

# Factors affecting students' re-enrolment at a public university system

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# Introduction

In the recent decades, particular interest has been paid to the **persistence** and **dropout** rates among university students (Pascarella & Terenzini, 2005; Seidman, 2005; Foster, 2010; OECD, 2010; Chen, 2011).

These studies have covered, on the one hand, the **identification** and **validation** of constructs combining different variables to improve the **explanatory models** and, on the other hand, the **analysis of specific factors** (Herzog, 2005; Cabrera et al., 2006).

# Introduction

**Although a lot of the literature tends to examine dropout as a permanent decision, in the majority of cases it is temporary** (Johnson, 2006; Stratton et al., 2008).



**30%** of the college-going population **stopped out** during some non-summer term (O' Tool, Stratton & Wetzel, 2003).

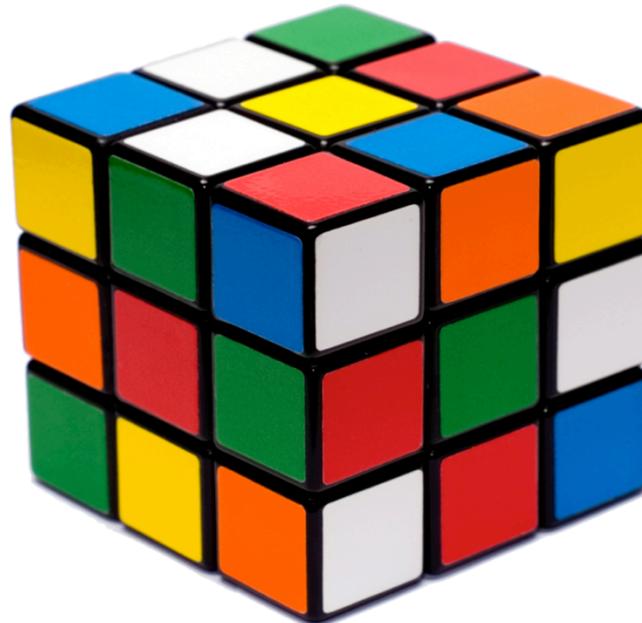
**71%** of students (n=12,648) had at least **one spell of non-continous enrollment** (Desjardins & McCall, 2010).

Only **5% to 7%**, depending on the institution, can be considered definitive dropouts (Hernández, 2010).

# Problem

However, the **effort** to understand the elements conditioning the **return** of students to the university system have been **fewer** (e.g., Ahson et al., 1998, Schatzel et al, 2011).

**Studies about Spanish university system tend to focus on single institutions** (e.g., Corominas, 2001; González et al., 2007; Lassibille & Navarro, 2009; Villar, 2010).



# Aim of the study

- (1) to construct and empirically test an **exploratory model** about students' **re-enrolment behaviour**;
- (2) to promote more **effective policies** to enhance students' **retention** through a better understanding of persistence patterns among Spanish university students.



## Participants

21,473 university students who began their degree in 2000/01 and 2001/02 and dropout the Catalan university system until the academic year 2005-2006.

	Dropout students	Re-enrolled students	Long-term dropout students
<b>Gender</b>			
Female	48.6	46.9	49.6
Male	51.4	53.1	50.4
<b>Nationality</b>			
Spanish	97	99.2	95.6
European	1.8	0.3	2.7
Non-European	1.2	0.4	1.7
<b>Area of Knowledge</b>			
Arts	17.2	13.5	19.4
Sciences	9.2	11.9	7.6
Social Sciences & Law	40.4	34.6	43.9
Engineering	29.7	36.8	25.4
Health Sciences	3.5	3.2	3.6
<b>N</b>	<b>21473 (100%)</b>	<b>8053 (37.5%)</b>	<b>13420 (62.5%)</b>

# Method

## Measures

**Socio-demographics.** Gender, age and nationality

**Area of Knowledge.** Arts, sciences, social sciences and law, engineering, health sciences.

**Credit-hour earned.** 20% or less, between 21% and 50%, between 51% and 80%, 81% or more.

**University re-enrolment.** Dropout students who return elsewhere until the academic year 2005-2006.

**Same area of re-enrolment.** Dropout students who return to their initial area of knowledge (stopout vs. transfer-out).

