

ANALYSIS OF CAUSAL LINKS AND RELATIONSHIP BETWEEN HIGHER EDUCATION QUALITY, STUDENTS' SATISFACTION AND INTENTION, BASED ON DEVELOPMENT OF A CONCEPTUAL MODEL

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Abstract

The aim of this article is to identify the causal link between higher education quality, students' satisfaction and their intention to continue studying at the same university. In a globalised world, the universities are exposed to the wide public, and if they want to remain in the market, they need to attract a significant number of students. To this effect, the universities seek to obtain competitive advantages, and make efforts to offer satisfaction to the higher education consumers, in view of retaining them for the next academic cycles: master and PhD. By underlining the causal link between quality of services offered by higher education institutions, students' satisfaction and intention, we are seeking to develop in this article a conceptual model that would emphasize this bilateral relationship.

Key words: higher education institutions, quality, satisfaction, intention

Jel Classification: I23, M31

1. Introduction

While the worldwide competition increased and the student mobility programs developed, the preoccupation for quality has become an extremely important issue for higher education institutions. Thus, quality of services provided in any domain, including higher education, is a crucial step for consumer satisfaction, underlining it, considering the fact that satisfaction generates a higher effect on consumer's re-buying intention than the perceived quality of services (Cronin, J.J. and Taylor, S.A. 1992), as it is the result of comparison between expectations and performance (Parasuraman A., et al., 1985, p. 42). The need to assure high standard quality grew to influence the future of the higher education environment; the expectations of potential consumers rise continuously, as they are triggered by the social evolution,

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globalization, and the presence of new actors in the academic market, competing with the traditional higher education institutions.

This article is made of four parts: the first part is the introduction, the second part includes an overview of the specialised literature dealing with the higher education quality concept, and the identification of relationships between academic service quality and student satisfaction. The third part, a theoretical research based on fundamental research principles, envisages the elaboration of a conceptual model for the identification and analysis of the causal relationship between the higher education service quality and the student satisfaction, as this satisfaction leads to the intention of continuing the studies within the same university where the bachelor degree was obtained, because a satisfied consumer will keep and enhance the relationship with the service provider and will develop preferences. The conclusions will be drawn referring to relationships between quality, satisfaction and intention.

2. The theoretical approach of the academic quality and student satisfaction

If we were to define quality, it would be quite difficult, because this is an intangible item. The specialized literature gives numerous definitions and various interpretations to the concept of *quality*. A first definition of quality " *meeting or exceeding customer expectations*" (http://www.shsu.edu/~mgt_ves/mgt481/lesson1/lesson1.htm) places the customer in the centre of an organization's concerns. The authors - Ramaiyah Arivalan, Zain Ahmad Nurulazam Md., Ahmad Halim Bin – in the article " *Exploring the Dimensions of Service Quality in Higher Education Research*" (<http://eprints.um.edu.my/16/1/arivalan.pdf>, p.2) view various dimensions of the concept of quality:

- ✓ *Quality viewed as an exceptional, very high standard*
- ✓ *Quality viewed in terms of consistency in a process*
- ✓ *Quality viewed in terms of achieving customer satisfaction*
- ✓ *Quality viewed as an expression of value for money*
- ✓ *Quality viewed as an expression of transformation*

Other definition of the concept of quality is, according to " *the ISO 8402:1994: Standard - a set of characteristics and particular features of an entity (product or service) which enables it to satisfy the expressed and implicate needs of some beneficiaries.*" (Todorescu Liliana-Luminița, 2009, p.219-220). From the point of view of the author Korca Mihai (2009) - " *the education quality is defined as a set of characteristics of a research program and its providers, which meet the beneficiaries' expectations.*" (Korca Mihai coord. 2009, p.17)

Quality assurance in higher education is a long term process, which implies " *evaluation, from various perspectives and institutional levels, of the way in which a higher education institution operates and meets the training and scientific research needs of its „clients*" (Miroiu Adrian (coord.), Crăciun Claudiu, Florian Bogdan , 2007, p. 5)

In the literature, various authors approach the education quality based on beneficiary satisfaction. Thus, Reising, R. W. (1995) considers that " *knowledge represents the climax of quality in education*". Zammuto, R. F., Keaveney, S. M. & O'Connor, E. J.

