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Analysis of predictor variables of academic satisfaction in international master's degree students

Análisis de las variables predictoras de la satisfacción académica en los estudiantes internacionales de máster

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Abstract

International student mobility (ISM) is a phenomenon with a great impact on the internationalisation policies of higher education institutions. However, in the Spanish context it is necessary to expand the research carried out especially at the postgraduate level. This article aims to approach the phenomenon of transitions in this group by analysing motives for choice, expectations of self-efficacy, and initial motivation and adaptation as predictors of academic satisfaction. A quantitative study is carried out using scales of the socio-cognitive constructs of academic adaptation to a sample of 314 students of official master's degrees in the field of Social Sciences (181 native and 133 international) in Catalonia. The results obtained shed light on the explanation of academic satisfaction among master's students as a key element for success in their transitions; it is influenced by a set of independent variables such as reasons for choice and motivation and adaptation to studies. All this should help us to approach the phenomenon of ISM in order to improve their social, cultural and academic adaptation processes, promoting support actions for an important group in and for our university system.

Keywords: international students; master's degrees; student satisfaction; student motivation; self-efficacy.

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Resumen

La movilidad de estudiantes internacionales (MEI) es un fenómeno con gran impacto en las políticas de internacionalización de las instituciones de educación superior (IES). No obstante, en el contexto español es necesario ampliar las investigaciones que se realizan especialmente en niveles de posgrado. Este artículo pretende aproximarse al fenómeno de las transiciones de este colectivo analizando los motivos de elección, expectativas de autoeficacia y motivación y adaptación iniciales como variables predictoras de la satisfacción académica. Se realiza un estudio por encuesta de los constructos sociocognitivos de adaptación académica a una muestra de 314 estudiantes de másteres oficiales del ámbito de Ciencias Sociales (181 autóctonos y 133 internacionales) en Cataluña. Los resultados obtenidos arrojan luz sobre la explicación de la satisfacción académica entre el alumnado de máster como un elemento clave para el éxito en sus transiciones; en ella inciden un conjunto de variables independientes como los motivos de elección y la motivación y la adaptación a los estudios. Todo ello debe ayudarnos a aproximarnos al fenómeno de la MEI para poder mejorar sus procesos de adaptación social, cultural y académica, promoviendo acciones de acompañamiento para un colectivo importante en y para nuestro sistema universitario.

Palabras clave: estudiantes internacionales; másteres; satisfacción de los estudiantes; motivación de los estudiantes; autoeficacia.

Introduction

Internationalisation has taken a central role in the development policies of HEIs in any country in the world. In this context, the MEI emerges as the visible face of such policies that have entered the agendas of universities and governments around the world (Knight, 2020; Vázquez García, 2015). The impact of this dimension differs from country to country; thus, data on mobility flows show that students tend to choose certain destinations: The United States (20%), together with the United Kingdom (10%), Canada and China (9% respectively), account for half of these. In terms of origin, there are also clear and consistent trends: China (993,367) and India (375,055) alone account for a quarter of those migrating for studies (OECD, 2023).

For Spain, this pattern has its own differentiated characteristics. Thus, we are positioned as the main pole of attraction for students from Latin America and the Caribbean (LAC) at master's and doctoral levels, a trend that has been maintained over time. According to data from the Ministry of Universities (MU, 2023), the total number of international students in the academic year 2021-22 was 135,474 (60% mobility by degree); the master's and doctoral levels tend to concentrate a greater number of students seeking to obtain a degree in Spain (OECD, 2023).

The international mobility project: motivations, adaptation and self-efficacy expectations

MEI has its own characteristics within the analysis of university transitions. Studying in another country is a complex transition involving multiple areas of student experience

(Beech, 2019). It is not just a transition to a new level of education, but to a new system, with differences in its pedagogical culture; an experience in a new context, with different social norms than in their home country. Schlossberg et al. (1995) point out that the magnitude of any life transition, i.e. the impact of the situation on the person experiencing it, is proportional to the set of changes it entails in their life. Therefore, the analysis of transition must be approached from a systemic perspective to capture the nature of these interactions.

