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What do exchange students value when choosing a destination for their study period abroad?
A conjoint experiment

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Introduction

According to the latest UIS/UNESCO statistics, Europe welcomes the largest number of international students worldwide. The prevailing form of international student mobility on the continent is organized short-term mobility, i.e., a form of institutionalized mobility through which exchange students obtain credits in a host higher education institution, that are formally recognized and will count towards their degree in their home university. This type of student mobility, also called credit mobility, has been promoted by the EU Commission since 1987 through the European Action Scheme for the Mobility of University Students, commonly known as the Erasmus Programme[1]. From the time of its launch until 2017, the exchange programme has provided 4.4 million university students with the opportunity of conducting short-term study periods abroad (EU Commission, 2017).

Over the last decade, short-term student mobility has increasingly been the object of academic research, focusing on various aspects: e.g., the effect of the stay on participants´ identity (Van Mol, 2013), former exchange students´ employment rates (Teichler and Janson, 2007) and wages (Kratz and Netz, 2018), as well as the impact of international students´ presence on urban changes (Malet Calvo, 2017). An important strand of the literature has dealt with the determinants and factors influencing the intention to study abroad for a short period (Findlay et al., 2006; Van Mol, 2014; Netz, 2015; Petzold and Moog, 2018). Research exploring the decisions of exchange students to select a specific destination is rarer and generally focuses on country level and institutional characteristics (e.g., Llewellyn-Smith and McCabe, 2008; Rodríguez-González et al., 2011). More recently, the decisive role played by cities in the choice

[1] In 2014, the programme was renamed Erasmus+ due to its extension to other collectives (e.g., educators, university staff members and youth workers) beyond higher education students. Now the scheme also involves vocational education and training, school and adult education, as well as youth and sport initiatives.

of destination for a short study period abroad has been also highlighted (Van Mol and Ekamper, 2016; Malet Calvo, 2017).

Investigating what drives exchange students to a specific destination presents methodological challenges that are difficult to overcome using observational studies. One of the most important challenges is connected to the fact that the aspects which might draw students to a specific destination are often highly correlated: e.g., cities that have a broad cultural and entertainment offering are often those in which the most well-known universities are located but are also those in which the cost of living is higher. It is, therefore, very difficult to assess the isolated causal effect of each individual factor in explaining the destination choice. A further problem is related to systematic self-selection, which originates from the fact that students with particular characteristics or preferences may systematically enrol in specific disciplines and faculties. This might strongly affect their conditions for studying abroad (Petzold and Moog, 2018), as well as their possibility to choose destinations with specific characteristics (Ballatore, 2020). Indeed, exchange students' destination choice is usually constrained by a list of institutions which have an agreement with the home university/home faculty. This causes that students´ characteristics and conditions affecting the possibility to choose destinations with specific attributes are confounded in observational studies, hampering the unbiased estimation of the importance of destination attributes in driving the choice.

Students with different characteristics might display different preferences regarding the choice of destination for a study period abroad. For instance, existing research has shown that individuals with previous experiences abroad and already familiar with transnational social practices have different individual attitudes, especially in relation to their willingness and capacity to engage with other cultures (Petzold, 2017); moreover, students with different academic performances display different time-preferences that affect their decisions (Horn and Kiss, 2018). Although these aspects are arguably important in explaining students´ choices regarding a study period abroad, they are still underexplored in existing research on international student mobility.

In this paper, a methodology is proposed that enables these challenges and limitations to be overcome and addresses the following research questions:

The methodology proposed consists of a conjoint experiment that simultaneously varies the attributes of possible destinations and asks respondents to choose between pairs of these. The advantages of factorial experiments in exploring exchange students' decision-making have recently been demonstrated (Petzold and Moog, 2018). Indeed, in contrast with observational studies, the absence of correlations in experimental designs between the different treatments (in our case, the attributes of a given destination) as well as between the treatments and the respondents' characteristics, allow an unbiased estimation of the isolated causal effects of the manipulated treatments (Druckman and Leeper, 2012). The conjoint methodology allows researchers to put the respondent in a situation that involves careful consideration of the different

aspects of the potential destination, more closely mirroring actual Erasmus applicants' decision-making. Finally, this process enables a comparison on a common scale of the different destination attributes that may influence the choice of a given destination, as well as a comparison between different subgroups of students.

Conjoint experiments have been used in higher education market research to elicit the most important university attributes explaining students' preferences (see, e.g., Soutar and Turner, 2002; Hagel and Shaw, 2010). A conjoint experiment among a sample of undergraduate students has also been applied by Garver and Divine (2008) to examine the intentions and preferences relating to short-term study periods abroad with regard to different attributes (such as the duration of the stay, the country or continent of destination, career-associated benefits). To our knowledge, this type of experiment has never been used to explore international students' destination choice.

The experiment was part of a survey conducted in November-December 2019 among two groups of students (Erasmus applicants and first-year students) in a Spanish public university (Autonomous University of Barcelona). Spain is one of the main countries that sends and receives Erasmus exchange students. In 2018/2019 it was ranked first as the most popular destination for Erasmus higher education students from abroad and was ranked second (after France) in relation to the number of higher education students sent abroad within the framework of the Erasmus programme (EU, 2020).

1. Theoretical framework and hypotheses

Studying abroad is linked to decision-making on education and on temporary migration. One theory that has been applied to explain both types of decisions over a long time period is rational choice theory. According to this theory, decisions result from a rational evaluation of the costs and benefits associated with a particular action. Within this theoretical framework, migration is conceived as an individual rational decision made to maximize income, predicting that a person acting rationally decides to move if the future expected benefits exceed the migration costs (Sjaastad, 1962). Even though early studies were mainly focused on the economic costs and benefits of migration, the idea that migration also involves other types of non-economic costs and benefits, such as psychological and social, appears early in the literature and has become increasingly widespread of late (Clark and Lisowski, 2017).

Rational choice theory has been applied to explain decision-making relating to studying abroad, particularly regarding the decision as to whether to move or to stay (e.g., Netz and Finger, 2016; Petzold and Moog, 2018). It has also been applied to explain migrants´ destination choice. According to Borjas (1987), migrants estimate the costs and benefits of moving to alternative destinations and migrating to areas where the net returns are greatest.

In the case of intra-European exchange mobility, where travel costs are reduced, visa costs are inexistent and where exchange students are exempted from the payment (or pay a very small amount) of tuition fees in the host institution, the main direct economic cost related to study abroad is represented by the cost of living at the destination. Literature related to studying abroad has shown how it is indeed one of the main factors taken into account by students when deciding whether to stay or to go (Doyle et al., 2010; Van Mol and Timmerman, 2013; Netz, 2015; Lörz et al., 2016). According to Rodríguez-González et al. (2011), the difference in the cost of living between home and the host society also plays a role in the direction of Erasmus student mobility flows, driving students to select specific destinations over others (Rodríguez-González et al., 2011).

Further indirect economic costs, associated with a short-term study period abroad, are related to the fear of delaying graduation and, consequently, labour market entry (Doyle et al., 2010; Lörz et al., 2016). This means that when choosing a destination for their stay abroad, students may avoid destinations where they feel their graduation could be delayed.

Beyond economic costs, social, psychological and time costs are associated with the separation from loved ones, with the movement itself and with the processes of adaptation to the new conditions, as well as integration at the destination. Social networks abroad reduce these types of costs and the uncertainty related to migration, by providing access to relevant knowledge, information, assistance and other relevant resources (Ritchey, 1976). Research on short-term student mobility has shown how social networks, especially peers, are crucial in terms of sharing living experiences, giving advice and providing recommendations (Beech, 2014). We, therefore, expect that:

The higher the costs connected with a potential destination, the less the likelihood of the destination being preferred (H1). This means that: *destinations with a higher cost of living (H1a), with a university renowned for its level of difficulty (H1b) and without any recommendations from people having been or living there (H1c) are less likely to be chosen.*

If we consider the benefits of conducting a study period abroad, better labour market opportunities are considered one of the main potential advantages. Literature has indeed shown that graduates who spend time abroad are more likely to earn higher wages than those who did not (Kratz and Netz, 2018). Students may consider that a host university, with a higher reputation, may provide enhanced career opportunities after graduation (Petzold and Moog, 2018). The reputation of the higher education institution has been found to represent the most important attribute, influencing the decision-making of individuals when selecting where to study higher education (Hooley and Linch, 1981; Hagel and Shaw, 2010) as well as being a pull factor attracting the mobility of international degree students (Findlay, 2011). In their study on the macro-determinants of Erasmus students, Rodríguez-González et al. (2011) found a positive relationship between the chosen host country and its general academic prestige, demonstrating

how the reputation of the host university also plays an important role in the exchange students´ choice of destination.

Specific research on credit student mobility has, however, found that for exchange students, experiential benefits associated with new experiences, leisure and fun might be even more significant than educational motives (Findlay et al., 2006; Van Mol and Timmerman, 2014). For Llewellyn-Smith and McCabe (2008), for example, exchange students to Australia seek 'sea, sun and surf' and are mainly drawn to this country due to its tourist attractions, natural environment and climate. With regard to the latter, Rodríguez-González et al. (2011) show how Erasmus student mobility is biased towards Mediterranean countries, probably because of their pleasant climate. As exchange students enjoy travelling and embark upon tourist trips, they are increasingly seen as an important segment of the educational tourism market, increasingly attracting tourism researchers´ attention (e.g., Llewellyn-Smith and McCabe, 2008). In this field of research, the primary climate variable regarding tourism is that of temperature. In this regard, Scott et al. (2008) found that for university students, the ideal temperatures for tourism, considering different environments, i.e., beach, urban, mountain, etc. tended to be rather mild or warm (on average 23.26 degrees).