(1996) in their article "Rethinking student services: assessing and improving service quality", refer to the concept of perceived quality, which means the consumer's evaluation of his/her experience related to a specific organization or institution. Parasuraman A., et al. (1985) in their ISI article – "A Conceptual Model of Service Quality and Its Implications for Future Research" elaborated a service quality model, shown in Figure no.1 below:

Figure no.1 – Service quality model



Source: Parasuraman A., Zeithaml Valarie A., Berry Leonard L. (1985) - *A Conceptual Model of Service Quality and Its Implications for Future Research*, The Journal of Marketing, JSTORE, Vol. 49, No. 4, ISSN: 0022-2429 , p. 44.

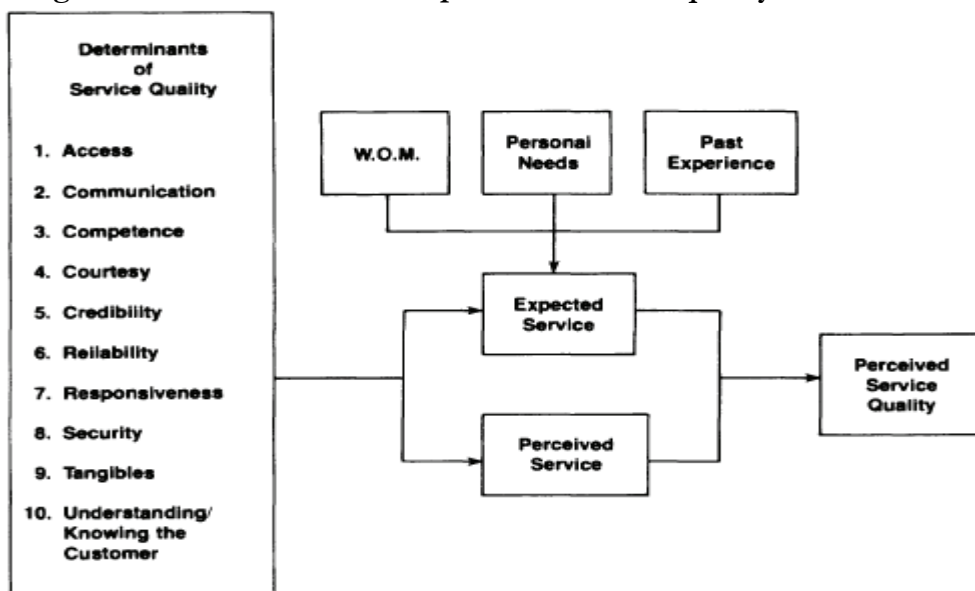
According to the authors, there are discrepancies, gaps related to the perception of service quality. These GAPS – as presented in the above figure - can be major hurdles in the consumers' perception of higher quality of the provided services.

(Parasuraman A., et al., 1985, p. 44). The authors identified 5 GAPs in the model, as follows:

- GAP 1 – consumer expectations – management of perceived quality
- GAP 2 – management of perceptions – service quality specifications
- GAP 3 – service quality specifications – service delivery
- GAP 4 – service delivery – external communications
- GAP 5 – expected service – perceived service (Parasuraman A., et al., 1985)

The same authors have identified 10 determinants of *quality perceived* by consumer, as shown in Figure no.2:

Figure no.2 – Determinants of perceived service quality



Source: Parasuraman A., Zeithaml Valarie A., Berry Leonard L. (1985) - *A Conceptual Model of Service Quality and Its Implications for Future Research*, The Journal of Marketing, JSTORE, Vol. 49, No. 4, ISSN: 0022-2429, p. 48.

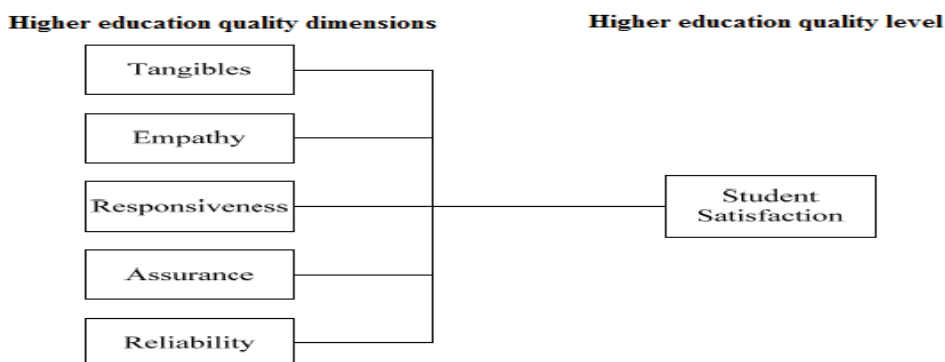
According to the authors, the 10 determinants of *quality perceived by a consumer* imply the following aspects: (Parasuraman A., Zeithaml Valarie A., Berry Leonard L., 1985, p. 47)

