

## THE INFLUENCE OF LOYALTY IN THE WORD-OF-MOUTH ADVERTISING IN A NON-PROFIT HIGHER EDUCATION INSTITUTION

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### Abstract:

Some studies emphasize the influence of loyalty in word-of-mouth. However, and while important for universities, this approach is still little studied in the educational context and only a few studies have attempted empirically measuring such relation. At the purpose of testing that relation at a non-profit university in Brazil, this paper aims to verify the influence of students' loyalty in the word-of-mouth advertising at the institution. By means of a descriptive and quantitative survey with the participation of Brazilian university students, it was found, through structural equation modelling, that loyalty influences the production of word-of-mouth advertising. It was also noticed, from *t*-test results, that even though students are loyal, they do not necessarily put emphasis on word-of-mouth advertising, although there is a relation between them, as highlighted. Finally, it was found, through regression method, that the phase at which the student is enrolled does not significantly influence the levels of loyalty and word-of-mouth advertising.

**Keywords:** *higher education institutions; loyalty; word-of-mouth advertising*

## LA INFLUENCIA DE LA LEALTAD EN LA PUBLICIDAD BOCA A OREJA EN UNA INSTITUCIÓN NO LUCRATIVA DE EDUCACIÓN SUPERIOR

### Resumen:

Algunos estudios resaltan la influencia de la lealtad en el boca-a-oreja. Sin embargo, y aunque importante para las universidades, este enfoque ha sido aún poco estudiado en el contexto educativo y sólo unos pocos estudios han intentado medir empíricamente tal relación. Para probarla en una universidad sin ánimo de lucro en Brasil, este artículo trata de verificar la influencia de la lealtad de los estudiantes en la publicidad boca-a-oreja en la institución. Con un estudio descriptivo y cuantitativo con participación de estudiantes universitarios brasileños se obtuvo, mediante modelos de ecuaciones estructurales, que la lealtad influye en la producción de publicidad boca-a-oreja. También se vio, a partir de los resultados *t*-test, que aun siendo leales, los estudiantes no necesariamente hacen énfasis en la publicidad boca-a-oreja, aunque hay una relación, según se señala. Finalmente, se constató, mediante regresión, que la fase en la que el estudiante está matriculado no influye significativamente en los niveles de lealtad y publicidad boca-a-oreja.

**Palabras clave:** *instituciones de educación superior; lealtad; publicidad boca-a-oreja.*

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## 1. Introduction

Loyalty and word-of-mouth advertising are routinely searched topics in marketing, especially with regard to consumer behaviour. Loyalty refers to the consumer's intention to continue as the organization's client (Jacoby and Kryner 1973; Griffin 1998; Lam et al. 2004; Qayyum et al. 2013). On the other hand, the word of mouth advertising refers to the client voluntarily recommending the brand to others (Haywood 1989; Fitzgerald-Bone 1992; Brown et al. 2005; East et al. 2008; Van Hove and Lievens 2009; Zhang et al. 2010).

Such involuntary recommendation provides organizational advantages, and it can be driven by the consumer loyalty (Hennig-Thurau and Klee 1997; Griffin 1998; Gremler and Brown 1999; Arnold and Reynolds 2000; Qayyum et al. 2013). Therefore, understanding customer loyalty becomes even more relevant, since it can be a predictor of a more active consumer action, even in the educational context (Petruzzellis and Romanazzi 2010).

In recent years, the education sector has witnessed an exponential increase in the number of vacancies due to the growing number of institutions and types of education (Governo Federal do Brazil 2011). As a result, students' loyalty and word-of-mouth advertising to a third party got a prominent place in the definition of management strategies. By allocating resources to activities that foster students' loyalty, managers add value, build a lasting relationship, retain students (Henning-Thurau et al. 2001) and promote the university recommendation (Petruzzellis and Romanazzi 2010).

Students' loyalty is one of the goals of Higher Education Institutions (HEI) which seek to differentiate themselves in the education sector (Dugaich 2005; Petruzzellis and Romanazzi 2010). It is obtained when students become satisfied by the received services (Mohamad and Awang, 2009). Loyal students, emotionally attached to their educational institution, will recommend it to others, then favouring the uptake of new students and the organization's permanence in the educational market (Westbrook 1987; Petruzzellis and Romanazzi 2010).