We therefore expect that:

The higher the perceived benefits connected with a potential destination, the greater the likelihood of the destination being preferred (H2). That is: *destinations with a well-known university (H2a), with a broad cultural and entertainment offering (H2b) and with a mild or warm climate (H2c) are more likely to be chosen.*

Empirical research has shown that experiences abroad and transnational social practices affect individual attitudes, especially in relation to cosmopolitanism (Mau et al., 2008). According to Petzold (2017: 170), cosmopolitanism is an individual orientation, the 'crucial point' of which 'is the willingness and the ability of actors to engage with other cultures '. It follows that these kinds of experiences and practices may change the way that the costs and benefits of a study period abroad are evaluated. Thus, we expect that:

Students experienced in cross-border mobility and/or with transnational practices will display different preferences compared to students who are not (H3). More specifically, we expect that: *Students experienced in cross-border mobility and/or with transnational practices will be less afraid of the level of difficulty of the host university (H3a) and will rely less on recommendations (H3b).*

Finally, it is also important to consider that many decisions involve costs and benefits that occur at different points in time (Horn and Kiss, 2018; Goldsteyn et al., 2014). In the case of a study period abroad, for example, while the experiential benefits are associated with the near future (the time of the stay), educational/professional benefits are related to a time in the distant future

(the post-graduation period). From the perspective of behavioural economists, not everyone displays the same time preferences (Frederick et al. 2002; Odum, 2011). Due to different time preferences, certain people may prefer an immediate, lower-utility outcome than a future outcome with higher utility (Pornpattananangkul et al., 2017). As shown by Horn and Kiss (2018), there is a relationship between time-preferences and the academic performance of university students. They demonstrate, in particular, that since education is an investment for the future, the more the time preferences are regarded as being present-biased (i.e., more value is given to the present than to the future) the poorer is the academic performance. Similarly, Goldsteyn et al. (2014) show how adolescents, exhibiting the capacity to forego an immediate benefit for the sake of a greater future reward, are more likely to obtain higher grades. We therefore hypothesize that:

Students with different academic performances will display different preferences (H4). Specifically: *compared with other students, students with a particularly high academic performance will assign less importance to the attributes related to the leisure dimension, i.e., cultural and entertainment offerings and climate (H4a) and more importance to the reputation of the host university (H4b).*

2. Methodology

3.1 The advantages of the experimental conjoint design

Identifying the aspects that drive international students to a given destination by means of observational studies presents several limitations and challenges. One of the main challenges is connected to the fact that several factors are at stake and that many of these are often highly correlated. It is, therefore, very difficult to assess the isolated causal effect of each factor in explaining the destination choice. Asking students to state their preferences in relation to different cities or countries (e.g., Garver and Divine, 2008) is, therefore, problematic because the 'name' of the city is a recipient of sorts in which several dimensions are contained, which are difficult to disentangle. The same holds true if we consider real destinations and attempt to understand the attraction they hold for students. This last approach, for example, by Van Mol and Ekamper (2016), provides fundamental information on the distribution of students in different European cities. Nonetheless, as the same two authors admit (6), 'more developed insights into the decision-making process of exchange students are needed'.

A common attempt to overcome these challenges has been to ask directly about preferences relating to each individual aspect separately, by means of traditional survey questions (e.g., Llewellyn-Smith and McCabe, 2008). However, as pointed out by Garver and Divine (2008), with these type of questions, it is common for many respondents to state several attributes as being important. This could erroneously lead to the portrait of an ideal destination. It is instead plausible to consider that, in many cases, the destination for the study period abroad may not be

the student's most preferred location, but one of the preferences among a set of limited options. Moreover, direct questioning on single aspects is a fictive exercise, that may not reflect the real decision-making process, which usually involves the consideration of different factors at different levels simultaneously (Bansak et al., 2018) and an in-depth thinking regarding the trade-offs between different options (Hainmueller et al., 2014).

A further problem is related to systematic self-selection. Indeed, students with particular characteristics or preferences may systematically choose specific disciplines and faculties, and this significantly affects their conditions for going abroad (Petzold and Moog, 2018), as well as their possibility to choose destinations with specific characteristics (Ballatore, 2020). As institutional conditions, individual characteristics and destination attributes can be confounded in observational studies; an unbiased estimation of the importance of each attribute in explaining the choice cannot be assured due to the endogeneity at stake. In contrast with research based on observational studies and due to the absence of correlations between the different manipulated treatments, as well as between the treatments and the respondents' characteristics, experiments allow the unbiased estimation of the isolated causal effects of each manipulated treatment (Druckman and Leeper, 2012; Leeper, 2018).

The experiment we apply is a factorial experiment, commonly known as a conjoint analysis. Besides the advantages related to causal inference, conjoint analysis presents features that render it particularly suited to our research goals. Conjoint analysis refers to different designs in which respondents are asked to rate, rank or choose between profiles, which randomly vary across a series of attributes (Hainmueller et al., 2014). For each attribute, there is a range of possible levels. Conjoint analysis is, therefore, ideal 'for handling situations in which a decision maker has to deal with options that simultaneously vary across two or more attributes' (Green et al., 2001: 57), as is the case when choosing a destination for a study period abroad. It, therefore, has increased realism, as it mirrors real-world decision-making (Bansak et al., 2018). Conjoint designs force the respondent to make difficult decisions, allowing the researcher to study, compare and make causal inferences of several attributes simultaneously.

3.2 Design of the experiment

The conjoint design used in our research is a 'choice-based conjoint', which constitutes one of the most commonly used conjoint experiments. In this design, respondents are presented with two or more options that randomly vary their attributes and they are asked to choose their most preferred attribute. To simplify the task, we required a choice between each pair of destinations on the screen, with the following introduction: 'Deciding upon a destination for an Erasmus study period abroad is an important choice. Now we will present a series of pairs of potential destinations, with different characteristics. Please indicate which of the two you would choose. Even if neither of them seems the perfect destination, please indicate which of the two you would prefer'.

This task is repeated four times for each respondent, each time drawing upon a new set of attribute levels from the same randomized distribution. Considering the results of previous research in which a large number of tasks were tested to evaluate the potential deterioration of data quality, due to respondents' fatigue and satisficing, we can be confident that the inferences drawn are robust with respect to the number of assigned tasks. Indeed, it has been shown that dozens of tasks can be assigned to respondents without any substantial decline in their response quality (Bansak et al., 2018).

The forced choice between the two destinations enables us to evaluate the role of each attribute level regarding the preference of one profile relative to another. It obliges the respondent to think more carefully about the trade-offs between the different options. This closely mirrors real-life destination decision-making, in which aspiring mobile students are presented with a list of possible destinations, presenting different characteristics. Furthermore, as empirically shown by Hainmueller et al. (2015), paired conjoint designs tend to perform better than single-profile designs in terms of external validity.

The experiment randomly varies the levels of six attributes among the potential destinations to capture decisive factors influencing the choice, as hypothesized above (H1-H2). Table 1 shows the full set of possible levels for each attribute.

TABLE 1 HERE

The information presented in each conjoint table varied randomly. Randomization occurred uniformly, i.e., with equal probability for all attribute levels and independently across respondents, across tables and across attributes. The order of attributes was also randomized to neutralize potential biases due to the primacy effect, i.e., the likely possibility that the respondent primarily pays attention to the attributes that appear at the top of the conjoint table (Hainmueller et al., 2014).

The survey also measured other variables that allowed us to test our hypotheses concerning the differences between subgroups of students (H3-H4). The variable 'cosmopolitan student' indicates whether the respondent has attended a foreign or an international secondary school and/or has already lived abroad for at least one month during his/her life. The variable 'excellent student' distinguishes students with a particularly high academic performance from other students. We considered those who had an average grade of 8 out of 10 or more as 'excellent students'. This corresponds to the grades '*Notable alto*' (= highly remarkable) and '*Sobresaliente*' (= outstanding) of the Spanish academic grading system. In all the analyses, we control whether the respondent is a first-year student or an Erasmus-applicant within the faculty attended and consider the level of study and gender.

3.3 Data collection and sample

The experiment was part of an online survey, conducted among two groups of students within the Autonomous University of Barcelona, a public university located in a middle-sized city within the urban area of Barcelona. The first group was made up of students who applied for an Erasmus grant, whereas the second group was composed of first-year students at both bachelor and master's level. The decision to apply the survey to these groups of students is motivated by the following: whereas research has shown that Erasmus students may constitute a select group, as they are likely to perform better than non-mobile students (Findlay et al., 2006), the European Council's determination to expand learning mobility and exchanges (EU Council, 2018) will result in the near future in an increasing number of people with different characteristics and backgrounds accessing and benefitting from the scheme. It, therefore, seemed important not to limit our research to people who apply to the scheme, rather to extend the focus to include a broader segment of the student community.

