

WE ARE HAPPY HERE AND WE WILL STAY, WHAT ABOUT YOU? THE CROSS-LEVEL IMPACT OF EMPLOYEE LOYALTY AND PERFORMANCE ON STUDENT LOYALTY

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Abstract

The purpose of this study is to examine links between, on the one hand, employee satisfaction, loyalty and performance, and on the other, the relationship between customer satisfaction and loyalty, as well as their inter-relationship. We conducted a study with employees (53 employees) and students (262 students) across seven departments of a private university in a developing European country. In order to test the cross-level effects of employee-level constructs on student-level constructs, a multilevel analysis was conducted using hierarchical linear modeling. The results confirmed the positive effect of employee satisfaction on employee loyalty and employee performance, but not the impact of the employees' loyalty on their performances. At the same time, the results showed that students' satisfaction was positively related to loyalty. Finally, the results showed that, unlike employee performance, employee loyalty at the level of the department had a positive and significant impact on the students' loyalty and also enhanced the effect of students' satisfaction on student loyalty.

Keywords: employee satisfaction, employee loyalty, employee performance, student satisfaction, student loyalty, HLM

JEL classification: M31, J28, I23

1. INTRODUCTION

Employees in service businesses have a role as direct service providers. They are responsible for the successful provision of services and also for communication with their customers. At the same time, they belong to a group of internal customers who are supposed to accept the organizational values and service culture in the company (Rafiq and Ahmed 2000). This study focused on service employee-related concepts within internal marketing, on the one hand, and customer-related concepts that fall in the domain of external service marketing, on the other. Finally, within the domain of interactive marketing, the study examined the effects of employee-related concepts on the perceptions of customers (Grönroos 1997;

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Gummeson 1987).

The role of employees, their attitudes and behavior in higher education institutions (universities) is critical for an institution's reputation and sustainability. Since two main groups of employees, academic and non-academic, deliver a university's services, their willingness to cooperate with each other and with the management is the most important prerequisite for the achievement of its goals and performance. In that context, university management should be focused on creating prerequisites for employees' engagement in the process of service delivery, as well as on increasing employees' satisfaction, loyalty and performance.

This is especially important for academic staff. Namely, this type of employee has very specific needs regarding what drives their loyalty besides financial rewards. A supportive environment and the availability of scientific research resources have a great impact on academic staff satisfaction (Webber and Yang 2014). On the other hand, their loyalty cannot be always assumed even when they are satisfied, primarily because of their inherent motives for achieving self-promotion and joining prestigious universities and the academic elite. This is a consequence of social exchange theory (Emerson 1976), which suggests that an individual's choice of academic career may be a result of their desire to achieve cognitively rich relationships with other individuals (students and academic peers). This implies that an attractive intellectual environment and challenging research atmosphere can easily cause an individual's decision to change their organization (Webber and Yang, 2014).

At the same time, student satisfaction and loyalty are key factors on which universities insist. Namely, students belong to the group of stakeholders that are often considered to be the most important. The number of students, their academic success and professional achievements have a great impact on a university's reputation and, furthermore, on its long-term success and sustainability (Douglas and McClelland 2008; Sung and Yang 2008). Student satisfaction and loyalty depend on the quality of a university's services, but they also depend upon academic staff and their academic and teaching skills, reputation and attitudes regarding students and the university. Taking all of the previous issues into consideration, we can assume there is a direct impact from employee loyalty and performance on student satisfaction and loyalty at the department level and a moderating effect on the connection between student satisfaction and student loyalty.

Previous studies have confirmed the positive impacts of employee satisfaction, employee loyalty and employee performance, both separately or combined,

on a university's performance. According to previous research (Blackmore, Douglas, and Barnes 2006; Douglas and McClelland 2008), student satisfaction and loyalty are also positively related to a university's business success and reputation. However, to the best of our knowledge, there has been no research about the direct impact of employee performance on student performance. Our aim was to identify whether such influences exist, and if they did, to establish their importance and significance. Such information would be relevant in practice, since in most cases university management neglects the importance and impact of academic staff on students and students' behavior. There is also a certain kind of aversion to marketing at universities (Hawkins and Frohoff 2011; Svensson and Wood 2007).

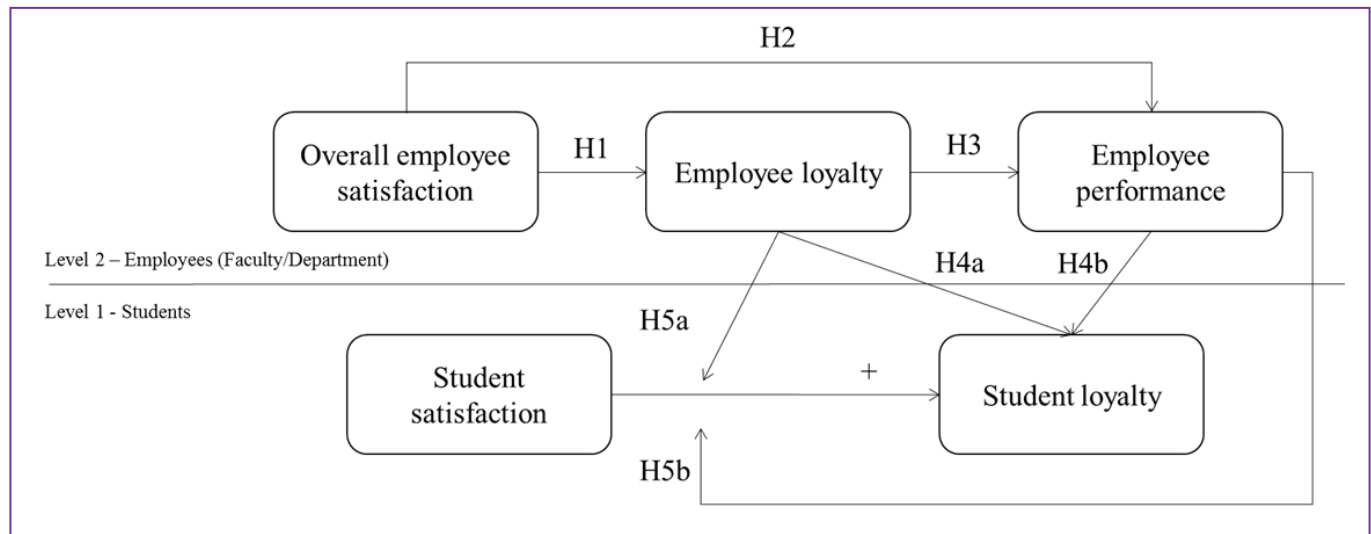
Our study contributes to the literature on higher education services by: (1) examining the impact of employee satisfaction on employee loyalty and performance in the context of social exchange theory, (2) providing additional evidence of the relationship between student satisfaction and loyalty in the private university setting and in the context of a developing economy, where the higher education (HE) system is in the process of transforming itself from a typical public self-managed economy to a privately-owned one, (3) examining the impact of employee loyalty and performance at the department level on student satisfaction and loyalty; and finally (4) assuming that some situational factors can undermine or enhance the impact of student satisfaction on student loyalty, we examined the moderating effect of employee behavior, expressed as loyalty and performance, on the student satisfaction-student loyalty link.