From the field of transitions, the aim is to understand the process of adaptation to university on the part of international students. For them, academic and social adaptation at university is the precursor to university persistence/abandonment, a subject of institutional importance in the field of higher education.

Research over the last two decades has allowed us to advance towards a more global and comprehensive vision of the complexity of factors involved in the adaptation of university students. Likewise, we have witnessed the development or revision of explanatory models of the processes of transition to university, converging in more comprehensive proposals that highlight the interaction of personal and institutional factors in the explanation of these phenomena (Figuera et al., 2022). The literature identifies Tinto's model as one of the most influential, both in general research and in research with international students (Sarmiento et al., 2019). Tinto (2012) points out the importance of differentiating two key elements that contribute to student adaptation and satisfaction at university: academic integration understood as success in meeting the educational demands that influence performance and the desire to remain on campus; and social integration referring to the interpersonal demands of university life and related to the quality of ties between students, teachers and the wider community.

Regarding the variables that affect integration and satisfaction, the literature highlights the importance of motivation in undergraduate (Llanes et al., 2021) and Master's degree (Figuera et al., 2018; Figuera et al., 2022) academic contexts. As Popadiuk and Arthur (2021) state, the international student experience is strongly influenced by motivations for studying in another country, and evidence has been provided on how the degree of motivation influences adaptation. Several studies specifically point to the role of intrinsic motivation (Huisman et al., 2022; Wang et al., 2017). For example, Mostafa and Lim (2020) found a positive correlation between intrinsic motivation, extrinsic motivation and resilience, defined as their ability to withstand the inevitable challenges of higher education, and found significant differences between intrinsic and extrinsic motivation and students' background.

Among other important personal antecedent variables of international student adjustment, research points to the importance of positive self-efficacy, stress management and internal locus of control (Gopalan et al., 2019; Mesidor and Sly, 2016). Self-efficacy expectations indicate the degree of confidence a person has in his or her abilities to achieve academic goals. They are considered to be one of the factors that influence how students cope with the transition process in university contexts, as well as their perceived experiences and satisfaction during the transition (Lent et al., 2017). It has also been described as a person's ongoing ability to function effectively in a wide range of stressful contexts (Schwarze, 1992, cited in Gebregergis et al., 2020, p. 343), as in the case of international student adjustment. In transition research, self-efficacy is affected by

students' inexperience in an unfamiliar educational setting (Figuera and Torrado, 2015). Although international students have acquired a series of skills in their previous stage, which translate into greater confidence in handling knowledge and the logic of studying at university, in the case of international students, differences in academic and social culture limit the transfer of these previous skills (Güzel and Glazer, 2019; Muraru et al., 2020).

Academic satisfaction in successful transition

Several authors propose to analyse transition processes in the framework of what is called the student's life cycle. This processual conception of transitions also allows us to organise the intervening factors into key moments, which helps to understand the dynamics and experiences of students, as well as the outcomes in terms of adaptation and transition (Calikoglu, 2018; Fakunle, 2019). Focusing on the life cycle of the international student, this article focuses on the second stage of the MEI project, where academic satisfaction will be key to their successful adjustment and adaptation process.

Formulations have pointed to academic satisfaction as an indicator of university adaptation, driving the development of models that explain this construct, such as the socio-cognitive model of Lent (2004), validated in numerous countries, or the model of Schartner and Young (2016, 2020) for international students. For these authors, the process of academic adaptation of international students follows an upward curve as the time of their stay passes, being lower at the beginning or arrival and improving as they progress and adapt to the new academic reality. It follows from the model that international students are more likely to adapt to the country, the university and the Master's degree if they are satisfied with the international experience and have expectations of self-efficacy and results with respect to their studies that help them to stay oriented towards their goals. Two key elements are highlighted in this model: the impact on academic satisfaction of the different contexts in which students participate (academic, classroom level or social context). In addition, the student's expectations of self-efficacy, considered as an input to the process, are identified as a precursor to the experience and the resulting satisfaction.

