CAUSES OF ABSENTEEISM IN UNIVERSITY STUDENTS AND ITS EFFECTS IN THE ACADEMIC PERFORMANCE

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CAUSES OF ABSEENTISM IN UNIVERSITY STUDENTS AND ITS EFFECTS IN THE ACADEMIC PERFORMANCE

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Natividad Crespo, Maria Teresa Palomo, Mariano Méndez

ESIC Business & Marketing School, Madrid, Spain

E-mails natividad.crespo@esic.edu, maite.palomo@esic.edu, mariano.mendez@esic.edu

Abstract

This paper presents the results obtained in the evaluation of the reasons involved in the university student absenteeism at ESIC Business & Marketing School.

The term absenteeism has been defined as the conscious and deliberated action of been away from the physical space of the University classroom conditioned for some factors that influence the search of alternatives to the use of time.

For a good quality of teaching and good academic performance is required that the students regularly assist to classes for this reason abseentism in education is considered a first order problem from the educational, social, economic and personal point of view.

In order to detect the main reasons that impact in the decision of not assisting to class, a questionnaire containing 78 items regarding the causes of abseentism was created.

Different focus groups of students and teachers were created for the design of the questionnaire, also were included questions from previous researches in the literature.

The question asked to the students was: From these factors, indicate which elements are important in your decision of no assisting to the classroom. That's to say I decide not to assist to class because…

The answer was in form of a Liker scale from 1 to 5. 1 indicating totally disagrees and 5 indicating totally agree.

Information about the percentage of lost classes, gender, academic grade, course, and age was also required.

The sample included a total of 545 students from different degrees and courses. Information of mean academic grade was obtained from a total of 225 students.

The study provides new evidences on the importance of considering variables related to physical, motivational and emotional factors that affect the students not considered in previous studies. Also confirms the results of the literature including factors related to the nearness of examinations, the Professor's methodology and the social commitments.

It was obtained clear statistical evidence of the inverse relation between absenteeism and academic grade.

Keywords: Absenteeism, university students, academic performance.

1 DISCUSSION

The term absenteeism has been defined as the conscious and deliberated action of been away from the physical space of the University classroom conditioned for some factors that influence the search of alternatives to the use of time.

The majority of the papers trying to explain the abseentism analyze the subject in terms of multicausality. The first studies in the 60s from Dole and Digman [1] in the Hawai University concluded that there exist 13 reasons for assisting to class, based on four categories: reasons, interest, values and influences.

Clark [2] indicates that the main difference between absentee and not absentee students comes from the social life of the firsts.

In the 90s, Devadoss and Foltz [3] concluded that the factors related with the class assistance are: motivation, self financing of the student, number of hours in the job, the quality of the teachers, the average grade of the previous course and the methodology in the classroom.

The work of Timmis and Kaliszer [4] identifies social and personal compromises and stress as factors that explain the abseentism in the University.

Rodriguez et al. [5] relates abseentism with the methodology of the teachers, proximity of exams and teacher motivation to students. Espada [6] with the same questionnaire obtains as the main cause of abseentism the proximity of exams.

Alvarez et al. [7] points out that the teacher and proximity of exams are the main causes of abseentism.

Massingham and Herrington [8] indicate that the factors affecting abseentism are: illness, occupation, work, bored classes, new technologies or the teacher.

Doyle et al. [9] find that the dissatisfaction with the teachers, time to the travel from home, the familiar or social compromises are related with abseentism.

Recently Triado-Ivern et al. [10] and De Jorge et al. [11] explain abseentism with causes not related to the students, bored classes, the subject or the teacher's methodology.

In short, the literature points out that the main factors relating with abseentism are:

- Social life, familiar or social compromises
- Job, number of hours
- Quality of teachers, teacher's motivation to students, teacher's methodology
- Stress
- Time of travelling from home
- Proximity of exams

In our case, in order to detect the main reasons that impact in the decision of not assisting to class, a questionnaire containing 78 items regarding the causes of abseentism was created. Different focus groups of students and teachers were created for the design of the questionnaire.

Apart from the focus group the main reasons found in the literature were included.

As a result the questionnaire contained the following blocks trying to explain the causes that the student perceives as the main factors to be absent are, and can be seen in the Table 1.

Table 1. Classification of the reasons to not assist to class.

