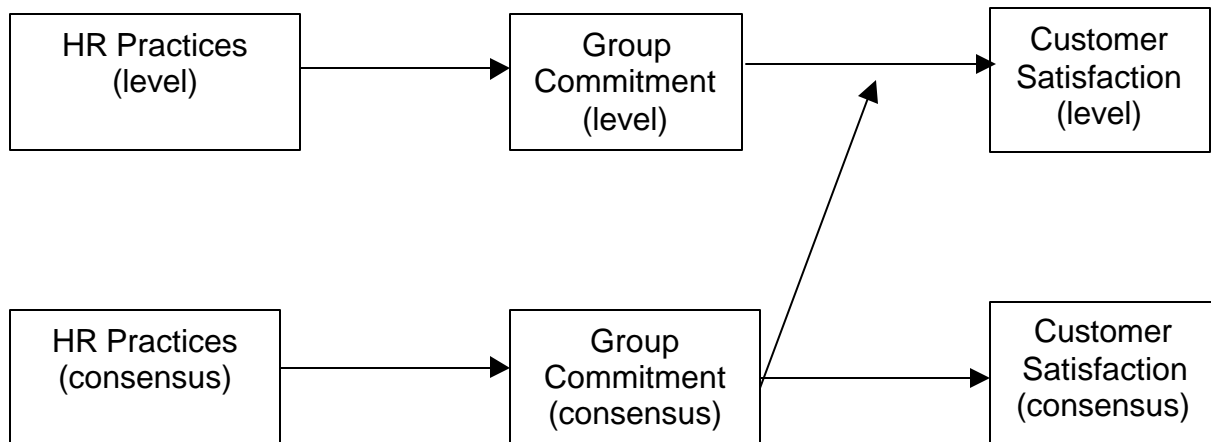
H4: The relationship between consensus on high performance HR practices and consistency of customer satisfaction will be mediated by consensus of group commitment.

In fact, level of commitment and degree of consensus on commitment are not independent in a particular organizational context, but are likely to have interactive effects. A climate with a low level of consensus and a moderate level of commitment may produce more detrimental group outcomes than a climate with high degree of consensus and moderate level of commitment because of interpersonal friction and process loss (Lindell & Brandt, 2000). Thus

consensus can also be expected to moderate the influence of mean level of commitment on customer satisfaction (see Figure 1).

H5: The degree to which commitment is shared (consensus) will moderate the relationship between level of commitment and customer satisfaction.

Figure 1
Model of HR Practices and Customer Satisfaction



Method

Sample.

This study was part of a larger research program on strategic human resource management. Our sample is unique in that it consists of autonomous business units within one large food service distributing company. Each business unit consists of only one establishment or site. For the larger study we had a business unit participation rate of 54%.

All business units are free to develop their own systems of HR practices with little or no direction from corporate headquarters, and much variation across establishments exists. SHRM researchers have advocated a move down from the firm to the establishment level in order to better capture the nature of HR practices and performance relationship (Delery & Doty, 1996; Wright & Sherman, 1999). Focusing on the HRM practices measured for the core workforce on multiple jobs has also been advocated to enhance measurement reliability and precision (Delery, 1998). In this study we utilize a sample of three core job categories within a sample of

autonomous business units at the establishment level: Marketing Representatives, Service Representatives, and Drivers. The unit of analysis in the current study is the job group in each organization. Each establishment specific job-group represents a collection of individuals who are similar to one another but different from the other job groups in the same establishment and from the same job groups in different establishments. Scholars have argued that organizations should and do treat occupational groups differently with regard to human resource management practices (Lepak & Snell, 1999; Jackson, Schuler, & Rivero, 1989). In fact, we found significant mean differences in HR practices both across business units and across jobs.

Procedure

Business-unit human resource managers were instructed by the corporate office to randomly select 20% or more of the employees from each job group. Employees took surveys on company time and the response rate for employees in these groups was 100%. Only responses that contained at least six respondents per job category were retained in order to ensure inter-rater reliability. To avoid the risk of percept-percept bias, of the responding employees surveyed within each job category per business unit, a random half was used as respondents for the measure of existence of HR practices, and the other half was used to report organizational commitment. Survey responses were matched to customer satisfaction surveys. Customer satisfaction surveys were received for 30 business units and were matched to core job groups having at least six employee respondents, leading to a final sample size of 171 employees in 35 job groups from 13 business units.

Measures

HR Practices. Although there is considerable variation in what HR practices are measured in previous studies, they all include some measure of careful selection, employee involvement, extensive training, internal promotion, and performance based pay (Dyer & Reeves, 1985). Consistent with previous research, we used an additive index of these HR practices (e.g. MacDuffie, 1995, Youndt, Snell, & Lepak, 1996).