Finally, several studies have examined the influence of country of origin on students' adaptation and satisfaction levels. For example, Ammigan et al. (2021), using data from *i-graduate's International Student Barometer* (ISB) , report differences in satisfaction, with Asian international students scoring lower. Suh et al. (2019) suggest that the adjustment experiences of Asian international students may differ from others; Gautam et al. (2016) or Jones and Kim (2020) add that those from Europe adapt better than Asians, attributing the differences to the cultural similarity of Western societies.

Despite the importance of these results, we lack information on the experience of international students in Spain, especially those who move to study for a Master's degree: what are their motivations, expectations and adaptation processes, and to what extent do these variables affect their academic satisfaction? In order to answer these questions, this research pursues the following objectives:

1. To analyse the reasons for choosing the degree, self-efficacy expectations and initial adaptation and motivation, observing possible differences according to their origin (differentiating between Spanish, LyC and international students from other regions);

2. To identify those variables that predict academic satisfaction, understood as a subjective dimension of adaptation to the context of the master's degree.

Method

This paper presents the results of the survey study on the transition of international Master's students in the Social Sciences and the differences between this group and native students in their adaptation to the new cultural and academic context. This research has the favourable opinion of the Bioethics Commission of the University of Barcelona (*Institutional Review Board*: IRB00003099).

Sample

The population is made up of students from 14 official master's degrees in Social Sciences from two Catalan public universities (Universitat de Barcelona and Universitat Autònoma de Barcelona), institutions where the highest percentage of international students at master's degree level is concentrated (MU, 2023). The participating Master's degrees have been classified according to their orientation: professionalising or training in skills for the practice of the profession; research-oriented, focused on the development of research skills in a specific field (they are usually aimed at the doctorate); and finally, mixed Master's degrees that offer both routes or itineraries. The degrees included are diverse in their disciplinary fields (Economics, Communication, Law and Education).

With the prior authorisation of the Master's coordinators, the questionnaire was administered to students during class hours. Table 1 shows the distribution of the sample participating in the study: 68.9% of the total enrolled students answered the questionnaire (sampling error = 3.2%, 95% confidence level for finite populations: p and q = 0.5); the sampling method was non-probabilistic, accidental according to student attendance in the classroom during the first semester. Of the 314 participants who responded to the questionnaire, 133 (42.4%) were international students, of whom seven out of ten were from LIS countries (percentages similar to those found in SUE).

As for the general profile of the sample: 73.2% are women (a percentage that drops to 67% among international students); the average age is 26.6 years (Dt. = 5.33), a third of the students live with their parents and access the master's degree directly from the Bachelor's degree (without previous related professional experience). This profile differs for international students: older students (28 years old; Dt. = 5.46) and with a previous professional career in the Master's field of study.

Table 1

Population and sample of students participating in the research

	Registration (N)	Sample (n)	Response rate (%)	Autochthonous n (%)	International n (%)
Total	456	314	68,9	181 (57,64)	133 (42,36)

Instrument

The Initial Questionnaire for Transition to University Master's Degrees (CIT-MU) designed within the framework of the R&D project[2] was used to collect the information. The study considered the constructs and variables:

1. The origin of the student body as a contrast variable, obtaining the following categories: Spanish, LAC and Other international (including those who are not from Latin American and Caribbean countries).

2. The reasons for choosing the degree were measured by means of an 11-item scale with 5 rating points. As developed in previous studies (Figuera et al., 2022), there are three clear motivational factors: intrinsic, extrinsic ("Improvement of professional situation") and those that have to do with professional change or redefinition ("Change of professional area"). For the specific case of international students, a subdivision emerges among the intrinsic factors called personal and academic self-fulfilment ("Enjoying a new educational experience"), and another related to professional prospective - "Expanding professional competences" (Valls-Figuera et al., 2023). The technical analysis of the scale on choice motives shows the following results: Cronbach's α = 0.677; KMO = 0.675; Bartlett's test p = ,000; the items are grouped into four factors that explain 62.72% of the variance.