Related with the student:	Related with the University
• Motivational factors • Personal, familiar and social troubles • Physical factors • Emotional factors	• Organization • Academic • External variables
Related with the teachers: • Methodology • Attitude	Related with the Social Environment • Leisure time

2 QUESTIONARY DESCRIPTION

In order to make a profile of the student the following data was collected: gender, age, course, average grade, missed class percentage, academic level of the parents and time to arrive to the University.

The rest of the survey has 78 items in Likert scale (1, strongly disagree to 5, strongly agree) with the following question:

Mark in which measure the following elements influence in your decision of **NO** assisting to class. That's to say, **I decide not to assist to class because**…

3 SAMPLE

The survey was made to 545 students of ESIC Business & Marketing School, obtaining 460 valid answers with the declaration of the missed class percentage. The proportion of missed classes can be seen in Table 2.

Table 2. Proportion of missed classes

		Frequency	Percent
Valid	0 and 10 %	193	42,0
	11 and 20 %	166	36,1
	21 and 30 %	77	16,7
	31 and 40 %	24	5,2
	Total	460	100,0

4 MEAN RESULTS

In the Table 3 we can see the mean of the answers to the items related with the student. The items with greater mean are "I'm tired" with a value of 2.9 and "I can decide with freedom not to assist to class" with a value of 2.8.

Table 3. Mean of answers related with the student causes not assist to class.

			Mean	Std. Dev.	Median	Mode
Student	**Motivation**	Lack of interest in the degree	1,3	0,8	1	1
		I'm not motivated	1,9	1,1	1	1
		Boredom	1,5	0,9	1	1
		I can pass without going to class	1,7	1,0	1	1
		My behavior is irresponsible	1,7	1,1	1	1
		I can decide with freedom not to assist to class	*2,8*	*1,5*	*2,5*	*1*
		Because of my economic situation I'm not worried about my degree	1,3	0,8	1	1
		I have all my necessities covered I don't mind my degree	1,1	0,5	1	1
		If you are obliged to assist to class you do the opposite	1,5	0,9	1	1
		Bad election of the degree	1,3	0,8	1	1
		Lack of effort	1,5	0,9	1	1
		Lack of habit to assist to class	1,5	0,9	1	1
		Lack of habit of punctuality	1,6	1,0	1	1
		My degree is not a priority for me	1,2	0,6	1	1
		I prefer to study by notes instead of assist to class	1,7	1,1	1	1
		I usually miss the first and last classes	1,8	1,1	1	1
		I can't find a direct relation between the contents of the degree and my expectation	1,7	1,0	1	1
		I can't be bothered to go to class	**2,4**	**1,2**	**2**	**2**
		I prefer to assist to an academy or particular classes instead to the University	1,2	0,5	1	1
		I'm thinking in leaving my degree and begin to work	1,3	0,8	1	1
		I'm thinking in changing my degree	1,4	0,9	1	1
	Personal, familiar, social troubles	Bad relation with the group	1,5	0,9	1	1
		Serious personal troubles	1,4	0,9	1	1
		Familiar troubles	1,5	0,9	1	1
		My parents are only bothered about the grade	1,7	1,0	1	1
		I have troubles with my couple	1,5	0,9	1	1
	Physical	Health troubles	1,4	0,9	1	1
		I'm tired	*2,9*	*1,4*	*3*	*4*
		I always go to bed late; as a consequence I'm sleepy	**2,1**	**1,2**	**2**	**1**
		I don't take the breakfast at home; I go to take the breakfast because I'm hungry	1,8	1,2	1	1
	Emotional	I have anxiety and stress	1,8	1,2	1	1
		I'm feeling very down hearted: sadness, apathy	1,9	1,1	2	1
		I don't feel secure about myself	1,3	0,7	1	1
		I'm worried to be asked in class	1,6	0,9	1	1
		I'm not adapted to the Institution	1,3	0,8	1	1
		I think I'm not able to pass the subject	**2,0**	**1,3**	**1**	**1**

Bold, factors with mean bigger than 2. Bold and Italic, factors with mean bigger than 2.5

In the Table 4 we can see the factors related with teachers, social environment and University.

The factors with bigger mean are included in University and related with external variables: "I prefer to study, especially when I have exams" with 3.1 and "I have exams, presentations.." with 3.2 and "With good weather is better to be out of class", with 2.9

Leisure time organization "I have alternative leisure plans: cafeteria, sports, etc" with 2.6 is the next variable with higher mean.

Factors related with teachers and methodology have mean values of 2.5 for "The teacher do not explains with clarity" and "The classes are monotonous and bored" and "The classes are very theoretic" with a 2.3.