Regarding the recommendation, it is noticed that students tend to do word-of-mouth advertising of the place where they study when they assess the quality of education (Chang et al. 2013) or feel attached to their HEI (Borges and De Mello 2015). Briefly, the word of mouth advertising is important to strengthen the university (Arnettm et al. 2003; Petruzzellis and Romanazzi 2010).

As mentioned, students' loyalty and word-of-mouth advertising are strategic issues for HEI (Reynolds and Arnold 2000; Hennig-Thurau et al. 2001; Marzo-Navarro et al. 2005; Østergaard and Kristensen 2005; Grace and Kim 2008; Petruzzellis and Romanazzi 2010; Kheiry et al. 2012; Ueda and Nojima 2012; Mitsis and Foley 2012; Chang et al. 2013. Fares et al. 2013; Aritonang and Lerbin 2014; Pedro et al. 2014; Borges and De Mello 2015); However, despite their importance, few studies have empirically investigated such relation in the educational context.

One of the few studies that measured this relation was the one by Petruzzellis and Romanazzi (2010), who proved that Italian students tend to recommend their university. This recommendation by means of word-of-mouth advertising is strengthened as students feel more loyal to the institution.

Seeking to fill this gap and to test the findings by Petruzzellis and Romanazzi (2010) in another continent and context, more specifically in a nonprofit university, this study aims to answer the following question: *does students' loyalty contribute to their word of mouth advertising about their HEI?*

As a general goal, we aim to determine the influence of loyalty in students' word-of-mouth advertising of a nonprofit HEI. Confirming that relationship in this context would become interesting, especially because nonprofit institutions do not make large investments in media to become known. It is important to highlight that the word of mouth advertising is a way the company has to minimize media expenditures, as it ends up becoming a kind of spontaneous publicity by consumers (Haywood 1989). This characteristic also applies to HEI (Petruzzellis and Romanazzi 2010).

## 2. Theoretical framework

The literature review and theoretical framework providing the basis for this paper can be divided into two sections, depending on the concrete topic they are devoted to: i) loyalty intention; and ii) word-of-mouth advertising.

## 2.1. Loyalty

Customers' loyalty is understood either as a deep commitment to a product, service, brand or organization (Lam et al. 2004), or a sufficiently rooted repurchase agreement to remain even under adverse situational influences or competition marketing efforts (Oliver 1997). It is also characterized as a behavioural response of intentional repetition, manifested over a period of time (Jacoby and Kryner 1973), reflecting customers' preference, the probability of recommending their decision to others and the intention to consume the product again (Qayyum et al. 2013).

Loyal consumers hold regular product purchases of the same brand, indicating them to other people (Griffin 1998). Following Singh and Sirdeshmukh (2000), loyalty is the behaviour that indicates the intention to maintain and expand a relationship with a supplier. Customers' loyalty generates recommendations of the received service to others, benefiting the supplier, who will increase his customer base and gain new customers more likely to become loyal than if they had been attracted by advertising. Advertising expenses also tend to decrease (Gremler & Brown, 1999).

In general, loyalty is measured from behavioural, attitudinal and composed perspectives (Toh et al. 1993; Pritchard and Howard 1997; Tepeci 1999). Basically, loyalty is measured by customers' purchase repetition (Tepeci 1999). The attitudinal approach takes into account the emotional and psychological addictions that permeate loyalty. In this perspective, even if the client is not able to consume the brand, there is a positive attitude towards it and a tendency to recommend it (Toh et al. 1993). The composed measurement, on the other hand, considers the consumers' preferences for products, brands, shopping frequency and the total value of acquisitions (Pritchard and Howard 1997).

In the service sector, measuring loyalty is complex. Unlike product loyalty, loyalty to services also depends on interpersonal relationships (Macintosh and Lockshin, 1997). In the educational context, students' loyalty and satisfaction became a priority for any university (Østergaard and Kristensen 2005). Moreover, students' loyalty is a key target for higher education institutions and source of competitive advantage (Aritonang 2014).

