Studying abroad: the role of consumer cosmopolitanism in the enrolment decisions

Abstract

Purpose: Cosmopolitans transcend their local boundaries by interacting and actively seeking other cultures, and the applications of these characteristics to consumption behaviour is called consumer cosmopolitanism. To outline inferences on what school leavers would experience, consider or do when planning to study abroad, this research examines people who have experienced Erasmus concerning the relationship between their level and type of consumer cosmopolitanism and the decisions related to enrolling in the Erasmus programme, which include the decision itself, motivations, choice of destination, pursuing cultural differences, and search for different levels of globalisation.

Methodology: After proposing a conceptual model, data were collected by surveying undergraduate or postgraduate students. Then a set of multivariate analyses were developed to validate the hypotheses.

Findings: Contrary to what could be expected, results indicate that consumer cosmopolitanism decreases the likelihood of students enrolling on the programme. Additionally, three types of consumer cosmopolitanism were found: low, cultural and high cosmopolitans. According to results, low cosmopolitans display lower likelihoods of enrolment than the other two types. This evidence supports that intention to enrol is not always a good predictor of behaviour and that a gap is also proven here. This study also suggests that cosmopolitan consumers do not reveal a preference for countries with similar/different cultures or levels of globalisation to that of their own country, but, conversely, experiencing a different culture remains one of the leading motivations for these consumers.

Originality: Although cosmopolitanism has been extensively studied in different research fields, its link with studying abroad has barely been explored.

Keywords: Consumer cosmopolitanism; Erasmus programme; Consumer Behaviour.

Article classification: Research paper.

Introduction

Cosmopolitanism has been studied in political science (Ferrara, 2007), sociology (Merton, 1957), philosophy (Chen, 2020), and consumer behaviour (Cleveland, Laroche and Papadopoulos, 2009; Riefler and Diamantopoulos, 2009), amongst others interested in studying the desire of individuals to interact and experience different cultures.

On the other hand, international student mobility has significantly increased in the past decade (Van Mol and Ekamper, 2016), with short-term mobility in the form of an exchange programme being the most prevailing form of student mobility in Europe (Brooks and Waters, 2011), and with the Erasmus programme being the most prominent European exchange programme. The attractiveness of this programme is its accessibility and wide range of countries to choose from for the exchange period, and such an appeal has triggered the development of alternative programmes, such as short-duration programmes for youths groups from 13 years old (*Youth exchanges | Erasmus+*, no date). As expected, extensive literature is available on the Erasmus programme (King and Sondhi, 2018), be it on the motivations to enrol (Krzaklewska, 2008b; Fombona, Rodríguez and Ma Ángeles Pascual Sevillano, 2013) or on what influences the choice of country (Sova, 2017; Clemente-Ricolfe and Garciá-Pinto, 2019a).

Despite both subjects having been greatly investigated, no research was found to understand how consumer cosmopolitanism impacts the decisions related to the Erasmus enrolment. Particularly, in order to outline some inferences on what school leavers would experience, consider or do when planning to study abroad, this research examines people who have experienced Erasmus concerning how their level and type of consumer cosmopolitanism is related to: (a) the decision of enrolment into Erasmus programme or not; (b) the motivations to the enrolment on Erasmus programme; (c) the choice of destination; (d) the seek for cultural differences when enrolling into the Erasmus programme; (e) the seek for different levels of globalisation when enrolling into the Erasmus programme.

Literature review

Factors influencing studying abroad

There are factors that "push" students to pursue international education, along with factors that "pull" students towards a specific university (Mazzarol and Soutar, 2002). When discussing the motivation for studying abroad, the model proposed by Krzaklewska (2008b)

brings two dimensions: the first one, called experimental dimension, encompasses the cultural motivation and the personal motivation, and represents the student's desire to learn about new cultures, have new experiences and have fun while studying abroad; the second is called career dimension, which encompasses career and academic motivations, and is related to the students' academic path and increase in the likelihood of employment due to their period abroad. Indeed, the academic and personal development dimensions are also mentioned by other authors, such as Clemente-Ricolfe and Garciá-Pinto (2019a) that also called attention to a factor labelled as individual development, which considers the development as an individual as well as academically.

Additionally, seeking to experience a different culture is also one of the primary motivations to enrol on the programme (Fombona, Rodríguez and Ma Ángeles Pascual Sevillano, 2013; Sova, 2017), along with improving a foreign language (Freed, 2003; Llanes, Tragant and Serrano, 2012; Ahmad and Buchanan, 2016) and seeking international experience. As González et al. (2011) and Juvan and Lesjak (2011) state, personal motives exceed academic and these can not only help improve student engagement, but also socialisation with locals and opportunities to experience host countries' culture, which can lead to professional growth in the long run (Hadis, 2005; Waters, Brooks and Pimlott-Wilson, 2011; Lesjak *et al.*, 2015; Clemente-Ricolfe and Garciá-Pinto, 2019b). According to Sova (2017), the cultural dimension is "one of the most important Erasmus students' motivations" (p.28). She states that this choice is either motivated by eagerness to learn about a new and different culture (discovery), wanting to change environments (change) or knowing almost nothing about the host country and wanting to learn more (curiosity). Van Mol and Ekamper (2016) studied the flows of European students and found that these students are mainly attracted to capitals and large metropolitan cities.

Studies that focus on students' choice of destination for a mobility period are mainly case studies that focus on specific countries (Özoğlu, Gür and Coşkun, 2015; Ghazarian and Keller, 2016; Varpahovskis and Ayhan, 2020) or universities (Fombona, Rodríguez and Mª. Ángeles Pascual Sevillano, 2013; Clemente-Ricolfe and Garciá-Pinto, 2019b). In fact, research suggests that factors related to the destination characteristics, such as weather, history or tourism factors, seem to influence the students' decisions more than the universities' characteristics (Beerkens et al., 2016; García-Rodríguez & Mendoza Jiménez, 2015; Lesjak et al., 2015). Yet, the quality and reputation of the host institution still influence the decision in short-term mobility, therefore, a host country with a large number of top-

ranked universities represents a significant pull factor for Erasmus students (Mazzarol and Soutar, 2002; González, Mesanza and Mariel, 2011).

Even though these aspects all influence the decision of which country to spend the mobility period, they are not equal-weighted, which means that different students can prioritise certain aspects more than others depending on their own characteristics.

Consumer cosmopolitanism

Consumer cosmopolitanism is one of the constructs that explain consumers' inclination to foreign products and countries (Bartsch, Riefler and Diamantopoulos, 2016), thus envisioning it as a set of norms and beliefs. However, it can also be seen as an orientation, as it goes beyond an attitude perspective of just buying or not certain products and assists in explaining consumers' decisions, that is, why consumers buy without implying ethical or moral values.

Riefler and Diamantopoulos (2009) investigated the construct and specified three dimensions of a cosmopolitan consumer: open-mindedness, appreciation for diversity and consumption of products that originate in other cultures. Additionally, Cleveland et al. (2009) note that cosmopolitan consumers tend to prefer foreign and globally popular brands.