Table 4. Mean of answers of factors related with the teacher, social environment and University.

			Mean	Std. Dev.	Median	Mode
Teacher	**Methodology**	*The teacher do not explains with clarity*	*2,5*	*1,2*	*2*	*2*
		The teacher do not apply a good methodology	1,9	1,0	2	1
		The teacher do not mind to be understand	2,0	1,1	2	1
		The teacher do not encourages the participation in the class	1,7	1,0	1	1
		The classes are monotonous and bored	**2,3**	**1,1**	**2**	**2**
		The classes are very theoretic	**2,3**	**1,1**	**2**	**1**
		Going to class do not makes easier to understand the subject	1,8	1,1	1	1
		The explanations are not adapted to my understanding	1,4	0,8	1	1
		In class is not transmitted the relation between the subject and its applications	1,9	1,1	2	1
	Attitude	**The teacher has an excess of discipline with punctuality in the first hours**	**2,2**	**1,3**	**2**	**1**
		The teacher do not motivate the students	**2,2**	**1,2**	**2**	**1**
		The teacher is not accessible	**2,2**	**1,2**	**2**	**1**
		The teacher is not interested in the students	1,8	1,0	1	1
		I have conflicts with teachers	1,4	0,8	1	1
		The teacher has lack of authority and discipline in the class	1,7	1,0	1	1
		In the class my failures are emphasized	1,4	0,9	1	1
		The effort is not valued in the class	1,9	1,1	2	1
		Sometimes a student is censored	1,8	1,1	1	1
Social Environment	**Leisure time**	*I have alternative leisure plans: cafeteria, sports, etc*	*2,6*	*1,3*	*2*	*2*
		If I go to party during the week I miss the next day class	1,4	0,8	1	1
		I have appointments with my couple, friends, etc	**2,4**	**1,3**	**2**	**1**
		I'm convinced by my friends to not assist to class	**2,3**	**1,2**	**2**	**1**
		My friends are not a good influence	1,3	0,7	1	1
University	**Organization**	The timetables of the subjects of different courses are overlapped	1,6	1,1	1	1
		I have too many free hours between subjects	1,2	0,7	1	1
		The classes are very consecutive	**2,1**	**1,3**	**2**	**1**
		I have online platform I don't need to assist to class	1,8	1,1	1	1
		The missed class system is not rigorous	**2,1**	**1,4**	**1**	**1**
		The classroom is not adequate	1,6	1,0	1	1
		The materials used in the classroom are not adequate	1,5	0,8	1	1
	Academic	**The content of the subject is very easy**	**2,0**	**1,0**	**2**	**1**
		The content of the subject is very difficult	1,7	0,9	1	1
		The evaluation is not related with the content in class	1,7	1,0	1	1
	External variables	*With good weather is better to be out of class*	*2,9*	*1,4*	*3*	*2*
		With bad weather I don't feel like to go to class	1,9	1,1	2	1
		I have troubles with the transport	**2,2**	**1,4**	**2**	**1**
		I'm obliged to do other activities, banks, etc	1,9	1,2	1	1
		My priorities are the business practices, not the classes	1,6	1,0	1	1
		My parents do not control me	1,8	1,2	1	1
		I have to work	1,4	0,9	1	1
		I prefer to study, especially when I have exams	*3,1*	*1,4*	*3*	*4*
		I have exams, presentations	*3,2*	*1,4*	*4*	*4*

Bold, factors with mean bigger than 2. Bold and Italic, factors with mean bigger than 2.5

5 RELATION BETWEEN ATTENDANCE AND ACADEMIC PERFORMANCE

In order to relate the attendance and academic performance were selected the 225 students who declared their average grade.

The average grade is the dependent variable and its value goes from 0 to 10. 10 is equivalent to A.

Were created three dummy variables, the first dummy had a value of 1 if the student declared that missed less than 10% of the classes, 0 for the rest of the values. The second dummy had a value of 1 if the student declared that missed between 10 and 20% of the classes and the third dummy had a value of 1 if the student declared that missed between 20 and 30% of the classes.

If all the dummies are 0 the student missed between 30 and 40% of the classes.

The R^2 of the regression is 0.2423 meaning that if we consider all the causes of the grade, attendance represents a 24.23% of variability.

In the Table 5, we can see the results of the regression:

Table 5. Results of the regression of number of missed classes and academic grade.

