Corvinus University of Budapest

Doctoral School of

Business and Management

THESIS SUMMARY

To the doctoral dissertation

Attila Mucsi

STUDY ABROAD MOTIVATIONS, SATISFACTION AND LOYALTY: THE IMPACT OF SERVICE QUALITY, ACCULTURATION AND INTERNATIONAL STUDENT CHARACTERISTICS IN HIGHER EDUCATION

Supervisor:

Dr Erzsébet Malota

Associate professor

Budapest, 2021

Department of Marketing Research and Consumer Behaviour

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1. RESEARCH BACKGROUND AND RESEARCH RELEVANCE

The sheer growth in the number of international students makes the research field very attractive, as such growth often comes with new challenges and dimensions that are yet to be discovered. The number of international students enrolled globally have surpassed 4.5 million by 2015 (OECD, 2017) and went above 5.5 million in 2018 (UNESCO 2020). As universities receive less government funding (Zebal et al, 2012) and more programs target internationalization (Ahmad & Buchanan, 2017), the priorities of universities are shifting towards recruiting and retaining international students. With the abundant number of international students, the hegemony of traditional, anglophone and Western study abroad destinations are facing serious competition from developing and Eastern countries (IIE, 2017).

The importance of service quality and student satisfaction in the higher education industry has been acknowledged by the scientific community, as there has been a surge of studies about academic service quality and satisfaction in the past two decades. Nevertheless, in case higher education institutions measure only academics related service quality, satisfaction and loyalty, they are missing out on a great deal of useful information. Institutions could increase their competitive advantage by understanding the diverse challenges and personal struggles international students are facing during their study abroad program, which all together may impact their perception of service quality and satisfaction level. Institutions could gain competitive advantage by measuring the study abroad experiences beyond the academic experience of international students (Borzooei & Asgari, 2014).

The current research aims to fill this gap by providing a holistic framework to investigate the study abroad program satisfaction by describing the connection between factors associated with the host country culture, host institution, personal characteristics and motivations of international students. By gaining a better understanding of the intertwined nature of the above constructs rooted in marketing and psychology, institutions can ultimately support the academic, professional and personal development of international students.

1.1. Research aim

The aim of the dissertation is to explore and analyse the influence of international students' motivation for studying abroad on their satisfaction and loyalty towards their host institution, and also to examine the mediating role of acculturation in the host country culture and the perceived quality of services provided by the host institution. Following a holistic approach to describe the international student experience, the secondary aim of the dissertation is to test the

effect of a wide range of control variables related to the experienced culture shock, student characteristics and personality types of international students. The main research question of the dissertation is the following.

> What are the most important host country culture, host institution service and individual level influencing factors when measuring the relationship between self-determined motivations for studying abroad, satisfaction and the loyalty of international students?

1.2. Examined constructs and scales of the dissertation

Study abroad motivations: motivations for studying abroad include personal development, cultural learning, exploring a new country, making international friends or nurture an international career path (Leutwyler & Meierhans, 2013). The push and pull factors (McMahon, 1992; Mazzarol, 1998; 2002) categorized host country level and host institution level reasons to study abroad. In the dissertation the self-determined motivations scale is used, where the highest autonomy is achieved through intrinsic, identification and positive introjected motivations, while the decision-making process has a low level of autonomy in case of negative introjection, external and amotivation (Yang et al, 2017).

Culture shock: in a new cultural environment international students often face some degree of culture shock (Oberg, 1960). While instantly losing the usual supporting network of family and friends (Chaney & Martin, 2011), the newly encountered norms, values, language, behaviour or people of the local culture (Malota, 2013) and fellow international students may cause a great deal of mental and even physical inconvenience (Hidasi, 2004). Mumford (1998) categorized culture shock into core elements that are perceived by the individual (disgust, acceptance, stress, confusion, lack of support) and the interpersonal elements, which are related to the interactions with members of the host culture.

Acculturation (sociocultural adaptation): from the idea of early clinical treatment for culture shock (Oberg, 1960), researchers shifted to culture learning, where acculturation was measured with the behavioural outcome (Zhou et al, 2008), the sociocultural adaptation of international students (Searle & Ward, 1990; Ward & Kennedy, 1999). The acculturation construct in the empirical research focused on the behavioural outcomes of acculturation, measuring sociocultural adaptation through the competence of international students (Wilson, 2013).

Perceived service quality: the performance only SERVPERF approach was developed by Cronin and Taylor (1992). In order to obtain more accurate results, higher education specific

measurement scales have emerged, for instance the HEdPERF (Firdaus, 2006). It was further polished by more recent research results (Faizan et al, 2016), considering the most important aspects of academic and faculty related service delivery, university reputation, access to services and the overall program offering.