The existence of a positive image can promote students' loyalty (Kheiry et al. 2012). Having loyal students is beneficial for the institutions not only when students are formal participants, but also when they are discharged. Therefore, students' loyalty refers to loyalty during and after the studied period in an educational institution (Henning-Thurau et al. 2001). What is more, along the considered period students often have the opportunity to switch to other educational institutions or, for various reasons, just leave their institution. Despite those possibilities, students' loyalty is not related only to short-term effects. Loyal students are committed to the campus routine and to the defence of teaching quality (Rodie and Kleine 2000). After completing their courses, loyal students remain linked to the HEI, by means of donations, word of mouth advertising and other ways of collaboration (Hennig-Thurau and Klee 1997).

The emotional attachment to the institution is crucial for the students' loyalty (Hennig-Thurau and Langer 2001). This loyalty ends up attracting former students in search of knowledge update (Marzo-Navarro et al. 2005). The importance of promoting loyalty to the HEI has led several researchers to focus their efforts on this subject, and most of those studies have been conducted in Europe and Asia.

Grace and Ji-Hyun (2008), on the basis of their research on 228 Korean university students, that students' loyalty is influenced by the quality of campus life. Kheiry et al. (2012) investigated loyalty in a group of 989 students from eight universities in Tehran. They found that preserving students' loyalty is not an easy task but, when achieved, it benefits the university for a long time.

Ueda and Nojima (2012) concluded, on the basis of the data from a study over a sample including 258 students from a private university in Tokyo, that the perceived academic support affects both students' loyalty and cooperation. Fares et al. (2013) conducted a survey on a sample of 160 international students from a university in Malaysia and found that the service quality, satisfaction and the university reputation impact positively on students' loyalty.

Aritonang and Lerbin (2014) tested an empirical model to explain undergraduates' loyalty on a sample of 226 students involved in Management and Accounting degrees at a university in Jakarta (Indonesia). Their results indicated that loyalty is influenced by satisfaction, trust and social identification. Similarly, Pedro et al. (2014), from a sample of 726 students from universities in Portugal, realized that the quality of academic life is a good predictor of loyalty and recommendation by university students.

The only contribution considering the influence of students' loyalty in their word-of-mouth advertising was the one by Petruzzellis and Romanazzi in 2010. The empirical research was conducted in twelve Italian universities, involving the participation of 923 students. Obtained results indicate that the higher the students' loyalty is, the more they tend to do word-of-mouth advertising of their universities.

To summarize, three exciting approaches have been discussed so far:

- loyalty contributes to the word-of-mouth advertising (recommendation) of the brand (Hennig-Thurau and Klee 1997; Griffin 1998; Gremler and Brown 1999; Reynolds and Arnold 2000; Qayyum et al. 2013);
- loyalty provides advantages for universities (Hennig-Thurau and Klee 1997; Reynolds and Arnold 2000; Rodie and Kleine 2000; Henning-Thurau et al. 2001; Østergaard and Kristensen 2005; Rad and Asgari 2012; Aritonang and Lerbin 2014); and
- students' loyalty contribute to word-of-mouth advertising of the university (Petruzzellis and Romanazzi 2010).

## 2.2. *Word-of-mouth*

Customers' experiences are usually exciting survey topics, in which several consumers show the habit of commenting their experiences to one another; in practice, they do word-of-mouth advertising of the business. This disclosure generally occurs when a company offers products or services that satisfy the customers (Haywood 1989).

Word-of-mouth advertising has become, in the marketing field, an important focus for many organizations (Sweeney et al. 2012). It refers to a form of disclosure that causes personal interaction (Zhang et al. 2010) and can be understood as a "group phenomenon in the form of exchanging individual comments, thoughts, and ideas among two or more individuals who are not a source for marketing" (Fitzgerald 1992, p. 579).

The basic idea behind word-of-mouth advertising is that information on products, services, shops, businesses, etc. can spread from one consumer to another (Brown et al. 2005). Such information, which circulates in social environments, can be either positive or negative (East et al. 2008; Van Hove and Lievens 2009).