	Coefficients
Intercept	5,2**
Up to 10% Classes Missed	1,99**
Up to 20% Classes Missed	1,30**
Up to 30% Classes Missed	0,77*

** 1% Level. * 5% Level

The intercept indicates that the expected grade if a student fails 40% of the classes is 5.2. As the attendance increases the expected grade increases in 0.77 for the students that miss 30% of the classes 1.30 points if the student miss 20% of the classes, and 1.99 points if the student misses only 10% of the classes.

The Table 6 shows the expected grades at a 95% confidence interval for each of the groups in the regression:

Table 6. Expected grades at 95% confidence for each percentage of missed classes.

	Expected Average Grades and Attendance		
	Lower	Expected	Upper
Up to 10% Classes Missed	6,0	7,2	8,4
Up to 20% Classes Missed	5,3	6,5	7,8
Up to 30% Classes Missed	4,7	6,0	7,3
Up to 40% Classes Missed	4,6	5,2	5,8

6   REGRESSION ANALYSIS OF THE ITEMS IN THE SURVEY RESPECT TO THE DEPENDENT VARIABLE "PERCENTAGE OF MISSED CLASSES"

The objective with this analysis is trying to identify the items in the survey that better explains the decision of not assist to the class.

From the 78 items in the survey, only 9 variables had a level of significance of at least a 95%. The Table 7 depicts the reasons significant.

Table 7. Significant reasons that explains the causes of abseentism.

- Student
  - Motivational Factors:
    - My behavior is irresponsible
    - Lack of habit to assist to class
    - I usually miss the first and last classes
    - I'm thinking in changing my degree
  - Emotional Factors:
    - I don't feel secure about myself
    - I think I'm not able to pass the subject
- Teacher
  - Methodology
    - Going to class do not makes easier to understand the subject
- Social Environment
  - Leisure time:
    - My friends are not a good influence
- University
  - External Variables:
    - I have troubles with the transport

Is interesting to note that the majority of the factors are related with the student, only one item is related with teachers and is important the distance in travel to the University.

The R^2 of the regression is 0.869, meaning that an 86.9% of the variability of the dependent variable, percentage of missed classes, is explained with this 9 items.

The item with a higher regression coefficient or more influence in the decision to no assist to class is the item related with the motivation to assist to the first and last class.

The next items are related with emotional factors and social environment.

The coefficients of the regression can be seen in the Table 8.

Table 8. Coefficients of the regression.

	Coefficients
My behavior is irresponsible	0,078*
I think I'm not able to pass the subject	0,113**
Lack of habit to assist to class	0,110**
I don't feel secure about myself	0,170**
Going to class do not makes easier to understand the subject	0,098**
I usually miss the first and last classes	0,212**
I'm thinking in changing my degree	0,111**
My friends are not a good influence	0,169**
I have troubles with the transport	0,063**

** 1% Level. * 5% Level

7 CLASIFICATION OF THE STUDENTS AS A FUNCTION OF THEIR REASONS TO NOT ASSIST TO CLASS

Once we have detected the main reasons of missing classes is interesting to try to classify the students depending on the reasons of not assisting to class.

A K means cluster analysis was made in order to find coincidences in the profiles of the students.

Three clusters or groups were detected and the proportion of students per cluster is on Table 9.

Table 9. Proportion of students per cluster

Cluster	# Students	% Students
1	99	21,52%
2	278	60,43%
3	83	18,04%

In order to analyze if for each group exist different causes for not assisting to class, the regression analysis for each cluster was made with the 9 variables obtained as significant in the previous step.

The results are on Table 10.

Table 10. Significant causes of abseentism for each cluster.

	Coefficients	R^2
Cluster 1		0,868
I usually miss the first and last classes	0,495*	
I have troubles with the transport	0,262*	
Cluster 2		0,839
I think I'm not able to pass the subject	0,205*	
Going to class do not makes easier to understand the subject	0,173*	
I usually miss the first and last classes	0,269*	
I'm thinking in changing my degree	0,193*	
My friends are not a good influence	0,340*	
Cluster 3		0,892
I think I'm not able to pass the subject	0,222*	
I don't feel secure about myself	0,251*	
Going to class do not makes easier to understand the subject	0,162*	
I usually miss the first and last classes	0,224*	

* 5% Level

In the three regressions for each cluster the level of R^2 are of more than 83% and in the third cluster is almost of 90%.

In the Cluster 1 the item with higher coefficient is "I usually miss the first and last classes" that is an issue of motivation, but strongly related with transport and distance to the University.

In the Cluster 2 the main items are related with motivation to assist to the first or last classes, and also emotional and leisure time factors.