Satisfaction: it is often the main indicator of success in international higher education as well as in various industries (Oliver, 1997; Alves & Raposo, 2007). In the dissertation the satisfaction construct has a central role and will be measured both with overall host country and host institution satisfaction indicators (Paharoo et al, 2013) and a multi-attribute version of the host institution satisfaction scale (Faizan et al, 2016).

Loyalty: it is also a well-known consequence of customer satisfaction (Fernandes et al, 2013; Helgesen & Nesset, 2007), and it has an important role in the dissertation, as the attitudinal loyalty elements, including word-of-mouth (Faizan et al, 2016) are key for universities when recruiting international students.

Personal characteristics: some of the most important differentiators are the age group, gender, study level, personality type, learning style and grade point average (Fredericksen et al, 2000; Brokaw et al, 2004), program length, time spent abroad, major, financial status, grant status (Malota, 2013), prior knowledge and education, country of origin (Vangelis & Hill, 2019) and personality traits (John & Srivastava, 1999), and the shortened Big Five personality traits scale is used (Nandi & Nicoletti, 2009).

1.3.Proposed theoretical framework

The extant literature is abundant when considering each construct separately, however there is a varying level of evidence for their interrelationship in the higher education industry, and there are not any holistic models that include all these constructs in a single framework (Figure 1.).

The middle section: direct line connection between self-determined motivations for studying abroad (Yang et al, 2017), satisfaction, and the connection between satisfaction and loyalty (Paharoo, 2013; Faizan et al, 2016).

The top section: host country layer, including the experienced culture shock (Mumford, 1998) in the host country and the level of acculturation of international students (Wilson, 2013).

The bottom left section: perceived service quality is a proposed mediator

The **bottom right** section comprises of the personal characteristics of international students. There are basic demographics (Malota, 2016), personal background (Vangelis & Hill, 2019) and personality traits of international students (Nandi & Nicoletti, 2009).

Figure 1. Theoretical framework of the dissertation
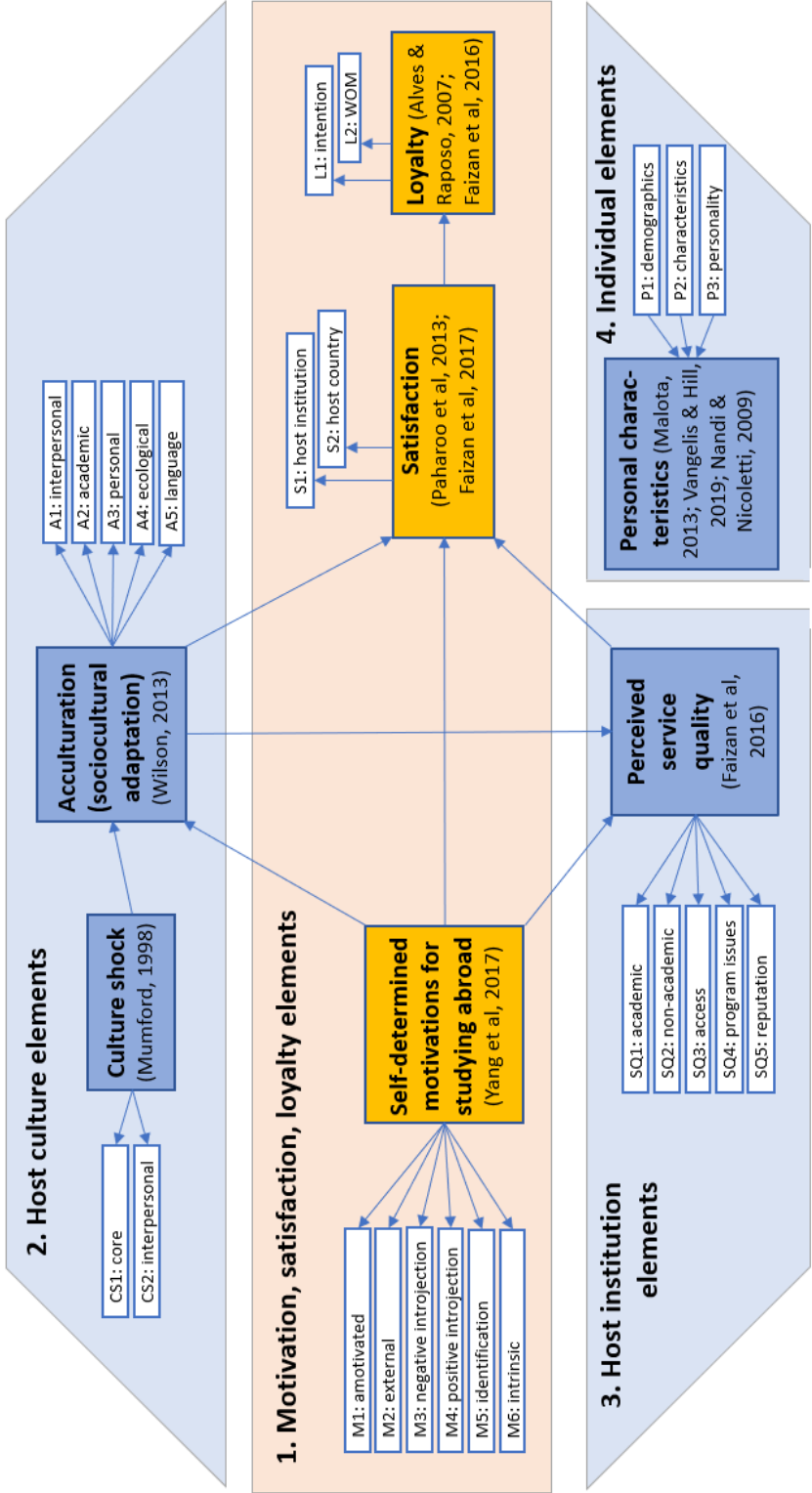
Source: own construction