Several scales were developed to measure consumer cosmopolitanism. The CYMYC scale is the most common scale used to measure consumer cosmopolitanism; however, according to Riefler and Diamantopoulos (2009), this scale "suffers from poor content validity, unclear dimensionality, low internal consistency, and questionable construct validity" (p.414). Another scale is contained within the AGCC scale (Acculturation to Global Consumer Culture), developed by Cleveland and Laroche (2007) and later matured (Cleveland, Laroche and Papadopoulos, 2009), that only considers the open-mindedness dimension of cosmopolitanism. Contrarily to the previous, the C-COSMO scale (Riefler, Diamantopoulos and Siguaw, 2012) seems to be conceptually well-integrated, with clear dimensionality, and provides adequate results in terms of internal consistency and validity. The three dimensions encompassed by the scale are open-mindedness, diversity appreciation, and consumption transcending borders.

More recently, Han and Won (2018) formulated a scale to measure consumer cosmopolitanism which included items from the AGCC and from the C-COSMO scale; however, sparse information is available on the scale and tests on internal consistency and validity are not provided.

All in all, consumer cosmopolitans can be defined by their desire to experience other cultures, either by meeting new people and getting to know their culture, establishing new cross-group friendships or by buying foreign products (Cannon and Yaprak, 2002; Cleveland, Laroche and Papadopoulos, 2009; Riefler and Diamantopoulos, 2009; Cleveland and Balakrishnan, 2019). On the other hand, it is also important to mention that cosmopolitan consumers pursue cultural capital to exhibit as a form of prestige and status, revealed in the form of voracious consumption patterns of experiences or objects that are ideally difficult to acquire (Cleveland and Bartsch, 2019; Prince, Yaprak and Palihawadana, 2019).

Similarly, for Erasmus students, the possibility to meet new people and learn about other cultures are some of the primary motivators that drive the decision to enrol on the programme (Krzaklewska, 2008b), as well as it might be exhibiting their status of studying abroad. The fact that the cultural motivation is present for both cosmopolitan consumers and Erasmus students indicates that cosmopolitan consumers might enrol on the programme to satisfy their desire to encounter and be immersed in a different culture.

Hypotheses development and Conceptual Model proposed

Research suggests that cosmopolitans are in a state of transition from locals, meaning they cannot be found in a finished form (Thompson and Tambyah, 1999). In fact, Tsoukalas (2019) found that these students develop a more cosmopolitan perspective of the world after their period abroad. This seems to indicate a relationship between consumer cosmopolitanism and enrolling on the Erasmus programme, therefore:

H1: The level of consumer cosmopolitanism impacts the decision to enrol on the Erasmus programme.

Four different types of cosmopolitan consumers were presented in the reviewed literature that are very similar in terms of innovation and risk-taking. (Riefler, Diamantopoulos and Siguaw, 2012). Nevertheless, not all cosmopolitan profiles actively seek different cultures (Cannon and Yaprak, 2002), which might indicate that not all cosmopolitans will enrol on the Erasmus programme. Based on this, the following hypothesis is proposed:

H2: The type of consumer cosmopolitanism impacts the decision to enrol on the Erasmus programme.

Cosmopolitan consumers are more predisposed to enjoy exotic foods, art and music than others (Thompson and Tambyah, 1999) as they perceive this consumption as an expression

of their orientation and morality (Skrbis, Kendall and Woodward, 2004). In the same sense, and keeping Krzaklewska (2008) categorisation of the motivations in mind, consumers with a higher level of this orientation might have different reasons to enrol on the programme, for example, consumers with lower levels of consumer cosmopolitanism could enrol on the programme for personal reason, such as to have fun, while consumers with a higher level of cosmopolitanism might enrol for more cultural reasons believing that these contribute to express their orientation.

H3: The level of consumer cosmopolitanism impacts the motivations to enrol on the programme.

Cosmopolitan consumers exhibit different purchase behaviours in addition to distinctive needs for quality and variety. For example, according to Cannon and Yaprak (2002), pure and local cosmopolitans both work towards broadening their cultural scopes, but they do it in different ways, while the former enjoys learning by visiting museums and other artefacts, the latter prefer to communicate with the local people. This leads to the belief that cosmopolitan consumers will have different motivations when partaking in the Erasmus programme.

H4: The type of consumer cosmopolitanism impacts the motivations to enrol on the programme.

Riefler et al. (2012) found that consumer cosmopolitanism is higher on consumers from urban settings than those from rural. This indicates a relationship between consumer cosmopolitanism and locations. Accordingly, consumers will select their destination based on different aspects of the country and culture. As such, the following hypothesis is proposed:

H5: The level of consumer cosmopolitanism impacts the choice of destination.

Although some types of cosmopolitan consumers pursue a similar idea, cultural diversity, they have different ways to achieve it (Cannon and Yaprak, 2002). Using the above-mentioned example, when choosing a country of destination for the Erasmus programme, pure cosmopolitans might look for countries with a high number of museums and artefacts for their mobility period, while local cosmopolitans will look for countries where they can easily communicate with the locals, which serves as the foundation for the following hypothesis:

H6: The type of consumer cosmopolitanism impacts the choice of destination.

For consumers with a cosmopolitan orientation, culture is one of the main factors to consider even if they do not seek it in their consumption choices. In the same way, for most Erasmus students, learning about different cultures is when of their primary motivations (Krzaklewska, 2008b; Sova, 2017). When going on Erasmus, students might experience a cultural shock (Furnham and Bochner, 1982), and the level of this shock depends on the cultural differences between their origin and host country. Consumers with higher levels of consumer cosmopolitanism will search culturally different to their own. Consequently:

H7: The level of consumer cosmopolitanism positively impacts the cultural difference sought when going on Erasmus.

Different types of cosmopolitan consumers could search for a country with more (or less) cultural differences than their own in the same way they search for cultural diversity in different ways. Thus, the following hypothesis is proposed:

H8: The type of consumer cosmopolitanism impacts the cultural difference sought when going on Erasmus.

According to Han and Won (2018), cosmopolitanism is higher in developed countries with a positive trade balance, suggesting that cosmopolitan consumers will be more prevalent in countries with a higher value of the KOF Globalisation index. Since consumers with this orientation are more likely to search for a higher variation in the KOF index, as such:

H9: The level of consumer cosmopolitanism positively impacts the difference sought in the level of globalisation.

When going on Erasmus, one type of cosmopolitan consumer might look for a country with a higher value of the KOF Globalisation Index than that of their home country, while others might look for one with a lower value.

H10: The type of consumer cosmopolitanism impacts the difference sought in the level of globalisation.