2. EMPLOYEE SATISFACTION, LOYALTY AND PERFORMANCE

We developed a conceptual framework (see Figure 1) that operated on two levels. Level 1 was the level of students, where we focused on student satisfaction and loyalty, while Level 2 was the level of employees in departments, where the focus was on employee satisfaction, loyalty and performance. Furthermore, the cross-level effects were assumed to be the relationships between the employee-level and customer-level concepts.

2.1. Employee satisfaction

Bhatti and Quershi (2007) suggested the unique definition of employee satisfaction as a measure of

Figure 1: Conceptual framework of the study

workers' happiness, which includes general satisfaction and specifically job and salary satisfaction. The authors underlined employee satisfaction as one of the key factors of organizational effectiveness and claimed that an organizational culture that encourages employee satisfaction is a prerequisite for organizational effectiveness.

Kusku (2001, p. 114) considered employee satisfaction "the degree to which the individual's needs and desires are met and the extent to which this is perceived by the other employees." Moreover, when discussing satisfaction, the authors connected the category of satisfaction with a single contact or with cumulative satisfaction (Fornell 1992) resulting from the total experience of an individual and related to different contact points and situations. The author considered employee satisfaction a state of positive emotional reactions resulting from the contact of an individual to other customers or partners in the interaction. Certain authors explain employee satisfaction as an attitudinal issue (e.g. Meyer, Becker, and Vandenberghe 2004), while others discuss the connection of employees' attitudes and beliefs with their experience (Bhatti and Qureshi 2007; Hansemark and Albinsson 2004; Judge et al. 2001).

In the context of discussing employee satisfaction elements, job satisfaction is often considered the essential and most significant factor affecting employee retention, loyalty and performance (Kumari and Pandey 2011; Rajput, Singhal, and Tiwari 2016). As a consequence, many studies have focused on job satisfaction as the crucial category in organizational behavior (Hogreve, Iseke, Derfuss, and Eller 2017; Khan, Ahmed, and Nawaz 2011), but here the authors have assumed a wider concept of job satisfaction that includes elements such as working conditions,

cooperation with co-workers (peers), as well as levels of independence, authority and responsibility. Thus, discussing job satisfaction in the context of education, Pandey and Khare (2012) suggest this includes the overall attitudes and views of academic staff towards their working conditions and their profession. In this study, we approached the overall satisfaction of academic staff by measuring job satisfaction, salary satisfaction and general satisfaction (Kusku 2001), and the impact of their satisfaction on loyalty and performance.

2.2. Employee loyalty

Employee loyalty is defined as an emotional (Wan 2012) or behavioral (Meyer et al. 2004) category assuming reciprocity between two parties in an interaction. In this context, the essential elements of employee loyalty can be identified (Rajput et al. 2016) as commitment to the organization, active job involvement and emotional attachment to the company or a feeling of belongingness.

Meyer et al. (2004) also suggests two types of loyalty – one attitudinal and the other behavioral. However, they conclude that behavioral loyalty is more important to the organization and suggest that attitudinal loyalty leads to behavioral loyalty. According to Wan (2012), employee loyalty implies psychological attachment or commitment to the organization and the employees' willingness to remain with the organization. Hart and Thompson (2007) also insist on the psychological aspect of employee loyalty and their conscious decision to stay and contribute to the organization.

In the context of higher educational services, loyalty and loyal behavior are related to employee

readiness to spread positive information by word-of-mouth about the university as their employer, their intention to stay, their tolerance of negative circumstances (Rajput et al. 2016; Zeithaml et al. 1996) and their resistance to a competitor's offer. In this study, employee loyalty is considered to be attitudinal loyalty, which would be directly perceived by students during the teaching-learning process and that had an immediate impact on the students' emotional reactions to the service experience and their behavior.

2.3. *Employee satisfaction and employee loyalty*

Kumari and Pandey (2011) find that job performance was comparatively high when positive beliefs and affective experiences were salient and, thus, predominant at a certain point in time, although performance could still be comparatively low at other times. It was found that employee satisfaction has a critical importance for employee loyalty, and previous studies confirmed a positive correlation between employee satisfaction and loyalty (Khan et al. 2011). Some authors, including Pandey and Khare (2012), Rajput et al. (2016) and Wan (2012), suggest that employee loyalty expressed as the attachment to the organization is a result of high levels of satisfaction. The authors connect employee willingness to invest great effort in achieving the university's goals and their commitment to the university's success with their satisfaction (Kumari and Pandey 2011). On the other hand, Pandey and Khare (2012) connect job satisfaction with organizational commitment to employee loyalty. Due to an organization's expectations, it is important that satisfied and loyal employees are more responsible and capable of delivering high quality services (Schneider and Bowen 1985) and continuously improving service quality, as this is crucial to organizational performance (Silvestro 2002).

H1: Overall, a university's employee satisfaction is positively related to employee loyalty.