East et al. (2008) measured the proportions of positive and negative word-of-mouth advertising and found that 64% of consumers use to do positive word-of-mouth advertising while 48% use to do negative word-of-mouth advertising, which is a significant difference. Furthermore, positive word-of-mouth advertising appears as being 76% more influential than negative one. Moreover, positive word-of-mouth advertising can, besides attracting consumers, serve as attractive to new employees, showing that it generates a good image for the company (Van Hove and Lievens 2009).

So, positive word-of-mouth advertising affects consumers' decisions more than negative one, that is, the former one is more influential than the later one. This explanation can be given because positive word-of-mouth brings the consumers closer to the brand, while negative word-of-mouth gets them neither closer nor more significantly distant (East et al. 2008). Positive word-of-mouth advertising also serves as a way to minimize the negative effects suffered by the brand, and it is also a means to minimize the undesirable effects of negative word-of-mouth advertising (Allsop et al. 2007).

As a result, positive word-of-mouth advertising is so important for companies that it can instil in the listener the desire to buy the product. Furthermore, when an individual is already a customer, word-of-mouth becomes an incentive for their loyalty (Martin and Lueg 2011; Sweeney et al. 2012). In this sense, here it is a provoking reflection: it was earlier realized that loyalty can contribute to the achievement of word-of-mouth advertising (recommendation) and, as pointed out by authors as Martin and Lueg (2011) and Sweeney et al. (2012), the recommendation also encourages loyalty, demonstrating that both complement and contribute substantially to the strengthening of the organization.

It can be observed that word-of-mouth advertising is a decisive action to consumers during the decision-making process over a good or service (Spangenberg and Giese, 1997) and it influences the strength of the brand and the longevity of the company (Freire and Nique, 2005). Eisingerich (2014) points out that people do word-of-mouth advertising because they feel a need to share good purchase experience and like to omit their opinions from other consumers.

Positive word-of-mouth advertising is the recommendation of the company or brand by the customer and it is directly related to the quality of services provided by the organization. When it offers quality services, consumers' perception becomes more empathetic, causing consumers assign more value to the organization and (Sweeney et al. 2012). Tam (2012) reinforces this assumption when stating that, when a quality service is provided, customers become satisfied, and this perceived satisfaction causes them to recommend the service to others.

This way of spontaneous disclosure by customers is extremely important for service organizations, mainly because the basis for services is information. Another advantage is that the organization is able to minimize investments in traditional media. Thus, service providers should be aware of information exchanged among consumers, seeking to adapt their service to market needs and expectations (Haywood 1989). Briefly, when a service experience is beneficial or enjoyable, consumers encourage friends and family to experience the same type of service (Babin et al. 2005).

The importance of word-of-mouth advertising is also part of the educational environment, since when students are satisfied with the quality of educational services, they tend to do positive word-of-mouth advertising about the university (Chang et al. 2013). Positive word-of-mouth advertising in the university context is a promotion that former and present students or staff do when they speak about their university (Arnett et al. 2003).

Mitsis and Foley (2012) studied word-of-mouth advertising by Business students in graduate courses and realized that they usually do positive word-of-mouth advertising about their institution. In Brazil, Borges and De Mello (2015) found that public university students use to recommend their institutions to society, and such recommendation is influenced by emotional attachment.

Therefore, university administrators must work in order to achieve the spread of positive word-of-mouth advertising by their students, since it is part of the students' behaviour, and an effective marketing strategy that tends to give return to the university (Mitsis and Foley 2012).

### 3. Methodological issues

The empirical work of this paper consists of a quantitative and descriptive survey with Business undergraduate students at a non-profit community university, located in Southern Brazil. The research universe consists of students enrolled in the Business Graduation course, totalling 797 individuals.

A convenience sample was used for research purposes. The researchers visited one group of each semester to distribute structured questionnaires to be filled by the students. The final sample consisted of 286 students, representing a 35.88% of the total population.

The questionnaire consisted of one open question (the semester that the student would be attending) and a set of 13 metric questions to be answered through a 5-point Likert scale ranging from 1 ("*strongly disagree*") to 5 ("*strongly agree*"). Those questions measured two constructs: *loyalty* and *word-of-mouth advertising*.