The survey was applied in collaboration with the university that was in charge of sending an e-mail, with a link to the survey, to all students within these two groups. Two reminders were sent. The survey's response rate was 23.93% (more specifically, it was 27.76% for Erasmus applicants and 20.10% for first-year students)[2]. Table 2 gives an overview of the sample, including demographic and study-related characteristics, both in total and differentiated between first-year students and Erasmus applicants[3].

TABLE 2 HERE

Overall, as shown in the table, 70.83% of the respondents are female. A total of 31.78% of the sample attended a foreign or an international secondary school and/or had already lived abroad for at least one month during their life; 49.15% were achieving average grades = or >8. This last percentage is slightly higher (53.07%) for the group of Erasmus applicants.

To check for issues of non-representation or non-observation, we provide figures in Table 3 comparing the characteristics of the respondents with those of the total population of first-year students and Erasmus applicants, based on information provided by the university and relating to the same academic year that the survey was conducted.

[2] These response rates are not uncommon in surveys conducted among university students. They are slightly higher than those obtained by several studies, which reported survey response rates below 20% (cf. Van Mol, 2017). In his study on the effect of sending reminders so as to increase the response rates of surveys conducted among university students, Van Mol (2017) obtained a similar rate (24.96%) after two reminders.

[3] As the questions used to construct the variables, "cosmopolitan students" and "excellent students", were placed at the end of the questionnaire and certain respondents dropped out before completion, these two variables contain missing values as shown in Table 2. In Appendix Table 5 we present a comparison of the distribution of observed demographic and study-related variables between individuals for whom the data are complete and for whom the data have missing values in these two variables. The comparison shows only slight differences in relation to gender and faculty attended. In more detail, it seems that the groups of respondents with missing values in these variables correspond slightly to men and to students studying Law, Tourism and Translation/Languages.

TABLE 3 HERE

Concerning gender, the comparison shows how female students are overrepresented in our sample. This is in line with the findings of previous research regarding a higher likelihood of female students responding to surveys (Van Mol, 2017). Additionally, this overrepresentation can also be linked to the fact that female students are more likely to participate in the Erasmus programme and are more interested in studying abroad (Cordua and Netz, 2021; Van Mol, 2021). Regarding faculties, the main differences concern students of Medicine/Nursery who are underrepresented in both groups (by 1.89 percentage points in the group of first-year students and by 4.54 percentage points in the group of Erasmus applicants, respectively) and students of Translation/Languages who are overrepresented in the group of first-year students by 4.4 percentage points[4].

It must be noted that, while this information is important in evaluating participation in the study, with factorial survey experiments, the causal effects of the experiment's treatments can also be estimated in an accurate way, in the absence of a representative sample (cf. Auspurg and Hinz, 2015; Petzold and Moog, 2018)[5].

3.4 Quality checks of the experimental design

To test for the successful randomization and variation and, in this way, assess the quality and internal validity of the experimental data collected, we calculate bivariate Pearson´s correlations between all the conjoint attributes and between treatments' variables and respondents' characteristics.

TABLE 4 HERE

As shown in Table 4, the correlations between conjoint attributes are all close to zero, due to successful systematic variation. The correlations between conjoint attributes and respondents´ characteristics are also close to zero, due to successful randomization (Table 5).

TABLE 5 HERE

Additionally, as can be consulted in Appendix Table 1, all the conjoint attributes and levels are equally likely to be displayed. All these results confirm that the two key properties of factorial experimental designs, i.e., the zero-correlation of the conjoint attributes (orthogonality) and the variance of the levels (balance) were met in the study. This enables the unbiased estimation of the treatment effects and guarantees internal validity (cf. Kuhfeld, 1997).

3.5 Empirical model

[4] For data protection reasons, the collaborating university could not provide student population data on secondary schools attended and academic performance.

[5] More reflections on the appropriateness of applying inferential statistics to experimental data obtained from non-probability samples and on their generalizability can be found in Edgington (1966), Mullinix et al. (2015) and Lang (2009).

To analyse the data, we reorganized the dataset so that each destination, *k*, of task, *j*, presented to respondent, *i*, is in a different row.

As Hainmueller et al. (2014) show, the average change in the probability of selecting an option, caused by the inclusion of each attribute, can be estimated using linear regression. If one attribute is particularly important to the respondents, certain attribute levels will predict the choice of a given destination compared to the baseline level. We coded the responses to the question on the preferred destination as a binary variable, namely, 1 if the destination profile was preferred and 0 otherwise. This is the dependent variable. We regressed the dependent variable on all levels of each attribute (with the exception of the reference category for each attribute):

$$y_{ijk} = X_{ijk}\beta + e_{ijk}$$

Whether respondent, *i*, chooses destination, *k*, in task, *j*, is modelled as a function of X_{ijk}, a vector that contains the attribute levels of the destination proposed to the respondent in that task. We cluster standard errors by respondents.

As in the design we do not have restricted profiles, and randomization was uniform across profiles (all combinations of attribute levels are equally likely to be displayed); the regression coefficients provide the average marginal component effects (AMCEs). These can be interpreted as the average change in the probability that an option will be preferred instead of the reference category (Hainmueller et al., 2014: 19). As the effect of the attribute levels is measured on the same scale, AMCEs indicate the average of the effect of one attribute level across all combinations of the remaining attribute levels (De la Cuesta et al., 2019). Therefore, we can compare the importance respondents assign to each attribute level on the same scale. The randomization also allows us to disentangle the effects of potentially-correlated attributes, such as the cost of living, the cultural and entertainment offering or the reputation and level of difficulty of the university.

Based on the utility attached to each attribute level, it is possible to calculate the preference score of each attribute, i.e., the relative importance of an attribute compared to the others (Kotri, 2006). This can be calculated as follows:

$$S_a = \left(\frac{(\max u_a - \min u_a)}{\sum_{p=1}(\max u_a - \min u_a)} \right)$$

Where S_a is the relative importance of an attribute, max u_a is the utility of the attribute´s most preferred level and min u_a is the utility of the attribute´s least preferred level.

To compare preferences between subgroups, we follow the suggestions made by Leeper et al. (2020) and present graphs displaying conditional marginal means (MMs). We also test for the

presence of any subgroup differences across all attributes by performing an F-test to compare two equations: one estimating only the effects of the attribute levels and the same model measuring the interaction between the subgrouping variable and the attribute levels. After comparing subgroups' preferences by visualizing MMs, we consider the conditional AMCEs for each subgroup to assess the size of the causal effect of specific destination attributes on the overall destination favourability within each subgroup of interest. As in the two grouping variables, there are missing values; as a robustness check, we repeated the analyses after having imputed the missing values through multiple imputation[6]. The results, shown in Appendix Tables 6 and 7, are very similar to those obtained with the complete case analysis.

For the sake of clarity and more intuitive interpretation, we chose to graphically display the major results. Tabular presentations of the results displayed in the Figures can be found in the Appendix.

3. Results

To further check the quality of the randomization, different models were calculated that are presented in Appendix Table 2: a first model contains the experimental attributes only, whereas in the other models, the control variables (gender, faculty, type of students and level of study) have been inserted gradually. Across all the models, the coefficients are identical, confirming successful randomization and variation. This means that the coefficients of the attributes can be interpreted as isolated causal effects on the destination decision-making.

Figure 1 graphically shows the results for all the respondents jointly. The dots indicate points´ estimates, whereas the lines show 95% confidence intervals for the AMCEs of each attribute value, based on the probability of respondents choosing a particular destination. The dots without confidence intervals denote reference categories. For example, the second line from the top indicates that the destinations with a higher cost of living are 13.6 percentage points less likely to be chosen than destinations with the same cost of living as that of the respondents' city.

FIGURE 1 HERE

As can be seen, destinations with a higher cost of living and with a university known for its level of difficulty are less likely to be chosen. Destinations recommended by someone who has been there are more likely to be preferred (by 9.9 percentage points). Even more likely to be chosen (11.7 percentage points) are those destinations recommended by someone who lives there,

[6] As the variable relating to the average grade was continuous and the variables regarding whether the respondent lived abroad for more than one month and whether the respondent attended a foreign/international school were dummy variables, we imputed missing values iteratively by using chained equations, namely, a sequence of univariate imputation methods with a fully conditional specification of prediction equations. Following the suggestions by White et al. (2011) regarding the number of imputations to perform, and considering the percentage of missing data in the analysis, we performed 15 imputations. Multiple imputation diagnostics are available upon request.

probably due to the greater support networks that the city can provide to potential newcomers. Concerning the perceived benefits connected with a potential destination, the results show how destinations with a well-known university, with an extensive entertainment and cultural offering and with a temperate and warm climate are more likely to be chosen.

Examining Figure 1, it is also possible to observe how, for many of the attributes, attribute levels that imply 'losses' have a greater effect than attribute levels implying 'gains'. For example, whereas destinations in which the cost of living is higher than that of the respondents' city are 13.6 percentage points less likely to be chosen, destinations with a lower cost of living are only 2.7 percentage points more likely to be preferred. Similarly, destinations with an extensive entertainment and cultural offering are 9.1 percentage points more likely to be chosen than a destination with an average leisure offering, however, destinations with limited leisure pursuits are 18.8 percentage points less likely to be preferred.