2.4. *Employee performance*

Most previous studies (e.g. Bhatti and Qureshi 2007; Bowen and Schneider 2014) were focused on the identification of factors affecting organizational performance, but employee performance as a consequence of employee emotional attitudes and behavior, i.e. employee satisfaction and loyalty, have been

neglected, especially in areas such as higher education and in the case of academic staff. Namely, the performance of higher education employees cannot be measured in traditional ways such as output quality, efficiency and productivity. Thus, except in the discussion of employee performance generally, this study has focused on the impact of HEI employees on student loyalty and its effect on the link between student satisfaction and student loyalty.

Employee performance is a multidimensional construct that has different explanations, depending on the given source. Harrison, Newman and Roth (2006) define employee performance as the successful completion of different tasks provided by an employee or group of employees, who share mutual values and accept organizational values. Similarly, Griffin et al. (2007) suggest it is individual, team and organizational task proficiency, adaptivity and proactivity, while Koopman et al. (2014) imply it is task and contextual performance, as well as counterproductive work behavior. On the other hand, more emotional and intangible dimensions such as creativity, reactivity to difficulties and interpersonal adaptability are suggested by Audrey et al. (2012) as important elements of employee performance.

In the context of organizational performance, managers evaluate employees' performance as their productivity related to the operational processes and final output (Kahtani 2013). Following this point of view, Judge et al. (2001) suggests two groups of employee performance measures: a) internal measures of efficiency related to service output and operations, and b) external measures expressed through customer experience and satisfaction. Furthermore, Bowen and Schneider (2014) include in-role and customer-focused behavior as employee outcomes, but ignore task performance in the context of the organizational service climate.

Most of the criteria discussed are inadequate for the evaluation of HEI employee performance. Here, professionalism and academic results (publishing and research results) are a focus of employee performance, and quality of lecturing and teaching are considered employee performance in terms of the educational process. The measures of output quality also include students' commitment and performance (i.e. class participation and project works) and these cannot be controlled by employees alone (Liao and Chuang 2004). This is especially important if the role of employees' engagement and commitment in providing HE services is taken into consideration (Ganić, Babić-Hodović, and Arslanagić-Kalajdžić 2017).

2.5. *Interrelation of employee satisfaction, loyalty and performance*

The importance of employee satisfaction and its positive impact on employees' performance is a topic of previous research, such as Shamila (2013) and Harrison et al. (2006). The authors agreed that employee satisfaction was the most important factor affecting employee performance, but also stressed its impact on employees' emotional relationships with their organizations. Harrison et al. (2006) state that employee satisfaction affects not only employee productivity and performance, but also motivation, as one of the main assumptions of performance.

Previous research confirmed the positive impact of employee satisfaction on organizational efficiency and effectiveness (e.g. Khan et al. 2012; Pandey and Khare 2012). Moreover, studies have supported the importance of employee satisfaction and positive attitudes regarding job positions on employee productivity. Supporting these conclusions, Bhatti and Qureshi (2007) suggest that employees' authority and accountability in an organization's activities have strong positive effects on their satisfaction and loyalty. However, there is a gap in the available research on the direct impact of employee satisfaction on employee performance, especially in the case of higher education. Therefore, we hypothesized:

H2: Overall employee satisfaction is positively related to employee performance.

Taking into consideration the role of employees in an organization, many studies have confirmed the negative effects of high employee turnover rates on organizational performance and business results, as well as the negative psychological impacts these can have on other employees in the organization (Chan et al. 2010; Park and Shaw 2013; Shaw et al. 2005). Employees leaving the company create an additional workload for other employees and cause negative effects on their performance, as well as increasing job stress and the burnout rate of remaining employees (Harrison et al. 2006).

In order to prevent the negative effects that arise from turnover, companies have to identify key factors that have the greatest impact on the rate of employee turnover and loyalty. For this purpose, Wan (2012) suggests the improvement of working conditions, empowering employees and increasing their authority, as well as applying motivational and stimulating programs in the form of fair payment and rewards. Hassan et al. (2013) also considers the empowerment of employees to be a significant factor for employee loyalty, while Elegido (2013) stated that loyalty leads to the

commitment of employees who intentionally work in the best interests of their employers. To continue and develop this discussion concerning employees in the higher education area, we next hypothesized:

H3: Employee loyalty is positively related to employee performance.

3. *CUSTOMER SATISFACTION AND LOYALTY IN AN INTERACTIVE CONTEXT*

Customer satisfaction and loyalty represent the most important factors affecting an organization's success and profitability (Gupta and Zeithaml, 2006; Sandada and Matibir, 2016). Previous studies have discussed this relationship (Hogreve et al. 2017), arguing that organizations can maximize their level of success through providing safe and superior products or services in order to increase customer satisfaction and loyalty. The general understanding of satisfaction in marketing can be captured as the overall attitude of an individual regarding a specific category, which can cause his/her future behavior, or as the final state of the psychological process of customer experience in the process of interaction with the service provider (Locke 1976).

3.1. *Student satisfaction*

Elliot and Shin (2002) explained student satisfaction as a favorable subjective evaluation of the outcomes and experience that students have at university, with university staff and their experiences with the teaching and learning processes. Marzo-Navarro (2005) explained student satisfaction to be the final state of the psychological process a student goes through in the process of choosing a university. On the other hand, Appleton-Knapp and Krentler (2006) advocated an attitude that the assessment of an individual's experience in the context of satisfaction measurement is related to the students' expectations; Hansemark and Albinsson (2004) had similar attitudes.

There are many elements that affect student satisfaction, from university programs, learning resources and educational processes (Hill et al. 2003), "overall impression of the school", "overall impression of the quality of education" (Mai 2005, 873) to the most important dimension – the professionalism and performance of academic staff (Hill et al. 2003; Marzo-Navarro 2005), as well as the continuity of their engagement at the university, i.e. their loyalty to the higher education institution. However, there are no unified findings

regarding the drivers of student satisfaction or key factors affecting satisfaction and loyalty. Most of the authors accepted the role of academic and non-academic staff at university, but they suggested different factors which have an impact on students' satisfaction and loyalty (Appleton-Knapp, and Krentler 2006; Hill et al. 2013; Hogreve et al. 2017).