Specifically, the construct *word-of-mouth advertising* came from the research by De Macedo-Bermamo et al. (2011), which measured the loyalty and retention by students of a university. This construct was composed of six questions. The representative items of the construct *word-of-mouth advertising* originated from the contribution by Teo and Soutar (2012), who researched the history of this construct with students from a university in Singapore.

So, the first step was the translation of a *word-of-mouth advertising* scale for Portuguese language, since data were collected in Brazil. The scale related to *loyalty* was already available in Portuguese version, coming from a local publication. After the translation, a pretest was conducted presenting the initial version of the scales to students in four Business classes. The result of the pretest suggested the convenience of concrete adjustments on some issues. After such minor amendments, the complete field research was conducted from 25th to 27th April 2015.

Half of the students were analyzed using descriptive statistics, and a regression analysis was used to assess their relation with the studied constructs, being the *semester* the independent variable. The relation between *loyalty* and *word-of-mouth advertising* was measured by means of structural equation modelling. The results are shown in the next section of the paper.

#### 4. Presentation and discussion of results

Table 1 shows the distribution of participants according to the semester in which they were enrolled. As it can be appreciated, students in all semesters of the Business degree took part in the study.

Then, an exploratory factor analysis was made in order to verify the representativeness of the items on the two studied dimensions. Table 2 shows commonalities and load factors for the *loyalty* construct from principal component analysis. LOY4 and LOY6 items were excluded due to their low commonality values under 0.5, as advised by Hair et al. (2005). LOY5, despite presenting a commonality lower than desired, was kept in order to observe their performance in the second round, as some improvement can occur after the exclusion of other items. Similarly, Table 3 shows commonalities and load factors for the *word-of-mouth advertising* construct. In this case, the WOM5 item was excluded because its isolated allocation in another dimension.

**Table 1.** Distribution of the participants in the survey regarding the semester in which they were enrolled

| Semester                  | Frequency | Percentage |
|---------------------------|-----------|------------|
| 1 <sup>st</sup> semester  | 30        | 10.5%      |
| 2 <sup>nd</sup> semester  | 30        | 10.5%      |
| 3 <sup>rd</sup> semester  | 37        | 12.9%      |
| 4 <sup>th</sup> semester  | 24        | 8.4%       |
| 5 <sup>th</sup> semester  | 31        | 10.8%      |
| 6 <sup>th</sup> semester  | 22        | 7.7%       |
| 7 <sup>th</sup> semester  | 37        | 12.9%      |
| 8 <sup>th</sup> semester  | 26        | 9.1%       |
| 9 <sup>th</sup> semester  | 21        | 7.3%       |
| 10 <sup>th</sup> semester | 28        | 9.8%       |
| Total                     | 286       | 100.0%     |

**Table 2.** *Loyalty intention* (LOY) items (after 1<sup>st</sup> round of analysis)

| Item   | Commonality | Load factor |
|--------|-------------|-------------|
| LOY1   | 0.556       | 0.746       |
| LOY2   | 0.560       | 0.749       |
| LOY3   | 0.611       | 0.782       |
| LOY4 * | 0.330       | 0.575       |
| LOY5   | 0.443       | 0.665       |
| LOY6 * | 0.347       | 0.589       |

\* Excluded due to the low load factor value

**Table 3.** *Word-of-mouth advertising* (WOM) items (after 1<sup>st</sup> round of analysis)

| Item   | Commonality | Load factor (1 dim.) | Load factor (2 dim.) |
|--------|-------------|----------------------|----------------------|
| WOM1   | 0.613       | <b>0.648</b>         | 0.440                |
| WOM2   | 0.683       | <b>0.640</b>         | 0.523                |
| WOM3   | 0.625       | <b>0.755</b>         | -0.235               |
| WOM4   | 0.652       | <b>0.720</b>         | -0.365               |
| WOM5 * | 0.456       | 0.456                | <b>0.499</b>         |
| WOM6   | 0.624       | <b>0.774</b>         | -0.158               |
| WOM7   | 0.701       | <b>0.746</b>         | -0.381               |

\* Excluded for being separately allocated in another dimension

After the described first round of the exploratory factor analysis, a second round was performed, now excluding items LOY4 and LOY6 in case of the *loyalty* dimension, and WOM5 in case of the *word-of-mouth advertising* dimension. The obtained results after this second round are shown in Tables 4 and 5.