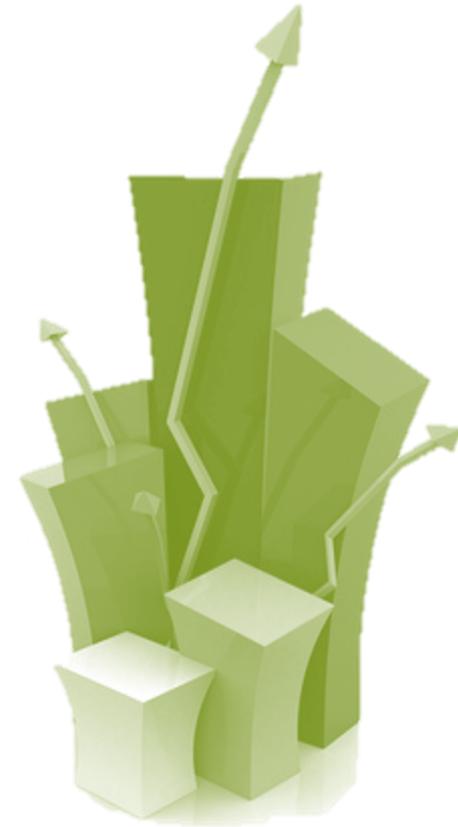
**First-year re-enrolment.** Students who return during the first year after the dropout (early re-enrolment vs. late re-enrolment).

## Data Analysis

Descriptive and bivariate analysis

Multivariate analysis: 3 multiple regressions were ran to determine the relationship between re-enrolment and every independent variable.

An interaction between gender (i.e., moderator variable), age and area of knowledge was also computed.



# Findings

	University re-enrolment	Same area re-enrolment	First-year re-enrolment
Percentage	37.5	12.7	76.9
N	21,473	8,053	8,053

- ❑ The majority of dropouts are definitive.
- ❑ A small percentage of students return to the area of knowledge of their initial studies.
- ❑ Most of the students re-enrol during the first year.

# Findings

	University re-enrolment	Same area re-enrolment	First-year re-enrolment
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## Gender

Female	36.2 (-2.2)	15.4 (4.7)	75.9 (-0.7)
Male	38.7 (2.1)	10.3 (-4.4)	77.8 (0.7)

## Age

19 years and less	67.1 (29.0)	11.1 (-2.1)	83.5 (3.7)
20 & 22 years	49.8 (16.1)	12.3 (-0.6)	75.8 (-0.7)
23 & 24 years	28.6 (-9.1)	12.3 (-0.3)	75.9 (-0.4)
25 years and over	17.4 (-28.5)	16.6 (4.0)	68.3 (-3.5)

## Nationality

Spanish	38.4 (2.0)	12.6 (-0.2)	77.1 (0.2)
European	7.2 (-9.7)	25.0 (1.8)	67.9 (-0.5)
Non-Eu	13.4 (-6.4)	22.9 (1.7)	42.9 (-2.3)

❑ A higher proportion of women who do re-enrol do so in the area of knowledge of the original course

❑ Younger students re-enrol more and in a higher proportion during the first year

❑ Non-Spanish students reveal a lower percentage of re-enrolment

# Findings

	University re-enrolment	Same area re-enrolment	First-year re-enrolment
<b>Area of Knowledge</b>			
Arts	29.4 (-8.0)	51.1 (35.6)	68.3 (-3.2)
Sciences	48.3 (7.8)	28.5 (13.8)	75.7 (-0.4)
Social Sciences and Law	32.1 (-8.2)	4.3 (-12.4)	74.2 (-1.6)
Engineering	46.5 (11.7)	1.6 (-17.0)	83.1 (3.8)
Health Sciences	34.9 (-1.2)	10.0 (-1.2)	75.0 (-0.3)

- ❑ Engineering and social sciences and law recover less students in the re-enrolment processes
- ❑ Engineering students re-enrol the most, behind science only, and does so earlier.

