A teachers' orientation approach to understand the university teacher-student relationship

Un enfoque de orientación del profesor para comprender la relación profesor-estudiante universitario

Inés Küster Boluda
Universidad de Valencia
Ines.kuster@uv.es
http://orcid.org/0000-0002-8688-9175

Natalia Vila López
Universidad de Valencia
Natalia.vila@uv.es
http://orcid.org/0000-0001-9438-3337

Abstract: This research intends to advance the understanding of the university teacher-student relationship in the context of teachers' market orientation with the aim to improve students' performance. Thus, the study is articulated on three axes: the students' performance approach, the relationship among diverse aspects of teachers, and, finally, the effect of these aspects on students' performance. The results gained from a sample of 45 teachers and 932 students show that teachers' student orientation influences perceived learning and student satisfaction. Other interesting results are also attained that lead to certain conclusions and implications.

Keywords: Teachers' orientation, Student orientation, Burnout/engagement, University teachers and students, SEM, Multilevel models.

Resumen: Este estudio pretende avanzar en la comprensión de la relación entre el profesor y el estudiante universitario con el objetivo de mejorar el rendimiento de los estudiantes. Se articula sobre tres ejes: el enfoque de rendimiento del estudiante, la relación entre diversos aspectos del profesor y, finalmente, el efecto de estos aspectos sobre el rendimiento del estudiante. Los resultados obtenidos de una muestra de 45 profesores y 932 estudiantes muestran que la orientación al estudiante por parte del profesor afecta al aprendizaje percibido y a la satisfacción del estudiante. Se alcanzan otros interesantes resultados que permiten establecer ciertas conclusiones e implicaciones.

Palabras clave: Orientación del profesor, Orientación del estudiante, Burnout/engagement, Profesor y estudiante universitario, SEM, Modelos multinivel.

DOI: 10.15581/004.40.149-172

Introduction

There is a solid research in the field of motivation of exploring how teachers' beliefs, and the resultant instructional contexts, support students' motivation and learning (Summers, Davis and Hoy, 2017). Educators and learning environments are perceived to be most effective when students are proactive and engaged (Costa, Cardoso, Lima, Ferreira and Abrantes, 2015). In this situation, and according to de Vries and Ibarra (2004), for decades, universities have discussed how power is distributed regarding the participation of various internal and external actors in decision making. At the same time, as Ackerman and Hu (2011) state, it has been an ongoing discussion on whether marketing educators should customize their teaching activities based on the learning styles found in their classes recently.

In this context, the interest of this research lies in analysing the role of teacher performance and student satisfaction and trying to move forward on several lines. First, it tries to explain students' academic performance using variables related to the students themselves (their orientation in the classroom and their perceived self-efficacy). Second, it addresses the relationship between teacher orientation (MO), burnout syndrome (BO), and the degree of engagement (E) in the work of teaching. Finally, it studies the effect of these three teacher variables on a student performance model. So, with a sample of 45 teachers and 932 students in a Faculty of Economics, a study was carried out. SEM and multilevel analysis were used to test the hypotheses stated.

Theoretical foundation. Teacher' and students' achievement

Teachers

If the nature of knowledge is modified to that of a fluid substance that grows exponentially and changes its strategy and dynamics rapidly, our relationship with it must grow and change accordingly (Mateo and Vlachopoulos, 2013). Thus, the dominant position of proper education in the last century is followed by pedagogical approaches with competent management in the current model. In this context, the need to collect information on what is happening in the educational setting, disseminate it, and respond with the aim of providing added value compared with other educational institutions is underlined, that is, market-driven. However, it is not unusual to find studies that the focus of attention is on teachers and on how the process of teaching and learning is handled in the current context. But training and qualifications of human capital in any organization are two of the key factors in

the successful implementation of its strategies (Flavián and Lozano, 2003). Thus, it could be understood that the teaching staff is a key to the implementation of a student-oriented, market-oriented approach (MO).