Beyond plotting the effects of each attribute level, Figure 1 allows to visualize the attribute utility range, which is provided by the difference between the highest and lowest utilities of an attribute. The larger the attribute utility range, the greater the relative importance of an attribute in influencing the respondents´ choice of a given destination. With regard to attribute utility ranges, we can calculate each attribute preference score (Figure 2), indicating the relative importance of an attribute compared to the others. This highlights which attributes have the greatest impact on decision-making: the higher the score, the higher the relative importance of the attribute in determining the choice. All the scores add up to 100. Preference scores are ratio-scaled and are relative to the other attributes used in the study. This means, for example, that an entertainment and cultural offering with a score of 29.35 is more than five (5.2407) times as important as climate, which has a score of 5.6.

FIGURE 2 HERE

As can be seen in Figure 2, the two attributes with the highest scores are theoretically related to the benefits of studying abroad; the attribute with the highest score is the entertainment and cultural offering followed by the host university reputation. The third most important factor is cost of living, followed by received recommendations. The last two attributes in order of importance are the level of difficulty of the university and climate.

FIGURE 3 HERE

Figure 3 examines the differences between 'cosmopolitan students' and the remainder of the respondents. As previously mentioned, we consider 'cosmopolitans' as those students who have attended a foreign or international secondary school and/or have already lived abroad for at least one month during their lifetime. The F-test gives reason to believe that there are subgroup differences in the preferences between 'cosmopolitan students' and the other participants: $F(13, 16306) = 3{,}02$, $p=0.0001$. Figure 3 shows that the main differences between the two subgroups

concern three attributes: recommendations, level of difficulty of the university and university reputation.

TABLE 6 HERE

As the conditional AMCEs in Table 6 show, shifting the attribute from 'no recommendation' to 'recommended by someone who has been there' increases the likelihood of 'cosmopolitan students' choosing that destination by 6.6 percentage points, and by 11.7 percentage points in the case of other students. Similarly, while for 'cosmopolitan students', destinations recommended by someone who currently lives there are 8.6 percentage points more attractive than destinations that have not been recommended, for the remainder of the respondents, they are 13.1 percentage points more attractive than non-recommended destinations. Another important difference seems to concern the level of difficulty of the university, which appears to matter less for the 'cosmopolitan students' than for other students. Considering conditional AMCEs, we can see that, for 'cosmopolitan students', destinations with a university well-known for its degree of difficulty are 6.4 percentage points less likely to be preferred than destinations with a university of an average level of difficulty, however, such universities are 10.5 percentage points less likely to be chosen by other students. Additionally, for 'cosmopolitan students', university reputation seems to matter more than in the case of other students. More specifically, when considering conditional AMCEs in relation to destinations in which the university is relatively known, destinations in which the university is relatively unknown are 15.1 percentage points less likely to be chosen by 'cosmopolitan students', whereas regarding the remainder of the students, these destinations are 9.8 percentage points less likely to be chosen than the reference category.

FIGURE 4 HERE

Finally, we compare the results for particularly high-performing students ('excellent students') with the remainder of the respondents in Figure 4. The results of the F-test confirm that there are differences between the two subgroups: $F(14, 16285) = 2.88$, $p=0.0002$. The figure shows how the patterns for almost all the attributes are quite similar for the two subgroups, the only exception being the university reputation.

TABLE 7 HERE

The AMCE results, presented in Table 7, show that among the subgroup of 'excellent students', destinations with a well-known university are 16.5 percentage points more likely to be chosen compared with destinations with a relatively known university. For the remaining students, the particularly good reputation of a university increases the likelihood of a destination being chosen by 10.8 percentage points compared with the reference category. A destination with a relatively unknown university is 10.1 percentage points less likely to be preferred compared to the reference category for the remaining students, but 12.7 percentage points less likely to be chosen by 'excellent students'. These results clearly indicate how students who perform particularly well

academically, attach more importance to the reputation of a university in which to study abroad, than the other respondents[7].

4. Discussion and Conclusions

This paper has highlighted a set of methodological challenges associated with the study of exchange students' decision-making concerning the choice of destination. These challenges are related to the multidimensionality of the choice, the trade-offs that are involved in choosing between different options, as well as the endogeneity bias that observational studies may suffer. This hampers the unbiased estimation of the isolated causal effect of different destinations´ attributes on exchange students´ decision-making when using survey data. By means of a conjoint experiment, this paper addresses these challenges, aiming to answer the following research questions: What drives exchange students to a particular destination? Which destination attributes are the most important in driving exchange students' decision-making? To what extent does the effect of the destination attributes vary according to students´ previous experience with cross-border mobility, transnational practices and academic performance?

Following rational choice theory, we conceive the decision relating to the selection of the study destination as the result of careful consideration of the costs and benefits associated with the different available options. Yet, inspired by existing research on the impact of international experiences and transnational practices on 'cosmopolitan attitudes' (Mau et al., 2008; Petzold, 2017), we also hypothesize differences in preferences between students with and without these kinds of experiences. Finally, as the benefits of a study period abroad concern different points in time, inspired by the findings of behavioural research on differences relating to time preferences (e.g., Goldsteyn et al., 2014), we also considered the differences in destination preferences between students, according to their academic performances.

In accordance with rational choice theory, our results show how higher costs discourage students from selecting a destination (H1). Destinations with a higher cost of living are less likely to be chosen (H1a), as well as destinations with a university with a high level of difficulty (H1b). The latter is maybe linked to the fear, pointed out in previous research (Doyle et al., 2010; Lörz et al., 2016), that studying abroad could lead to a delay in graduation and labour market entry. The effect of this attribute is lower for students with previous international experiences. As expected, (H1c) recommendations received and social networks within the destination have the effect of limiting the time, social and psychological costs of moving and settling in, and consequently, play a role in the decision-making process. Besides the importance of factors relating to costs, the results confirm our hypotheses that destinations with a well-known university (H2a), with an extensive entertainment and cultural offering (H2b) and with a temperate and warm climate (H2c) are more likely to be chosen. Regarding the latter, it should be noted that although

[7] As a further robustness check, to show the size and significance of the effect of the different attribute levels for the subgroups, we include in Appendix Tables 8 and 9 the estimations of the full model with interaction terms.

destinations with a mild or warm climate are more likely to be preferred than cold destinations, the relative importance of this attribute compared to the others is much less significant.

Interestingly, the results also show that, in many cases, attribute levels that imply 'losses' have a greater effect than the attribute levels implying 'gains'. Destinations where the cost of living is higher than that of the respondents' city are much less likely to be chosen than destinations with a lower cost of living. Similarly, selecting a destination with a limited entertainment and cultural offering is considered less favourable than a destination with an extensive offering. These findings can be interpreted in the light of prospect theory (Kahneman and Tversky, 1979). This is a theory that considers risk as a central element of the decision-making process. Indeed, as choices frequently concern unsure future outcomes, they can often be considered risky endeavours. According to prospect theory, when individuals make a risky decision, they tend to display 'loss aversion', and are more concerned about what they may lose than what they may gain (Kahneman and Tversky, 1984).

Comparing the relative importance of the attributes, it is possible to note that the two attributes with the highest relative importance are theoretically related to the benefits of studying abroad. Confirming previous research (Findlay et al., 2006; Llewellyn-Smith and McCabe, 2008; Van Mol and Timmerman, 2014), short-term student mobility is very much driven by an experiential rationale. The reputation of the host university is also crucial and constitutes the second most important attribute in explaining the choice. Students are more likely to prefer destinations where the reputation of the university is good and avoid destinations in which the university is not well-known. The reputation of the university is particularly important for students who already have an international profile and for those who perform particularly well academically.

These results underline the pertinence of considering the differences between various subgroups of students. The results highlight the importance of taking into account previous international experiences when exploring exchange students´ preferences. Indeed, they confirm our hypotheses regarding the differences in preferences between students who already have experience of international stays abroad and/or have been educated in an international environment (labelled 'cosmopolitan students') and students who have not had these kinds of experiences (H3). These differences may be due to mobility dispositions (Petzold, 2017) and 'cosmopolitan attitudes' (Petzold and Moog, 2017), which these students acquired through their international experiences/transnational practices, causing them to evaluate migration costs and benefits in a different way compared to non-experienced students. More used to an international environment, these students, for example, seem to feel less uncertainty in relation to migration and therefore, are less afraid of the level of difficulty of a foreign university (H3a); these students are also less likely to rely less on advice and recommendations (H3b). The results also show that, as expected (H4b), students who perform particularly well academically ('excellent students') place more importance on the reputation of the host university, an attribute related to future rewards, than students with poorer academic grades. Nonetheless, in contrast to our

expectations (H4a), no difference could be found regarding the importance assigned by the two subgroups to the attributes relating to the leisure dimension. A further exploration of individual time preferences and their impact on exchange students' decision-making may shed more nuanced light onto how people ponder costs and benefits related to a study period abroad. Future studies may, therefore, wish to include tasks which reveal time preferences, as well as self-reported measures, to better check the relationship between time preferences and destination preferences when studying abroad.