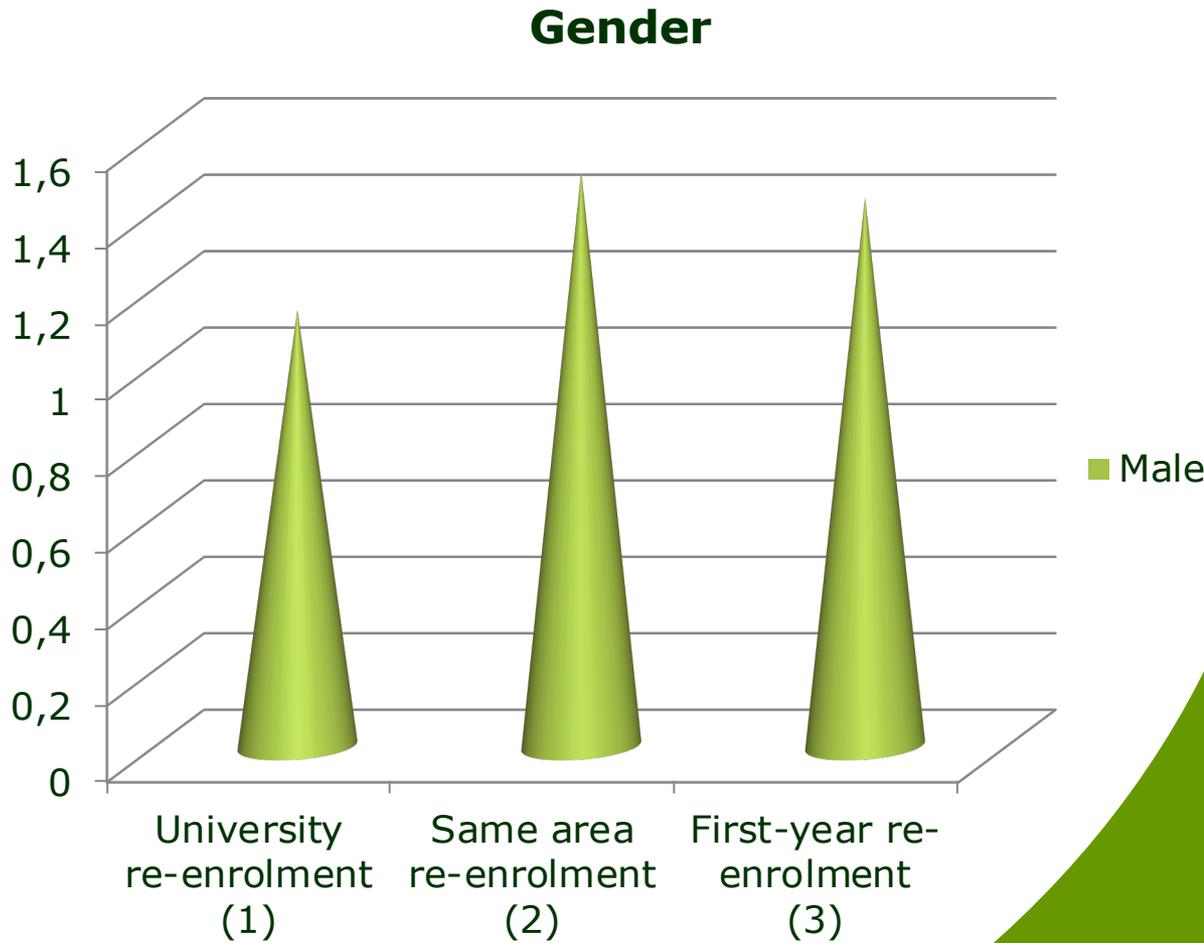
# Findings

	University re-enrolment	Same area re-enrolment	First-year re-enrolment
<b>Credit hour earned</b>			
20% and less	41.0 (7.2)	12.4 (-0.7)	76.0 (-0.8)
Between 21 & 50%	28.5 (-8.7)	13.9 (1.1)	80.6 (1.4)
Between 51 & 80%	29.4 (-4.3)	15.8 (1.6)	87.4 (2.1)
81% and over	7.7 (-11.4)	7.1 (-1.0)	50.0 (-2.0)