1. **Access** - means that the service is easily accessible to the consumer
2. **Communication** - means keeping customers informed.
3. **Competence** - means possession of the required skills to perform the service.
4. **Courtesy** - involves politeness, respect, consideration and friendliness of the contact personnel.

5. **Credibility** – involves customer relationship trustworthiness and honesty.
6. **Reliability** – refers to performance, compliance with deadlines and fulfillment of promises.
7. **Responsiveness** – means giving prompt service and immediate feedback.
8. **Security** – means protection from danger, risk or doubt.
9. **Tangibles** – includes physical evidence of the service, such as: physical facilities, personnel appearance, equipment used to provide the service.
10. **Understanding the consumer** – means making the effort to understand customer needs. (Parasuraman A., Zeithaml Valarie A., Berry Leonard L. ,1985, p. 47)

Cronin, J.J., Brady, M.K. and Hult, G.T.M. (2000) identified in the ISI article- "Assessing the effect of quality, value, and customer satisfaction on consumer behavioral intentions in service environments?" a strong causal relationship between the service quality and consumer satisfaction. Also, the authors Al-Alak Basheer A., Alnaser Ahmad Salih Mheidi (2012) have developed a model expressing the relationship between the quality dimensions of the SERVQUAL model and students' satisfaction; the influence of the independent variables represented by the quality dimensions upon the dependent variable – quality level in higher education – is shown in Figure no.3 below :

Figure no. 3 – Relationship between higher education quality dimensions and service quality level



Source: Al-Alak Basheer A., Alnaser Ahmad Salih Mheidi (2012) – *Assessing the Relationship Between Higher Education Service Quality Dimensions and Student Satisfaction*, Australian Journal of Basic and Applied Sciences, 6(1), ISSN 1991-8178, p. 159.

Based on the hypotheses that each element of the quality dimension has a positive influence on the student's satisfaction, the author concluded that *quality assurance* has a positive influence, as the students believe that the information and knowledge received from lecturers are credible and trustworthy. Also, the research emphasizes the causal relationship between *empathy*, as a quality dimension, and the

student's satisfaction. Individualized attention has a higher influence on satisfaction. There is a strong link between *tangibles* and satisfaction. Students appreciate the provision of equipment, teaching materials, and other physical evidences assured by a university's staff. Also, *reliability* seems to have a significant relationship with the student's satisfaction. It is a prerequisite for the administrative staff and lecturers to be able to answer and address the students' query with a high degree of reliability and consistency. The research has proved that there is no significant relationship between *responsiveness* and students' satisfaction. This is probably due to the policy pursued by the faculty analyzed in the study, where all queries were not dealt with appropriately and promptly. Thus, the question of *responsiveness* as a quality dimension does not arise in the minds of the students. (Al-Alak Basheer A., Alnaser Ahmad Salih Mheidi, 2012, p. 161).

Thus, the student's satisfaction is directly influenced by the quality of the academic environment where he/she is enrolled. The elements of the SERVQUAL model positively contribute to the creation of satisfaction, which is considered the key to success of higher education institutions in the battle for obtaining competitive advantage.

3. The development of a conceptual model based on relationships between “quality, student satisfaction and intention for further studies at the same university”

3.1 Research method, objectives and hypotheses

This theoretical research is intended to analyse the existing relationships between the quality of the services delivered by higher education institutions, the students' satisfaction and their intention to continue their studies at the same university, due to the satisfaction and quality perceived in the academic years.

Research hypotheses:

H1 – Continuous enhancement of the higher education quality creates the feeling of satisfaction amongst students.

H2 – Quality perceived by students enhances their satisfaction as beneficiaries of services provided by the university, and contributes to the positive image of the university through the word-of-mouth communication of students.