Specifically, Table 4 shows that all the *loyalty* items in this second round had commonalities and load factors close to or above the desired levels of 0.5 (for commonalities) and 0.3 (for load factors), as advised by Hair et al. (2005). In this case, no additional items were deleted. Below, the second round of the Word of Mouth Advertising construct is shown.

Table 5 shows that all the items considered in case of the *word-of-mouth advertising* construct presented commonalities and load factors close to or above the desired level following Hair et al.'s advise (2005). So, no additional items were deleted. Moreover, all items were allocated in a single dimension, then showing one-dimensionality. Following, a confirmatory factor analysis was made.

Figure 1 shows a view of the structural equation modelling. As it can be seen, the WOM1 and WOM2 items of the *word-of-mouth advertising* construct were excluded from the model. The exclusion of these two items is justified by the fact that they presented low load factor values in the first round of the principal component analysis, that is, load factors under the 0.6 reference value, as suggested by Kline (2011).

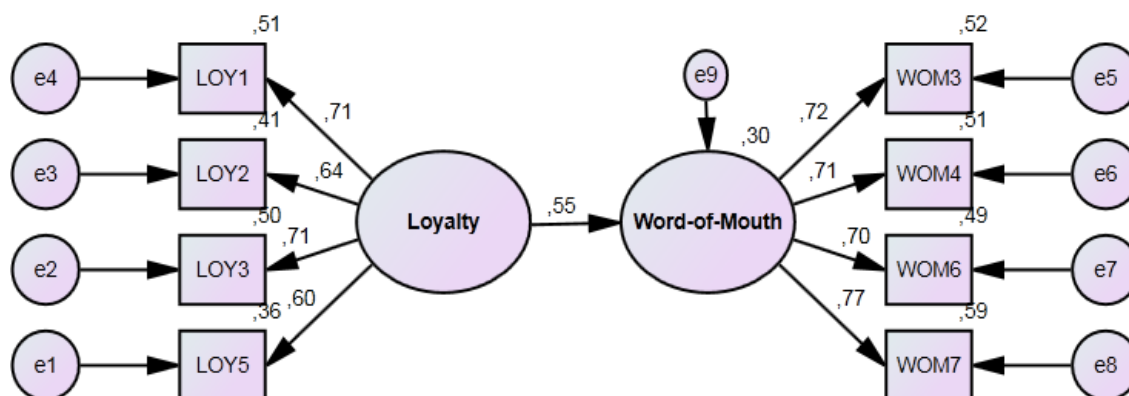
**Table 4.** *Loyalty intention (LOY) items (after 2<sup>nd</sup> round of analysis)*

| Item | Commonality | Load factor |
|------|-------------|-------------|
| LOY1 | 0.639       | 0.799       |
| LOY2 | 0.555       | 0.745       |
| LOY3 | 0.631       | 0.794       |
| LOY5 | 0.494       | 0.703       |

**Table 5.** *Word-of-mouth advertising (WOM) items (after 2<sup>nd</sup> round of analysis)*

| Item | Commonality | Load factor (1 dim.) | Load factor (2 dim.) |
|------|-------------|----------------------|----------------------|
| WOM1 | 0.758       | <b>0.645</b>         | 0.585                |
| WOM2 | 0.768       | <b>0.624</b>         | 0.615                |
| WOM3 | 0.625       | <b>0.768</b>         | -0.190               |
| WOM4 | 0.640       | <b>0.741</b>         | -0.301               |
| WOM6 | 0.626       | <b>0.778</b>         | -0.147               |
| WOM7 | 0.712       | <b>0.761</b>         | -0.365               |

**Figure 1.** Structural equation modelling



From Figure 1 it is noticed that *loyalty intention* considerably influences *word-of-mouth advertising* (0.55 on a 0-1 ranging scale). This relation was confirmed, since the  $p$ -value was 0.000. This means that when students present *loyalty intention*, then they tend to recommend the institution where they are enrolled.