Students' performance

One of the aims of teachers and the university system is to improve student performance. This paper defends the proposal by Fenollar, Cuestas and Román (2008, p. 9), who considered "academic performance beyond traditional score or note, extending it to other qualitative variables such as perceived and expected learning note". Therefore, student achievement can be approximated from a qualitative point of view by the following two variables: the expected and the perceived learning. In the present investigation, Fenollar *et al.*'s (2008) proposed model is extended, widening the field of study not only to university students in marketing, but to any students in economics, and an additional variable, the overall student satisfaction, is included. For this, we turn to the cognitive theory of motivation, achievement, and self-efficacy to explain the academic performance of students. With this model, it is possible to check whether the effect of self-efficacy on academic performance is direct or mediated by orientations or motivations (or even both).

1. Self-efficacy and effects

Caballero (2006) stated that the perceptions of students about their own self-efficacy have become a fundamental requirement for successful development actions in pursuit of personal goals. According to Usher and Pajares (2006), a high level of academic self-efficacy may cause a student to show more interest in academic work, propose more ambitious targets, cope with difficulties, and accept academic challenges when facing greater competition. In this regard, previous studies have shown that self-efficacy has a positive effect on learning orientation (e.g. Sullivan, War and Hsieh, 2007). Similarly, it can be expected that lower levels of self-efficacy will translate into a greater focus on preventing tasks, as the student will feel worse about his or her ability to undertake these academic tasks effectively (Sullivan *et al.*, 2007).

This relationship is not as obvious when it comes to the result orientation. Those with high academic self-efficacy feel confident in their ability to cope with difficulties and are also more optimistic (Pajares, 1996). These students do need not need to demonstrate an assumed ability (Fenollar *et al.* 2008). On this line, authors like Pajares, Hartley and Valiante (2001) found no significant relationship between the two concepts, but other authors yes (e.g. Gao and Xiang, 2007). Simi-

larly, Phillips and Gully (1997) found that, as perceived by the student, self-efficacy is positively related to the learning orientation, yet this relationship is negative relative to the orientation result. Therefore, we pose the following hypothesis:

> *Hypothesis 1 a-c.* Perceived academic self-efficacy by students has (a) a positive effect on their learning orientation, (b) a negative effect on their performance goal orientation, and (c) a negative effect on their work avoidance orientation.

As noted, a student with low self-efficacy will also have a low yield and probably avoid participating in the assigned activities (Knight, 2007). However, a student with high self-efficacy is more committed to the activity assigned and will show greater persistence and, therefore, greater academic satisfaction, that is, the self-efficacy that the student perceives himself also influences his academic performance. Thus, we establish the following hypothesis:

> *Hypothesis 2 a-b.* Perceived self-efficacy by students has a positive effect (a) on their perceived learning and (b) on their expected grade.

2. Orientations/motivations and effects

Students who have a learning orientation show an effort of continuous learning and greater perseverance in the study because they have a greater desire to enhance their competence and increase their knowledge (Murphy and Alexander, 2000, p. 28). Although some studies have not obtained a significant effect of learning orientation on academic performance, a considerable number of others have done so (e.g. Fenollar *et al.*, 2008). We therefore expect a positive and significant relationship between the two concepts.

> *Hypothesis 3 a-b.* Students' orientation towards learning has a positive effect on (a) their perceived learning and (b) their expected grade.

On the other hand, performance goal orientation arises when the individual is concerned primarily about attaining positive results to show his or her ability to others, regardless of the activities carried out to achieve those goals. In the educational field, although several studies have found a significant effect, others have not (e.g. Elliot, Shell, Henry and Maier, 2005). However, overall, a positive and direct effect of orientation on the performance outcome expected by the student (in terms of perceived learning and expected grade) should be articulated. Therefore:

Hypothesis 4 a-b. The performance goal orientation has a positive effect on (a) students' perceived learning and (b) students' expected grade.

Finally, students who show work avoidance orientation attempt academic tasks with the least possible effort to avoid negative consequences, such as academic failure. For example, a disposition to avoid tasks has been shown to be associated with low academic performance (Nurmi, Onatsu and Haavisto, 1995). In view of the foregoing, the following hypothesis arises:

Hypothesis 5 a-b. The work avoidance orientation has a negative effect (a) on students' perceived learning and (b) on students' expected grade.