This research is not exempt from shortcomings and future research is needed to address these. According to Clark and Lisowski (2017: 7433), 'people make different choices about the same likely outcome of moving depending on their reference points' and in the migration decision-making process, the most important reference point is the place of origin of the decision-maker with its endowment (i.e., the stock of perceived locational advantages and disadvantages associated with it). The results of this research can, therefore, be conditioned by the fact that the study is conducted in one public higher education institution, located in the urban area of Barcelona, in Spain. Furthermore, students´ characteristics may change from one higher education institution to another, since factors such as the reputation of the university, admission to the university and to the different faculties, as well as the cost of tuition fees can differ from one university/region to another. A theory-guided replication of the experiment (cf. Stroebe et al., 2018) among students from universities located in different parts of the country and in different European countries is, therefore, needed. The inclusion of different types of students appears to be particularly important, considering that one of the key results of this research shows that students with different characteristics differ in terms of the importance they assign to the various attributes.

Another shortcoming of the experiment presented in this research concerns the fact that respondents' attention is focused on a restricted set of variables and that preference scores are ratio-scaled and relative to the other attributes used in the study. Future research may wish to further validate the set of variables presented in our experiment. Additionally, in the future, there is a need to check whether and to what extent the way in which the attributes are presented may have an effect on the results obtained. To do so, similar experiments should be conducted in the future in which the same list of attributes is presented with different phrasings.

Beyond these limitations, following the pioneering work of Petzold and Moog (2018), this study shows the contribution that experiments can make to the literature on mobile students' destination choice and encourages future studies to further employ these kinds of techniques. Compared with observational studies, experiments allow testing the isolated effect of different explanatory factors in an unbiased way. Additionally, by mirroring the real decision-making process more closely, the conjoint experimental approach constitutes a promising avenue along which decisions concerning the destination choice of students and other categories of migrants can be examined.

5. References

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Tables

Table 1 - Complete list of attributes and related levels

ATTRIBUTES	ATTRIBUTE LEVELS
Cost of living	• Higher than in the city where you are currently living • The same as in the city where you are currently living *(reference category)* • Lower than in the city where you are currently living
Cultural and entertainment offering	• Broad cultural and entertainment offering • Average cultural and entertainment offering *(reference category)* • Limited cultural and entertainment offering
Climate	• Warm • Temperate *(baseline condition)* • Cold
Recommendation received by peers	• No recommendation received *(reference category)* • Recommended by someone who is living there • Recommended by someone who has been there
University reputation	• Well-known university • Relatively known university *(reference category)* • Relatively unknown university
University level of difficulty	• Exams difficult to pass • Average level of difficulty *(reference category)* • Exams easy to pass

Table 2 – Overview of the respondents´ characteristics

VARIABLE	TOTAL			FIRST-YEAR STUDENTS			ERASMUS APPLICANTS		
	N	**%**	**Range**	**N**	**%**	**Range**	**N**	**%**	**Range**
Gender			1-3			1-3			1-3
Male	649	28.25		549	29.05		100	24.57	
Female	1627	70.83		1323	70.00		304	74.69	
Other	21	0.91		18	0.95		3	0.74	
Missing	0			0			0		
Level of study			1-2			1-2			1-2
Undergraduate	1961	85.37		1555	82.28		406	99.75	
Master's	336	14.63		335	17.71		1	0.25	
Missing	0			0			0		
Faculty			1-14			1-14			1-14
Biosciences	218	9.49		176	9.31		42	10.32	
Sciences	192	8.36		153	8.10		39	9.58	
Polit. & Soc. Sciences	125	5.44		99	5.24		26	6.39	
Communic. Sciences	160	6.97		132	6.98		28	6.88	
Education	192	8.36		170	8.99		22	5.41	
Law	149	6.49		134	7.09		15	3.69	
Economy & Business	197	8.58		164	8.68		33	8.11	
Tourism	19	0.83		3	0.16		16	3.93	
Letters/Phil./Arts	297	12.93		256	13.54		41	10.07	
Engineering	130	5.66		115	6.08		15	3.69	
Medicine/Nursery	176	7.66		140	7.41		36	8.85	
Prevention/Security	3	0.13		1	0.05		2	0.49	
Psychology	150	6.53		122	6.46		28	6.88	
Translation/Languages	211	9.19		164	8.68		47	11.55	
Veterinary	78	3.40		61	3.23		17	4.18	
Missing	0			0			0		
´Cosmopolitan student´			0-1			0-1			0-1
Yes	730	31.78		607	32.12		123	30.22	
No	1346	58.60		1100	58.20		246	60.44	
Missing	221	9.62		183	9.68		38	9.34	
´Excellent student´			0-1			0-1			0-1
Yes	1129	49.15		913	48.31		216	53.07	
No	910	39.62		762	40.32		148	36.36	
Missing	258	11.23		215	11.37		43	10.57	
Total	**2297**			**1890**			**407**		

Table 3 – Comparison of respondents and population*

	FIRST-YEAR STUDENTS		ERASMUS APPLICANTS	
	Respondents	Total first-year students (2019/2020)	Respondents	Total Erasmus applicants (2019/2020)
Gender				
Male	29.05	39.58	24.57	Not available
Female	70.00	60.42	74.69	Not available
Other	0.95	Not available	0.74	Not available
Level of study				
Undergraduate	82.28	87.06	99.75	Not available
Master's	17.72	12.94	0.25	Not available
Faculty				
Biosciences	9.31	6.8	10.32	10.12
Sciences	8.1	8.45	9.58	6.35
Polit. & Soc. Sciences	5.24	4.17	6.39	5.47
Communic. Sciences	6.98	6.66	6.88	6.79
Education	8.99	8.4	5.41	4.78
Law	7.09	7.13	3.69	5.34
Economy & Business	8.68	10.47	8.11	7.67
Letters/Phil./Arts	13.54	12.27	10.07	13.2
Engineering	6.08	8.59	3.69	3.65
Medicine/Nursery	7.41	9.3	8.85	13.39
Psychology	6.45	6.7	6.88	5.66
Translation/Languages	8.68	4.28	11.55	12.88
Veterinary	3.23	3.31	4.18	1.26
Tourism	0.16	2.41	3.93	3.27
Prevention/Security	0.05	1.07	0.49	0.19

* Data on the number of Erasmus applicants by level of study are not available. Indeed, as explained by the International Relations Office of the university, the number of master's students applying to the Erasmus programme is reduced, therefore, they do not count or separate students according to the level of study in their statistics,. The fact that there are so few master's students applying to the Erasmus programme in the university where the study was conducted explains why, among the Erasmus applicants, only one master's student participated in the survey.

Table 4 - Correlations between conjoint attributes

	1	2	3	4	5	6
1. Cost of living	1.0000					
2. Difficulty of host university	-0.0038	1.0000				
3. Host university prestige	-0.0060	0.0126	1.0000			
4. Recommendations	0.0055	-0.0000	0.0002	1.0000		
5. Entertainment/cultural offering	-0.0078	-0.0060	0.0066	-0.0069	1.0000	
6. Climate	0.0077	0.0103	-0.0010	0.0045	0.0022	1.0000

Table 5 - Correlations between conjoint attributes and respondents´ characteristics

	ERASMUS APPLICANT OR FIRST-YEAR STUDENT	FACULTY	GENDER	LEVEL OF STUDY	´COSMOPOLITAN STUDENT´	´EXCELLENT STUDENT´
Cost of living	0.0044	0.0088	0.0082	-0.0079	-0.0016	0.0037
Difficulty of host university	0.0005	-0.0013	-0.0096	0.0006	-0.0017	0.0114
Host university prestige	-0.0034	0.0161	-0.0129	0.0032	-0.0072	0.0041
Recommendations	-0.0029	0.0014	-0.0020	0.0012	0.0055	-0.0066
Entertainment/cultural offering	-0.0025	-0.0042	-0.0014	-0.0150	-0.0049	0.0006
Climate	0.0085	-0.0065	-0.0036	-0.0032	-0.0018	0.0060

Table 6 – Differences between ´cosmopolitan students´ and the remaining students – conditional AMCEs