Employee respondents are asked whether or not fifteen specific HR practices exist for their job category (1=yes, 2=no, 3=I don't know). See Table 1 for the complete listing of the HR practice items used in this study. Sample items include: "Applicants for this job take formal tests (paper and pencil or work sample) before being hired" (selection), and "Pay raises for employees in this job are based on job performance" (compensation).

One training item was originally written in a different response format than the rest of the HR practice items. This item was "On average, how many hours of formal training do employees in this job receive each year?" This item was re-coded to comply with the yes/no dichotomous

Table 1
Human Resource Management Practice Questions

Selection and Staffing

1. Applicants undergo structured interviews (job related questions, same questions asked of all applicants, rating scales) before being hired.
2. Applicants for this job take formal tests (paper and pencil or work sample) before being hired.
3. Qualified employees have the opportunity to be promoted to positions of greater pay and/or responsibility within the company.

Training

4. On average how many hours of formal training do employees in this job receive each year?^b
5. Supervisors in charge of employees in this job receive at least 2 days of training in supervisory skills each year.

Pay for Performance

6. Employees in this job regularly (at least once a year) receive a formal evaluation of their performance.
7. Pay raises for employees in this job are based on job performance.
8. Employees in this job have the opportunity to earn individual bonuses (or commissions) for productivity, performance, or other individual performance outcomes.

Participation

9. Employees in this job have a reasonable and fair complaint process.
10. Employees in this job are involved in formal participation processes such as quality improvement groups, problem solving groups, roundtable discussions, or suggestion systems.
11. Employees in this job communicate with people in other departments to solve problems and meet deadlines.
12. How often do employees in this job receive formal company communication regarding:^c
 - Company goals (objectives, actions, etc)?
 - Operating performance (productivity, quality, customer satisfaction, etc.)?
 - Financial Performance (profitability, stock price, etc.)?
 - Competitive performance (market share, competitor strategies, etc.)?

^a With the exception of those marked, the response option for these questions was "Yes, No, I don't know."

^b Response option was "Hours _____"

^c Response options for these questions were: "Never, Annually, Quarterly, Monthly, Weekly, Daily."

response format of the other practice items. If the number of training hours entered is equal to or greater than 15, that response was coded as “1”=yes. Hours below 15 were coded as “0”=no, as such low levels arguably do not represent significant investment in employee training.

Several participation items were also re-coded to a dichotomous response format (See Table 1). These items were written in Likert scale formats asking about the frequency of communication in various domains (1=Never, 6=Daily). Responses of “quarterly” or more frequently were coded as “1”=yes. Responses of “annually” and “never” were coded as “0”=no as these do not represent significant investments in communication. All HR practice items were summed into an aggregate index and then aggregated by job group (ICC(1)=.39, ICC(2)=.93).

Consensus of HR Practices. The level of agreement of employee reports of HR practices can be viewed as an index of the success of the communication and implementation of the practices. If employees have poor agreement on a practice, arguably it is not effectively communicated or implemented. Agreement was assessed by calculating the variance on each individual practice item within a job group and then taking the mean of all variances of the HR practices within the job group. Variance has been suggested as an appropriate index of agreement in groups (Lindell & Brandt, 2000).

Organizational Commitment. Six items were used from two different organizational commitment scales (Meyer & Allen, 1997; Porter et al, 1974). A sample item is “I feel a strong sense of belonging to this organization.” Items were summed to create one index ($\alpha = .86$, ICC(1,1)=.52, ICC(1,k)=.95).

Consensus of commitment. All individual level scales were aggregated by job group using standard deviation aggregation procedures. Standard deviation aggregation was then squared in order to create organizational commitment variance.

Customer Satisfaction was assessed with a single item measure for each job group. This measure asks respondents to rate the service of their representatives of the core job categories

(Marketing, Service Representative, or Driver) using a Likert scale (1=strong disagree, 5=strongly agree). A sample item includes “How satisfied are you overall with the helpfulness of your (company name) Customer Service Representative?” An average of 74 customers rated each job group in each business unit (ICC(1,1)=.01, ICC(1,k)=.43)

Consistency of Customer Satisfaction All ratings were aggregated by job group using standard deviation aggregation procedures. Standard deviation aggregation was then squared in order to create job group customer satisfaction variance.