3. Self-efficacy expectations, based on the scale of Lent et al. (2017) in its Portuguese version and subsequent translation into Spanish, consisting of seven items ("Completar de forma satisfactoria de todos los requisitos académicos") that measure the degree of confidence that the person has about their abilities to achieve academic goals (Cronbach's α = 0.813; KMO = 0.848; Bartlett's test p = ,000; S^2 explained = 49.06%; one-factor structure for which a single-score independent variable has been generated).

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4. Overall perception of initial adaptation to studies (one item), degree of initial motivation (one item) and academic satisfaction with the entrance qualification (one item); all measured on a 5-point rating scale.

5. Finally, the adaptation of the academic satisfaction scale (Figuera et al., 2019), composed of seven items and five rating points (Cronbach's α = 0.872; KMO = 0.891; Bartlett's test p = ,000; S^2 explained = 57.41%) and treated as a single factor. From the overall mean scale score, it was dichotomised to be considered as a dependent variable in the logistic regression study.

Data collection and analysis procedure

The parametric assumptions of the scalar variables were verified (p < ,001) and bivariate descriptive and multivariate non-parametric analyses were carried out with the SPSS-Win v.26 statistical software. The different constructs included in the questionnaire were analysed independently in order to contextualise them. Finally, in order to establish the predictor variables of academic satisfaction, a Binary Logistic Regression analysis was performed.

Results

The analysis of the reasons for choice (Table 2) shows statistically significant differences between the mean scores of international and native students in the second factor (p = 0.000), related to the value of training in itself (personal and academic self-fulfilment), so that it is more important for international students, with a moderate effect size. The rest of the factors follow a similar trend, with similar scores: higher scores for deciding to do a Master's degree in order to broaden professional competences and acquire a better educational background (Factor 3); secondly, the importance of extrinsic motives for both groups; finally, the lower scores on the fourth factor show that they are not a priority objective for either Spanish or international students ($\bar{x}$ < 3).

Table 2

Motives for choice according to student type, significance of the contrast test and effect size

Factors [1]	Total (n=314) $\bar{x}$ (Dt.)	Spaniards (n=181) $\bar{x}$ (Dt.)	International (n=133) $\bar{x}$ (Dt.)	Contrast test [2] Sig.	Size of the effect Cohen's d (1-β)
F1	3,93 (0,88)	3,94 (0,86)	3,91 (0,91)	,820	
F2	3,55 (0,74)	3,40 (0,72)	3,76 (0,72)	,000 [*]	0,5 (0,99)

F3	4,54 (0,7)	4,53 (0,66)	4,56 (0,76)	,336
F4	2,91 (1,12)	2,85 (1,07)	2,99 (1,18)	,212

Note.[1] (F1) Extrinsic motives; (F2) Motives for personal and academic self-fulfilment; (F3) Motives for professional prospective; (F4) Motives for professional change or redefinition. [2] Mann-Whitney U-means test for two independent samples. [*] Identifies $p < ,05$.