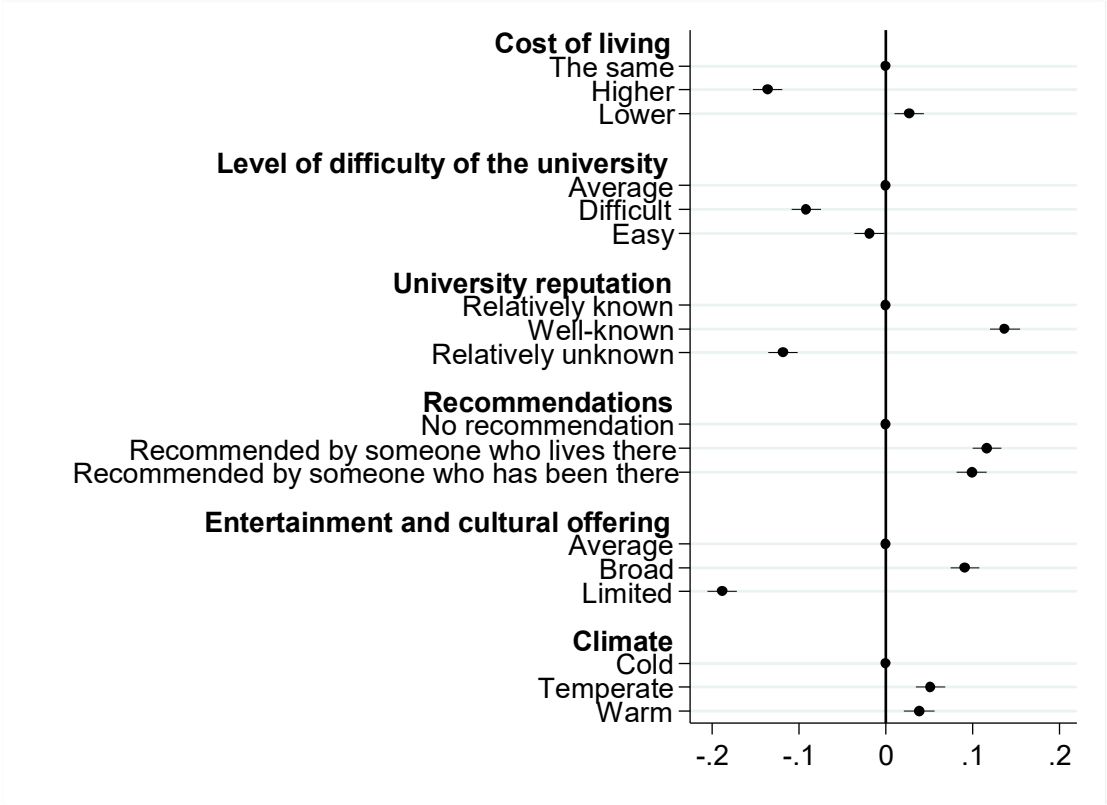
	´COSMOPOLITAN STUDENTS´	´NON-COSMOPOLITAN STUDENTS´
Cost of living *(ref. the same)*		
Higher	-0.135***	-0.138***
	(0.02)	(0.01)
Lower	0.013	0.032**
	(0.01)	(0.01)
Level of difficulty of university *(ref. average)*		
Difficult	-0.064***	-0.105***
	(0.02)	(0.01)
Easy	-0.031*	-0.012
	(0.02)	(0.01)
University reputation *(ref. relatively known)*		
Well-known	0.146***	0.135***
	(0.02)	(0.01)
Relatively unknown	-0.151***	-0.098***
	(0.02)	(0.01)
Recommendations *(ref. no recomm.)*		
By someone who lives there	0.086***	0.131***
	(0.01)	(0.01)
By someone who has been there	0.066***	0.117***
	(0.02)	(0.01)
Entertain. and cult. offering *(ref. average)*		
Broad	0.088***	0.094***
	(0.01)	(0.01)
Limited	-0.176***	-0.193***
	(0.02)	(0.01)
Climate *(ref. cold)*		
Temperate	0.056***	0.050***
	(0.02)	(0.01)
Warm	0.046**	0.031**
	(0.02)	(0.01)
Constant	0.527***	0.482***
	(0.03)	(0.02)
R-squared	0.137	0.141
N. obs.	5840	10768
N. respondents	730	1346

Table 7 – Differences between ´excellent students´ and other students – conditional AMCEs

	´EXCELLENT STUDENTS´	´NON-EXCELLENT STUDENTS´
Cost of living *(ref. the same)*		
Higher	-0.131***	-0.146***
	(0.01)	(0.01)
Lower	0.012	0.041**
	(0.01)	(0.01)
Level of difficulty of university *(ref. average)*		
Difficult	-0.077***	-0.103***
	(0.01)	(0.01)
Easy	-0.023	-0.012
	(0.01)	(0.01)
University reputation *(ref. relatively known)*		
Well-known	0.165***	0.108***
	(0.01)	(0.01)
Relatively unknown	-0.127***	-0.101***
	(0.01)	(0.01)
Recommendations *(ref. no recomm.)*		
By someone who lives there	0.118***	0.113***
	(0.01)	(0.01)
By someone who has been there	0.112***	0.082***
	(0.01)	(0.01)
Entertain. and cult. offering *(ref. average)*		
Broad	0.092***	0.093***
	(0.01)	(0.01)
Limited	-0.198***	-0.177***
	(0.12)	(0.01)
Climate *(ref. cold)*		
Temperate	0.046***	0.064***
	(0.01)	(0.01)
Warm	0.028***	0.053***
	(0.01)	(0.01)
Constant	0.501***	0.496***
	(0.02)	(0.02)
R-squared	0.150	0.129
N. obs.	9032	7280
N. respondents	1129	910

Figures

Figure 1 - Effects of destination attributes on the probability of being preferred, all respondents



AMCEs estimates with 95% CI

Figure 2 – Attributes´ preference scores

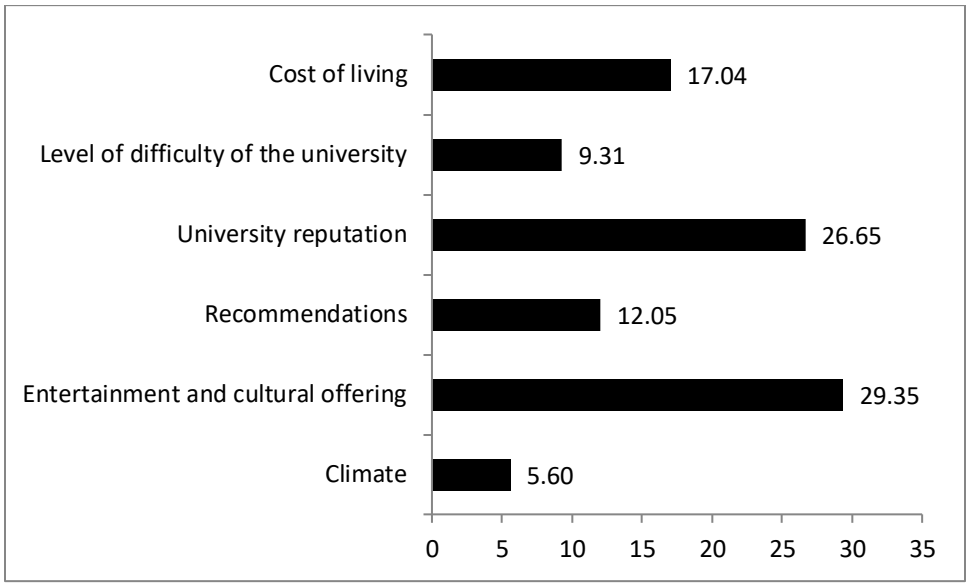
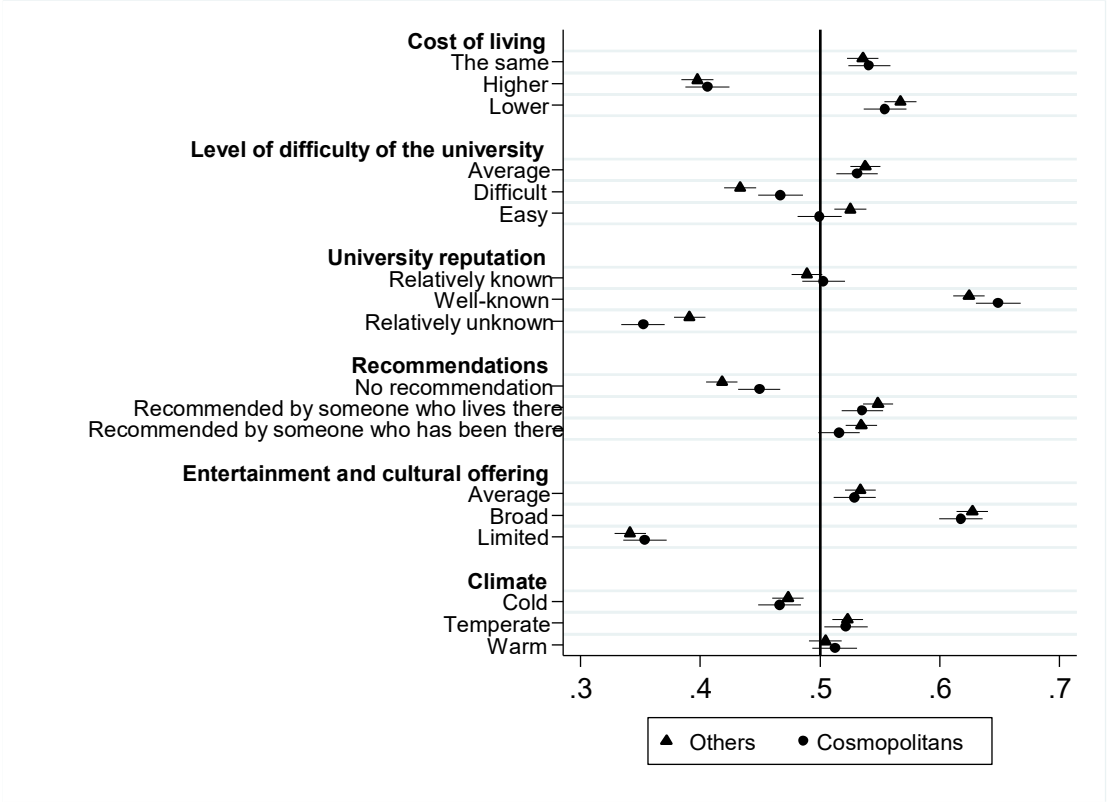
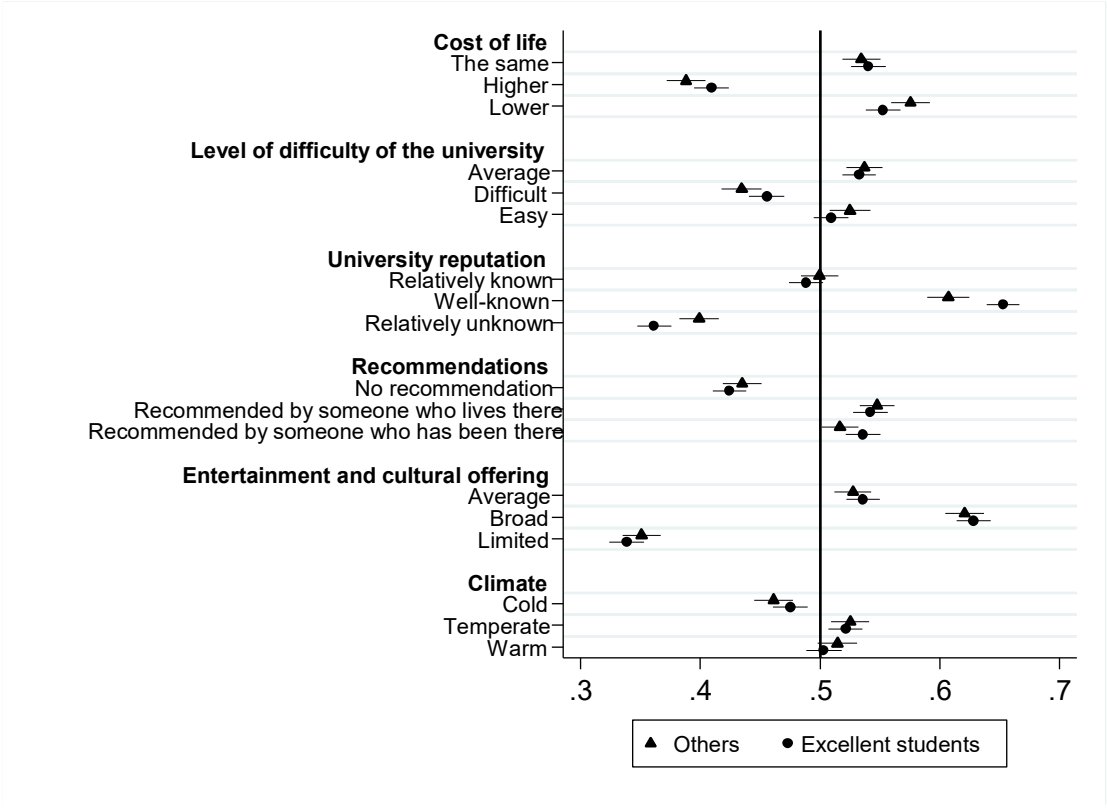