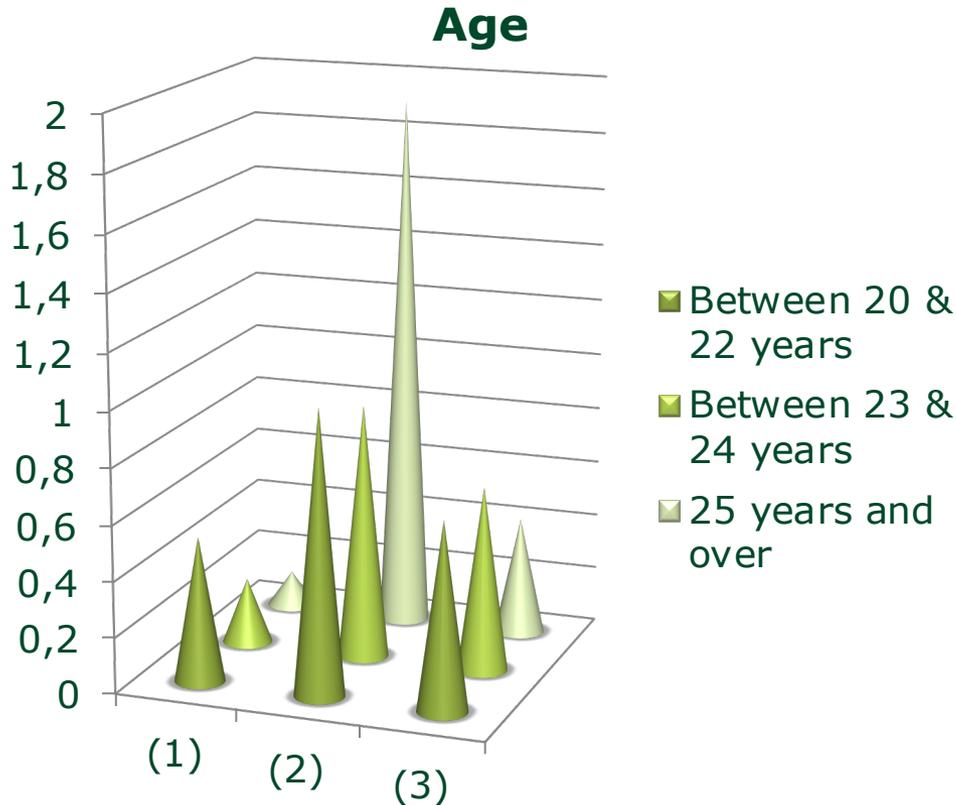
- ❑ Students with a higher percentage of studies successfully passed have the lowest re-enrolment rate, tend to change area the most and do so the latest.

# Findings

- gender has the most consistent influence
- male students have more probabilities of both re-enrolment and the two re-enrolment types analysed.