Based on the previous hypotheses, Figure 1 presents the proposed conceptual model.

insert Figure 1 about here

Methodology

Although the objective of this research is to outline inferences on what school leavers would experience, consider or do when planning to study abroad when in the university, the target population of this study is composed of people who have experienced Erasmus, encompassing students that were enrolled in an undergraduate or postgraduate course, ageing between 18 and 30 years. The survey was written in English to obtain answers from multiple countries across the EU. Data were collected between January and February 2021 using an online tool. Table I presents the adopted scales (with respective items) in the survey.

After the collection, the data went through a cleaning process, which included eliminating incomplete questionnaires or whose responses presented repeated answers across all scale items (e.g. "7-7-7" / "1-1-1"); and standardising the Erasmus period (e.g. if the respondent answered with the academic year, say "2018-2019", the most recent year was considered, 2019 in this case).

insert Table I about here

Furthermore, two types of secondary data were used in this research. The first was the values of the KOF globalisation index (Gygli *et al.*, 2019), used to classify and compare the countries that appear in this study. Moreover, to measure cultural differences between the country of origin and the host country, the Kogut and Singh index was applied (Kogut and Singh, 1988), which adopts the culture dimensions presented by Minkov and Hofstede (2012): Power Distance, Individualism, Masculinity, Uncertainty Avoidance, Long Term Orientation, Indulgence).

Data analysis

Descriptive analysis

A sample of 168 valid responses was obtained. 42% of the respondents were from Portugal, followed by France and Germany. 52% of the observations were male, and the average age for the sample was 23,73 years.

The variables collected in metric form (scale items referring to consumer cosmopolitanism and Erasmus motivation, as well as cultural difference sought and difference sought in the level of globalisation) were tested for skewness and kurtosis. Variables' skewness ranges between -2.403 and 0.953, and kurtosis varies between -1.775 and 5.334, showing that the variables are fairly symmetrical or present a moderated negatively skewed, pointing out to some mesokurtic distributions. Nevertheless, those parameters can still be considered

acceptable for the variables to be used in bivariate analyses for the hypotheses tests (Kline, 1998; Finney and DiStefano, 2006).

The sample can be divided into two different groups based on whether or not the respondents have participated in the Erasmus programme (labelled "Erasmus" and "Non-Erasmus"). This group division was intended as, apart from the C-Cosmo scale, consumers were redirected to a different part of the survey based on if they had (or not) studied abroad. Groups are similar in sociodemographic terms; however, the Erasmus group presented significantly higher scores in all three dimensions of the C-Cosmo scale when compared to the Non-Erasmus group (open-mindedness: 6.23 vs. 5.91, p=0.001; diversity appreciation: 5.31 vs. 5.03, p=0.028; consumption transcending borders: 5.88 vs. 5.51, p=0.001).

In addition to measuring the consumer cosmopolitanism of the Erasmus group, they were inquired on what their motivations to enrol on the programme were, as well as the main factors that influenced their choice of destination. The average score confirmed that most consumers enrol on the programme to have new experiences, to live in a foreign country, to have fun and to meet new people (MOT_1, $\bar{x}$=4.84; MOT_5, $\bar{x}$=4.73; MOT_6, $\bar{x}$=4.69; and MOT_4, $\bar{x}$=4.60, respectively). Improving academic knowledge (MOT_8, $\bar{x}$=3.98) is the least important motivation for the Erasmus group.

This group was also asked to select the main factors that influenced their choice of destination. These factors include the willingness to change their environment (COD_2), possibly for tourism in the host destination (COD_5) and the cost of living (COD_9). Distance to home country (COD_12) is not considered by many students when choosing a destination. In addition to the criteria provided, it was made possible for students to add other criteria. The additional reasons provided are diversified, with students mentioning having been limited by the choices provided by the university, interesting subjects in the host institution, recommendations from friends, the country itself, among others. Yet, none of the responses provided was repeated, hence not being significant enough to warrant the creation of a new category.

Regarding the Non-Erasmus group, the follow-up questions were related to the barriers they might have found to not enrol on the Erasmus programme, in addition to a question asking if they would change their decision if provided with a chance. When inquired on the reasons why they did not partake in the programme, the majority selected the high financial costs involved with studying abroad and a general lack of interest in the programme itself (BAR_3

and BAR_1, respectively). Moreover, respondents were allowed to write their own reasons if not available, and many stated either that the pandemic limited their possibility to do so, while others intend to participate in the future. This is consistent with the answers obtained in the following question, where 76.67% of the respondents would change their decision and join the programme.

Using the k-means algorithm, three clusters were created based on the responses for the C-Cosmo scale (Table II).

insert Table II about here

Cluster 1 has the lowest number of observations and a low score of 4.36 on the consumer cosmopolitanism scale (thus referred to as **low cosmopolitans - LC**); it is mainly comprised of males (54.17%), and 42.86% have participated in the Erasmus programme. Cluster 2 (referred to as **cultural cosmopolitans - CC**) can be considered the medium cluster as its average scores are in between the other two clusters, except for the open-mindedness dimension. It has a similar gender distribution as the first cluster (53.45 %) and a high percentage of students that participated in the programme (68.97%); also, 72,22% of observations stated they would change their decision from not participating to participating. Individuals from this cluster do not value as much the diversity appreciation. Finally, Cluster 3 (referred to as **full cosmopolitans - FC**) is the group with the highest number of observations and the highest average level of consumer cosmopolitanism (6.17), as well as in all dimensions of the construct; this cluster is mainly comprised of people that have gone on Erasmus (68.30 %) and, for those who did not, around 92% stated that they would change their decision and participate. Furthermore, this is the only cluster where the majority of the observations are female (51.22 %).

Hypothesis testing

The method used to validate each hypothesis varied according to the nature of both dependent and independent variables. For this section, when testing hypotheses that contain the variable "level of consumer cosmopolitanism", this variable is represented by the average of the scores of the C-Cosmo scale, and for hypotheses with "type of consumer cosmopolitanism", the clusters found in the previous section were used. Table III presents the test used to validate each hypothesis, and Table IV summarises the main results.

insert Table III about here

insert Table IV about here

For H1, the level of consumer cosmopolitanism presents a negative estimate value, suggesting that students with higher levels of consumer cosmopolitanism are less likely to participate in the Erasmus programme.

For H2, two significant p-values were obtained for types of consumer cosmopolitanism (0.0224 for cultural cosmopolitans and 0.0190 for high cosmopolitans). The estimated values for both types of consumer cosmopolitans are negative, implying they are less likely to participate in the programme than low cosmopolitans.

For H3, the individual statements were used to test the hypothesis. The level of consumer cosmopolitanism positively impacts five of the motivations, indicating that an increase in the level of consumer cosmopolitanism as it increases the importance of each motivation: "to have new experiences", "To learn about different cultures", "To meet new people", "To live in a foreign country" and "to be independent" (MOT_1, MOT_3, MOT_4, MOT_5, and MOT_9, respectively).

For H4, just two of the motivations to enrol on the Erasmus programme didn't present significant differences when comparing the here types of consumer cosmopolitanism: "to practice a foreign language" and "to live in a foreign country" (MOT_2, MOT_5).

