

# **INTERNAL MARKETING AND EMPLOYEE SATISFACTION AND LOYALTY: CROSS-CULTURAL SCALE VALIDATION IN CONTEXT OF U.S. AND GERMAN NURSES**

**Andrew J. Dahl, University of Wisconsin -Whitewater  
James W. Peltier, University of Wisconsin -Whitewater**

## **ABSTRACT**

Frontline healthcare service providers' job satisfaction and loyalty continues to remain a key global issue. Efforts to increase employee satisfaction and loyalty are antecedents to improving the service experience, customer (patient) satisfaction, and customer loyalty. This article develops and validates a parsimonious scale for internal marketing's impact on employee satisfaction and loyalty within the nursing profession. A combination of exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and regression analyses are used in a staged-approach to assess face, content, predictive, and convergent validity. The resulting 14-item scale shows a high level of cross-country (U.S. and Germany) reliability and validity and provides strong evidence of the stability of the four underlying internal bonding dimensions (structural, nurse social, physician social, and financial bonds). The scale provides managerial insights on the relative priority of relational bonds internal marketing efforts should address to enhance employee satisfaction and loyalty.

## **INTRODUCTION**

Internal marketing is receiving considerable attention as a mechanism for developing sustainable competitive advantages through enhanced employee engagement, satisfaction, and loyalty (Vasconcelos 2008; Bowen and Schneider 2014). Internal marketing includes cross-functional systems and efforts that employ a marketing approach to educate and engage a customer-centric workforce (Ahmed and Rafiq 2003; Snell and White 2009). Internal marketing's impact

extends beyond the employee-firm relationship vis-à-vis its ability to link employee satisfaction to superior service quality (Homburg, Wieseke, and Hoyer 2009; Sousa and Coelho 2013). Highly satisfied employees enhance the quality of service delivery leading to increased customer satisfaction, customer loyalty, and organizational performance (Powers and Valentine 2008; Tortosa, Moliner, and Sanchez 2009; Salegna and Fazel 2011).

Personal, high contact services like healthcare have particularly strong relationships between employee satisfaction, service quality, and customer (patient) satisfaction (Brown and Lam 2008; Hong, Liao, Hu, and Jiang 2013). The existing research shows internal marketing's potential to address common complaint issues such as low job satisfaction, job stress, high job burnout, and high turnover (Chang and Chang 2007, 2009). Moreover, nurse retention remains a focal point in light of the ongoing global shortage caused by the increasing demand for care, aging and migrating healthcare workforce, and other factors (Buerhaus, Auerbach, and Staiger 2009; MacLean, Hassmiller, Shaffer, Rohrbaugh, Collier, and Fairman 2014). The negative effects on patient safety and health outcomes as a result of dissatisfied and overworked staff are also well documented (Kane, Shamliyan, Mueller, Duval, and Wilt 2007; Rafferty, Clarke, Coles, Ball, James, McKee, and Aiken 2007). Internal marketing thus has significant value to organizations seeking to improve patient experiences and outcomes (Peltier, Pointer, and Schibrowsky 2008; Somers, Finch, and Birnbaum 2010).

Despite increased focus on internal marketing's positive impact, research examining internal marketing in cross-cultural settings is limited (Huang and Rundle-Thiele 2014)

especially in healthcare settings. Moreover, no scale has been validated for cross-cultural use that identifies the most important relational bonds to internal satisfaction/dissatisfaction and loyalty. Cross-country comparisons of internal marketing's impact on nurses' job satisfaction and retention are especially important to study given the global nursing crisis and related implications for nursing and healthcare management (MacLean et al. 2014). Research is thus needed that offers scholars and the healthcare community the opportunity to assess comparative constructs across national borders.

Extending the work of Peltier, Schibrowsky, and Nill (2013), the purpose of this study is to develop an internal marketing scale that has cross-country reliability and validity. We contribute to the literature by offering a parsimonious instrument that can be used in various countries to identify the relative importance of structural, social, and financial bonds to improve job satisfaction and retention of healthcare workers. Following a literature review of internal marketing bonds, we present validation of our scale across the two countries and highlight the relative importance of the four scale dimensions to U.S. and German nurses.