The influence of *loyalty* in *word-of-mouth advertising* had already been found in previous researches, as those conducted by Griffin (1998), Gremler and Brown (1999), Reynolds and Arnold (2000), and Qayyum et al. (2013). However, only Petruzzellis and Romanazzi (2010) tested this relation in the educational context.

The confirmation of the model reliability can be seen in Table 6, which shows that all indicators had acceptable indices compared to the reference values suggested by Kline (2011). Only the RMSEA value was slightly below regarding the recommended one. However, this is not bad, since it represents the error: the higher it is, the more errors the model will have. These results confirm that the model can be trusted.

Finally, we analyzed whether the *semester* in which the student is enrolled influences or not their *loyalty intention* and *word-of-mouth advertising*. It is important to highlight that only items refined after the exploratory and confirmatory factor analysis rounds were verified, testing results by linear regression. The results are shown in Tables 7 and 8.

To be precise, Table 7 shows that the *semester* in which the student is enrolled does not influence the *loyalty intention* (Sig. > 0.05). This means that students tend to have a same level of *loyalty intention* regardless the semester in which they are enrolled at the moment, thus suggesting that the time factor is not relevant. It was believed that the longer students stay in the institution, the more their *loyalty intention* increases, but this assumption was not confirmed.

Next, Table 8 shows the relationship between the *semester* and *word-of-mouth advertising*, and results indicated that the former one has no effect on the later one (Sig.> 0.05). This means that students tend to maintain a same level of *word-of-mouth advertising*, regardless the concrete *semester* they are enrolled at. These results also indicate that the time factor is not relevant in this case. It was believed that the longer students stay in the institution, the more they would tend to recommend it, but this was not confirmed.

**Table 6.** Final model indices

| Adjust measures | Acceptable level       | Final model              |
|-----------------|------------------------|--------------------------|
| GL              | ---                    | 19                       |
| $\chi^2$ ep     | - ( $p < 0.000$ )      | 25.463 - ( $p < 0.000$ ) |
| $\chi^2 / GL$   | $\leq 5$               | 1.340                    |
| GFI             | > 0.90                 | 0.978                    |
| AGFI            | > 0.90                 | 0.959                    |
| SRMR            | < 0.10                 | 0.0402                   |
| RMSEA           | 0.05 - 0.08            | 0.035                    |
| TLI             | > 0.90                 | 0.986                    |
| CFI             | > 0.90                 | 0.991                    |
| PNFI            | > 0 and < 1, next to 1 | 0.654                    |

**Table 7.** Regression model 1 (*semester* and *loyalty intention*)<sup>a</sup>

| Model | Non standardized coefficients |                | Std. coeff. | $t$    | Sig.   |
|-------|-------------------------------|----------------|-------------|--------|--------|
|       | B                             | Standard model | $\beta$     |        |        |
| 1     | (constant)                    | 3.968          | 0.099       | 40.249 | 0.000  |
|       | Semester                      | 0.000          | 0.016       | -0.001 | -0.013 |

<sup>a</sup> Dependent variable: *loyalty intention*



**Table 8.** Regression model 2 (*semester* and *word-of-mouth advertising*)

| Model | Non standardized coefficients |                | Std. coeff. | <i>t</i> | Sig.   |       |
|-------|-------------------------------|----------------|-------------|----------|--------|-------|
|       | B                             | Standard model | $\beta$     |          |        |       |
| 2     | (constant)                    | 2.811          | 0.118       |          | 23.799 | 0.000 |
|       | Semester                      | -0.013         | 0.020       | -0.039   | -0.654 | 0.514 |

<sup>a</sup> Dependent variable: *word-of-mouth advertising*

**Table 9.** Median, mean and *t*-test values for constructs

| Construct                 | Median | Mean | Difference | <i>t</i> | Sig.  |
|---------------------------|--------|------|------------|----------|-------|
| Loyalty                   | 3      | 3.89 | 0.89       | 20.750   | 0.000 |
| Word-of-mouth advertising | 3      | 2.76 | -0.24      | -4.600   | 0.000 |

Finally, the performance of each construct was analyzed. This performance was evidenced by the analysis of the means. Only representative items were considered at this purpose, i.e. those ones which were considered in the final modelling step (LOY1, LOY2, LOY3 and LOY5 in case of *loyalty*; and WOM3, WOM4, WOM6 and WOM7 in case of *word-of-mouth advertising*). The results from this new analysis are shown in Table 9.