Figure 3 - Comparison of preferences between “cosmopolitan students” and the remaining students



MMs estimates with 95% CI

Figure 4 - Comparison of the preferences of “excellent students” and other students



MMs estimates with 95% CI

APPENDIX

Table 1 - Frequencies of conjoint attributes and levels

ATTRIBUTES AND LEVELS	N	%	Level
Cost of living			
The same	5883	33.27	1
Higher	5924	33.50	2
Lower	5874	33.23	3
Level of difficulty of the university			
Average	6103	34.01	1
Difficult	5693	32.20.	2
Easy	5976	33.80	3
University prestige			
Relatively known	5934	33.56	1
Well-known	5774	32.67	2
Relatively unknown	5972	33.77	3
Recommendations			
No recommendation	5948	33.64	1
Recommended by someone who lives there	5798	32.79	2
Recommended by someone who has been there	5936	33.57	3
Cultural and entertainment offering			
Average	5914	33.45	1
Broad	5820	32.91	2
Limited	5948	33.64	3
Climate			
Temperate	5897	33.35	1
Warm	5812	32.87	2
Cold	5973	33.78	3
Total *N* tables	17682	100	

Table 2 – AMCE, all respondents

	1	2	3	4	5
Cost of living *(ref. the same)*					
Higher	-0.136***	-0.136***	-0.136***	-0.136***	-0.136***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Lower	0.027**	0.027**	0.027**	0.027**	0.027**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Level of difficulty of university *(ref. average)*					
Difficult	-0.092***	-0.092***	-0.092***	-0.092***	-0.092***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Easy	-0.018	-0.018	-0.018	-0.018	-0.018
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
University reputation *(ref. relatively known)*					
Well-known	0.137***	0.137***	0.137***	0.137***	0.137***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Relatively unknown	-0.118***	-0.118***	-0.118***	-0.118***	-0.118***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Recommendations *(ref. no recomm.)*					
By someone who lives there	0.117***	0.117***	0.117***	0.117***	0.117***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
By someone who has been there	0.099***	0.099***	0.099***	0.099***	0.099***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Entertain.and cult. offering *(ref. average)*					
Broad	0.091***	0.091***	0.091***	0.091***	0.091***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Limited	-0.188***	-0.188***	-0.188***	-0.188***	-0.188***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Climate *(ref. cold)*					
Temperate	0.052***	0.052***	0.052***	0.052***	0.052***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Warm	0.039***	0.039***	0.039***	0.039***	0.039***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Gender *(ref. male)*					
Female		-0.002	-0.003	-0.003	-0.003
		(0.00)	(0.00)	(0.00)	(0.00)
Other		0.000	0.000	0.000	0.000
		(0.00)	(0.00)	(0.02)	(0.02)
Faculty (ref. biosciences)					
Sciences			-0.012*	-0.012	-0.012
			(0.01)	(0.01)	(0.01)
Polit. & Soc. Sciences			-0.001	-0.001	-0.001
			(0.01)	(0.01)	(0.01)
Commun. Sciences			-0.005	-0.005	-0.005
			(0.01)	(0.01)	(0.01)
Education			-0.016*	-0.017**	-0.017**
			(0.01)	(0.01)	(0.01)
Law			-0.000	-0.002	-0.002
			(0.01)	(0.01)	(0.01)
Economy & Business			-0.000	-0.001	-0.002
			(0.01)	(0.01)	(0.01)
Letters/Phil./Arts			-0.000	-0.000	-0.001
			(0.01)	(0.01)	(0.01)
Engineering			-0.014	-0.014	-0.014
			(0.01)	(0.01)	(0.01)
Medicine/Nursery			-0.008	-0.008	-0.008
			(0.01)	(0.01)	(0.01)
Psychology			-0.002	-0.002	-0.002
			(0.01)	(0.01)	(0.01)
Translation/Languages			-0.006	-0.006	-0.006
			(0.01)	(0.01)	(0.01)
Veterinary			-0.006	-0.006	-0.006
			(0.01)	(0.01)	(0.01)
Tourism			0.034*	0.039*	0.039*
			(0.02)	(0.02)	(0.02)
Prevention/Security			-0.012	-0.008	-0.008
			(0.36)	(0.34)	(0.34)
Type of student *(ref. first year-student)*					
Erasmus applicant				-0.008	-0.008
				(0.00)	(0.00)
Level of study *(ref. undergraduate)*					
Master					-0.001
					(0.00)
Constant	0.499***	0.500***	0.506***	0.506***	0.507
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
R-squared	0.138	0.138	0.139	0.139	0.139
N. obs.	17536	17536	17536	17536	17536
N. respondents	2296	2296	2296	2296	2296

Table 3 – Differences in preferences between "cosmopolitan students" and the rest – MMs

	Cosmopolitan students		Non-cosmopolitan students	
	est.	SE	est.	SE
Cost of living				
The same	0.541	0.01	0.536	0.01
Higher	0.406	0.01	0.397	0.01
Lower	0.555	0.01	0.567	0.01
Level of difficulty of university				
Average	0.531	0.01	0.538	0.01
Difficult	0.467	0.01	0.433	0.01
Easy	0.500	0.01	0.525	0.01
University reputation				
Relatively known	0.503	0.01	0.489	0.01
Well-known	0.649	0.01	0.625	0.01
Relatively unknown	0.352	0.01	0.391	0.01
Recommendations				
No recommendations	0.449	0.01	0.418	0.01
By someone who lives there	0.536	0.01	0.549	0.01
By someone who has been there	0.516	0.01	0.535	0.01
Entertain. and cult. offering				
Average	0.529	0.01	0.534	0.01
Broad	0.618	0.01	0.627	0.01
Limited	0.354	0.01	0.341	0.01
Climate				
Cold	0.466	0.01	0.473	0.01
Temperate	0.522	0.01	0.523	0.01
Warm	0.512	0.01	0.504	0.01

Table 4 – Differences in preferences between “excellent students” and the rest - MMs