## **LITERATURE REVIEW**

Internal marketing theory suggests organizations are more likely to enhance employee satisfaction and loyalty by treating employees similar to "valued" customers (Mudie 2003; Lings and Greenley 2005; Bowers and Martin 2007). Relational bonds between firms and employees play a vital role in influencing job satisfaction (Ballantyne 2003). Spector (1997) defined job satisfaction as an indication of how much people like or dislike their jobs. Within a healthcare context, structural, social, and financial bonds have been classified as antecedents to establishing long-term relationships with healthcare staff (Berry 1995) and the presence of all three bonds strengthens organizational commitment (Peltier et al. 2008).

We briefly review three types of relational bonds: financial, social, and structural. See Peltier et al. (2013) for an extensive review.

### **Financial Bonding Activities And Job Satisfaction/Loyalty**

Employee financial packages include salary, overtime pay, and fringe benefits (Murrells, Clinton, and Robinson 2005). Improved financial packages enhance employee relationships by creating greater job satisfaction and less turnover (Bowers and Martin 2007). As organizations enhance financial packages, employees are more likely to believe the organization is committed to them, appreciates their contribution, and concerned about their welfare.

### **Social Bonding Activities And Job Satisfaction/Loyalty**

Similar to efforts to develop social bonds with external customers, personal interactions are important for creating social bonds with internal customers (employees). Willem, Buelens, and De Jonghe (2007) identified communication between physicians and nurses and horizontal communication structures within nursing units as antecedents to job satisfaction. Ahmed and Rafiq (2003) outline the increased importance of internal marketing communications in cross-functional settings. Given the cross-functional nature of healthcare, it is imperative that these firms view internal marketing from an emotional orientation perspective (Ahmed, Rafiq, and Saad 2003; Ahmed and Rafiq 2003).

### **Communication with Other Nurses And Caregivers**

Positive communications between nurses and others involved in the care process leads to improved job performance and quality of care, while also increasing job satisfaction (Rosenstein and O'Daniel 2005). Similarly, Miller (2006) identified a relationship between cooperative/supportive work environments and nurse satisfaction and retention. Importantly, communication nurses have with other nurses and healthcare providers is different from communication nurses have with physicians.

## Communications Between Nurses And Physicians

Efforts to enhance nurse-physician relationships are critical to establishing positive work environments and serve as a precursor to nurse satisfaction and loyalty as well as improved patient outcomes (Boyle and Kochinda 2004.). Conversely, poor nurse-physician relationships lowers job satisfaction and increases the likelihood nurses will leave (Rosenstein and O'Daniel 2005).

## Structural Bonds And Job Satisfaction/Loyalty

A growing research stream supports a connection between structural empowerment, nurses' job satisfaction, and loyalty to the organization (Laschinger and Finegan 2004; Patrick and Laschinger 2006). Feelings of empowerment are not only connected to the amount of input nurses believe they have over patient care, but also serve as a precursor to job satisfaction and loyalty (Laschinger and Finegan 2004; Nedd 2006). Additionally, healthcare organizations that encourage autonomy and control decrease job burnout while increasing nurses' satisfaction (Aiken, Clarke, Sloane, Sochalski, Busse, Clarke, Giovannetti, Hunt, Rafferty, and Shamian 2001). However, the perception that nurses have little input into care decisions and perform a subservient role is a major barrier to increasing the pool of potential nurses and suggests efforts that increase empowerment are needed (Chaguturu and Vallabhaneni 2005).

## Comparisons Of U.S. And German Healthcare Systems And Nurses

The U.S. and German healthcare systems and nursing professions are quite different, offering an ideal setting for cross-country scale development and validation. First, Germany provides universal insurance coverage and greater equity/access to care compared to the U.S. (Organization for Economic Cooperation and Development (OECD) 2014). Although cost inefficiencies exist in the U.S., hospital

admission rates and length of stays are shorter (U.S. 4.8 days; Germany 9.2 days) (OECD 2014) suggesting higher quality of care in the U.S. Meanwhile the number of doctor consultations per capita is higher in Germany (Germany 9.7; U.S. 4.0) (OECD 2014) suggesting different workloads. Finally, German nurses tend to be more dissatisfied (Germany 37%; U.S. 25%) and have greater intentions to leave their job within the next year (Germany 36% vs. U.S. 14%) (Aiken, Sermeus, Van den Heede, Sloane, Busse, McKee, Bruyneel, Rafferty, Griffiths, Moreno-Casbas, Tishelman, Scott, Brzostek, Kinnunen, Schwendimann, Heinen, Zikos, Sjetne, Smith, and Kutney-Lee. 2012). In combination, these differences provide an ideal setting for cross-border assessment of the internal bond dimensions.