3. Perceived learning and its effects

It can be considered that teaching is effective if it can improve student outcomes after a period of instruction and in a manner consistent with the educational objectives (Marsh, 1987). In this regard, one of the accepted criteria for evaluating the effectiveness of the student is learning (Marsh, 1987). Furthermore, the effectiveness of teaching refers to the ability to modify the knowledge and skills of the student in a given time period (Fenollar *et al.*, 2008). On this line, Olivares (2001) found that perceived learning is positively related to the expected grade of the student. Accordingly, the following hypothesis arises:

Hypothesis 6. Learning perceived by students has a positive effect on their expected grade.

Finally, Petruzzellis, D'Uggento and Romanazzi (2006) conducted a study to ascertain the reasons for student satisfaction regarding studies and determined that the two most important factors were the ability to meet the students' needs in general terms and the ability to achieve a good level of education. Therefore, those students for whom the perceived learning and expected grade are higher may show higher levels of satisfaction. Caballero (2006) verified the positive relationship with academic performance achieved by students in terms of average scores and satisfaction studies. Therefore, the following hypothesis can be posed:

Hypothesis 7 *a-b. (a) T*he perceived learning and (b) the expected grade of students have a positive effect on their overall satisfaction.

Teachers' market orientation and burnout/engagement: effects on students

1. Teachers' market orientation and students' academic performance and satisfaction

Scott and Dinham (2003) argued that teachers occupy a crucial position in meeting the expectations and hopes of society in education and teaching as well as in achieving the realization of groups and individuals. At the university level, the academic staff is a key resource, because the level of performance in teaching and research activities largely determines the contribution that the institution makes to society (Capelleras and Veciana, 2004). Moreover, teachers should discuss learning strategies to improve student performance (Gullason, 2009), such as the incorporation of marketing approaches, which are likely to produce better evaluations and demands by the students (Danko and Schaninger, 1988).

Thus, Marks (2000) noted the importance of the role of instructor/teacher (in the manner of organizing the course and behaviour in the classroom) in the performance of 2,200 students. It is assumed that market-oriented teachers try new kinds of knowledge, produce new classes, and have new external relations with other colleges and universities as well as with people in their respective regions (Keith, 1998). Therefore, this should generate a positive relationship between the teacher's MO and the creation of value for the student (the perceived learning and expected grade of the student) and between the teacher's MO and student satisfaction. In sum, the following hypothesis is raised.

> *Hypothesis 8*. The teachers' market orientation has a direct and positive effect on (a) perceived learning by students, (b) students' expected grade, and (c) students' overall satisfaction.

2. Teachers' BO/E syndrome, academic performance, and student satisfaction

Evidence suggests that teachers' attitudes and behaviours are the factors with greater relative importance to the quality of services in university education (Capelleras and Veciana, 2004). Cabrera and Báez de la Fe (2003) highlighted effort, dedication, and enthusiasm, which are related to teachers' burnout and engagement in their work.

Based on the above, we consider the lack of motivation caused by the BO syndrome as one of the personal factors that influence not only the intensity or the degree of teachers' orientation (MO), but also academic performance and student satisfaction. This phenomenon of BO can work to condition both oneself and the

people directed (Maslach, 2003). Thus, the field of education has been considered one of the working contexts in which people are more likely to suffer from this syndrome (Maslach, Schaufeli and Leiter, 2001). According to the literature, the three-factor BO model of Maslach is the most widely used model in studies of teachers. It describes three types of symptoms or factors: emotional exhaustion, depersonalization or cynicism, and a sense of low professional accomplishment (Maslach, 2003).

More recently, research has attempted to ascertain the feelings contrary to BO. In this sense, engagement is identified as a positive motivational concept (Knight, 2007; Schaufeli, Salanova, González-Romá and Bakker, 2002). It consists of three components contrary to BO: vigour against emotional exhaustion, dedication against cynicism, and effectiveness against inefficacy (Maslach *et al.*, 2001).