In the third Cluster, we find two emotional factors, with high coefficients, and also appears the motivational factor to assist to the first and last classes.

7.1 Profile of the Students of Each Group

In order to make a profile of the students is analyzed the personal information of students, including: age, percentage of missed classes, repeat course, average grade, option in the selection of the grade, and time to arrive to the University.

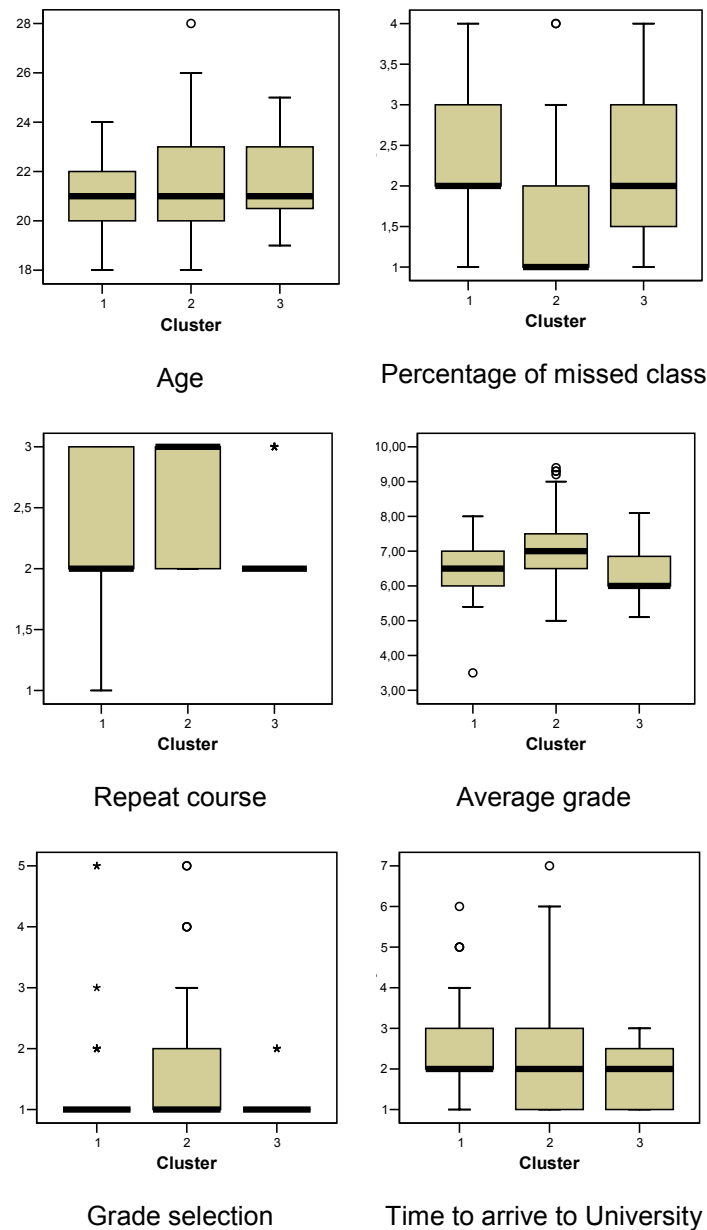The boxplots of the results are in "Fig. 1".

Figure 1. Box plots of the different personal information variables for each cluster.

In the Table 11 there is a summary and conclusion of the 3 groups and the causes of abseentism.

Table 11. Summary and conclusions of the classification.

Group	Characteristics of the Students	Causes of abseentism
Group 1. 21.5%	• This group last more time to arrive to University. • High percentage of missed classes • More students repeating course • Their grade is their first selection	• I usually miss the first and last classes • I have troubles with the transport
	Conclusion: • The main reason to not assist is referred to transport problems	
Group 2. 60.4%	• Good average grades • Few missed classes • Less students repeat course • Less students that select the grade as first option	• I think I'm not able to pass the subject • Going to class do not makes easier to understand the subject • I usually miss the first and last classes • I'm thinking in changing my degree • My friends are not a good influence
	Conclusion: • This group can be considered as not absentee	
Group 3. 18%	• Bad average grades • High percentage of missed classes • More students repeating course • Their grade is their first selection • Lesser time to arrive to the University	• I think I'm not able to pass the subject • I don't feel secure about myself • Going to class do not makes easier to understand the subject • I usually miss the first and last classes
	Conclusion: • The students of this group have an inadequacy in their personal competences as a cause of abseentism	

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