## METHODOLOGY

### Questionnaire Development

For cross-country scale validation purposes, the survey was administered to nurses in the U.S. and Germany. A multi-stage process was undertaken to construct the questionnaire. First, internal marketing and relationship marketing literatures, including articles within a healthcare context, were reviewed to identify potential questionnaire items specific to financial, social and structural bonds and loyalty (see Peltier et al. 2013). Second, face validity was established vis-à-vis 20 interviews with nurses and their supervisors to identify items. Lastly, the questionnaire was pre-tested for clarity with a sample of ten nurses.

From the literature, an initial set of 28 internal bonding statements were included on the questionnaire related to financial, social, and structural bonds (five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree). Two dependent variables were also included: (1) overall satisfaction with their job (five-point scale ranging from 1 = very dissatisfied to 5 = very satisfied) and (2) employment referral likelihood (five-point scale ranging from 1 = very unlikely to 5 = very likely). These two dependent variables were summed to create an Overall

**Table 1**  
**Profile of Respondents**

	<b>US Nurses N=201</b>	<b>German Nurses N=109</b>
<b>Years Worked at Hospital</b>		
<b>0-2</b>		
<b>3-5</b>	21.1%	18.5%
<b>6-9</b>	13.1%	11.1%
<b>10+</b>	11.6%	12.0%
	54.2%	58.4%
<b>Position</b>		
<b>LPN</b>		
<b>RN</b>	5.5%	5.5%
	94.5%	94.5%
<b>Age</b>		
<b>&lt; 30</b>		
<b>30-39</b>	16.7	7.5
<b>40-49</b>	25.9	32.4
<b>50+</b>	38.1	37.0
	18.3	23.1
<b>Shift</b>		
<b>Days</b>		
<b>PM</b>	50.3%	52.5%
<b>Nights</b>	34.6%	29.3%
	15.1%	18.2%

Satisfaction/Loyalty Score (2-10). This score is used in the regressions reported later.

For German nurses, the questionnaire was originally developed and written in English. To translate it into German, the translation/back-translation technique was employed to achieve a semantic, conceptual and normative equivalent relative to the English version (Behling and Law 2000). Specifically, a German speaking professional translated the questionnaire into German. Another bilingual individual with no knowledge of the original questionnaire translated the German version back into English. The back-translated version was then reconciled to eliminate any discrepancies.

#### **Data Collection Procedure**

The questionnaires were administered to full-time nurses working at three hospitals in the

United States and two in Germany. Advanced notice of the purpose of the study was communicated to nurses to motivate response. The survey was distributed via internal mail to the nurses at the five hospitals. To maintain confidentiality and candid responses, completed surveys were collected via anonymous/sealed envelopes placed in a secure drop box. A total of 310 surveys were returned - 201 from the U.S. (80% response rate) and 109 from Germany (70% response rate), for a total response rate of 76%. Table 1 contains the respondent profiles for the U.S. and Germany responses. A cross-tabulation of respondent profiles across the two countries revealed no significant differences. This provides some evidence that the samples were demographically comparable across the U.S. and German nurses, allowing for initial pooling of the data.

### Scale Validation Results: Pooled U.S.-German Sample

The primary purpose of this research is to develop a parsimonious internal marketing scale in a nursing context that has a high level of cross-country validity and reliability. With this in mind, a staged approach was utilized to assess face, content, predictive, and convergent validity. Face validity was accomplished through a literature review that identified a set of pertinent scale items (for a review see Peltier et al. 2013). Content validity was established through an exploratory factor analysis (EFA), including reliability assessment. Predictive validity was determined through a regression analysis using the internal bonds as independent variables and a summed overall satisfaction and referral likelihood score as the dependent variable. Convergent validity was assessed via a confirmatory factor analysis (CFA) using the parsimonious item set found from the EFA. Lastly, structural consistency was established by examining the factor structures and regression

results across the U.S. and German sample of nurses.