As for H5, a higher level of consumer cosmopolitanism increases the likelihood of choosing "eagerness to learn about the country" (COD_1) and "wanting a change of environment" (COD_2), as these are the only results with significant p-values.

For H6, results indicate that only the quality of the host institution (COD_7) is associated with the type of consumer cosmopolitanism; however, using logistic regression (more robust test) did not detect a significant p-value.

Moving on to H7 to H10, the p-values found do not allow the acceptance of the respective hypotheses, meaning that neither the level nor the type of consumer cosmopolitanism presented a significant impact on cultural differences sought and level of globalisation difference sought when going on Erasmus.

Results discussion

Consumer cosmopolitanism has not been previously studied in the context of the Erasmus programme, making the prediction and comparison of the findings complex in many cases. This implies that results combining the two topics represent the main contributions of this research. Focusing on the literature, the expectation was that higher levels of consumer

cosmopolitanism increased the likelihood of students participating on Erasmus, seeing as cosmopolitan consumers are looking to interact with other cultures, whether it be by buying foreign products or travelling to be able to experience different cultures (Hannerz, 1990; Cannon and Yaprak, 2002; Riefler and Diamantopoulos, 2009), and that the programme allows them to achieve this need (Sova, 2017). Surprisingly, the results indicate that the opposite is true. One of the reasons for this may be that the respondents filled the questionnaire after their period abroad, and their level of consumer cosmopolitanism could have already improved with the experience (Tsoukalas, 2019). On the other hand, assuming that consumers with a higher degree of consumer cosmopolitanism are in contact with other cultures more regularly, be it by living in a city with multiple different cultures or having the financial capability to travel to other countries, they may not see great value in studying abroad to satisfy their motivation to learn more about different countries.

Further analysis showed that this result is supported by the types of consumer cosmopolitanism found in the sample. Out of the three, low cosmopolitans presented the lowest scores for all the dimensions considered for consumer cosmopolitanism and were the most likely to enrol on the programme. Nonetheless, contradicting results were found when reviewing the types of consumer cosmopolitanism found in the sample, as full cosmopolitans present the highest percentage of students going on Erasmus. A reason for this is the gap between intention and behaviour (Sniehotta, Scholz and Schwarzer, 2005; Carrington, Neville and Whitwell, 2010, 2014). In this case, full cosmopolitans do not intend to participate in the programme, but their behaviour does not match the intention when presented with the opportunity.

Whilst evaluating the scores for the motivations to study abroad, the average score for the motivations in the experimental dimension (cultural and personal) are higher than those from the career dimension. This supports the claim that personal motivations are more important for students in an exchange programme than academic (González, Mesanza and Mariel, 2011; Juvan and Lesjak, 2011). Several motivations were found to be positively influenced by the degree of consumer cosmopolitanism. These motivations include - but are not limited to - learning about different cultures, wanting to have new experiences, and meeting new people. Additionally, different importance was given to the motivations based on the type of consumer cosmopolitanism. For instance, learning about different cultures is more relevant for cultural and full cosmopolitans than for low cosmopolitans. The same can be said for wanting to be independent and meet new people. As for the academic dimension, full

cosmopolitans value this part of Erasmus more than the other types. Thinking about the intention-behaviour gap, when presented with the opportunity to participate in the programme, full cosmopolitans take full advantage of what Erasmus has to offer, whereas cultural cosmopolitans focus more on the personal and cultural aspect of the programme and low cosmopolitans just want to live in a different country.

Moving on to decisions related to the choice of destination, in contrast to Van Mol and Ekamper's (2016) findings, no evidence was found suggesting students prefer capitals when going on Erasmus. The fact remains that, although a few capitals were present as host cities, there was no significant increase in flows to them. Interestingly, for consumers with higher values of consumer cosmopolitanism, the probability of choosing a destination based on eagerness to learn about the destination's culture and wanting to change their environment increases. Moreover, some students mentioned that the options provided by the university were an important factor when choosing the destination. This fact is a possible explanation for the association between the type of consumer cosmopolitanism and the quality of the host university. Since students prefer to choose from their university's available options, full cosmopolitans may try to make the best choice by balancing a university that will improve their employment prospects and a country they can explore culturally and geographically. In contrast to Clemente-Ricolfe and Garciá-Pinto (2019), as well as Lesjak et al. (2015), there is no indication in the data that students are more influenced to choose a country based on touristic characteristics of the destination over characteristics of the host university.

The cultural aspect of the Erasmus programme is a factor with a significant impact on the decision to partake in the programme and the choice of destination. However, no results were found to quantify, for instance, that when going on Erasmus, students seek higher or lower levels of cultural difference or globalisation, leading to the conclusion that students partake in the programme to experience and be immersed in another culture, no matter how different or similar to their own.

Implications, limitations, and future research

Considering the objective of outlining inferences on what school leavers would experience, consider or do when planning to study abroad, the first path for this exploratory study was to examine people who have experienced Erasmus concerning the relationship between their consumer cosmopolitanism and the decisions related to enrolling in the Erasmus programme. This was done by obtaining data from undergraduate and postgraduate students, which

embeds a noticeable study limitation. However, the results are valuable in identifying possible outcomes for a group of pre-university age students.

The most striking result from the data is that consumer cosmopolitanism negatively impacts the decision to enrol on the programme, meaning that a higher degree for consumer cosmopolitanism decreases the likelihood of students parting in Erasmus. But, unexpectedly, a gap between the intention and behaviour is confirmed, as full cosmopolitans present the highest percentage of students going on Erasmus. Thus, the first inference about youth students would be that, although young people with higher levels of cosmopolitanism tend to downgrade the idea of studying abroad, they are the most likely to engage in a programme like Erasmus, based on the identified intention-behaviour gap. Future research into this topic should require students to fill out the questionnaire before the Erasmus period to evaluate whether the level of consumer cosmopolitanism has increased or not when abroad.

Taking into account the three dimensions of consumer cosmopolitanism (Riefler and Diamantopoulos, 2009), this study also suggests the existence of a particular type of consumer cosmopolitanism, the cultural cosmopolitanism, which differ from full cosmopolitans in the sense that the availability of products from other cultural origin is not of high importance to them.

Moreover, consumer cosmopolitanism increases the importance given to the motivations to enrol on the Erasmus programme. Thus, higher levels of consumer cosmopolitanism led to students enjoying more all that studying abroad can offer. For instance, when full cosmopolitans spend their period abroad, all types of motivations are of more importance to them, whereas low cosmopolitans focus more on personal motivations. This finding tends to be repeated in pre-university age students in terms of motivations to study abroad compared to their level of consumer cosmopolitanism.

It was also possible to identify that consumer cosmopolitanism increases the importance of cultural factors influencing the choice of destination; however, no evidence was found suggesting students look for a culturally similar/distant country, indicating cosmopolitan consumers privilege the possibility to just experience a different culture.