3.2. Student loyalty

Loyalty is defined as the willingness of a customer to maintain relations with a particular firm or service (product) explained as their attitudinal (Kumar and Shekhar, 2012; Fullerton 2003) and behavioral loyalty (Caruana 2002; Bloemer and de Ruyter 2010). On the other hand, some authors defined student loyalty as students' deep commitment to their university or their emotional connection with it (Hennig-Thurau, Langer, and Hansen 2001; Ndubisi et al. 2012) developed after a certain period of time spent at the university. The authors consider loyal students a source of a university's strategic competitive advantage and proof of the improvement of service quality (Hennig-Thurau et al. 2001). Moreover, some authors suggested that student loyalty has a significant positive impact on the university during the time of studying, but even more after their graduation (Sung and Yang 2009).

In the context of higher education, student satisfaction and loyalty manifests itself through positive and affirmative word of mouth (WOM) about academic programs, academic staff professionalism and performance, as well as quality of educational services and university support. Since the impact of customer satisfaction on customers' attitudinal or behavioral loyalty has been proved in many previous studies (e.g. Mittal and Kamakura 2001; Zeithaml et al. 1996) we did not hypothesize on the relationship between students and university employees in our study.

3.3. Employee loyalty and performance and student satisfaction and loyalty

During service encounters, customers also experience service employees' commitment (which might be illustrated in loyalty) and expertise (which might be illustrated in performance). If employees are loyal to their organization, and if they exhibit a high level of devotion to their organization (particularly in the case of a university), customers perceive the service as more trustworthy and to be of higher quality. If employee performance indicates their competence and

customer orientation, customers perceive the service to be reliable, trustworthy and fair (Hogreve et al. 2017). Service employees who perform well and who are loyal also provide a sound basis for establishing a personal bond and trust (Silvestro 2002). Therefore, in interactive marketing and high-contact services, such as higher education services, employee loyalty and performance might do more for students' relationships with the university than the external service cues (i.e. reputation and/or external quality) that are considered further investment in retaining students. Therefore, we argue that the higher the employee loyalty and performance, the higher the student loyalty will be. Furthermore, employee loyalty and performance considered in this way may offer the opportunity to boost the effect of students' satisfaction on student loyalty. Therefore, we hypothesized that:

H4: Employee (a) loyalty, (b) performance, is positively related to student loyalty.

Silvestro (2002) claims that employee commitment to delivering high-quality services is manifested particularly in high-contact services. Thus, because employee loyalty in high-contact services is of great importance for customer satisfaction and loyalty, such should be the case with the role and impact of academic staff on student satisfaction and loyalty at a university.

It has been confirmed that satisfaction is not a guarantee that customers will stay loyal to the company (Jones et al. 1995; Storbacka et al. 1994), especially in competitive environments. Certain situational factors, such as alternative competitors' offers, price sensitivity or decreasing brand image, may cause customers to decide to leave an organization and switch to another supplier (Storbacka et al. 1994). In higher education services, academic staff have the greatest importance for student satisfaction and loyalty, while staff loyalty and performance positively affect the student satisfaction-student loyalty link. Aside from academic staff performance, which often reinforces the impact of student satisfaction on their choice to continue relations with a university, employee loyalty affects student loyalty even after their graduation (Sung and Yang 2009). Namely, students often decide to continue education at a university at which high-performing and professional academic staff remain engaged for years. Thus, the higher the loyalty exhibited by the academic staff, as well as their expertise/performance, the stronger the link between student satisfaction and loyalty. Based on the previous discussion the next hypothesis can be stated:

H5: Employee (a) loyalty, (b) performance, enhances the effect of student satisfaction on student loyalty.

4. METHODOLOGY

To empirically test the proposed conceptual framework, we conducted a study with employees and students from a private university in a developing European country. The study was conducted with the top management of the university and spanned seven departments of the university. Two different questionnaires were created based on pre-existing measures for relevant constructs. For the employee related questionnaire, the following scales were used: job satisfaction, salary satisfaction, general satisfaction (Kusku 2001), employee loyalty (Homburg and Stock 2004) and employee performance (Janssen 2001). The questionnaire targeting students used the following scales: student satisfaction (Hennig-Thurau 2004) and student loyalty (de Ruyter et al. 1998).

A paper-and-pencil survey was distributed both to employees and students of the private university during the same period. In order to address common method bias, we scattered the items in the questionnaire and ensure the anonymity of participants (Podsakoff et al. 2003). To additionally ensure that common method bias was addressed, our study provides variables obtained from three different sources: employees (separate study), students (separate study) and the management of the university, who assessed employee performance measures for each employee, therefore ensuring independent employee performance evaluations. In order to statistically control for common method bias, we included a single unmeasured latent method factor (common latent factor, Podsakoff et al. 2003) in the model. Our results confirm that the overall pattern of loadings remains the same across both models.

The employee sample was drawn from the entire

population of employees at the university, and included a total of 53 employees – 50% females, of the average age 34. The student dataset involved 262 students (an 80% response rate), and came from seven different departments of the private university (17-86 students per department). Students of all four undergraduate studies' years were involved in the study (29% - first year; 34% - second year; 22% - third year, and 15% in the fourth year of study). In terms of demographics, 53% were female students, and the average age was 21.

5. RESULTS

Prior to testing the hypotheses of the study, the first step (Anderson and Gerbing 1988) was to evaluate the measurement properties of the scales used in both surveys (employee and student samples). This test was done using confirmatory factor analysis (CFA) in Lisrel. For employees, the measurement model demonstrates an excellent model fit ($\chi^2=140.14$ ($P=0.17$); $df = 125$; $RMSEA = 0.05$; $NNFI = 0.95$; $CFI = 0.96$). Furthermore, the reliability and discriminant validity of the measures are achieved, as shown in Table 1.