H3 – Students' satisfaction contributes to their preference for the university and their intention to continue studies after graduation at the same higher education institution.

The work method was focused on the causal explanation of the existing relationship between the three variables: quality – satisfaction – intention. The study was intended to identify the constituent elements and the relationship between them within the logical triad “quality – satisfaction – intention”. The correlation analyses

performed in the specialized literature was the starting point for the conceptual definition of the model developed on the three aforementioned variables.

3.2 The development of a conceptual model based on relationships between “quality, student satisfaction and intention for further studies at the same university”

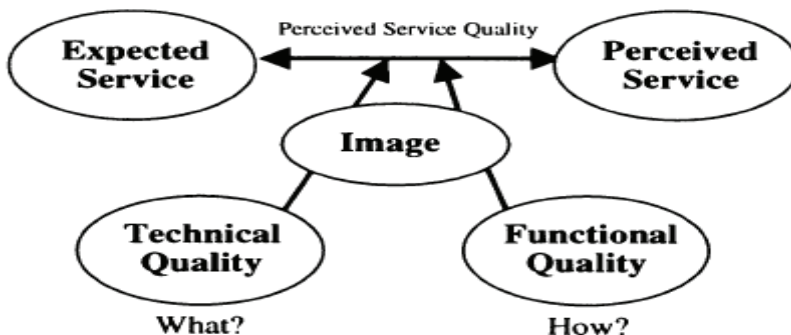
Due to the considerable development of the communication systems, the world and the market structure have changed significantly, and the universities have entered the competition for specific advantages. The development of the quality in services that would meet the consumers' needs is a goal that can be reached only through great efforts. In this context, the service quality is the result of a comparison between expectations and performance perceptions, (Martínez-Argüelles M., Castán J., Juan A., 2010, p. 152), which is the consumer's judgment about the provided service.

Within the SERVQUAL model, the service quality is defined as the gap between the customer perceptions of the future outcomes during the service transaction and his/her expectations of how the service transaction should have been performed. (Culiberg, Rojšek, 2010, p. 152). Quality is thus defined as the gap between perception and expectations: $Q = P - E$. (Parasuraman, A., Zeithaml, V.A. & Berry, L.L., 1988, p. 19), where Q is quality, P is perception, and E stands for expectations. Zeithaml, Berry, Parasuraman (1993, p. 4) identified four types of consumer expectations: expected service, wanted service, adequate service and predicted service. If we consider the students to be consumers of tertiary education services, we can state that they have the right to make a choice and benefit of the various available options for attending a university, depending on the quality of the provided services. Thus, *a positive students' perception of higher education service quality increases their satisfaction; and satisfied students will attract more students through the word-of-mouth or online communication of their satisfaction, and they will continue their relationship with the university* by attending the subsequent degree levels. (Voss Roediger, Gruber Thorsten, Szmigin Isabelle, 2007, p. 950, *op. cit.* Marzo-Navarro et al., 2005; Wiers-Jenssen et al., 2002; Mavondo et al., 2004; Schertzer Şi Schertzer, 2004). The students are the major stakeholders of the higher education institution; this is the reason for the causal relationship developed between them and the university: the students are the beneficiaries of the necessary knowledge for the labor market, and the universities need the students in order to survive in a competitive environment, receive financial support and accomplish their mission. (Munawar khan Mubbsher, Ahmed Ishfaq, Nawaz Muhammd Musarrat, 2011, p.160). Considering this tight relationship, the higher education institutions make intense efforts to increase the students' satisfaction through a better quality of the provided services, the services being continuously monitored and assessed according to the satisfaction level of the direct consumers, the students. (Low Lana 2000, *op. cit* Munawar, Ahmed, Nawaz, 2011, p.160).