An additional limitation is to be considered, which is the relatively small sample size and high influence of Portuguese respondents. Furthermore, the pandemic that has been affecting the world, complicated the circulation of the survey; also, it proved to be a barrier for students that were unable to participate in the Erasmus programme because of it, as well as impacting

their answers on the survey related to the intention of studying abroad. However, one can state that these findings are promising and should be revalidated considering the limitations mentioned above. Thus, further work into how pre-university age students planning to study abroad choose and what factors influence their choices should be performed, including perhaps the development of a scale.

This study is the first step towards improving the understanding of how consumer cosmopolitanism plays an important role in the many decisions related to studying abroad, and the implications of this research should also consider the broader perspectives of the Erasmus programme, reflected on their objectives and priorities. As can be seen on their website, Erasmus' general objective is to support people's educational, professional and personal development in Europe and beyond, contributing (among others) to social cohesion. Also, among the programme's priorities, one can see Erasmus' focus on inclusion and diversity, which emphasises the mitigation of barriers concerning cultural and social differences (Priorities of the Erasmus+ Programme | Erasmus+, no date). Since consumers with a trace of cosmopolitanism present an ability to navigate through intercultural environments combined with an openness to cultural diversity (Cleveland and Balakrishnan, 2019), this is the student profile to endorse Erasmus' focus on bringing together different cultures.

Furthermore, this work can help the teams managing their universities' Erasmus students to anticipate their interest in participating and suggest the best choices. Moreover, Erasmus programme management itself can benefit from this and other future studies regarding offer adjustments and value proposition for students. With further research into this topic, predictive algorithms can be created to forecast students' decisions. This will allow the development of a plan for distributing the Erasmus grant and the available destinations.

References

Ahmad, S. Z. and Buchanan, F. R. (2016) 'Choices of destination for transnational higher education: "pull" factors in an Asia Pacific market', *Educational Studies*. Routledge, 42(2), pp. 163–180. doi: 10.1080/03055698.2016.1152171.

Bartsch, F., Riefler, P. and Diamantopoulos, A. (2016) 'A taxonomy and review of positive consumer dispositions toward foreign countries and globalization', *Journal of International Marketing*, 24(1), pp. 82–110. doi: 10.1509/jim.15.0021.

Beerkens, M. *et al.* (2016) 'Similar Students and Different Countries? An Analysis of the Barriers and Drivers for Erasmus Participation in Seven Countries', *Journal of Studies in International Education*. SAGE PublicationsSage CA: Los Angeles, CA, 20(2), pp. 184–204. doi: 10.1177/1028315315595703.

Brooks, R. and Waters, J. (2011) *Student mobilities, migration and the internationalization of higher education*. Springer.

Cannon, H. M. and Yaprak, A. (2002) 'Will the Real-World Citizen Please Stand Up! The Many Faces of Cosmopolitan Consumer Behavior', *Journal of International Marketing*. SAGE PublicationsSage CA: Los Angeles, CA, 10(4), pp. 30–52. doi: 10.1509/jimk.10.4.30.19550.

Carrington, M. J., Neville, B. A. and Whitwell, G. J. (2010) 'Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically minded consumers', *Journal of Business Ethics*, 97(1), pp. 139–158. doi: 10.1007/s10551-010-0501-6.

Carrington, M. J., Neville, B. A. and Whitwell, G. J. (2014) 'Lost in translation: Exploring the ethical consumer intention-behavior gap', *Journal of Business Research*. Elsevier Inc., 67(1), pp. 2759–2767. doi: 10.1016/j.jbusres.2012.09.022.

Chen, X. (2020) 'Confucianism and cosmopolitanism', *Asian Philosophy*. Routledge, 30(1), pp. 40–56. doi: 10.1080/09552367.2020.1736253.

Clemente-Ricolfe, J. S. and Garciá-Pinto, P. (2019a) 'Erasmus University Students Motivation and Segments: The Case of Universitat Politècnica de València, Spain', *Journal of Educational and Social Research*, 9(2), pp. 72–82. doi: 10.2478/jesr-2019-0015.

Clemente-Ricolfe, J. S. and Garciá-Pinto, P. (2019b) 'Erasmus University Students Motivation and Segments: The Case of Universitat Politècnica de València, Spain', *Journal of Educational and Social Research*, 9(2), pp. 72–82. doi: 10.2478/jesr-2019-0015.

Cleveland, M. and Balakrishnan, A. (2019) 'Appreciating vs venerating cultural outgroups: The psychology of cosmopolitanism and xenocentrism', *International Marketing Review*, 36(3), pp. 416–444. doi: 10.1108/IMR-09-2018-0260.

Cleveland, M. and Bartsch, F. (2019) 'Global consumer culture: epistemology and ontology', *International Marketing Review*, 36(4), pp. 556–580. doi: 10.1108/IMR-10-2018-0287.

Cleveland, M. and Laroche, M. (2007) 'Acculturaton to the global consumer culture: Scale development and research paradigm', *Journal of Business Research*. Elsevier, 60(3), pp. 249–259. doi: 10.1016/j.jbusres.2006.11.006.

Cleveland, M., Laroche, M. and Papadopoulos, N. (2009) 'Cosmopolitanism, Consumer Ethnocentrism, and Materialism: An Eight-Country Study of Antecedents and Outcomes', *Journal of International Marketing*. SAGE PublicationsSage CA: Los Angeles, CA, 17(1), pp. 116–146. doi: 10.1509/jimk.17.1.116.

Ferrara, A. (2007) '"Political" cosmopolitanism and judgment', *European Journal of Social Theory*, 10(1), pp. 53–66. doi: 10.1177/1368431006068756.

Finney, S. J. and DiStefano, C. (2006) 'Non-normal and categorical data in structural equation modeling', in Hancock, G. R. and Mueller, R. O. (eds) *Structural equation modeling: A second course*, pp. 269–314.

Fombona, J., Rodríguez, C. and Sevillano, Ma Ángeles Pascual (2013) 'The motivational factor of erasmus students at the university', *International Education Studies*, 6(4), pp. 1–9. doi: 10.5539/ies.v6n4p1.

Fombona, J., Rodríguez, C. and Sevillano, Mª. Ángeles Pascual (2013) 'The Motivational Factor of Erasmus Students at the University', *International Education Studies*. Online Published, 6(4), p. p1. doi: 10.5539/ies.v6n4p1.

Freed, B. S. N. A. (2003) 'Language Learning Abroad: How Do Gains in Written Fluency Compare with Gains in Oral Fluency in French as a Second Language?.', *ADFL Bulletin*, 34(3), pp. 34–40.

Furnham, A. and Bochner, S. (1982) 'Social difficulty in a foreign culture: An empirical analysis of culture shock', in *Cultures in Contact*. Elsevier, pp. 161–198. doi: 10.1016/B978-0-08-025805-8.50016-0.