An evaluation of student satisfaction and loyalty scales was done as well using the CFA in Lisrel. Resulting measurement model demonstrates a good model fit ($\chi^2=26.24$ ($P=0.00$); $df = 8$; $RMSEA = 0.09$; $NNFI = 0.98$; $CFI = 0.99$). Due to the fact that high factor loadings were achieved as well as high composite reliability ($CR>0.9$), the reliability of the scales is confirmed. These two constructs have relatively high correlation ($\rho = 0.63$, $p < 0.001$); however, discriminant validity is still achieved since this correlation is lower than the square roots of average variances extracted for both constructs (Fornell and Larcker 1981). A detailed overview of the results is presented in Table 2.

We then proceeded with a test of the hypotheses

Table 1: Confirmatory factor analysis and discriminant validity assessment – Employees

| # | Construct | Loadings | CR | 1 | 2 | 3 | 4 | 5 |
|---|---------------------------------|-----------|------|-------------|-------------|-------------|-------------|-------------|
| 1 | Employee satisfaction (4 items) | 0.73-0.83 | 0.86 | 0.77 | | | | |
| 2 | Job satisfaction (3 items) | 0.60-0.91 | 0.79 | 0.63 | 0.75 | | | |
| 3 | Salary satisfaction (2 items) | 0.73-0.94 | 0.67 | 0.35 | 0.49 | 0.71 | | |
| 4 | Employee loyalty (3 items) | 0.70-0.90 | 0.86 | 0.16 | 0.03 | 0.25 | 0.82 | |
| 5 | Employee performance (6 items) | 0.73-0.92 | 0.97 | 0.20 | 0.24 | 0.20 | 0.08 | 0.87 |
| Model fit: $\chi^2=140.14$ ($P=0.17$); $df = 125$; $RMSEA = 0.05$; $NNFI = 0.95$; $CFI = 0.96$ | | | | | | | | |

Notes: CR = composite reliability; Square-roots of AVEs are shown on diagonal in bold; Correlations are shown below the diagonal

Table 2: Confirmatory factor analysis and discriminant validity assessment – Students

| # | Construct | Loadings | CR | 1 | 2 |
|---|---------------------------------|-----------|------|-------------|-------------|
| 1 | Students satisfaction (3 items) | 0.74-0.94 | 0.91 | 0.87 | |
| 2 | Student loyalty (3 items) | 0.72-0.95 | 0.90 | 0.63 | 0.87 |
| Model fit: $\chi^2=26.24$ (P=0.00); df = 8; RMSEA = 0.09; NNFI = 0.98; CFI = 0.99 | | | | | |

Notes: CR = composite reliability; Square-roots of AVEs are shown in bold; Correlations are shown below the diagonal

Table 3: Employee-level model results

| H | Relationship | β (se) | t-value (p-value) | R ² |
|----|--|--------------|-------------------|----------------|
| H1 | Overall employee satisfaction → Employee loyalty | 0.14 (0.09) | 1.53 (0.06) | 0.04 |
| H2 | Overall employee satisfaction → Employee performance | 0.21 (0.11) | 1.84 (0.03) | 0.07 |
| H3 | Employee loyalty → Employee performance | 0.03 (0.18) | 0.16 (0.44) | |

Notes: se = standard error; PROCESS Model 4 with 5,000 bootstrap samples; one-tailed t-test is used;

in our model. Due to sample size limitations and the possibility of making an assessment based on bootstrapped samples, a PROCESS tool was used to analyze the employee level model and hypotheses (Hayes 2017); to be precise, mediation Model 4 (5,000 bootstrap samples and 95% confidence intervals). These results are presented in Table 3.

The results of the analysis show that the employee satisfaction effect on employee loyalty is low and relatively marginal ($\beta = 0.14$, $p = 0.06$) but still supports H1. The effect of employee satisfaction is strong

and positive for employee performance ($\beta = 0.21$, $p = 0.03$), which confirms H2, while employee loyalty is not related to employee performance at all ($\beta = 0.03$, $p=0.44$) which shows that H3 is not supported. Furthermore, it is interesting to note that the explanatory power of the model is relatively low, with an R^2 for employee loyalty of 4% and an R^2 for employee performance of 7%.

In order to test the effect of employee-level constructs on the student-level construct, a multi-level analysis was conducted (Hox et al. 2017). The

Table 4: Multilevel model results

| H | Relationships | Baseline model | Model 1 | Model 2 |
|----------|---|----------------|----------------|----------------|
| | Student satisfaction → Student loyalty | 0.85 (p<0.001) | 0.89 (p<0.001) | 0.83 (p<0.001) |
| H4a | Employee loyalty → Student loyalty | | 0.52 (p=0.025) | |
| H5b | Employee performance → Student loyalty | | | -0.34 (p=0.41) |
| H4b | Employee loyalty x Student satisfaction → Student loyalty | | 0.46 (0.018) | |
| H5b | Employee performance x Student satisfaction → Student loyalty | | | -0.23(p=0.11) |
| Deviance | | 682.48 | 672.66 | 679.84 |

Model equations:

Baseline model: $SLOY_{ij} = \gamma_{00} + \gamma_{10} * SSAT_{ij} + u_{0j} + r_{ij}$

Model 1: $SLOY_{ij} = \gamma_{00} + \gamma_{01} * EPERF_j + \gamma_{10} * SSAT_{ij} + \gamma_{11} * EPERF_j * SSAT_{ij} + u_{0j} + r_{ij}$

Model 1: $SLOY_{ij} = \gamma_{00} + \gamma_{02} * ELOY_j + \gamma_{10} * SSAT_{ij} + \gamma_{12} * ELOY_j * SSAT_{ij} + u_{0j} + r_{ij}$

where: $SLOY_{ij}$ is student loyalty (dependent variable) for observation i (Level 1) in group j (Level 2), γ_{00} is the fixed regression coefficient for the intercept of the regression equation, $SSAT_{ij}$ is student satisfaction (independent variable) for observation i (Level 1) in group j (Level 2), γ_{10} is the fixed regression coefficient for the main effect of $SSAT_{ij}$, u_{0j} is the random regression coefficient for the intercept of the regression equation for group j , r_{ij} is the observation- and group-specific residual, $EPERF_j$ is employee performance (Level 2 predictor) for group j , γ_{01} is the fixed regression coefficient for the main effect of $EPERF_j$, $EPERF_j * SSAT_{ij}$ is cross-level interaction between student satisfaction for observation i (Level 1) in group j (Level 2) and employee performance for group j , γ_{11} is the fixed regression coefficient for the cross-level interaction between $EPERF_j$ and $SSAT_{ij}$, $ELOY_j$ is employee loyalty (Level 2 predictor) for group j , γ_{02} is the fixed regression coefficient for the main effect of $ELOY_j$, $ELOY_j * SSAT_{ij}$ is cross-level interaction between student satisfaction for observation i (Level 1) in group j (Level 2) and employee loyalty for group j , γ_{12} is the fixed regression coefficient for the cross-level interaction between $ELOY_j$ and $SSAT_{ij}$.

responses of 53 employees were aggregated across 7 departments of the private university into 7 groups. All students identified to which department they belonged. The dataset consisted of 262 students (Level 1), with 7 department-level scores based on 53 employees (Level 2).