Kotler et al. (2009, p.120) defines satisfaction as being "a feeling of pleasure resulted from comparing perceived performances to expectations." By assessing the students' expectations and their satisfaction level, the higher education institutions obtain the needed advantages and maintain a good position in the academic market. Thus, based on the definition of satisfaction, we can state that, if the academic performance meets the students' expectations, they will be satisfied. According to Parasuraman, Zeithaml, and Berry (1986), the satisfaction level is influenced by the gap between the service perceived by the consumer and the expected service. The students whose needs have been satisfied by the higher education institution are more likely to fully achieve their educational purposes and become attached to the university; later they may be devoted graduates, able to offer support to the current students. (Low Lana, 2000, p. 3). The consumers' satisfaction is important for the achievement of vital objectives of any higher education institution, as it contributes to the increase of financial benefits, *retaining the students at the university for the next academic cycles, a positive word-of-mouth communication of the university image*, mitigation of discontent and risks of losing the actual position. (Adaptation after Abedniya Abed, Zaeim Majid Nokhbeh, Hakimi Bardia Yousef , 2011 p.604)

In the specialized literature, Grönroos (1984) identified two quality dimensions: *functional quality*, which measures how the service is delivered (Gudlaugsson, 2009, p.10) and which expresses **how** the service defines the consumer's perception on delivery interactions and *technical quality* that measures **what** is delivered through the service (Gudlaugsson, 2009, p.10) and which reflects the result of the service delivery or what the client receives as a result of his/her interaction with the service. (Brady, Cronin 2001, p. 35). Grönroos model is represented in Figure no.4 :

Figure no. 4 - Quality Model developed by Grönroos (1984)



Source: Grönroos, Christian (1984), *A Service Quality Model and Its Marketing Implications*, European Journal of Marketing, ISSN: 0309-0566, 18 (4), 36-44. **op. cit.** Brady Michael K., J. Cronin Joseph Jr.(2001) - *Some New Thoughts on Conceptualizing Perceived Service Quality: A Hierarchical Approach*, Journal of Marketing, ISSN: 0022-2429, Vol. 65, No. 3 (Jul., 2001), p. 35

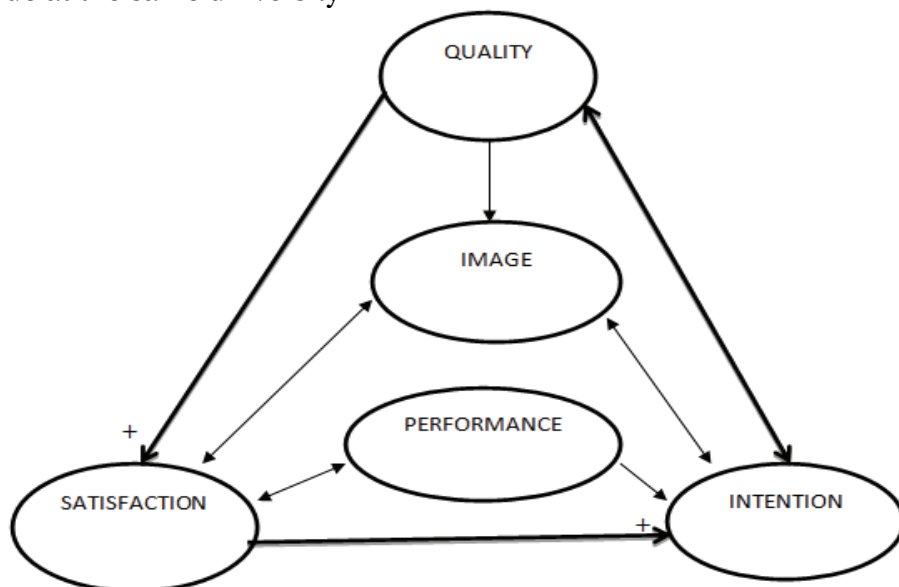
According to the model, the two quality dimensions identified by Grönroos (1984), contribute, through the *image concept*, to building a causal relationship between the expected service and perceived service. According to Palacio et al. (2002) the students' expectations arise before they enroll in the university. Also, the authors Ahmed Ishfaq, et. al. (2010), in the article ISI - "Does service quality affect students' performance? Evidence from institute of higher learning" analyse the impact of quality on the students' satisfaction and motivation. The authors consider that the satisfaction in learning is the major goal that should be reached by education, because "Satisfied students are the source of a competitive advantage and of the word-of-mouth communication of the educational institution's image." (Ahmed Ishfaq, Nawaz Muhammad Musarrat., Zulfqar Ahmad, Zafar Ahmad, Shaikat, . Muhammad Zeeshan, Usman Ahmad, Rehman Wasim-ul, Ahmed Naveed - 2010, p. 2528). Thus, **the university's positive image is the result of the higher education institution's efforts to insure high quality services to its beneficiaries**, as well as intense efforts to maintain and improve quality standards. According to Abbasi, Malik, Chaudhry and Imdadullah (2011, p.211) the university image has been created in the mind of higher education consumers before they enroll in the university; **this university's image affects their decision on enrolling at a specific higher education institution, and later on it affects the student's satisfaction during the academic studies.**