### Exploratory Factor Analysis

Following Churchill (1979), to determine dimensionality, a factor analysis using a VARIMAX rotation was conducted on the pooled data set using the 28 initial items representing structural, social and financial bonds. For parsimony, items were eliminated with low or multiple loadings. As expected, all three internal bond dimensions surfaced: Structural, Nurse Social, Physician Social, and Financial bonds. We then calculated coefficient alpha scores for each of the dimensions, eliminating items with low item-to-total correlations. Table 2 contains the factor loadings and coefficient alphas representing the remaining 14 internal bonding items. As shown in Table 2, all of the factor loadings exceeded .6. The coefficient  $\alpha$  scores for the four dimensions ranged from .83 to .93, indicating satisfactory levels of internal consistency (Nunnally 1978).

**Table 2**  
**Factor Analysis and Reliability Assessment Pooled Sample**

<b>Internal Bonds</b>	<b>Structural</b>	<b>Nurse Social</b>	<b>Physician Social</b>	<b>Financial</b>
Freedom to do your job as you see best	.800			
Your specific patient responsibilities	.793			
Your ability to provide the best possible care to patients	.788			
Your patient load assigned to you each shift	.719			
Amount of input you have in care decisions	.680			
Your relationship with nurses		.812		
Communication among nursing staff		.811		
Cohesion of the nursing staff		.781		
Communication with other members of health care team		.640		
Communication between physicians and you			.877	
Your relationship with physicians			.875	
How well physicians listen to what you have to say			.775	
Total income earned				.947
Hourly Wage That You Receive				.947
Total Variance Explained = 72.9%	23.3%	19.0%	17.2%	13.5%
Coefficient Alpha	.86	.83	.86	.93

**Table 3**  
**Regression Results Pooled Sample**

<b>Internal Bonds</b>	<b>Std Beta</b>	<b>Sig</b>
Structural	.315	.001
Nurse Social	.093	.01
Physician Social	.162	.001
Financial	.223	.001
Country (Germany = 1)	-.415	.001
F = 73.0, R-square = .55, p < .001		
Dependent Variable = Summed Overall Satisfaction/Loyalty		

### Regression Analysis

To assess predictive validity, the factor scores for the four internal bonding constructs were regressed against the summed overall satisfaction/loyalty score. The initial regression findings are shown in Table 3. The overall model was highly significant ( $F = 73.0$ ,  $R\text{-square} = .55$ ,  $p < .001$ ). Consistent with the literature, structural bonds had the greatest positive impact on overall satisfaction/loyalty ( $\text{std } \beta = .315$ ,  $p < .001$ ). Financial ( $\text{std } \beta = .223$ ,  $p < .001$ ), Physician Social ( $\text{std } \beta = .162$ ,  $p < .001$ ), and Nurse Social were all significant ( $\text{std } \beta = .09$ ,  $p < .001$ ) and in the hypothesized direction. All four dimensions remained significant when controlling for country of origin; with German nurses having lower levels of satisfaction/loyalty which is in line with Aiken et al. (2012).

### Confirmatory Factor Analysis

To confirm the four-factor structure, the remaining 14 items were subjected to a confirmatory factor analysis to corroborate the unidimensionality of the measures. Specifically, a model was estimated in which the items were required to load on their a priori specified factors with each factor allowed to correlate with the other factors (Anderson and Gerbing 1988). The measurement model was estimated using AMOS 20. The overall chi square statistic for the model was significant ( $\chi^2 = 140$ , 68 df,  $p = 0.001$ ). The comparative fit index (CFI = 0.97), goodness of fit index (GFI = 0.94), adjusted goodness of fit index (AGFI=.91), normed fit index (NFI = .94), root mean residual (RMR=.04), and root mean square error of

approximation (RMSEA=.059) all suggested a satisfactory model fit. Following Mathwick and Rigdon (2004), all of the individual item loadings were significant at  $p < .001$ , and the completely standardized solution for all items ranged from .57 - .96. The average variance extracted value was .63, exceeding Fornell and Larcker's (1981) convergent validity criterion of .5.