Hierarchical linear modeling, with HLM v.7.01 software, was used to test the hypothesized cross-level effects stated in H4 and H5 (Castro 2002; Hox et al. 2017). We first tested the intercept-only model, which revealed that the overall student loyalty mean is 5.37 and differs significantly from 0 (Hox et al. 2017); the inter-class correlation coefficient came to 0.1967, indicating that almost 20% of total variance in students' perceptions of value is explained at the department level (Level 2). Furthermore, the baseline model was assessed (the main relationship at Level 1) followed by adding the cross-level effects of employee loyalty and employee performance (see Table 4).

We then assessed a baseline specification, namely the regression-based model in a multilevel context. Consistent with prior literature, the effect of student satisfaction on student loyalty was positive and significant ($\gamma = 0.85$, $p < 0.001$). We next assessed the direct and interaction effect of employee loyalty (Model 1). This model shows that employee loyalty at the level of the department positively and significantly impacts student loyalty ($\gamma = 0.52$, $p < 0.05$), which confirms H4a. Furthermore, even the cross-level interaction effect is positive and significant, which shows that employee loyalty enhances the effect of students' satisfaction on student loyalty ($\gamma = 0.46$, $p < 0.05$), confirming H5a. Finally, we tested the direct and interaction effects of employee performance (Model 2). This model shows that employee performance does not have a significant effect on student loyalty, nor does it moderate the effect of student satisfaction on student loyalty, and therefore H4b and H5b are not confirmed.

6. DISCUSSION AND CONCLUSIONS

Our study examined the mutual relationships between HEI employees and students in regard to satisfaction, loyalty and employee performance. Specifically, drawing on social exchange theory, we examined the impact of employees' dependent variables at the level of university departments on student satisfaction and loyalty, and the moderating role of employee loyalty and performance on the relationships between student satisfaction and student loyalty, in the context of higher education and a private university in a developing country.

We first assessed the employee-level model

separately and found that employee satisfaction marginally impacted employee loyalty and strongly impacted employee performance, while there is no significant relationship between employee loyalty and employee performance. Hence, a high level of employee satisfaction has no strong effect, but rather a marginal effect on their loyalty, although it motivated them to increase their commitment to the achievement of the university's goals and to increasing their own as well as their university's performance.

Furthermore, the findings concerned with the impact of employee loyalty on employee performance did not confirm the expected relations. They implied that in this context, "staying" does not always mean "commitment". The relationships identified can be explained by contextual factors determining the field of higher education. Employee satisfaction, understood as an interaction in a specific category, may cause employees' positive reactions and high performance, especially those perceived and measured by management, as was the case here. Nevertheless, taking into account internal and external factors affecting employee attitudes and behaviour, as well as their personal and professional ambitions in higher education, one cannot expect that employees will remain if better alternatives, in the sense of a supportive environment (regarding scientific and research-based capacities), appear. Namely, scientists and academic professionals are focused on the development of their scientific and academic careers and their performance is mostly motivated by the goals they want or have to achieve if they want to keep their academic positions and further develop their academic careers. This means that satisfied employees can be disloyal but demonstrate high performance at the same time.

As expected, student satisfaction was positively related to student loyalty. When we aimed to further assess whether employee loyalty and performance at the level of department impacted student loyalty and the abovementioned satisfaction-loyalty link, we obtained some surprising results. Namely, employee loyalty at the level of department positively impacted student loyalty and was a significant positive moderator of the satisfaction-loyalty link. On the other hand, contrary to our expectations and previous findings (e.g. Hogreve et al. 2017), employee performance at the level of department was not related to student loyalty nor the satisfaction-loyalty link. This brought us to the interesting but unexpected conclusion that students found loyalty cues exhibited by employees more relevant than performance cues. These findings may be related to the essence of academic staff and student interactions, as well as the meaning of loyalty. Therefore, loyalty in itself assumes an emotional

connection between both groups of participants and often reciprocity in the development of relationships. When students can trust and believe employees they will accept and strengthen mutual relationships. In that context, students were more responsive to employee attitudes than their performance and, thus, would stay despite the fact that employee performance was not adequate.

6.1. Theoretical contribution

Our study reveals some relevant findings both for theory and for practitioners. The findings may broaden knowledge of the relationship between employee satisfaction, employee loyalty and employee performances in the higher education context, as well as the impact of these factors on student satisfaction and the student–loyalty relationship. This research presents novel findings in the context of developing countries and studies about the dimensions of higher education services. The findings confirm the importance of employees who provide HE services and, significantly, their direct and indirect impact on student loyalty. The main theoretical contribution can be seen in the extension and adaptation of applying social exchange theory in the higher education context, with a primary focus on the effects of employee loyalty and performance on student loyalty.

6.2. Managerial implications

A university's management must be aware of not only their employees' role in the process of higher education services delivery, but also the role of the students, their perception of service quality, and their satisfaction and loyalty. The managerial implications of this study show that ensuring employee loyalty at the university level might be the greatest challenge for university management. However, this challenge brings the highest rewards, since it can ensure loyal customers, in this case students continuing their education (i.e. at the master's or PhD level) at a given university.