The reasons for choice by region of origin (Figure 1) show that LyC students form a group with their own characteristics. The contrast according to origin (international versus Spanish) only shows differences in the second factor (personal and academic self-fulfilment motives); but when disaggregated according to region of origin, new ones emerge: in extrinsic motives (Factor 1) and career prospect (Factor 3). In all of them, LyC students score higher than the rest, and it is the other international students who present a lower average in the three factors where differences have been found.
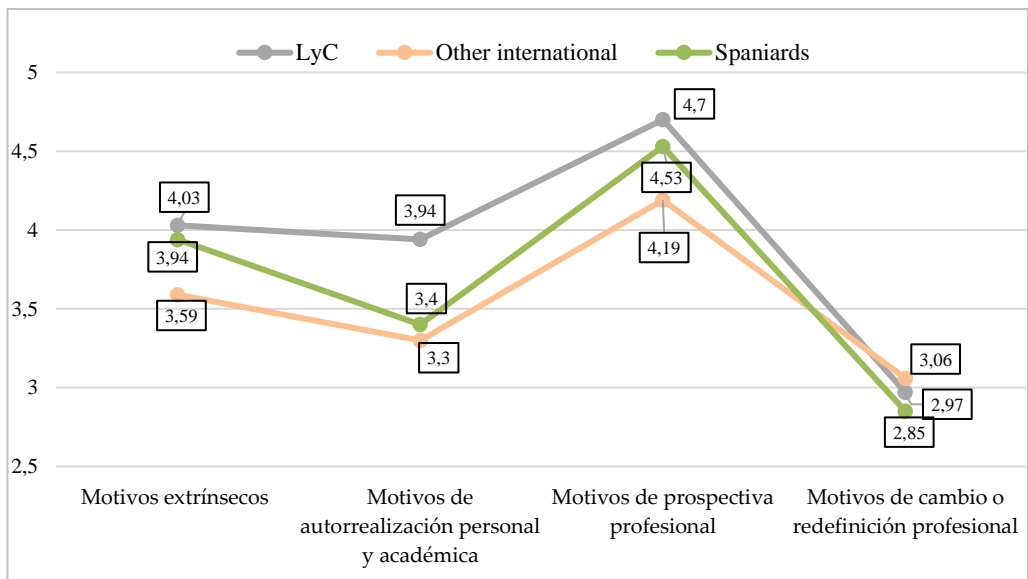

Figure 1. Mean scores on the choice motive factors according to origin

The differences in Factor 2 increase when the international group is segmented, which allows us to affirm that the R&C group gives more importance to intrinsic motivation (from an average of 3.76 to an increase of almost 0.2). This is due to the motivations of older students with work experience to enrol in a Master's programme abroad. In contrast,

extrinsic choice motives (Factor 1) come second in the choices of Spaniards and "other internationals", and are considered more important than personal and academic development motives.

In relation to self-efficacy expectations, the scores of international and Spanish students in the overall mean ($\bar{x}$ = 4,15 y $\bar{x}$ = 4.1 respectively) and on the items as a whole do not show statistically significant differences. However, the disaggregated analysis by region (Table 3) shows differences across the scale as a whole. These data indicate that LyC students are the most confident in their ability to respond to academic demands, to manage roles and to cope with difficulties, while those from other geographical regions perceive greater challenges in this same process.

Table 3

Expectations of self-efficacy as a function of student typology, significance of test-retest and effect sizes

Self-efficacy items	Spaniards	LyC	Other international	Contrast test [1]
	$\bar{x}$ (Dt.)	$\bar{x}$ (Dt.)	$\bar{x}$ (Dt.)	Sig.
AC1	4,27 (0,65)	4,43 (0,61)	3,89 (0,94)	,004 [*]
AC2	4,31 (0,66)	4,56 (0,60)	3,92 (0,83)	,000 [*]
AC3	3,96 (0,80)	4,16 (0,79)	3,78 (0,85)	,041 [**]
AC4	3,94 (0,87)	4,34 (0,75)	3,68 (0,91)	,000 [*]
AC5	4,30 (0,69)	4,39 (0,71)	3,78 (0,85)	,000 [*]
AC6	3,91 (0,90)	4,24 (0,79)	3,49 (0,87)	,000 [*]
AC7	4,01 (0,74)	4,28 (0,74)	3,32 (0,91)	,000 [*]
Total Self-Efficacy	4,10 (0,50)	4,33 (0,50)	3,69 (0,59)	,000 [*]

Note.[*] Identifies p < ,01;[**] Identifies p < ,05

With scores above 4, we conclude that the participants in the study feel fairly or very well adapted to the academic and social reality of the Master's degree (Table 4). In general terms, these values allow us to affirm that there are no significant differences depending on the type of student. However, the analysis by region detects statistically significant differences with a moderate effect (p = ,025; d = ,52) between LyC students ($\bar{x}$ = 4.17) and the rest ($\bar{x}$ = 3,81).