2. APPLIED METHODS

2.1. Research questions and hypotheses

Based on the theoretical framework, the research questions and the corresponding research hypotheses were finalized in the research model (Figure 2.). The main research question of the dissertation is: *What are the most important host country culture, host institution service and individual level factors when measuring the relationship between self-determined motivations for studying abroad, satisfaction and the loyalty of international students?*

Research question 1: what are the most important motivations for studying abroad and is there a direct connection to satisfaction? Does satisfaction have an impact on the loyalty of international students?

H1a: Self-determined motivations for studying abroad have a positive influence on satisfaction

H1b: Satisfaction has a positive influence on loyalty

Research question 2: does the level of acculturation mediate the relationship between self-determined motivations for studying abroad and satisfaction? Does the level of acculturation also mediate the relationship between self-determined motivations for studying abroad and the perceived service quality?

H2a: Self-determined motivations for studying abroad have a positive influence on acculturation (sociocultural adaptation)

H2b: Acculturation (sociocultural adaptation) has a positive influence on satisfaction

H2c: Acculturation (sociocultural adaptation) has a positive influence on perceived service quality

Research question 3: what are the most important culture shock factors for international students and does culture shock impact the acculturation?

H3: Culture shock negatively impacts acculturation (sociocultural adaptation)

Research question 4: does perceived service quality mediate the relationship between self-determined motivations for studying abroad and satisfaction?

H4a: Self-determined motivations for studying abroad have a positive influence on perceived service quality

H4b: Perceived service quality has a positive influence on satisfaction

Research question 5: do demographics, personal characteristics and personality traits of international students have an impact on satisfaction?

All demographic, personal characteristics and personality traits were tested for moderation between the examined constructs, and only the significant relationships will be discussed.

Figure 2. Final research model with hypotheses
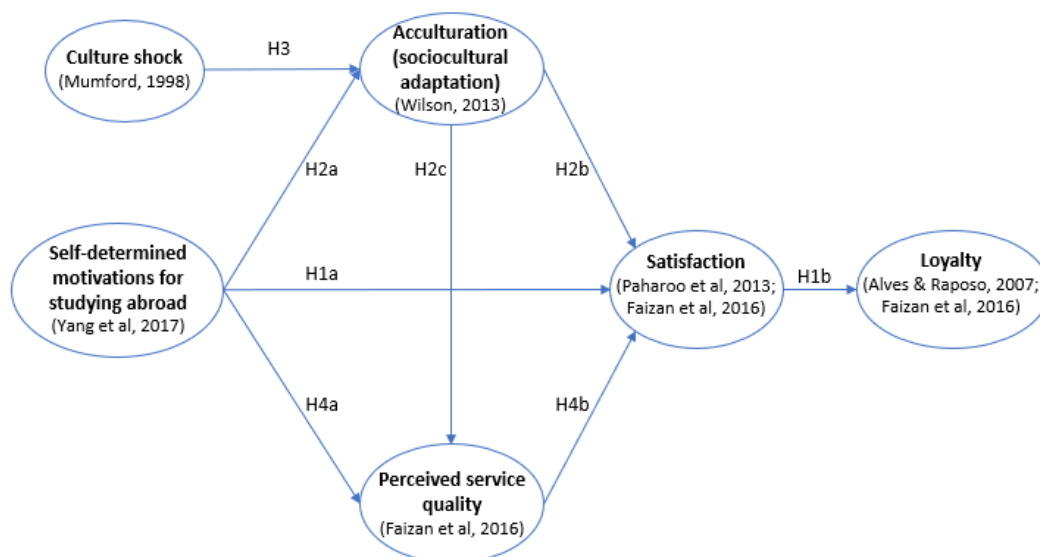
Source: own construction