### Scale Validation Results: Structural Consistency across Countries

The factor structure shown in Table 2 was then used as the base dimensionality for assessing scale consistency across United States and German nurses. Specifically, using separate samples, an identical principle components factor analysis was conducted for each country. Although the initial regression results showed strong predictive validity even when country was controlled for, establishing structural consistency increases confidence that our parsimonious internal bonding scale holds constant across countries. Table 4 summarizes the factor analysis results for each of the countries. High scale consistency is highlighted in four ways. First, all four internal bonding dimensions held constant across the two countries. Second, the total variance explained for each country varied by only 1.8% (68.1% Germany vs. 69.9% U.S.). Third, individual factor loadings remained high across the two countries, with relative consistency in their absolute values. Lastly, the variance explained for each of dimensions held constant across the countries (order was preserved). Combined,

these results provide strong evidence of the stability of the underlying dimensions.

As a final check we ran identical regression analyses for each of the countries, again using factor scores as independent variables and overall satisfaction/loyalty as the dependent measure. As Table 5 shows, for each country, all of the internal bonding dimensions

significantly impacted overall satisfaction/loyalty. We thus established predictive validity for each country. Although the U.S. model had a higher F value, it is expected given the larger sample size.

**Table 4**  
**Factor Analysis Results by Country**

	Structural		Nurse Social		Physician Social		Financial	
	US	Germany	US	Germany	US	Germany	US	Germany
Freedom to do your job as you see best	.761	.821						
Your specific patient responsibilities	.753	.793						
Your ability to provide the best possible care to patients	.756	.727						
Your patient load assigned to you each shift	.621	.669						
Amount of input you have in care decisions	.687	.664						
Your relationship with nurses			.759	.845				
Communication among nursing staff			.786	.806				
Cohesion of the nursing staff			.814	.746				
Communication with other members of health care team			.534	.690				
Communication between physicians and you					.853	.857		
Your relationship with physicians					.811	.874		
How well physicians listen to what you have to say					.785	.779		
Total income earned							.947	.951
Hourly Wage That You Receive							.945	.955
Total Variance Explained US = 69.9%								
Total Variance Explained Germany = 68.1%	21.0%	20.7%	17.5%	17.6%	17.5%	16.3%	13.9%	13.5%

**Table 5**  
**Regression Results by Country**

Bonds	United States		Germany	
	Std Beta	Sig	Std Beta	Sig
Structural	.386	.001	.324	.001
Nurse Social	.136	.01	.185	.05
Physician Social	.255	.001	.165	.05
Financial	.282	.001	.265	.01
	F = 22.1, R-square = .31		F = 5.0, R-square = .19	

## DISCUSSION

Satisfied frontline employees, such as nurses in healthcare, are important to the service delivery process, service quality, and customer satisfaction (Homburg et al. 2009; Sousa and Coelho 2013). In recognition that loyal frontline employees can build customer relationships that result in service provider and personal loyalty (Salegna and Goodwin 2005; Salegna and Fazel 2011), this study provides a starting point for filling the cross-border internal customer (employee) gap in the consumer satisfaction/dissatisfaction literature (Davidow 2012). Building on the internal marketing bond literature, the present study developed and validated a parsimonious internal marketing, employee satisfaction, and loyalty scale for the nursing profession with a high level of cross-country reliability and validity.

The study achieves parsimony through a 14-item nursing internal marketing scale identifying the internal bonds most important to establishing employee satisfaction and loyalty in healthcare organizations. Four dimensions surfaced in our model including structural, nurse social, physician social and financial bonds. In line with other studies, structural bonds focusing on control over care issues had the largest positive impact on overall employee satisfaction/loyalty across both countries. Importantly, the cross-country validation analysis indicates all four dimensions retain their

relative impact across the two countries, suggesting the scale may be generalizable to healthcare organizations in multiple countries and different healthcare systems.