García Rodríguez, F. J. and Mendoza-Jiménez, J. (2015) 'The role of tourist destination in international students' choice of academic center: the case of erasmus programme in the Canary Islands', *PASOS Revista de turismo y patrimonio cultural*. Universidad de La Laguna: Laboratorio de Antropología Social, 13(1), pp. 175–189. doi: 10.25145/j.pasos.2015.13.012.

Ghazarian, P. G. and Keller, D. R. (2016) 'Country image and ideal destination choice in study abroad: Evidence from the Republic of Korea', *The International Education Journal:*

Comparative Perspectives, 15(4), pp. 20–34.

González, C. R., Mesanza, R. B. and Mariel, P. (2011) 'The determinants of international student mobility flows: An empirical study on the Erasmus programme', *Higher Education*. Springer, 62(4), pp. 413–430. doi: 10.1007/S10734-010-9396-5/TABLES/3.

Gygli, S. *et al.* (2019) 'The KOF Globalisation Index – revisited', *Review of International Organizations*. Springer New York LLC, 14(3), pp. 543–574. doi: 10.1007/S11558-019-09344-2/TABLES/7.

Hadis, B. F. (2005) 'Why Are They Better Students when They Come Back? Determinants of Academic Focusing Gains in the Study Abroad Experience.', *Frontiers: The Interdisciplinary Journal of Study Abroad*. Frontiers Journal. Dickinson College P.O. Box 1773, Carlisle, PA 17013. Tel: 717-254-8858; Fax: 717-245-1677; Web site: http://www.frontiersjournal.com, 11, pp. 57–70.

Han, C. M. and Won, S. Bin (2018) 'Cross-country differences in consumer cosmopolitanism and ethnocentrism: A multilevel analysis with 21 countries', *Journal of Consumer Behaviour*. John Wiley & Sons, Ltd, 17(1), pp. e52–e66. doi: 10.1002/CB.1675.

Hannerz, U. (1990) 'Cosmopolitans and locals in world culture', *Theory, culture & society*. Sage Publications, 7(2–3), pp. 237–251.

Hofstede, G. (2011) 'Dimensionalizing Cultures: The Hofstede Model in Context', *Online Readings in Psychology and Culture*, 2(1). doi: 10.9707/2307-0919.1014.

Juvan, E. and Lesjak, M. (2011) 'Erasmus Exchange Program: Opportunity for professional growth or sponsored vacations?', *Journal of Hospitality & Tourism Education*. Taylor & Francis Group , 23(2), pp. 23–29. doi: 10.1080/10963758.2011.10697003.

King, R. and Sondhi, G. (2018) 'International student migration: a comparison of UK and Indian students' motivations for studying abroad', *Globalisation, Societies and Education*. Taylor & Francis, 16(2), pp. 176–191. doi: 10.1080/14767724.2017.1405244.

Kline, R. B. (1998) 'Software review: Software programs for structural equation modeling: Amos, EQS, and LISREL', *Journal of Psychoeducational Assessment*, 16(4), pp. 343–364.

Kogut, B. and Singh, H. (1988) 'The Effect of National Culture on the Choice of Entry Mode', *Journal of International Business Studies 1988 19:3*. Palgrave, 19(3), pp. 411–432. doi: 10.1057/PALGRAVE.JIBS.8490394.

Krzaklewska, E. (2008a) 'Why Study Abroad? – An Analysis of Erasmus Students' Motivation', *In: Fred Derwin, Michael Byram (eds.), Students, staff and academic mobility in higher education, Cambridge Scholars.*

Krzaklewska, E. (2008b) 'Why study abroad? An analysis of Erasmus students' motivations', *Students, staff and academic mobility in higher education*, pp. 82–98.

Lesjak, M. *et al.* (2015) 'Erasmus student motivation: Why and where to go?', *Higher Education*. Kluwer Academic Publishers, 70(5), pp. 845–865. doi: 10.1007/S10734-015-9871-0/TABLES/9.

Llanes, À., Tragant, E. and Serrano, R. (2012) 'The role of individual differences in a study abroad experience: the case of Erasmus students', *International Journal of Multilingualism*. Taylor & Francis Group , 9(3), pp. 318–342. doi: 10.1080/14790718.2011.620614.

Mazzarol, T. and Soutar, G. N. (2002) '"Push-pull" factors influencing international student destination choice', *International Journal of Educational Management*. Emerald Group Publishing Ltd., 16(2), pp. 82–90. doi: 10.1108/09513540210418403/FULL/PDF.

Merton, R. K. (1957) 'Social theory and social structure'. Free Press.

Minkov, M. and Hofstede, G. (2012) 'Hofstede's fifth dimension: New evidence from the world values survey', *Journal of Cross-Cultural Psychology*, 43(1), pp. 3–14. doi: 10.1177/0022022110388567.

Van Mol, C. and Ekamper, P. (2016) 'Destination cities of European exchange students', *Geografisk Tidsskrift - Danish Journal of Geography* . Routledge, 116(1), pp. 85–91. doi: 10.1080/00167223.2015.1136229.

Özoğlu, M., Gür, B. S. and Coşkun, İ. (2015) 'Factors influencing international students' choice to study in Turkey and challenges they experience in Turkey', *Research in Comparative and International Education*. SAGE PublicationsSage UK: London, England, 10(2), pp. 223–237. doi: 10.1177/1745499915571718.

Prince, M., Yaprak, A. N. and Palihawadana, D. (2019) 'The moral bases of consumer ethnocentrism and consumer cosmopolitanism as purchase dispositions', *Journal of Consumer Marketing*, 36(3). doi: 10.1108/JCM-11-2017-2432.

Priorities of the Erasmus+ Programme | Erasmus+ (no date). Available at: https://erasmus-plus.ec.europa.eu/programme-guide/part-a/priorities-of-the-erasmus-programme (Accessed: 26 February 2022).

Riefler, P. and Diamantopoulos, A. (2009) 'Consumer cosmopolitanism: Review and replication of the CYMYC scale', *Journal of Business Research*, 62(4), pp. 407–419. doi: 10.1016/j.jbusres.2008.01.041.

Riefler, P., Diamantopoulos, A. and Siguaw, J. A. (2012) 'Cosmopolitan consumers as a target group for segmentation', *Journal of International Business Studies*, 43(3), pp. 285–305. doi: 10.1057/jibs.2011.51.

Skrbis, Z., Kendall, G. and Woodward, I. (2004) 'Locating Cosmopolitanism: Between Humanist Ideal and Grounded Social Category', *Theory, Culture & Society*, 21(6), pp. 115–136. doi: 10.1177/0263276404047418.

Sniehotta, F. F., Scholz, U. and Schwarzer, R. (2005) 'Bridging the intention–behaviour gap: Planning, self-efficacy, and action control in the adoption and maintenance of physical exercise', *Psychology & Health*, 20(2), pp. 143–160. doi: 10.1080/08870440512331317670.

Sova, R. B. (2017) 'Understanding erasmus students' motivation: What directs erasmus students' choice of destination and particular course', *New Educational Review*, 50(4), pp. 26–35. doi: 10.15804/tner.2017.50.4.02.