# Findings

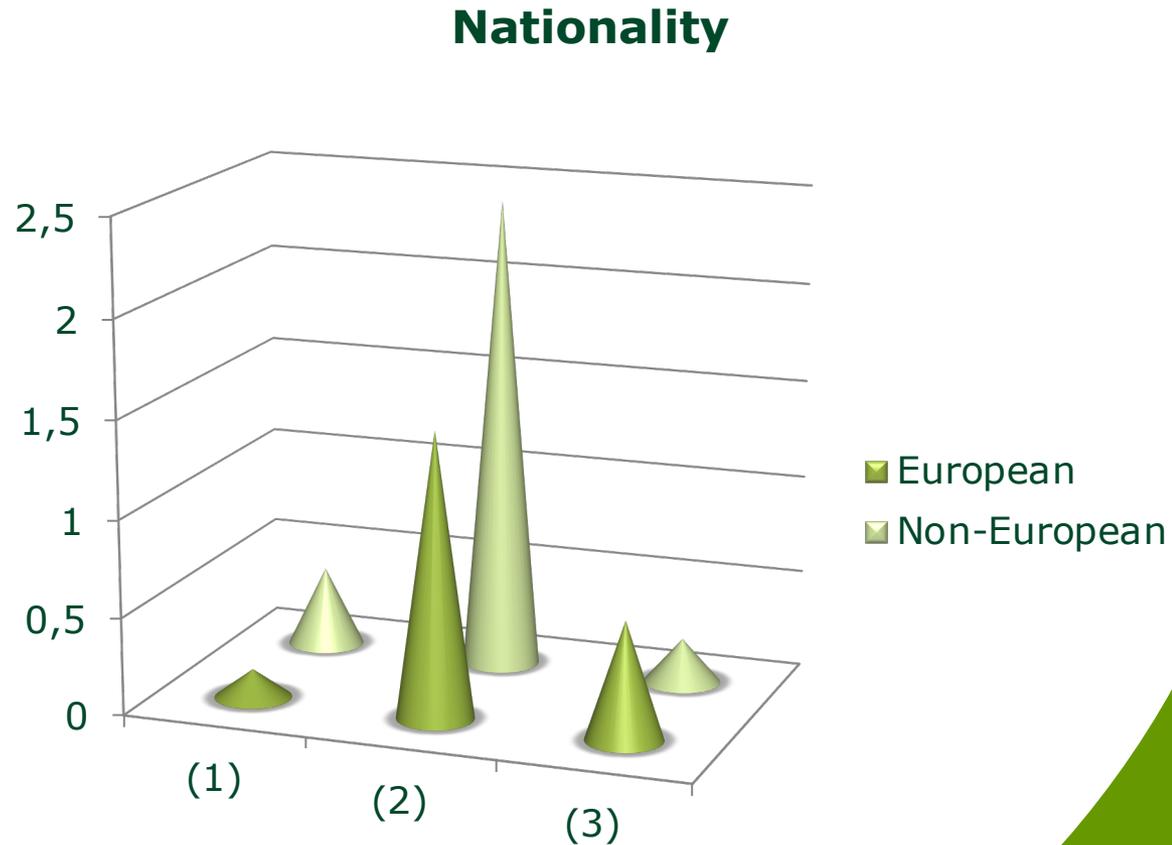


❑ the older the student, the less likely it is that they will re-enrol and do so during the first year following dropout

❑ the probability of re-enrolling in the same area of knowledge is almost double for students aged above 25 years of age, compared with younger students