Healthcare organizations around the globe will continue to face challenges related to nursing shortages and increased care demands (MacLean et al. 2014). The cross-country nursing internal marketing scale offers value to healthcare organizations seeking ways of increasing nurses' job satisfaction and loyalty. Focusing internal relationship marketing efforts on the internal bonds identified by our scale may help healthcare organizations reduce the growing care demand-supply chasm and reduce common complaints about job dissatisfaction, job stress, and burnout. Importantly, healthcare organizations in various countries can use the instrument to identify the specific internal marketing efforts that will lead to improvements in employee satisfaction and loyalty within their organization. While internal marketing efforts addressing all four bond dimensions are important, our results suggest enhancing structural bonds related to nurses' empowerment and input into care decisions is especially important. Furthermore, this aligns with research that commonly held perceptions about nurses' limited role in care decisions are a major barrier to attracting and retaining nurses (Chaguturu and Vallabhaneni 2005).

Although this study provides a starting point for cross-country internal marketing scale

development and validation, a few limitations exist. First, the study was conducted with nurses from only five healthcare locations in the U.S. and Germany. While the response rate was high across all five locations, the overall sample size in each country was relatively small. Future research should test the scale in other cultural and organizational settings, with a range of small and large-sized healthcare organizations from both rural and urban settings, and include healthcare staff beyond nurses. Second, the surveys occurred at only one point in time at each of the locations. Longitudinal studies investigating how internal marketing approaches utilized by healthcare organizations impact internal satisfaction and loyalty are also needed. Finally, this study provides a starting point for examining internal consumer (employee) satisfaction/dissatisfaction and loyalty. Given the service-profit chain relationship between employee satisfaction/loyalty, consumer satisfaction/loyalty, and organizational performance, similar cross-country efforts should be taken to extend and validate our internal marketing scale to service industries beyond healthcare that rely on personal and frequent contact between frontline employees and customers.

## REFERENCES

- Ahmed, Pervaiz K. and Mohammed Rafiq (2003), "Internal marketing issues and challenges", *European Journal of Marketing*, 37(9), 1177-86.
- Ahmed, Pervaiz K., Mohammed Rafiq, and Norizan M. Saad (2003), "Internal marketing and the mediating role of organizational competencies", *European Journal of Marketing*, 37(9), 1221-41.
- Aiken, Linda H., Sean P. Clarke, Douglas M. Sloane, Julie A. Sochalski, Reinhard Busse, Heather Clarke, Phylliss Giovannetti, Jennifer Hunt, Anne Marie Rafferty, and Judith Shamian. (2001), "Nurses' reports on hospital care in five countries", *Health Affairs*, 20(3), 43-53.
- Aiken, Linda H., Walter Sermeus, Koen Van den Heede, Douglas M. Sloane, Reinhard Busse, Martin McKee, Luk Bruyneel, Anne Marie Rafferty, Peter Griffiths, Maria Teresa Moreno-Casbas, Carol Tishelman, Anne Scott, Tomasz Brzostek, Juha Kinnunen, Rene Schwendimann, Maud Heinen, Dimitris Zikos, Ingeborg Stromseng Sjetne, Herbert L. Smith, and Ann Kutney-Lee (2012), "Patient safety, satisfaction, and quality of hospital care: cross sectional surveys of nurses and patients in 12 countries in Europe and the United States", *British Medical Journal*, 344, e1717, Open access article available at <http://www.bmj.com/content/344/bmj.e1717>.
- Anderson, James C. and David W. Gerbing (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, 103(3), 411-423.
- Ballantyne, David (2003), "A relationship-mediated theory of internal marketing", *European Journal of Marketing*, 37(9), 1242-60.
- Behling, Orlando and Kenneth S. Law (2000), *Translating Questionnaires and Other Research Instruments: Problems and Solutions*, Sage Publications, Inc., Thousand Oaks, CA.
- Berry, Leonard L. (1995), *On Great Service*, Free Press, Lexington, MA.
- Bowen, David E. and Benjamin Schneider (2014), "A service climate synthesis and future research agenda", *Journal of Service Research*, 17(1), 5-22.
- Bowers, Michael R. and Charles L. Martin (2007), "Trading places redux: employees as customers, customers as employees", *Journal of Services Marketing*, 21(2), 88-98.
- Boyle, Diane K. and Chiemi Kochinda (2004), "Enhancing collaborative communication of nurse and physician leadership in two intensive care units", *Journal of Nursing Administration*, 34(2), 60-70.
- Brown, Steven P. and Son K. Lam (2008), "A meta-analysis of relationships linking employee satisfaction to customer responses", *Journal of Retailing*, 84(3), 243-255.
- Buerhaus, Peter I., David I. Auerbach, and Douglas O. Staiger (2009), "The recent surge in nurse employment: causes and implications", *Health Affairs*, 28(4), 657-668.
- Chang, C. and H. Chang. (2007), "Effects of internal marketing on nurse job satisfaction and organizational commitment: example of medical centers in Southern Taiwan", *Journal of Nursing Research*, 5(4), 265-73.
- Chang, C. and H. Chang. (2009), "Perceptions of internal marketing and organizational commitment by nurses", *Journal of Advanced Nursing*, 65(1), 92-100.
- Chaguturu, Sreekanth and Snigdha Vallabhaneni. (2005), "Aiding and abetting – nursing crises at home and abroad", *New England Journal of Medicine*, 353(17), 761-1763.
- Churchill Jr., Gilbert A. (1979), "A paradigm for developing better measures of marketing