Table 4

Mean and deviation of the initial adaptation of Master's students according to their origin

	Initial adaptation	Contrast test [1]	Size of the effect
	$\bar{x}$ (Dt.)	Sig.	Cohen's d (1-β)
Total (n = 314)	4,17 (0,63)		
Nationals (n = 181)	4,07 (0,63)		
International (n = 133)	4,07 (0,68)		
R&C (n = 96)	4,17 (0,63)	,025 [*]	0,52 (0,83)
Other international (n = 37)	3,81 (0,74)		

Note.[1] Mann-Whitney U-test for two independent samples. [*] Identifies p < ,05

As with adaptation, Table 5 shows that initial motivation has high values in the sample as a whole ($\bar{x} = 4.13$; Dt = 0.73). Differences are observed between Spanish and international students as a whole. It is here that native students have a lower score ($\bar{x} = 4.03$, Dt. = 0.79) than international students ($\bar{x} = 4.27$, Dt. = 0.79). Although all the scores are high (above 4 out of 5), when we add the distinction by origin, this nuance between LyC students and students from other regions emerges again.

Table 5

Mean and deviation of the initial motivation of Master's students according to their origin

	Initial motivation	Contrast test [1]	Size of the effect
	$\bar{x}$ (Dt.)	Sig.	Cohen's d (1-β)
Total (n = 314)	4,13 (0,73)		
Nationals (n = 181)	4,03 (0,79)	0,004 [*]	0,30 (0,83)
International (n = 133)	4,27 (0,79)		
R&C (n = 96)	4,37 (0,73)	0,006 [*]	0,48 (0,78)
Other international (n = 37)	4,03 (0,69)		

Note.[1] Mann-Whitney U test for two independent samples. [*] Identifies p < 0.05

Table 6 shows the overall score on the academic satisfaction scale, and the differences according to origin. The LyC students show the highest overall satisfaction with their academic experience in the first period in the Master's degree, differing from the rest of the international students (p < ,000).

Table 6

Academic satisfaction of students according to their origin

	Total (n = 314)	Spaniards (n = 181)	R&C (n = 96)	Other international (n = 37)	Contrast test [2]	Size of the effect
	$\bar{x}$ (Dt.)	$\bar{x}$ (Dt.)	$\bar{x}$ (Dt.)	$\bar{x}$ (Dt.)	Sig.	Cohen's d (1-β)
Total [1]	4,02 (0,63)	3,92 (0,65)	4,26 (0,59)	3,94 (0,41)	,000 [*]	0,64 (0,9)

Note.[1] Sum of scale items. [2] Kruskal-Wallis H-test for k independent samples. [*] Identifies p < ,05

The satisfaction scale scores (Table 7) show a positive relationship with the other two variables that make up the academic adaptation construct: initial adaptation and motivation; this is shown by the correlation coefficient between these variables ($r = 0.540$ and $r = 0.656$ respectively). This positive trend in the direction of the correlation indicates that students who perceive themselves as more adapted and motivated with their studies at the start of the Master's degree are also those who feel more satisfied with the training received and with their role in the learning process. Satisfaction is also associated with the two intrinsic motivation factors (F2 and F2). The correlation with self-efficacy expectations is significant but weak (0.214).

Table 7

Spearman correlation with choice motives, expectations, motivation and initial adaptation factors.

	F1	F2	F3	F4	Self-efficacy	Motivation	Adaptation
Academic Satisfaction	0,083	0,350**	0,306**	0,141*	0,214**	0,656**	0,540**

Note: * p < 0.05. ** p < 0,01

The application of the regression study (Table 8) includes as independent variables (VI) all those that have given a significant relationship in the previous analyses and allows us to identify which variables are predictors of academic satisfaction, including, in addition, geographical origin, satisfaction with the degree of access and extrinsic motives. For Block 1 of the model, the ROA statistical efficiency score indicates that there is a significant improvement in the prediction of the probability of occurrence of the categories of the dependent variable (DV). Effectively, this indicates that the variables introduced in the model significantly improve their fit and therefore better explain Master's students'

academic satisfaction (DV).