In the field of teaching, there are studies that show a relationship between the level of BO and certain personal and organizational consequences. This highlights the negative attitudes towards self and others. This negative attitude towards others affects relationships with fellow teachers and students (Leiter and Maslach, 1999). For example, Marks and Seashores (1997) found that teaching skills affect student performance. Lackritz (2004) proved that there was a significant relationship between teachers with BO syndrome and the learning and results achieved by their students. In sum, the following hypotheses are raised:

> *Hypothesis 9.* Teachers' burnout has a direct and negative effect on (a) learning perceived by students, (b) the expected grade of students, and (c) their overall satisfaction.
> *Hypothesis 10.* Committed teachers (engagement) have a direct and positive effect on (a) learning perceived by students, (b) the expected grade of students, and (c) their overall satisfaction.

3. Teachers' BO/E and their MO degree

Burnout is a rather psychological pattern of response that has harmful implications for the organization and/or individual (Maslach, 2003). Conversely, an employee who experiences vigour against emotional exhaustion shows high energy levels and mental endurance at work and the desire to invest effort in working. The extent to which teachers are psychologically better (E) or worse (BO) will incline them to take on market-oriented behaviours to a greater or lesser extent. In view of the arguments, we set the following hypotheses:

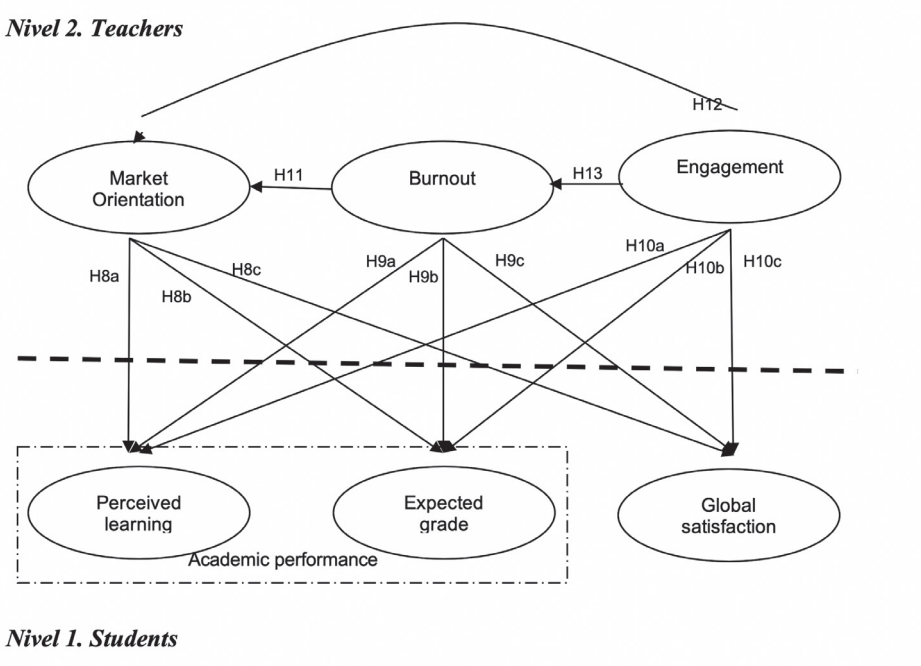
Hypothesis 11. There is a negative relationship between the teacher burnout level and the degree of teachers' market orientation.
Hypothesis 12. There is a positive relationship between the level of engagement of teachers and their degree of teachers' market orientation.

Finally, Schaufeli and Bakker (2004) argued that BO and E are negatively related. This assertion was supported by Maslach and Leiter (2001), who defined it as "an erosion of engagement" (p. 416), stating that what begins as significant work becomes unpleasant and pointless. Thus, the energy turns into depletion, dedication into cynicism, and self-efficacy into ineffectiveness. This produces the following hypothesis:

Hypothesis 13. There is a negative relationship between the level of engagement of teachers and their level of burnout.

Figure 1 summarizes the relationships proposed in this section.

Figure 1. Teacher's MO and BO/E



Method

In recent years, there has been great academic interest in improving the effectiveness of teaching in the discipline of economics (Gullason, 2009). This paper focuses on the Faculty of Economy at the University of Valencia (Spain), which currently serves about 9,000 students with a total of 448 teachers, both full-time and part-time.