Thus, HEIs should seek ways of increasing employee satisfaction and loyalty and, furthermore, student satisfaction and loyalty, in order to increase students' propensity generally to continue education at the same university, cooperate with their university after graduation, and recommend their university to others. Findings of this research offer insights into the most important areas from the perspectives of employees and students, and sends a signal to university management about key areas that should be improved.

6.3. Limitations and further research

This study is not without its limitations. Primarily, the empirical part of the study was limited by the low population of employees at the given university that was observed. However, the research covered all of the employees, hence the limitations regarding analysis and results of the analysis in terms of generalizability do not undermine the value of the research. The research has treated two groups of stakeholders only. Further research could be directed toward evaluation of the satisfaction with university services among other stakeholders.

One of the research limitations could be seen in the type of the university observed (a private university); hence, a suggestion for further research is to conduct a study encompassing both types of institutions (private and public). It would also be useful to monitor changes in the attitudes of the students and employees who participate in the survey after a certain period of time, or after management decisions that reacted to or made changes at the university based on these research results.

REFERENCES

- Anderson, J. C. and Gerbing, D. W. 1988. Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin* 103 (3): 411.
- Appleton-Knapp, S. L. and Krentler, K. A. 2006. Measuring student expectations and their effects on satisfaction: The importance of managing student expectations. *Journal of Marketing Education* 28 (3): 254-264.
- Audrey, C.V. and Patrice, R. 2012. Adaptive performance: A new scale to measure individual performance in organizations. *Canadian Journal of Administrative Sciences* 29 (2): 280-293.
- Bhatti, K. K. and Qureshi, T. M. 2007. Impact of employee participation on job satisfaction, employee commitment and employee productivity. *International Review of Business Research Papers* 3 (2): 54-68.
- Blackmore, J., Douglas, A. and Barnes, B. 2006. Measuring student satisfaction at a UK university. *Journal for Quality Assurance in Education* 14 (3): 251-267.
- Bloemer, J., & de Ruyter, K. (2010). Customer loyalty in high and low involvement service settings: The moderating impact of positive emotions. *Journal of Marketing Management* 15 (4): 314-330.
- Bowen, D. E. and Schneider B. A. 2014. Service Climate Synthesis and Future Research Agenda. *Journal of Service Research* 17 (1): 5-22.
- Campbell, J. P., McCloy, R. A., Oppler, S. H. and Sager, C. E. 1993. A theory of performance. In *Personnel selection*

- in organizations, edited by N. Schmitt and W. C. Borman, 35–70. San Francisco: Jossey-Bass.
- Caruana, A. 2002. Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing* 36 (7/8): 811–828.
- Castro, S. L. 2002. Data analytic methods for the analysis of multilevel questions: A comparison of intraclass correlation coefficients, *rwg(j)*, hierarchical linear modeling, within- and between-analysis, and random group resampling. *The Leadership Quarterly* 13 (1): 69–93.
- Chan, K. W., Yim, C. K. B. and Lam, S. S. K. 2010. Is customer participation in value creation a double-edged sword? Evidence from professional financial services across cultures. *Journal of Marketing* 74 (3): 48–64.
- de Ruyter, K., Wetzels, M. and Bloemer, J. 1998. On the relationship between perceived service quality, service loyalty and switching costs. *International Journal of Service Industry Management* 9 (5): 436–453.
- Douglas, J. and McClelland, R. 2008. The development of a conceptual model of student satisfaction with their experience in higher education. *Quality Assurance in Education* 16 (1): 19–35.
- Elegido, J. M. 2013. Does it make sense to be a loyal employee? *Journal of Business Ethics* 116 (3): 495–511.
- Elliott, K. M. and Shin, D. 2002. Student satisfaction: An alternative approach to assessing this important concept. *Journal of Higher Education Policy Management* 24: 197–209.
- Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology* 2: 335–362.
- Fisher C. D. 1980. On the dubious wisdom of expecting job satisfaction to correlate with performance. *Academy of Management Review* 5: 606 – 612.
- Fornell, C. and Larcker, D. F. 1981. Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research* 18: 382–388.
- Fullerton, G. 2003. When does commitment lead to loyalty? *Journal of Service Research* 5 (4): 333–344.
- Ganić, E., Babić-Hodović, V. and Arslanagić-Kalajdžić, M. (2017). Internal versus external service quality: Reflection of employees and customers in the mirror. *Millenium* 2 (4): 23–30.
- Griffin, M.A., Neal, A. and Parker, S.K. 2007. A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal* 50 (2): 327–347.
- Gummesson, E. 1987. The new marketing—developing long-term interactive relationships. *Long range planning* 20 (4): 10–20.
- Gupta, S. A. and Zeithaml, V. 2006. Customer metrics and their impact on financial performance. *Marketing Science* 25 (6): 718–739.
- Hansemark, O. C. and Albinson, M. 2004. Customer satisfaction and retention: The experiences of individual employees. *Managing Service Quality* 14 (1): 40–57.
- Harrison, A. D., Newman, A. D. and Roth, L. P. 2006. How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal* 49 (2): 305–325.
- Hart, D. W. and Thompson, J. A. 2007. Untangling employee loyalty: A psychological contract perspective. *Business Ethics Quarterly* 17: 297–323.
- Hassan, S., Mahsud, R., Yukl, G., & Prussia, G. E. (2013). Ethical and empowering leadership and leader effectiveness. *Journal of Managerial Psychology* 28 (2): 133–146.
- Hayes, A. F. 2017. Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford Publications.
- Hawkins, A. G. and Frohoff, K. M. 2011. Promoting the academy – the challenges of marketing higher education. *Research in Higher Education* 7: 7–13.
- Hennig-Thurau, T. 2004. Customer orientation of service employees: Its impact on customer satisfaction, commitment, and retention. *International Journal of Service Industry Management* 15 (5): 460–478.
- Hill, Y., Lomas, L. and MacGregor, J. 2003. Students' perceptions of quality in higher education. *Quality Assurance in Education* 11 (1): 15–20.
- Hogreve, J., Iseke, A., Derfuss, K. and Eller, T. 2017. The Service–Profit Chain: A Meta-Analytic test of a comprehensive theoretical framework. *Journal of Marketing* 81 (3): 41–61.
- Homburg, C. and Stock, M. R. 2004. The link between salespeople's job satisfaction and customer satisfaction in a business-to-business context: A dyadic analysis. *Journal of the Academy of Marketing Science* 32 (2): 144–158.
- Hox, J. J., Moerbeek, M. and van de Schoot, R. 2017. Multilevel analysis: Techniques and applications. Routledge.
- Janssen, O. 2001. Fairness perceptions as a moderator in the curvilinear relationships between job demands, and job performance and job satisfaction. *Academy of Management Journal* 44 (5): 1039–1050.
- Jones, T., Sasser, W. and Earl, W. Jr. (1995), Why satisfied customers defect. *Harvard Business Review* 73 (6): 88–99.
- Judge, T. A., Thoresen, C. J., Bono, J. E. and Patton, G. K. 2001. The job satisfaction and job performance relationship: A qualitative and quantitative review. *Psychological Bulletin* 127: 376–407.
- Kahtani, A. A. 2013. Employee emotional intelligence and employee performance in the higher education institutions in Saudi Arabia: A Proposed theoretical framework. *International Journal of Business and Social Science* 4 (9): 88–92.
- Khan, M. M., Ahmed, I. and Nawaz, M. M. 2011. Student's perspective of service quality in higher learning institutions;