As we can see, the mean values of the two constructs were statistically further from the median by *t*-test (Sig. = 0.000). In this case, results suggest the students' *loyalty* has a positive clearance, this meaning (in other words) that –in a general sense– students feel loyal to the higher education institution in which they are enrolled.

On the other hand, the performance of *word-of-mouth advertising* mean was negative and significant. So, in general terms, we should not state that students recommend the institution as it would be expected. After the conjoint analysis of both performances, it is possible to conclude that students appear much more as loyal individuals than precursors of word-of-mouth advertising.

## 5. Conclusion and final considerations

This paper aimed to verify whether students' loyalty contributes to the fact that they will do word-of-mouth advertising of the Higher Education Institutions (HEI) in which they are enrolled. This relation was expected as possible, as it was already suggested in previous studies by Hennig-Thurau and Klee (1997), Griffin (1998), Gremler and Brown (1999), Reynolds and Arnold (2000), and Qayyum et al. (2013). Moreover, it was confirmed that this relation specifically occurs in the university environment, as highlighted by Petruzzellis and Romanazzi (2010).

Furthermore, these results suggest that HEIs should aim their students' loyalty, as suggested by authors as Ueda and Nojima (2012), Fares et al. (2013), or Aritonang and Lerbin (2014), since it provides clear institutional advantages. Even more, our results take a step further, as confirming the existence of a consequence of loyalty in the educational context, that is, word-of-mouth advertising, as it has been suggested by Petruzzellis and Romanazzi (2010).

Namely, the perceived influence of loyalty in word-of-mouth advertising in our research was considerable. This is relevant if we take in mind the considered context, as it was a non-profit HEI. So, community HEIs, just as other HEI institutions, should promote educational environments making students feel loyal, and this will provide them two clear benefits: on the one hand, the existence of loyalty, which contributes to students' retention and their future return, like doing another course in the same HEI (undergraduate or graduate); on the other hand, word-of-mouth advertising for society, which does not generate costs for the university, an important factor when they are public –community– institutions. Moreover, as highlighted,

the existence of positive word-of-mouth advertising decreases the necessity of the organization to invest in traditional media to become known (Haywood 1989).

One of the intended goals was analysing the influence of the semester in which the students were enrolled and the intensity of their loyalty and word-of-mouth advertising. Initially, it was found that the semester does not influence the intensity of loyalty or word-of-mouth advertising. This means that the time of relationship with the university environment has no effect in practice, but students feel loyal and do word-of-mouth advertising regardless the time they have spent enrolled in the institution. This finding is interesting, as it supposes that the university can benefit from students' loyalty and recommendations as soon as they first get in contact with the institution. However, this finding should be confirmed by future research.

Another finding was that even when students feel loyal, their efforts in terms of word-of-mouth advertising have not an emphasis accordingly. This finding is also interesting, since loyalty influences on word-of-mouth advertising. Therefore, it is believed that the recommendation levels would be even lower if not for that loyalty, as this relationship is significant.

The main limitation of this study is due to the fact that it was carried out from data obtained through a non-probabilistic sample. Then, we should take in mind that results and findings are limited to the context of the university in which data were obtained and the concrete academic year, not being possible neither generalizations nor extrapolations to other contexts.

Regarding future research, two approaches are recommended: both a quantitative and a qualitative one. Quantitative studies can be conducted in other contexts in order to compare results. Even in Brazil, conducting similar studies in other kinds of HEIs is suggested, involving students in different degrees and in other regions of the country. Availability of comparative results is important in order to verify whether the findings of this study can be a trend or not. Qualitative studies should contribute to explain the main reasons driving students to do word-of-mouth advertising of their HEIs, mainly because –as above mentioned– the results obtained in this study are under expectations on the level or intensity of students' recommendation of their university.

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