Table 2
Descriptive Statistics

Variable	N	M	SD	1	2	3	4	5
1. HR Practices (level)	34	8.75	2.67	1.0				
2. HR Practices (consensus)	32	8.88	14.63	-.032	1.0			
3. Commitment (level)	35	22.72	2.34	.37*	-.110	1.0		
4. Commitment (consensus)	35	17.13	12.87	.23	.05	-.41**	1.0	
5. Customer Satisfaction (level)	35	4.42	.17	.44**	.07	.06	-.10	1.0
6. Customer Satisfaction (consensus)	35	.56	.19	.10	.07	.38*	.06	-.57**

*p<.05, **p<.01

Table 3
Hierarchical Regression Analysis Results
of the effects of HR Practices on Customer Satisfaction

Variable	Customer Satisfaction			
	Step 1	Step 2	Step 3	Step 4
HR Practices (level)	.44**	.31	.21	.21
Organizational Commitment (level)		.37*	.50*	.42
Organizational Commitment (consensus)			.22	-.37
Organizational Commitment (level x consensus)				.57
R ²	.20	.32	.35	.35
ΔR ²	.20	.12*	.03	.00
F	7.77**	7.18*	5.35	3.94

* p < .05

**p < .01

Note. Standardized coefficients are shown

Results

Descriptive statistics and bivariate correlations between HR practices (level and consensus), organizational commitment (level and consensus), and customer satisfaction (level and consensus) are listed in Table 2.

Bivariate correlations showed that the level of HR practices are positively related to the level of customer satisfaction, supporting Hypothesis 1 ($r = .44$, $p < .01$). We also hypothesized a mediation relationship of organizational commitment between HR practices and customer satisfaction (Hypothesis 2, see Table 3). Using hierarchical regression, organizational commitment was then added to the model to test its mediating role. Organizational commitment explained additional variance in customer satisfaction ($\Delta R^2 = .32$, $p < .05$) and was positively related as expected ($\beta = .37$, $p < .05$). HR Practices became insignificant when level of organizational commitment was included in the model suggesting that their relation with customer satisfaction is mediated by commitment. Organizational commitment explained significant variance in customer satisfaction ($\Delta R^2 = .12$, $p < .05$). As an additional post hoc test, we also examined whether consensus predicted any incremental variance above mean level of commitment. It did not.

Examination of the bivariate correlation between consensus of HR practices and consensus of customer satisfaction did not show a significant relationship, failing to support Hypothesis 3. Further, as Table 2 indicates, the degree to which commitment was shared within a job group was not significantly associated with the consensus of customer satisfaction ratings. Commitment consensus also was not significantly associated with customer satisfaction consensus. Thus the necessary precondition correlations to test mediation were absent (Baron & Kenny, 1986), failing to support Hypothesis 4. Additionally, the degree to which commitment is shared did not moderate the relationship between the level of commitment and level of customer satisfaction (Hypothesis 5, Table 3).

Discussion

Methodologically, this study provided several advancements over previous SHRM work. First, we brought the level of analysis down to core jobs and ratings of customer satisfaction linked to those jobs. Second, HR practices were measured by multiple employees within a given job group. Use of employee respondents arguably more accurately represents the HR practices that exist for particular job groups rather than single raters (HR managers) as has been relied on in previous research (Delery, 1998). Third, we test for a mediating mechanism between HR practices and performance. Finally, we controlled for mono-method bias by using distinct groups of employee respondents from each job group to report on HR practices and organizational commitment.

Results indicate a positive relationship between HR practices and organizational commitment, between commitment and customer satisfaction ratings, and between HR practices and customer satisfaction. Most importantly, the effect of HR practices on customer satisfaction appears to be mediated by organizational commitment. Evidence of this mediation effect suggests that HR practices can positively enhance customer satisfaction through building the identification and involvement of its workforce.

Although consensus on HR practices should theoretically affect the consensus of commitment that develops, we did not find support for this hypothesis. Similarly, no effect for consensus of commitment was found on consensus of customer satisfaction, a measure of service consistency. Collectively, these results suggest that it is the overall mean level that is most important when considering commitment. There are several possible empirical explanations that could account for why we did not find an effect for consensus. Our small sample size could mean that we do not have enough power to detect an effect of consensus. Another possible explanation could be the restricted range of our commitment and customer satisfaction measures. However, we encourage future research to continue to examine consensus of group commitment in settings in which there is more variance in order to be more confident about the generalizability of the results of our current research. It is also possible that

job groups requiring greater levels of interdependence may be more susceptible to fluctuation in commitment among group members (Thompson, 1967).

Limitations and Future Research

Future research should seek additional performance outcomes at the job level from larger samples and increase statistical power. Use of a one item rating of customer satisfaction is also problematic. Single item measures are more prone to unreliability than summated measures (Spector, 1992). Future research should seek to develop fuller measures of customer satisfaction. Another limitation of the current study involves the use of agreement on “existence” of practices as a proxy for “strength” of practices or index of the communication quality. Future research should seek to develop better measures of HR resource system processes.

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