Thompson, C. J. and Tambyah, S. K. (1999) 'Trying to be cosmopolitan', *Journal of Consumer Research*, 26(3), pp. 214–241. doi: 10.1086/209560.

Tsoukalas, I. (2019) *Apprentice Cosmopolitans: Social identity, community, and learning among ERASMUS exchange students*. Stockholms universitet.

Varpahovskis, E. and Ayhan, K. J. (2020) 'Impact of country image on relationship maintenance: a case study of Korean Government Scholarship Program alumni', *Place Branding and Public Diplomacy*. Palgrave Macmillan, pp. 1–13. doi: 10.1057/S41254-020-00177-0/TABLES/11.

Waters, J., Brooks, R. and Pimlott-Wilson, H. (2011) 'Fuites juvéniles? Etudiants britanniques, l'éducation à l'étranger, et la poursuit du bonheur', *Social and Cultural Geography*, 12(5), pp. 455–469. doi: 10.1080/14649365.2011.588802.

Youth exchanges | Erasmus+ (no date). Available at: https://erasmus-plus.ec.europa.eu/opportunities/individuals/youth-exchanges (Accessed: 26 February 2022).

Figure 1: Proposed conceptual model.
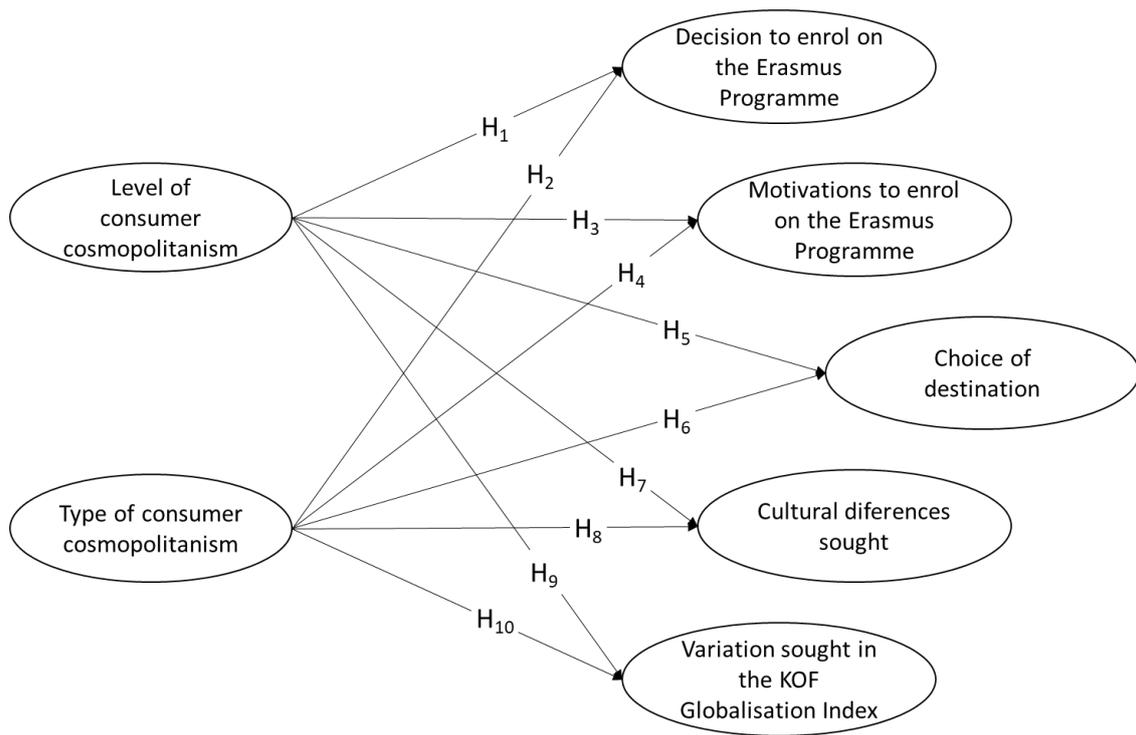
Source: The authors, based on the literature.

Table I: Adopted scales in the survey.

Consumer cosmopolitanism	
(Riefler et al., 2012)	CC_1. When travelling, I make a conscious effort to get in touch with the local culture and traditions CC_2. I like having the opportunity to meet people from many different countries CC_3. I like to have contact with people from different cultures CC_4. I have got a real interest in other countries CC_5. Having access to products coming from many different countries is valuable to me CC_6. The availability of foreign products in the domestic market provides valuable diversity CC_7. I enjoy being offered a wide range of products coming from various countries CC_8. Always buying the same local products becomes boring over time CC_9. I like watching movies from different countries CC_10. I like listening to music from other cultures CC_11. I like trying original dishes from other countries CC_12. I like trying out things that are consumed elsewhere in the world
Erasmus Motivations	
(Krzaklewska, 2008)	MOT_1. To have new experiences MOT_2. To practice a foreign language MOT_3. To learn about different cultures MOT_4. To meet new people MOT_5. To live in a foreign country MOT_6. To have fun MOT_7. To enhance future employment prospects MOT_8. To improve my academic knowledge MOT_9. To be independent
Barriers	
(Beerkens et al., 2016)	BAR_1. Lack of interest in the programme BAR_2. Home ties
(Nerlich, 2020)	BAR_3. Financial costs involved in studying abroad BAR_4. Lack of evidence on the return on investment
(Jones et al., 2016)	BAR_5. Safety concerns
Choice of destination	
(Sova, 2017)	COD_1. Eagerness to learn about the country COD_2. Wanted to change my environment COD_3. I knew little about the country and wanted to learn more
(Lesjak et al., 2015)	COD_4. Weather/ Climate COD_5. Possibility for tourism
(González et al., 2011)	COD_6. Reputation of the host institution COD_7. Quality of the host institution COD_8. Size of country COD_9. Cost of living COD_10. Language COD_11. Country encourages International student mobility COD_12. Distance to home country

Table II: Comparison between clusters.