- constructs", *Journal of Marketing Research*, 16(1), 64-73.
- Davidow, Moshe (2012), "CS/D&CB: the next 25 years", *Journal of Consumer Satisfaction, Dissatisfaction & Complaining Behavior*, 25, 1-6.
- Fornell, Claes and David F. Larcker (1981), "Evaluating structural equation models with unobservable variables and measurement error" *Journal of Marketing Research*, 18(1), 39-50.
- Homburg, Christian, Jan Wieseke, and Wayne D. Hoyer (2009), "Social identity and the service-profit chain", *Journal of Marketing*, 73(2), 38-54.
- Hong, Ying Hui Liao, Jia Hu, and Kaifeng Jiang (2013), "Missing link in the service profit chain: a meta-analytic review of the antecedents, consequences, and moderators of service climate", *Journal of Applied Psychology*, 98(2), 237-267.
- Huang, Yu-Ting and Sharyn Rundle-Thiele (2014), "The moderating effect of cultural congruence on the internal marketing practice and employee satisfaction relationship: an empirical examination of Australian and Taiwanese born tourism employees", *Tourism Management*, 42, 196-206.
- Kane, Robert L., Tatyana Shamliyan, Christine Mueller, Sue Duval, and Timothy J. Wilt (2007), "Nursing staffing and quality of patient care evidence report/technology assessment no. 151", Prepared by the Minnesota Evidence based Practice Center under Contract No. 290-02-0009, AHRQ Publication No. 07-E005. Rockville, MD: *Agency for Healthcare Research and Quality*. March 2007.
- Laschinger, Heather K. Spence and Joan E. Finegan (2004), "Empowerment, interactional justice, trust and respect: a nursing recruitment and retention strategy", *Academy of Management Proceedings*, C1-C6.
- Lings, Ian N. and Gordon E. Greenley (2005), "Measuring internal market orientation", *Journal of Service Research*, 7(3), 290-305.
- Lings, Ian N. and Gordon E. Greenley (2009), "The impact of internal and external marketing orientations on firm performance", *Journal of Strategic Marketing*, 17(1), 41-53.
- Lings, Ian N. and Gordon E. Greenley (2010), "Internal market orientation and market-oriented behaviours", *Journal of Service Management*, 21(3), 321-343.
- MacLean, Logan, Susan Hassmiller, Franklin Shaffer, Kathleen Rohrbaugh, Tiffany Collier, and Julie Fairman (2014), "Scale, causes, and implications of the primary care nursing shortage", *Annual Review of Public Health*, 35, 443-457.
- Mathwick, Charla and Edward Rigdon (2004), "Play, flow, and online search experience", *Journal of Consumer Research*, 31(2), 324-332.
- Miller, Joan F. (2006), "Opportunities and obstacles for good work in nursing", *Nursing Ethics*, 13(5), 471-87.
- Mudie, Peter (2003), "Internal customer: by design or by default?", *European Journal of Marketing*, 37(9), 1261-1276.
- Murrells, Trevor, Michael Clinton, and Sarah Robinson (2005), "Job satisfaction in nursing: validation of a new instrument for the UK", *Journal of Nursing Management*, 13(4), 296-311.
- Nedd, Nicole (2006), "Perceptions of empowerment and intent to stay", *Nursing Economic*, Vol. 24(1), 13-19.
- Nunnally, Jum C. (1978), *Psychometric Theory*, 2nd Ed., McGraw-Hill, New York, NY.
- Organization for Economic Cooperation and Development (OECD). (2014), "OECD health statistics", available at <http://www.oecd.org/els/health-systems/health-data.htm> (accessed 25 July 2014).
- Patrick, Allison and Heather K. Spence Laschinger. (2006), "The effect of structural empowerment and perceived organizational support on middle level nurse managers' role satisfaction", *Journal of Nursing Management*, 14(1), 13-22.
- Peltier, James W., Lucille Pointer, and John A. Schibrowsky (2008), "Internal marketing and the antecedents of nurse satisfaction and loyalty", *Health Marketing Quarterly*, 23(4), 75-108.
- Peltier, James W., John A. Schibrowsky, and Alexander Nill (2013), "A hierarchical model of the internal relationship marketing approach to nurse satisfaction and loyalty", *European Journal of Marketing*, 47(5/6), 899-916.
- Powers, Thomas L. and Dawn Bendall Valentine (2008), "A review of the role of satisfaction, quality, and value on firm performance" *Journal of Consumer Satisfaction, Dissatisfaction & Complaining Behavior*, 21, 80-101.
- Rafferty, Anne Marie, Sean P. Clarke, James Coles, Jane Ball, Philip James, Martin McKee, and Linda H. Aiken (2007), "Outcomes of variation in hospital nurse staffing in English hospitals: cross-sectional analysis of survey data and discharge records", *International Journal of Nursing Studies*, 44(2), 175-182.
- Rosenstein, Alan H. and Michelle O'Daniel (2005), "Disruptive behavior and clinical outcomes:

- perceptions of nurses and physicians”, *Nursing Management*, 36(1), 18-29.
- Salegna, Gary J. and Farzaneh Fazel (2011), “An examination of the relationships and interactions among product, brand, personal and service provider loyalty”, *Journal of Consumer Satisfaction, Dissatisfaction & Complaining Behavior*, 24, 41-55.
- Salegna, Gary J. and Stephen A. Goodwin (2005), “Consumer loyalty to service providers: an integrated conceptual model”, *Journal of Consumer Satisfaction, Dissatisfaction & Complaining Behavior*, 18, 51-67.
- Snell, Ian and Lesley White (2009), “An exploratory study of the application of internal marketing in professional service organizations”, *Services Marketing Quarterly*, 30(3), 195-211.
- Somers, Mark J., Linda Finch, and Dee Birnbaum (2010), “Marketing nursing as a profession: integrated marketing strategies to address the
- Willem, Annick, Marc Buelens, and Ives De Jonghe (2007), “Impact of organizational structure on nurses’ job satisfaction: a questionnaire survey”, *International Journal of Nursing Studies*, 44(6), 1011-1020.
- nursing shortage”, *Health Marketing Quarterly*, 27(3), 291-306.
- Sousa, Carlos M.P. and Filipe Coelho (2013), “Exploring the relationship between individual values and the customer orientation of front-line employees”, *Journal of Marketing Management*, 29(15/16), 1653-1679.
- Spector, Paul E. (1997), “Measurement of human service staff satisfaction: development of the job satisfaction survey”, *American Journal of Community Psychology*, 13(6), 693-713.
- Tortosa, Vicent, Miguel A. Moliner, and Javier Sanchez (2009), “Internal market orientation and its influence on organizational performance”, *European Journal of Marketing*, 43(11/12), 1435-1456.
- Vasconcelos, Anselmo F. (2008), “Broadening even more the internal Marketing concept”, *European Journal of Marketing*, 42(11/12), 1246-1264.

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Send correspondence regarding this article to:

**James W. Peltier, Ph.D.**  
 University of Wisconsin-Whitewater  
 Whitewater, WI 53190  
 peltierj@uww.edu