2.2.Research design and timeline

The dissertation applies the mixed-methods research methodology, where the research phases complement each other, thus creating synergies that can contribute to more consistent and higher quality research results (Tashakkory & Teddlie, 2003). In the research both theoretical and methodological triangulations were applied in the form of various literature synthesis, followed by qualitative and quantitative research phases as well (Venkatesh et al 2013; Berg & Lune, 2012). Considering the gaps in the literature with regards to the connection between study abroad motivations, acculturation, culture shock and perceived service quality, satisfaction and

loyalty constructs, the mixed-method research is expected to bring the best results. The results of the qualitative data collection and analysis were incorporated in the research model development and the subsequent quantitative research phase. The details of the applied research methods are discussed at the respective phases. The research timeline is shown in Table 1.

Table 1. Research timeline

Research strategy	Aim of the research step	Data collection and analysis	Research sample	Research timeline
Phase 1: Qualitative	Research model preparation, exploring dimensions: motivations, acculturation, culture shock, satisfaction, service quality, loyalty and student characteristics	In-depth interviews and thematic content analysis	20 international students	2018 November-December
			20 international students	2020 April-May
Phase 2: Quantitative	Research instrument development and questionnaire testing	Online survey with pilot respondents	10 international students	2021 February-March
	Model and hypotheses testing: motivations for studying abroad, satisfaction, loyalty, acculturation, culture shock, perceived service quality and personal characteristics	Online survey and PLS path modelling	426 international students	2021 April-May

Source: own construction

During the time of the second qualitative data collection, COVID-19 already had an impact on academic mobility programs, thus the influence of the pandemic was expected and accounted for in the research.

2.3. Research methods

2.3.1. Qualitative data collection and sampling

For the qualitative data collection, purposive and quota (both non-probability) sampling techniques were applied to find interview subjects among international students studying at Corvinus Business School or outside. The minimum length of the program was set to 1 semester to gather richer details about the cultural experience of international students. The ratio of European and non-European citizens was defined in a close to 50:50 ratio to capture heterogeneity in the sample and allow cultural input from the widest range of countries possible. The qualitative data was collected via in-depth interviews in English, the first set of 20 interviews were held in the researcher's office (some were conducted online) and lasted between 60-80 minutes each, while due to the COVID-19 pandemic the second set of 20 interviews were conducted entirely via an online platform for safety reasons.

2.3.2. Quantitative data collection and sampling

Respondents for the quantitative phase were recruited through the institution of Tempus Public Foundation (TPF). TPF was established in 1996 by the Hungarian government as a non-profit organization to manage education related international cooperation programs and trainings (TPF, 2021). The link to the survey was sent out with the regular newsletter of TPF, reaching the higher education institutions in Hungary, accordingly the sample consisted of international students studying in Hungary. The questionnaire was hosted in Qualtrics and a total of 463 responses were recorded in May 2021. After a rigorous data cleansing, 37 responses were removed because the respondents indicated that they had great to extreme difficulties to understand the survey questions or filled in the questionnaire too fast, providing inconsistent answers. The final valid sample of 426 international students is a smaller fraction of the approximately 30,000 plus international students in 2021, as 33,358 international students studied in Hungary in 2018 (Oktatási Hivatal, 2020), hence the results cannot be generalized.

2.3.3. Quantitative data analysis method

Since PLS is capable of explaining complex models, while CB-SEM provides weaker results with more indicators (Kemény, 2015), the PLS-SEM will be applied for the complex model of the dissertation. PLS-SEM has been widely used in the field of marketing, service research, international marketing (Hair et al, 2012) and many researchers used it to analyze the service quality, satisfaction and loyalty constructs in the higher education industry (Firdaus 2006; Faizan et al, 2016). After the data collection and data cleaning, the quantitative analysis of the data was carried out with SmartPLS 3 (Ringle et al, 2015). The main aim of the statistical analysis was to analyze the relationships between the constructs of the research model.