The Nagelkerke R-squared value, shown in Table 8, indicates that the proposed model explains 53.2% of the DV variance. The above results already attest that the VIs in the model can adequately explain what the DV outcome may be. In order to further evaluate the goodness of fit of the RL model, the Hosmer-Lemeshow test is applied; for the fit to be good, the significance must be greater than 0.05, a criterion that is met in the model assumption (Sig. = 0.719), so that the goodness of fit has been excellent, giving meaning to the regression study carried out.

Table 8

Variables in the equation , omnibus tests on coefficients and model summary

	Step 0 Constant	Step 1 Model	Step 1
B	0,428		
E.T.	0,128		
Wald	11,218		
gl	1		
Sig.	0,001		
Exp(B)	1,535		
Chi²		127,802	
gl		9	
Sig.		0,000	
-2 log likelihood			215,613a
Cox and Snell R-squared			0,393
R square of Nagelkerke			0,532

Note.a. The estimation has been terminated at iteration number 6 because the parameter estimates have changed by less than 0.001.

To assess the predictive capacity of the model, the sensitivity and specificity values are calculated to evaluate the fit of the regression model, comparing the predicted values with the observed values (Table 9). This first step shows the percentage of students correctly classified by the model, which represents a 78.5% probability of being correct in the DV result, taking into account the VIs included and being higher in the very satisfied students (84.5%).

Table 9

League table [a]

	Observed		Forecast		Percentage correct
			Academic satisfaction		
			Moderately satisfied	Satisfied or very satisfied	
Step 1	Academic satisfaction	Moderately satisfied	70	31	69,3
		Satisfied or very satisfied	24	131	84,5
	Overall percentage				78,5

Note.[a] The cut-off value is 0.500.

Finally, Table 10 presents the variables in the equation, the regression coefficients with their corresponding standard errors (SE), the value of the Wald statistic to evaluate the null hypothesis, the associated statistical significance and the value of the Odds Ratio (OR) with its confidence intervals.

Table 10

Variables in the equation[a]

	B	E.T.	Wald	gl	Sig.	Exp(B)	C.I. 95% for EXP(B)	
							Inferior	Top
Initial adaptation	**1,680**	**0,401**	**17,587**	**1**	**0,000**	**5,365**	2,447	11,765
Initial motivation	**1,338**	**0,326**	**16,803**	**1**	**0,000**	**3,810**	2,010	7,223
Motive F2	**1,253**	**0,319**	**15,429**	**1**	**0,000**	**3,501**	1,874	6,543
Satisfaction with access qualification	**0,444**	**0,223**	**3,985**	**1**	**0,046**	**1,559**	1,008	2,412
Motive F3	-0,186	0,281	0,437	1	0,509	0,830	0,478	1,441
Motive F4	0,336	0,172	3,815	1	0,051	1,399	0,999	1,961
Self-efficacy	-0,671	0,379	3,136	1	0,077	0,511	0,243	1,074
LyC students	**1,050**	**0,476**	**4,867**	**1**	**0,027**	**2,857**	1,124	7,261
Reason F1	**-0,487**	**0,231**	**4,464**	**1**	**0,035**	**0,614**	0,391	0,965
Constant	-13,411	2,274	34,781	1	0,000	0,000		

Note.[a] Variable(s) entered in step 1: initial adaptation, initial motivation, personal and academic self-fulfilment motives, satisfaction with the entrance qualification, career prospective motives, motives for change of professional area, self-efficacy expectations, LyC students, extrinsic motives.

The variables with the greatest explanatory weight and which make up the model of academic satisfaction of Master's students are: initial adaptation and motivation, personal and academic self-fulfilment motives, satisfaction with the entrance qualification and, finally, being an R&C student. From a negative point of view, extrinsic motives will have a negative influence on student satisfaction.

Discussion and Conclusions

This article presents an emerging field of study, both at master's level and in terms of the group analysed, which has received little attention in our country (Valls-Figuera et al., 2023). Research on the transition of international students should contribute to the provision of evidence in specific academic contexts to optimise their experiences throughout their academic journey.