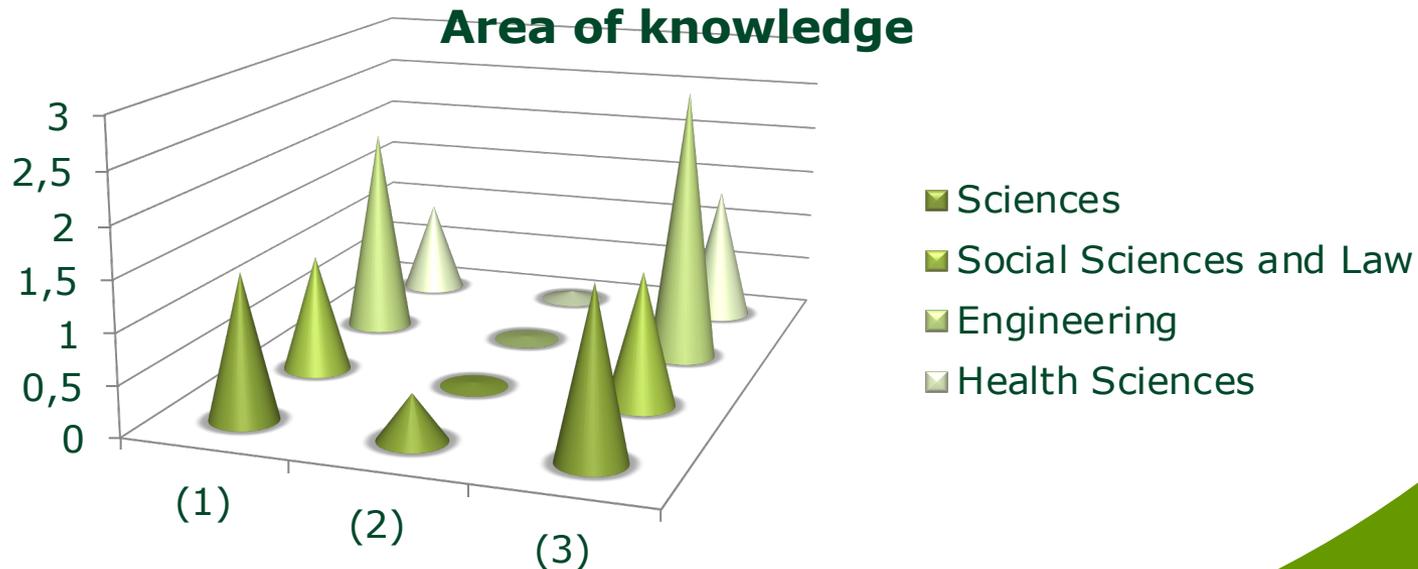
# Findings

□ although non-Spanish students have less probabilities of re-enrolment and of doing so during the first year, when they do re-enrol, they are more likely to remain in the same area of knowledge.



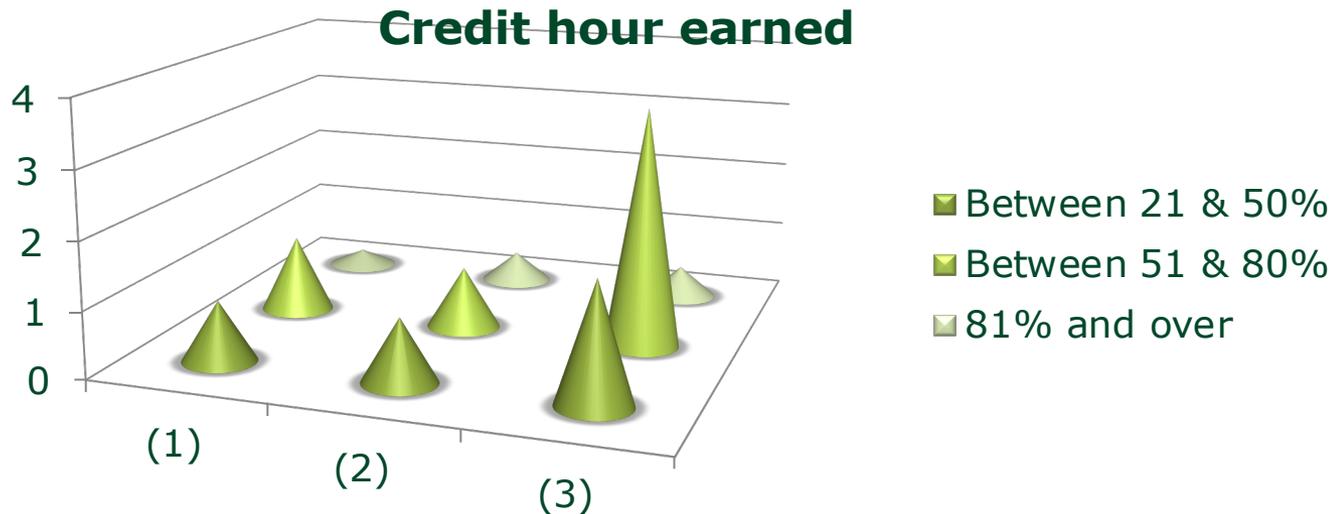
# Findings

- ❑ similar behaviour between the re-enrolment model and the first year re-enrolment model
- ❑ the group of students that presents most probabilities of re-enrolment is that of the area of engineering
- ❑ female arts students have higher probabilities of re-enrolling in the same area of knowledge



# Findings

- students with the 21% or more of the course credits have a slightly lower probability of returning to the same area of knowledge after a non-enrolment spell.
- students who have practically all the course credits (i.e., 81% or more) are only one quarter as likely to re-enrol and half as likely to do so in the same area of knowledge.



# Some (early) conclusions

- ❑ Our findings suggest the importance of **contextualizing retention strategies** to meet the particular needs of the degrees, schools and universities and understand the potential influence of national policies, management priorities, learning traditions and organizational cultures.
- ❑ The results highlight possible **deficiencies in the university tutoring and guidance systems** and
- ❑ Encourage the **design of targeted policies** that increase the **efficiency and effectiveness** of our university systems, clearly differentiating between those **students** who decide to **dropout** of their university studies, those who decide to have **non-enrolment spells** and those who continue their university studies by **enrolling in another degree or institution**.

# Thank you for your attention !!

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