3. SCIENTIFIC RESULTS OF THE DISSERTATION
3.1.   Results of the qualitative research

The results of the 40 in-depth interviews broadly confirmed the examined constructs and their assumed interrelationships which were identified and assumed based on the literature review.

The first research question of the dissertation was about the connection between motivations for studying abroad, satisfaction and loyalty of international students.
The earlier discussed self-determined motivations for studying abroad (Yang et al, 2017) can be matched with the motivations of international students' and their satisfaction levels (Table 2.). Country specific and life experience motivation groups were most often connected to

intrinsic motivations, which represent the highest level of autonomy of an individual. Since students in these groups had a deep personal reason to study abroad, in line with Yang et al (2017), it is expected that they will be more satisfied with their study abroad experience, even if they had negative experiences with their host country or host institution.

Table 2. Motivation groups based on the initial qualitative results

Yang et al (2017)	Empirical research results		
Motivation groups	Motivation groups and descriptions (aligned with the push and pull categories)	Co-motivation (pairs)	Level of satisfaction
Amotivated, External	Social pressure: conform with family, peers, professor, institutional or workplace expectations	Career building, Cost-efficient education,	Low by itself, Low with co-motivation
External, negative introjection	Cost-efficient education: relatively low tuition fee and living costs, favourable scholarship offers, avoid missing out	Life experience, Country specific	Low by itself, Medium with co-motivation
Positive introjection	Career building: enrich CV in the hope of an elevated (international) career path, preparation for future relocation	Country specific attractors	Low by itself, Medium with co-motivation
Positive introjection, identification	Educational immersion: quality education, favourable program conditions, wide range of course offering	Career building	Medium by itself, Medium with co-motivation
Identification, intrinsic	Country specific: cultural, language, traveling, historical and political interest, practice a foreign language in a live situation	Life experience	High by itself, High with co-motivation
Intrinsic, positive introjection	Life experience: traveling, personal challenges, making friends abroad, gain independence and have fun.	Country specific	High by itself, High with co-motivation

Source: own research, own construction

The second and third research questions of the dissertation examined the impact of acculturation and culture shock. Regarding the acculturation process, the majority of international students approached intercultural difficulties with their own cultural toolkit and were often unwilling to adjust their behaviour to the sociocultural norms of the host country. Low levels of sociocultural adjustment (Wilson, 2013) often resulted in the lack of cultural integration (Berry, 1994). As expected, based on Bochner (1982), the overall satisfaction seemed to be affected by the support received from local and international friends and the initial sacrifices that students had to make in order to be able to study abroad. International students showing lower level of self-determined motivations, tended to form less connections in the host country. The experienced culture shock was ranging from mild to severe shock in some cases,

which appeared to have an influence on the willingness to adjust to the local culture, in line with the findings of Dentakos (2016).

The fourth research question investigated the impact of perceived service quality on satisfaction. Acculturation appeared to influence service quality, as students striving to understand and accept the local culture were usually more satisfied with the quality of the services received, both with the academic and non-academic aspects. Motivations are also important factors for service quality, as the motivation groups seemed to have a direct impact on perceived service quality based on the findings. For instance, international students focusing on building their careers or immersing in education were more critical towards the quality of services provided by the higher education institutions. At the same time, study abroad motivations such as gaining life experience and learning about the host country tended to yield higher levels of perceived service quality, as international students appeared to be more forgiving in case of HEI mistakes.

The fifth research question examines the role of demographics, personal characteristics and personality traits. Some of the international students already studied abroad, and apparently, they were able to adapt to their host environment much faster for the second or third time. Preparation prior to studying abroad and setting realistic expectations was important (Vangelis & Hill, 2019), as there was a clear pattern showing that students who did their research on the host country culture, experienced less culture shock and were generally more satisfied with their study abroad experience. With regards to personality traits (Nandi & Nicoletti, 2009), students who were more outgoing and talkative, made more friends in the beginning of their program and built a supportive network faster, which often helped them through hard times while studying abroad.

3.2.Results of the quantitative research

Based on the results of the direct relationship between the constructs, the self-determined motivations, acculturation (sociocultural adaptation) and perceived service quality have a positive effect on satisfaction; acculturation (sociocultural adaptation) has a positive effect on perceived service quality; satisfaction has a positive influence on loyalty while culture shock negatively influences acculturation (sociocultural adaptation) as shown on Figure 3.