Firstly, the results have shown the existence of differences depending on the origin of the students, not only between native and international students, but also within this group, a differentiated profile has also been observed depending on the region. Thus, in relation to the reasons for choice, students from LyC are the most intrinsically motivated in their choice to study a Master's. They are also the most intrinsically motivated in their choice to study a Master's. In addition, they are the group with the highest level of intrinsic motivation. Moreover, they are the group with the greatest confidence in their ability to respond to academic demands, to manage their roles and to cope with difficulties; they perceive themselves to be more academically adapted and express higher levels of motivation. Students from other geographical regions find the same process more challenging and feel less adapted and motivated. As the review indicates, shared language elements and some cultural and academic similarities facilitate this perception. On the contrary, cultural distance has an important impact on adaptation processes, already noted in other similar research (Güzel and Glacer, 2019; Jones and Kim, 2020; Muraru et al., 2020; Sarmiento, 2020; Suh et al., 2019).

The second objective of the research was to analyse which of these variables are predictors of student academic satisfaction. As has been observed theoretically (Figuera et al., 2018; Lent et al., 2017; Schartner and Young, 2016) and confirmed by binary logistic regression analysis, initial adaptation and motivation for studies, intrinsic motivations and origin are predictors of academic satisfaction. This will be higher among those who are more adapted and motivated by their studies, who have chosen the Master's degree prioritising the intrinsic motives of academic and personal self-fulfilment and who are satisfied with their previous training. These results complement those obtained in previous studies which confirm differences according to the motivational pattern (Figuera et al., 2019; Figuera et al., 2022; Valls-Figuera et al., 2023).

The other predictor of satisfaction is the region of origin: students from LyC show the highest scores in relation to Master's satisfaction. In conclusion, it can be seen that the initial transition process of international students to the Master's is strongly associated with their region of origin. These results are consistent with those obtained in previous research pointing to the significant association between adjustment and international student background and related to cultural distance (Ammigan et al., 2021; Jones and Kim, 2020; Merola et al., 2019; Suh et al., 2019).

It is also worth noting the significant correlation between self-efficacy expectations and satisfaction. The importance of self-efficacy expectations is pointed out in the socio-cognitive model of Lent (2004) and the TRALS persistence model (Figuera and Torrado, 2015), as one of the factors that influence how the person resolves or faces the transition process in university contexts, contributing to satisfaction through adaptation and motivation. Likewise, from psychological approaches to migration, the perception of self-efficacy is included among the personal resources for coping with and negotiating situations in the international environment (Gebregergis et al., 2020; Gopalan et al., 2019; Jones and Kim, 2020; Mesidor and Sly, 2016; Sarmiento et al., 2019).

Puukari (2012) cited by García et al. (2018) describes MEI, metaphorically, as an "academic, intellectual, cultural and emotional journey that offers opportunities for international interaction and personal growth, enriching experiences, gaining knowledge and developing skills that benefit the student professionally and personally" (p. 240). A journey full of challenges that they will have to overcome or manage throughout their transition. However, institutions and guidance services need to pay attention to a group that is sometimes under-considered in order to find successful trajectories among them.

The impact of guidance services on the adjustment and adaptation processes of international students is another line of research. As pointed out by authors such as Arthur (2017) and Fakunle (2019), services play a key role in analysing the needs of students at different stages of mobility. Arambewela and Maringe (2012) argue that university services have been designed with domestic undergraduate students in mind. Moreover, the authors conclude that the needs of postgraduate students are different from those of undergraduate students, so that the required support services cannot be designed and developed organically on the same schemes. In addition, the heterogeneity of profiles among international students must be considered, and therefore the importance of addressing their problems and challenges and facilitating their adaptation.

As a limitation of the study and a prospective line at the same time, the aim is to monitor the transition of international students, gathering all the stages of the student's life cycle in order to obtain a better understanding of their experiences and needs: from the previous stage when the process of developing mobility begins; the development of the project, paying attention to the socio-cultural, academic and psychological adaptation of this group; finally, the closure of the mobility project and the possible post-mobility trajectories that may emerge. In addition, complementing this study with a qualitative approach in which the student reflects on his/her mobility project will allow a more holistic approach to the phenomenon and favour its understanding.

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