- an evidence-based approach. *International Journal of Business and Social Science* 2 (11): 159-164.
- Koopman, L., Berghnaards, C. M., Hildebrandt, V. H., Vet, H. C. W. and Berk, A.J. 2014. Construct validity of the individual work performance questionnaire. *Journal of Occupational and Environmental Medicine* 56 (3): 154-171.
- Kumar, D. N. S. and Shekhar, N. 2012. Perspectives envisaging employee loyalty: A case analysis. *Journal of Management Research* 12 (2): 100-112.
- Kumari, G. and Pandey, K. M. 2011. Job satisfaction in public sector and private sector: A comparison. *International Journal of Innovation, Management and Technology* 2 (3): 222-228.
- Kusku, F. 2001. Dimensions of employee satisfaction: A state university example. *METU Studies in Development* 28 (3/4): 399-430.
- Liao, H. and Chuang, A. 2004. A multilevel investigation of factors influencing employee service performances and customer outcomes. *Academy of Management Journal* 47 (1): 41-58.
- Locke, E. A. 1976. The nature and causes of job satisfaction. In *Handbook of industrial and organizational psychology*, edited by M. D. Dunnette, 1297-1349. Chicago: Rand McNally.
- Mai, L.W. 2005. A comparative study between UK and US: The student satisfaction in higher education and its influential factors. *Journal of Marketing Management* 21 (7/8): 859-878.
- Marzo-Navarro, M., Pedraja-Iglesias, M. and P. Rivera-Torres, P. 2005. Measuring customer satisfaction in summer courses. *Quality Assurance in Education* 13 (1): 53-65.
- Mittal, V. and Kamakura, W. 2001. Satisfaction, repurchase intent, and repurchase behavior: Investigating the moderating effect of customer characteristics. *Journal of Marketing Research* 38 (1): 131-142.
- Meyer, J. P., Becker, E. T. and Vandenberghe, C. 2004. Employee commitment and motivation: A conceptual analysis and integrative model. *Journal of Applied Psychology* 89 (6): 991-1008.
- Park, T.-Y. and Shaw, J.D. 2013. Turnover rates and organizational performance: A meta-analysis. *Journal of Applied Psychology* 98 (2): 268-309.
- Pandey, C. and Khare, R. 2012. Impact of job satisfaction and organizational commitment on employee loyalty. *International Journal of Social Science & Interdisciplinary Research* 1 (8): 26-41.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y. and Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88 (5): 879-903.
- Rafiq, M. and Ahmed, P. K. 2000. Advances in the internal marketing concept: definition, synthesis and extensionally. *Journal of Services Marketing* 14 (6): 449-462.
- Rajput, S., Singhal, M. and Tiwari, S. 2016. Job satisfaction and employee loyalty: A study of academicians. *Asian Journal of Management* 7 (2): 105-109.
- Sandada, M. and Matibir, B. 2016. An investigation into the impact of service quality, frequent flier programs and safety perception on satisfaction and customer loyalty in the airline industry in Southern Africa. *South East European Journal of Economics and Business* 11 (1): 41-53.
- Schneider, B. and Bowen, D. E. 1985. Employee and customer perceptions of service in banks: Replication and extension. *Journal of Applied Psychology* 70 (3): 423-433.
- Shamila, V. J. 2013. Employee engagement — an approach to organizational excellence. *International Journal of Social Science & Interdisciplinary Research* 2: 111-117.
- Shaw, J. D., Gupta, N. and Delery, J. E. 2005. Alternative conceptualizations of the relationship between voluntary turnover and organizational performance, *Academy of Management Journal* 48 (1): 50-68.
- Silvestro, R. 2002. Dispelling the modern myth: Employee satisfaction and loyalty drive service profitability. *International Journal of Operations and Production Management* 22 (1): 30-49.
- Storbacka, K., Strandvik, R and Gronroos, C. (1994). Managing Customer Relationship for Profit: The Dynamics of Relationship Quality. *International Journal of Service Industry Management* 5 (5): 21-38.
- Sung, M. and Yang, S. U. 2009. Student-university relationships and reputation: a study of the links between key factors fostering students' supportive behavioral intentions towards their university. *Journal of Higher Education* 57: 787-811.
- Svensson, G. and Wood, G. 2007. Are university students really customers? When illusion may lead to delusion for all. *International Journal of Educational Management* 21 (1): 17-28.
- Wan, H. L. 2012. Employee Loyalty at the Workplace: The Impact of Japanese Style of Human Resource Management. *International Journal of Applied HRM* 3 (1): 1-17.
- Webber, K. L. and Yang, L. 2014. The increased role of foreign-born academic staff in US higher education. *Journal of Higher Education Policy and Management* 36 (1): 43-61.
- Zeithaml, V. A., Berry, L. L. and Parasuraman, A. 1996. The behavioral consequences of service quality. *The Journal of Marketing* 60 (2): 31-46.