Figure 3. Significant paths and R^2 value
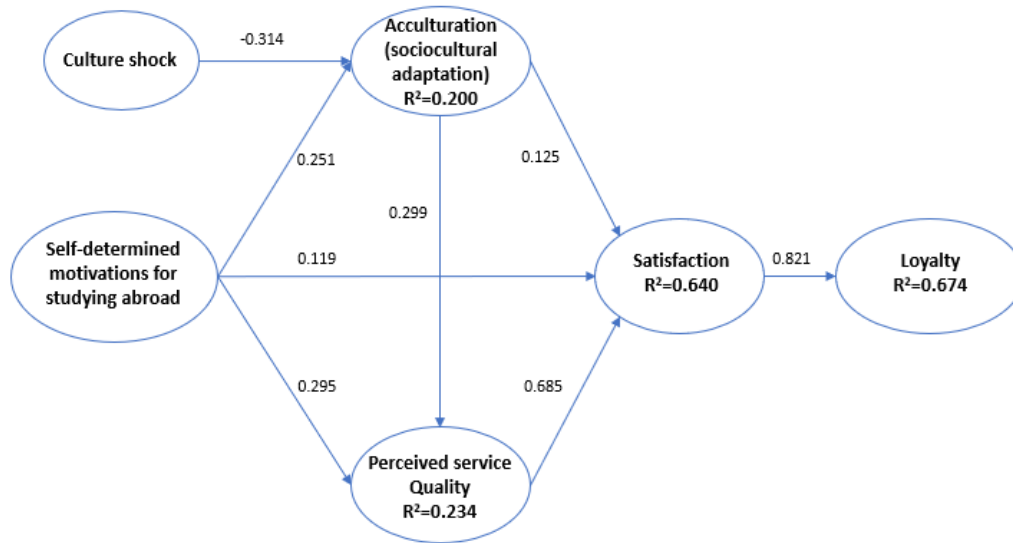
Source: own research, own construction

Based on the identified significant relationships, all of the research hypotheses were accepted at a 95% significance level, summarized in Table 3.

Table 3. Summary of research hypotheses results

H1a	Accepted	Self-determined motivations for studying abroad have a positive influence on satisfaction
H1b	Accepted	Satisfaction has a positive influence on loyalty
H2a	Accepted	Self-determined motivations for studying abroad have a positive influence on acculturation (sociocultural adaptation)
H2b	Accepted	Acculturation (sociocultural adaptation) has a positive influence on satisfaction
H2c	Accepted	Acculturation (sociocultural adaptation) has a positive influence on perceived service quality
H3	Accepted	Culture shock negatively impacts acculturation (sociocultural adaptation)
H4a	Accepted	Self-determined motivations for studying abroad have a positive influence on perceived service quality
H4b	Accepted	Perceived service quality has a positive influence on satisfaction

Source: own research, own construction

3.2.1. The most important indicators of the constructs (PLS)

Self-determined motivations: the lower autonomy part of the scale (amotivation, external, negative introjection) was removed due to their insignificant contribution to the construct. Based on the quantitative results, the construct of self-determined motivations for studying abroad included the higher autonomy indicators such as intrinsic motivations,

identification and positive introjection (Yang et al, 2017). The key indicators of self-determined motivations were joy, meaningful experience, personal importance, curiosity and a boost to self-esteem, all of which are in the high autonomy end of the SDT motivation continuum. Since most of the respondents were in Hungary already for over 3 years, they could have had difficulties recalling their initial (potentially more externally controlled) study abroad motivations. Also, during the lockdown, international students (and the population in general) had plenty of time to reflect on their goals and priorities, so they could have re-evaluated their motivations 1-2 years ago.

Culture shock: the culture shock construct retained both the core culture shock items and the interpersonal culture shock items. Based on the results the top culture shock indicators from the scale (Mumford, 1998) were the confusion about the role or identity in the new culture, anxiety when meeting local people, the sense of helplessness and powerlessness when trying to cope with the new culture and encountering with some shocking or disgusting elements in the host culture

These indicators are in line with the experiences brought by international students during the in-depth interviews, as they often felt that they could not ask for help in everyday situations (for instance shopping or using public transport) or they had to worry about having their student ID delayed for months.

Acculturation (sociocultural adaptation): applying the scale of Wilson (2013), the most important acculturation (sociocultural adaptation) indicators in the current empirical research were expressing ideas to other students in a culturally appropriate manner, working effectively with students from other cultures, adapting to the pace of life, participating in community activities and building and maintaining relationships. These indicators were in line with the qualitative research results, where it was found that international students were often craving to connect with locals and other international students, so any chance of a common activity or working on a course project together was an important cultural experience for them.