	Cluster 1	Cluster 2	Cluster 3
# of Observations	28	58	82
Average Age	23.43	23.36	24.10
Gender Distribution	57.14 % Male	53.45 % Male	48.78 % Male
Erasmus	42.86 % Yes	68.97 % Yes	68.30 % Yes
Change Decision	56.25 % Yes	72.22 % Yes	92.30% % Yes
CC_1	$\bar{x}$=4.29 / s=1.36	$\bar{x}$=6.03 / s=0.90	$\bar{x}$=6.00 / s=1.05
CC_2	$\bar{x}$=4.75 / s=1.71	$\bar{x}$=6.55 / s=0.68	$\bar{x}$=6.50 / s=0.82
CC_3	$\bar{x}$=5.07 / s=1.63	$\bar{x}$=6.50 / s=0.76	$\bar{x}$=6.51 / s=0.74
CC_4	$\bar{x}$=4.79 / s=1.26	$\bar{x}$=6.53 / s=0.63	$\bar{x}$=6.52 / s=0.76
Open-mindedness	$\bar{x}$=4.72 / s=1.49 CI: [4.17; 5.27]	$\bar{x}$=6.41 / s=0.74 CI: [6.22; 6.60]	$\bar{x}$=6.38 / s=0.84 CI: [6.20; 6.56]
CC_5	$\bar{x}$=3.96 / s=1.40	$\bar{x}$=4.74 / s=1.28	$\bar{x}$=6.50 / s=0.69
CC_6	$\bar{x}$=4.29 / s=0.71	$\bar{x}$=4.91 / s=1.01	$\bar{x}$=6.51 / s=0.63
CC_7	$\bar{x}$=4.11 / s=1.31	$\bar{x}$=4.71 / s=0.92	$\bar{x}$=6.57 / s=0.57
CC_8	$\bar{x}$=3.43 / s=1.73	$\bar{x}$=3.55 / s=1.45	$\bar{x}$=5.05 / s=1.51
Diversity Appreciation	$\bar{x}$=3.95 / s=1.29 CI: [3.47; 4.43]	$\bar{x}$=4.48 / s=1.17 CI: [4.18; 4.78]	$\bar{x}$=6.16 / s=0.85 CI: [5.98; 6.34]
CC_9	$\bar{x}$=4.21 / s=1.62	$\bar{x}$=5.76 / s=1.32	$\bar{x}$=5.80 / s=1.31
CC_10	$\bar{x}$=4.86 / s=1.38	$\bar{x}$=5.86 / s=1.15	$\bar{x}$=5.99 / s=1.39
CC_11	$\bar{x}$=4.25 / s=1.46	$\bar{x}$=5.90 / s=1.04	$\bar{x}$=6.52 / s=0.76
CC_12	$\bar{x}$=4.36 / s=1.16	$\bar{x}$=5.59 s –0.96	$\bar{x}$=6.38 / s=0.83
Consumption transc. borders	$\bar{x}$=4.42 / s=1.40 CI: [3.90; 4.94]	$\bar{x}$=5.78 / s=1.11 CI: [5.49; 6.07]	$\bar{x}$=6.17 / s=1.01 CI: [5.95; 6.39]
Average all items	$\bar{x}$=4.37 / s=1.47 CI: [3.82; 4.92]	$\bar{x}$=5.55 / s=1.35 CI: [5.21; 5.90]	$\bar{x}$=6.24 / s=1.03 CI: [6.01; 6.46]

$\bar{x}$=average; s=standard deviation; CI=95% confidence interval

Table III: Used test for each hypothesis testing.

Hypothesis	Independent variable	Dependent variable	Test used
H_1	Level of consumers cosmopolitanism (Metric)	Decision to enrol on the Erasmus programme (Binary)	Logistic Regression
H_2	Type of consumer cosmopolitanism (Categorical)	Decision to enrol on the Erasmus programme (Binary)	Chi-Square test + Logistic Regression
H_3	Level of consumers cosmopolitanism (Metric)	Motivations to enrol Erasmus programme (Metric)	Simple Regression
H_4	Type of consumer cosmopolitanism (Categorical)	Motivations to enrol Erasmus programme (Metric)	One-way ANOVA
H_5	Level of consumers cosmopolitanism (Metric)	Factors that influenced the choice of destination (Dummy variables)	Logistic Regression
H_6	Type of consumer cosmopolitanism (Categorical)	Factors that influenced the choice of destination (Dummy variables)	Chi-Square test + Logistic Regression
H_7	Level of consumers cosmopolitanism (Metric)	Cultural difference sought when going on Erasmus (Metric)	Simple Regression
H_8	Type of consumer cosmopolitanism (Categorical)	Cultural difference sought when going on Erasmus (Metric)	One-way ANOVA
H_9	Level of consumers cosmopolitanism (Metric)	Difference sought in the level of globalization (Metric)	Simple Regression
H_{10}	Type of consumer cosmopolitanism (Categorical)	Difference sought in the level of globalization (Metric)	One-way ANOVA

Table IV: Hypothesis test results.

Hypotheses	p-value	Goodness-of-fit	Result
H_1	0.0156	AIC – 216.8	Accept
H_2	0.0346	AIC – 218.53	Accept
H_{3MOT_1}	0.0000	$R^2 – 0.2030$	Accept
H_{3MOT_2}	0.0782	$R^2 – 0.0290$	Reject
H_{3MOT_3}	0.0000	$R^2 – 0.1892$	Accept
H_{3MOT_4}	0.0008	$R^2 – 0.1020$	Accept
H_{3MOT_5}	0.0029	$R^2 – 0.0808$	Accept
H_{3MOT_6}	0.0672	$R^2 – 0.3126$	Reject
H_{3MOT_7}	0.0222	$R^2 – 0.0484$	Accept
H_{3MOT_8}	0.0803	$R^2 – 0.0286$	Reject
H_{3MOT_9}	0.0000	$R^2 – 0.2030$	Accept
H_{4MOT_1}	0.0000		Accept
H_{4MOT_2}	0.8910		Reject
H_{4MOT_3}	0.0255		Accept
H_{4MOT_4}	0.0195		Accept
H_{4MOT_5}	0.2520		Reject
H_{4MOT_6}	0.0045		Accept
H_{4MOT_7}	0.0303		Accept
H_{4MOT_8}	0.0050		Accept
H_{4MOT_9}	0.0000		Accept
H_{5COD_1}	0.0179	AIC – 143.47	Accept
H_{5COD_2}	0.0206	AIC – 144.58	Accept
H_{5COD_3}	0.3250	AIC – 126.58	Reject
H_{5COD_4}	0.8540	AIC – 133.45	Reject
H_{5COD_5}	0.6530	AIC – 152.18	Reject
H_{5COD_6}	0.4880	AIC – 136.45	Reject
H_{5COD_7}	0.4970	AIC – 141.01	Reject
H_{5COD_8}	0.0671	AIC – 134.76	Reject
H_{5COD_9}	0.2520	AIC – 151.41	Reject
H_{5COD_10}	0.3130	AIC – 137.53	Reject
H_{5COD_11}	0.2150	AIC – 131.93	Reject
H_{5COD_12}	0.7350	AIC – 50.224	Reject
H_{6COD_1}	0.1136		Reject
H_{6COD_2}	0.0815		Reject
H_{6COD_3}	0.3164		Reject
H_{6COD_4}	0.7911		Reject
H_{6COD_5}	0.4291		Reject
H_{6COD_6}	0.0718		Reject
H_{6COD_7}	0.0334		Accept
H_{6COD_8}	0.2930		Reject
H_{6COD_9}	0.3505		Reject
H_{6COD_10}	0.9651		Reject
H_{6COD_11}	0.1338		Reject
H_{6COD_12}	0.6070		Reject
H_7	0.8050	$R^2 – 0.0006$	Reject
H_8	0.2950		Reject
H_9	0.1240		Reject
H_{10}	0.3320		Reject