	Excellent students		Non-excellent students	
	est.	SE	est.	SE
Cost of living				
The same	0.540	0.540	0.535	0.01
Higher	0.409	0.409	0.388	0.01
Lower	0.553	0.553	0.576	0.01
Level of difficulty of university				
Average	0.533	0.533	0.537	0.01
Difficult	0.455	0.455	0.435	0.01
Easy	0.509	0.509	0.525	0.01
University reputation				
Relatively known	0.489	0.489	0.500	0.01
Well-known	0.653	0.653	0.607	0.01
Relatively unknown	0.361	0.361	0.399	0.01
Recommendations				
No recommendations	0.424	0.424	0.435	0.01
By someone who lives there	0.542	0.542	0.548	0.01
By someone who has been there	0.536	0.536		0.01
Entertain. and cult. offering			0.517	
Average	0.536	0.536		0.01
Broad	0.628	0.628	0.528	0.01
Limited	0.338	0.338	0.621	0.01
Climate			0.351	
Cold	0.475	0.475		0.01
Temperate	0.521	0.521	0.461	0.01
Warm	0.503	0.503	0.525	0.01

Table 5 – Comparison between individuals with complete data and with missing values

	"Cosmopolitan student"			"Excellent student"		
	Resp. with complete data %	Resp. with missing values %	χ^2 (p)	Resp. with complete data %	Resp. with missing values %	χ^2 (p)
Gender			1.064(0.587)			1.683(0.431)
Male	27.94	31.22		27.86	31.40	
Female	71.15	67.87		71.26	67.44	
Other	0.92	0.90		0.88	1.16	
Level of study			0.286(0.593)			2.999(0.083)
Undergraduate	85.50	84.16		85.83	81.78	
Master	14.50	15.84		14.17	18.22	
Faculty			26.848(0.020)			24.376(0.041)
Biosciences	9.54	9.05		9.51	9.30	
Sciences	8.82	4.07		8.93	3.88	
Polit. & Soc. Sciences	5.35	6.33		5.44	5.43	
Comunic. Sciences	6.98	6.79		7.11	5.81	
Education	8.19	9.95		8.14	10.08	
Law	6.21	9.05		6.28	8.14	
Economy & Business	8.53	9.05		8.53	8.91	
Tourism	0.63	2.71		0.64	2.33	
Letters/Phil./Arts	12.81	14.03		12.85	13.57	
Engineering	5.92	3.17		5.89	3.88	
Medicine/Nursery	8.00	4.52		7.95	5.43	
Prevention/Security	0.14	0.00		0.15	0.00	
Psychology	6.41	7.69		6.38	7.75	
Translation/Languages	9.15	9.05		8.93	11.24	
Veterinary	3.32	4.07		3.29	4.26	
Type of student			0.046(0.830)			0.221(0.639)
First-year student	82.23	82.81		82.15	83.33	
Erasmus applicant	17.77	17.72		17.85	16.67	
Total	2076	221		2039	258	

Table 6 - Differences between "cosmopolitan students" and the rest – Conditional AMCEs, MI results

	Cosmopolitan students	Non-cosmopolitan students
Cost of living *(ref. the same)*		
Higher	-0.135***	-0.136***
	(0.02)	(0.01)
Lower	0.013	0.034**
	(0.01)	(0.01)
Level of difficulty of university *(ref. average)*		
Difficult	-0.064***	-0.105***
	(0.02)	(0.01)
Easy	-0.031*	-0.012
	(0.02)	(0.01)
University reputation *(ref. relatively known)*		
Well-known	0.146***	0.133***
	(0.02)	(0.01)
Relatively unknown	-0.151***	-0.102***
	(0.02)	(0.01)
Recommendations *(ref. no recomm.)*		
By someone who lives there	0.086***	0.132***
	(0.01)	(0.01)
By someone who has been there	0.067***	0.116***
	(0.01)	(0.01)
Entertain. and cult. offering *(ref. average)*		
Broad	0.089***	0.093***
	(0.01)	(0.01)
Limited	-0.176***	-0.195***
	(0.12)	(0.01)
Climate *(ref. cold)*		
Temperate	0.056***	0.050***
	(0.02)	(0.01)
Warm	0.046***	0.035***
	(0.01)	(0.01)
Constant	0.547***	0.486***
	(0.03)	(0.02)

Table 7 - Differences between "excellent students" and the rest – Conditional AMCEs, MI results

	Excellent students	Non-excellent students
Cost of living *(ref. the same)*		
Higher	-0.129***	-0.146***
	(0.01)	(0.01)
Lower	0.017	0.041*
	(0.01)	(0.01)
Level of difficulty of university *(ref. average)*		
Difficult	-0.083***	-0.103***
	(0.01)	(0.01)
Easy	-0.023*	-0.012
	(0.01)	(0.01)
University reputation *(ref. relatively known)*		
Well-known	0.158***	0.108***
	(0.01)	(0.01)
Relatively unknown	-0.131***	-0.101***
	(0.01)	(0.01)
Recommendations *(ref. no recomm.)*		
By someone who lives there	0.120***	0.113***
	(0.01)	(0.01)
By someone who has been there	0.112***	0.082***
	(0.01)	(0.01)
Entertain. and cult. offering *(ref. average)*		
Broad	0.090***	0.093***
	(0.01)	(0.01)
Limited	-0.196***	-0.177***
	(0.12)	(0.01)
Climate *(ref. cold)*		
Temperate	0.044***	0.064***
	(0.01)	(0.01)
Warm	0.029***	0.053***
	(0.01)	(0.01)
Constant	0.511***	0.508***
	(0.02)	(0.02)

Table 8 – Full model for "Cosmopolitan students and the rest" with interaction terms

Cost of living *(ref. he same)*	
Higher	-0.138***
	(0.01)
Lower	0.032**
	(0.01)
Level of difficulty of university *(ref. average)*	
Difficult	-0.105***
	(0.01)
Easy	-0.012
	(0.01)
University reputation *(ref. relatively known)*	
Well-known	0.136***
	(0.01)
Relatively unknown	-0.098***
	(0.01)
Recommendations *(ref. no recomm.)*	
By someone who lives there	0.131***
	(0.01)
By someone who has been there	0.117***
	(0.01)
Entertain. and cult. offering *(ref. average)*	
Broad	0.094***
	(0.01)
Limited	-0.193***
	(0.01)
Climate *(ref. cold)*	
Temperate	0.050***
	(0.01)
Warm	0.031**
	(0.01)
Cosmopolitan student=Yes	0.032
	(0.03)
Interaction terms	
Higher cost of living*Cosmopolitan student=Yes	0.003
	(0.02)
Lower cost of living*Cosmopolitan student=Yes	-0.018
	(0.02)
Difficult university*Cosmopolitan student=Yes	0.041*
	(0.02)
Easy university*Cosmopolitan student=Yes	-0.019
	(0.02)
Well-known university*Cosmopolitan student=Yes	0.010
	(0.02)
Relatively unknown university*Cosmopolitan student=Yes	-0.052**
	(0.02)
Recommendations by someone who lives there*Cosmopolitan student=Yes	-0.044*
	(0.02)
Recommendations by someone who has been there*Cosmopolitan student=Yes	-0.050**
	(0.02)
Broad entertain. and cult. offering*Cosmopolitan student=Yes	-0.005
	(0.02)
Scarce entertain. and cult. offering*Cosmopolitan student=Yes	-0.017
	(0.02)
Template climate*Cosmopolitan student=Yes	-0.006
	(0.02)
Warm climate*Cosmopolitan student=Yes	-0.020
Constant	0.489***
	(0.02)
R-squared	0.140
N. obs.	16608
N. resp.	2076

Table 8 – Full model for "Excellent students and the rest" with interaction terms

Cost of living *(ref. the same)*	
Higher	-0.147***
	(0.01)
Lower	0.041**
	(0.01)
Level of difficulty of university *(ref. average)*	
Difficult	-0.103***
	(0.01)
Easy	-0.012*
	(0.01)
University reputation *(ref. relatively known)*	
Well-known	0.108***
	(0.01)
Relatively unknown	-0.101***
	(0.01)
Recommendations *(ref. no recomm.)*	
By someone who lives there	0.113***
	(0.01)
By someone who has been there	0.082***
	(0.01)
Entertain. and cult. offering *(ref. average)*	
Broad	0.093***
	(0.01)
Limited	-0.176***
	(0.01)
Climate *(ref. cold)*	
Temperate	0.064***
	(0.01)
Warm	0.053***
	(0.01)
Excellent student=Yes	0.002
	(0.03)
Interaction terms	
Higher cost of living*Excellent student=Yes	0.015
	(0.02)
Lower cost of living*Excellent student=Yes	-0.029
	(0.02)
Difficult university*Excellent student=Yes	0.025
	(0.02)
Easy university*Excellent student=Yes	-0.011
	(0.02)
Well-known university*Excellent student=Yes	0.057**
	(0.02)
Relatively unknown university*Excellent student=Yes	-0.027
	(0.02)
Recommendations by someone who lives there*Excellent student=Yes	0.005
	(0.02)
Recommendations by someone who has been there*Excellent student=Yes	0.030
	(0.02)
Broad entertain. and cult. offering*Excellent student=Yes	-0.001
	(0.02)
Scarce entertain. and cult. offering*Excellent student=Yes	-0.021
	(0.02)
Template climate*Excellent student=Yes	-0.018
	(0.02)
Warm climate*Excellent student=Yes	-0.025
Constant	0.499***
	(0.02)
R-squared	0.141
N. obs.	16312
N. resp.	2039