Perceived service quality: based on the empirical results, the indicators of the construct largely contributed to the construct, retaining all of the key elements: academic aspects, non-academic aspects, access, program issue and reputation as well, confirming the validity of the service quality scale used by Faizan et al (2016). The most important perceived service quality indicators were the professional knowledge of teachers, availability of teachers and administrative staff, adequate documentation from teachers, the reputation of the study program and the overall service quality of the program. These results are in line with previous researchers

(Fernandes et al, 2013; Suleyman, 2014; Arrivabene, 2019) and the qualitative empirical research results as well.

Satisfaction: the most important satisfaction indicators were the sense of enjoyable experience (Faizan et al, 2016), the services provided by the host institution and life in the host country (Paharoo et al, 2013).

Loyalty: the highest scoring loyalty indicators were about the pride in studying at the host institution (Alves & Raposo, 2007), the recommendation to friends and family, and that students would choose another program at the same HEI in case they wanted to enrol to a different program in the future (Faizan et al, 2016). The empirical results also confirmed that loyalty is a consequence of satisfaction (Fernandes et al, 2013; Helgesen & Nesset, 2007; Faizan et al, 2016; Arrivabene et al, 2019) and that loyalty can be measured as single multi-attribute construct, including word-of-mouth in the loyalty construct (Faizan et al, 2016).

3.2.2. The relationship between motivations, satisfaction and loyalty

Research question 1: what are the most important motivations for studying abroad and is there a direct connection to satisfaction? Does satisfaction have an impact on the loyalty of international students?

Based on the PLS path modelling there is weak, but significant direct connection between self-determined motivations for studying abroad and satisfaction, and there is a strong and significant direct connection between satisfaction and loyalty.

3.2.3. The mediating role of acculturation

Research question 2: does the level of acculturation mediate the relationship between self-determined motivations for studying abroad and satisfaction? Does the level of acculturation also mediate the relationship between self-determined motivations for studying abroad and the perceived service quality?

The relationship between motivations and acculturation is under researched (Chirkov at el, 2007; 2008), and Dentakos et al (2016) found that acculturation motivation could be a good predictor of sociocultural adaptation. Based on the in-depth interviews, self-determined motivations such as interest in the local culture and gaining life experience (intrinsic and identification motivations (Yang et al, 2017) appeared to indicate higher rates of acculturation. The relationship between acculturation and service quality has been also quite under researched (Davis et al, 2017), but acculturation was found to support the academic adjustment of

international students (Chirkov, 2008). Based on the PLS analysis the acculturation (sociocultural adaptation) has a weak partial mediating effect on the relationship between self-determined motivations for studying abroad and satisfaction. The mediation is only partial, because the direct connections of the construct were also significant as discussed in the previous research question. At the same time, acculturation was a moderately strong partial mediator construct between self-determined motivations for studying abroad and service quality. Based on these partial mediations the importance of adjusting to the host country culture has been proven as well.

3.2.4. The impact of culture shock on acculturation

Research question 3: what are the most important culture shock factors for international students and does culture shock impact the acculturation?

This connection is in line with the expectations based on the literature and the in-depth interviews. The PLS path modelling confirmed that there is a moderately strong negative connection between culture shock and acculturation, meaning that a higher level of culture shock resulted in lower level of acculturation (sociocultural adaptation).

3.2.5. The mediating role of perceived service quality

Research question 4: does perceived service quality mediate the relationship between self-determined motivations for studying abroad and satisfaction?

The PLS path modelling analysis showed that perceived service quality has a partial mediating role between self-determined motivations for studying abroad and satisfaction. This finding confirms the importance of the services provided by HEIs, and also that perceived service quality can be improved through identifying and managing the motivations of international students.

3.2.6. The moderating role of control variables

Research question 5: do demographics, personal characteristics and personality traits of international students have an impact on satisfaction?

The PLS path modelling identified a number of demographics, personal characteristics that have an impact on the satisfaction of international students, however personality traits did not have a significant impact. Confirming the findings of Vangelis & Hill (2019), international

students who knew more about the differences in teaching style between their home country and Hungary, were more likely to reach a higher level of acculturation. Students who kept in touch with their friends and family on a daily basis also reached higher level of acculturation, which seems to contradict the current theories (Berry, 1994), but it may be only a temporary impact of the pandemic. In case international students had to make significant sacrifices (Vangelis & Hill, 2019) to be able to study abroad, they were less loyal to the host institution. The satisfaction of international students was negatively moderated by the age group of the students and it was positively moderated by the academic performance of the students confirming the results of Brokaw et al (2004). Control variables such as gender, financial situation, host country choice, prior cultural exposure, study program level, host city, program length and program start (pre-COVID / during COVID), time spent abroad and the major study area did not moderate the examined relationships.