The consumers are able to evaluate a service (are or are not satisfied with it) only after perceiving it (Culiberg Barbara, Rojšek Ièa, 2010, p. 154). In the specialized literature, many researchers who approached in their papers the complex issue of "consumer satisfaction" and its relationship with the delivered service, concluded that *the latter directly affects and influences the consumer satisfaction* (Cronin, J. J. Jr. & Taylor, S. A. (1992), Lee, H., Lee, Y. & Yoo, D. (2000), Wang, Y., Lo, H. P. & Hui, Y. V. (2003), Abedniya Abed, Zaeim Majid Nokhbeh, Hakimi Bardia Yousef , (2011)).

Many research papers approach the students' intention to continue studying after graduation at the same university. "The intention is the result of the developed motivation; it may take the shape of a tendency and represents a probable estimate of the future behavior." (Cătoi, Teodorescu, 2004, p. 23)

Kara Ali, DeShields Oscar W. (2004) developed a conceptual model of the students' satisfaction, their intention and retention. The authors state that *the experience gathered during the academic years has a positive influence on the students' satisfaction and intention to remain at the same university for further studies.* In this context, we developed the model shown in Figure no. 5, in order to demonstrate the relationship between the higher education quality, students' satisfaction and their intention to continue at the same university.

Figure no. 5 – Conceptual model for analysis of the relationship between the higher education quality – students' satisfaction and their intention to continue at the same university



Source: Authors' own research

According to the SERVQUAL model, a higher quality of the academic environment has a positive influence on the students' satisfaction during the academic studies. But a higher quality creates a positive image to the public, regarding the respective higher education institution. The positive image is due to the academic performance. The satisfaction concept contributes to the students' intention to remain at the same university, and it has an effect on the academic performance of each student; thus, a bilateral relationship develops between performance and satisfaction. The perceived performance contributes to creating the intention, which is due also to the quality perceived by the student; actually, the intention is the positive judgment expressed by the wish to continue the cooperation with the institution. Chen, C.-F., & Tsai, D. (2007) developed a conceptual model whereby he showed that image affected the quality and value perceived by the consumer, which then influenced his satisfaction and intention to continue the relationship. According to the author, the image has such a powerful influence on the intention, that the consumer looks forward to recommend his experience.

The conceptual model is focused on the institution's image, as the image represents the stakeholders' perceptions; they are created based on the service quality perceptions, the understanding of satisfaction as a gap between what the student obtains and his/her expectations, and the impact of the intention on the image.

The model emphasizes a dynamic relationship between quality, satisfaction and intention. Any of the three variables has an impact on the

others. Even if the sequence quality-satisfaction-intention seems the only logical relationship, a thorough analysis shows that a stronger intention to remain at the same university represents a guarantee of the delivered quality, and a stable basis that would guarantee satisfaction. The image is the element that can guarantee the dynamic relationship among the three poles, as it is their effect, and their engine also.

Thus, by means of the analysis performed, which included the identification of the determinant elements and causal relationships with impact on the triad quality-satisfaction-intention, the research objective was accomplished and the three hypotheses of were confirmed.

4. Conclusions

The need to insure high standard quality bears effects on the future academic environment, as potential consumers' expectations increase continuously, triggered by the evolution of the society, globalisation, and the new actors on the academic market, which compete with the traditional higher education institutions. The concern for enhancing the quality of the academic environment has become an international practice, because, due to border opening and development of various programs that facilitate the students' mobility, each higher education institution has been exposed to the world. Thus, the higher education quality becomes the key to performance and excellence, because it requires continuous effort from the institution. In this context, the students' satisfaction becomes a barometer of quality, as the greatest challenge of a higher education institution is to become a source for the students' satisfaction. (Arambewela, Hall, 2006, p.144) Quality basically maintains an equilibrium between the internal and external forces (Rana Saba, 2009, p. 2) and contributes to the creation of the students' intention to continue studying at the same university after graduation.

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