3.3. Summary of the results

To sum it up, based on the literature review, a strong connection was expected between perceived service quality, satisfaction and loyalty, and also between culture shock and acculturation (sociocultural adaptation). The self-determined motivations for studying abroad, culture shock and acculturation received less attention in the international higher education context, hence it is an important finding of the dissertation that these psychological constructs were proven to be significantly connected to the well-known marketing constructs of perceived service quality and satisfaction. The above summarized results have answered the main research question as well: the study abroad motivation construct is an important starting point for the study abroad journey, acculturation (sociocultural adaptation) is a key host country related construct and perceived service quality is a prominent host institution related construct, and both have a significant impact on satisfaction, which in turn influences loyalty in the higher education industry.

3.4. Theoretical and practical contributions

The theoretical significance of the dissertation comprises of three elements.

On one hand, the literature review of the dissertation is a synthesis for the extant literature of study abroad motivations, culture shock and acculturation and also service quality, satisfaction and loyalty in the international higher education context. On the other hand, the dissertation explored and confirmed new theoretical connections between psychological and marketing

constructs, proving the importance of motivations and cultural elements in international higher education research. Secondly, the dissertation expanded the current theoretical framework. The most innovative findings of the dissertation are the established quantitative connections between self-determined motivations and satisfaction, self-determined motivations and acculturation, self-determined motivations and service quality, and finally the relationships between acculturation and perceived service quality and satisfaction. This is among the first studies connecting these constructs in a single theoretical framework, providing a holistic view on the study abroad program satisfaction and overall student experience by considering the host country culture factors, host institution factors and individual level factors as well. Lastly, in addition to the new findings of the theoretical framework, the dissertation tested the culture shock scale of Mumford (1998), the acculturation (sociocultural adaptation) scale of Wilson (2013), the self-determined motivation scale of Yang et al (2017), the perceived service quality scale of Faizan et al (2016) and the shortened Big Five personality traits scale of Nandi and Nicoletti (2009) in the higher education context.

The practical contribution of the dissertation is the holistic theoretical framework that could guide higher education institutions in designing the study abroad experience of their international student community. The model elements could be used as is or modified to fit the circumstances and could be filled even prior to enrolment at the host institution, that way the institution could learn about the motivations and background 'presage' of the students and take actions accordingly. The results also offer practical insights to higher education academic staff, international office coordinators and advisors. International coordinators and academic staff teaching international students must have the required cultural competence, openness and willingness to learn and embrace different cultures, so that the international students may personally benefit from the experience, and the faculty staff also grows their intercultural knowledge. Institutions must find a way to engage and excite international students, enhance their perceived service quality, provide professional support (and set an example with its staff) when it comes to sociocultural adaptation. Institutions could have closer collaboration with the HEI's international student organizations and external advisors as well, and also host families could be appointed to increase the interaction between international students and members of the host culture.

HEIs must keep in mind that loyal students are their top supporters when recruiting international students. Based on the results, HEIs could measure the study abroad motivations, experienced culture shock, acculturation and the service quality perceptions of their students to understand

how they could support their intrinsic motivations and acculturation process. By doing so, students will experience higher levels of service quality and satisfaction, which will lead to loyalty and international students who are voluntarily spreading positive WOM about the institution.

3.5. Limitations and future research

In spite the PLS path modelling provided evidence for the existence of all of the constructs and their interrelationship, the sample size (426 valid responses) does not represent the total population of international students in Hungary, hence the results cannot be generalized. Nevertheless, the results of the dissertation confirmed the examined constructs and uncovered theoretical connections that were not hypothesized before in the context of higher education, which adds to the extant literature and opens ways for new research directions.

Considering the sample, the quantitative data collection was impacted by the COVID-19 pandemic, as the sample consisted of international students who were in lockdown in Hungary for at least one year. It would be interesting to test the same model during a time when there is face-to-face education or use it to develop new scales that are fully adapted for the virtual educational environment.

Another limitation of the study is that in the sample most of the students spent already three years in Hungary, which might have resulted in lower accuracy in terms of recalling initial study abroad motivations and cultural experiences. It would be beneficial to collect a sample of international students who only spent a few months in the host country. Also, the quantitative research had only 14,6% of the students from Europe and 1,6% from North American countries, so it would be interesting to compare the results with a European or North American sample. In case of a larger sample collection, the cultural differences of the sender countries could be investigated as well and culture specific scales could be developed later on. The majority of the respondents received financial support (94,8%) from the Hungarian government, so it could be also further explored whether the moderating relationships stand or change in case of students without study abroad scholarships. The host institutions were not investigated in the current research, so a future data collection could collect larger samples from each university to define host institution and host city specific indicators.

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