To test the hypotheses, we considered two levels of analysis with two different samples. The first relates to the students and the second to their teachers. Thus, using a convenience sampling method, it was possible to contact a total of 97 teachers and obtain a final sample of 45 teachers. Most respondents (66.6%) are aged between 34 and 43 years, at a rate that is nearly equal for men and women (48.9% and 51.1%, respectively). Regarding employment, 84.4% are full-time and 15.6% part-time. The research showed a template of relatively young teachers whose experience in the institution is mainly concentrated between 10 and 20 years (68.3%) and who are doctors (75.6%).

Additionally, each teacher was asked to distribute the questionnaires to their students during the teaching of one of his subjects in class time. They were intended to represent as many degrees and courses as the Faculty of Economics offers. This process resulted in a total of 932 questionnaires. These were completed by a 64.3% of women. Of the questionnaires, 57% refer to the opinions of students about subjects taught in undergraduate studies (first and second cycle), followed by 33% that refer to subjects taught in reviews in diplomas (first cycle). The opinions of students who do not work were collected in 71.7% of questionnaires. This could explain the age range: a mean age of 22 years with students aged from 17 to 54 years. It is true that those aged 17 to 19 are in the first percentile. Note that the profile of the sample obtained from students does not differ from the profile of the population under study.

Both questionnaires used scales that were previously validated by the literature on educational psychology (Appendix 1).

The smaller of the samples (teachers) and the size and nature of the different hypotheses conditioned the use of different statistical analysis techniques. First, the students' performance model, level 1, was tested and validated. The structural equation model was used, the PLS (partial least squares), which does not presuppose a normal distribution of the data and can simultaneously assess the measurement model and the theory. The estimation of the significance of the parameters was performed by the method of bootstrapping with 400 sub-samples, with a sample size equal to the original sample of 932 cases. Thus, it could validate the tool

and test hypotheses H1 to H7. So, before to test hypotheses, and following the same procedure used in other studies (Chin, 1998; Loureiro and Miranda, 2011), psychometrics characteristics (reliability, validity and accuracy of the estimation) of the measurement model were verified, as explained below.

The adequacy of the measures was studied through the evaluation of the reliability of the individual items and the discriminant validity of the constructs (Vila, Küster and Pardo, 2012). By exploring the loading of the measures on their corresponding construct, item reliability was calculated. All the loadings of scales are proximate or exceed 0.6 (Hair, Sarstedt, Hopkins and Kuppelwieser, 2014). Composite reliability was used to analyse the reliability of the constructs since this has been regarded as a more exacting measurement than Cronbach's alpha (Fornell and Larcker, 1981). Because of composite reliability values exceed the threshold of 0.7, all constructs are reliable (Nunnally, 1978).

The measures showed convergent validity because the AVE (average variance of manifest variables) was at least 0.5. The square root of AVE was used to evaluate discriminant validity, which should be greater than the correlation between the construct and other constructs in the model. All variables have discriminant validity. In all cases, the HTMT (Heterotrait-Monotrait Ratios) surpass the value 0.85, confirming discriminant validity.

Second, and in relation to the second level, the psychometric characteristics of the concepts relating to teaching (MO, BO, and E) were evaluated. It should be noted that the three concepts are multidimensional constructs, so it was necessary to evaluate the second-order model. As PLS does not allow researchers to work with second-order constructs, the method proposed by Wold (1982) was followed: using the indicators of all the first-order constructs as indicators of the constructs of the second order. This method has been used in more than 2,000 studies (i.e. Aldás and Uriel, 2006). Following the same methodology than in the students' model, after verifying the validity of the instrument, hypotheses H11 to H13 were tested.

Finally, and following González-Romá (2008), multilevel analysis (HLM) was applied, using the M + program, to test hypotheses H8 to H10 (the cross-level effect of the teacher aspects considered that can affect performance and student satisfaction). Specifically, cross-level effects models have been applied as they allow the relationships between different constructs at different levels of analysis to be specified (González-Romá, 2008). Nesting of data occurs under the premise that certain characteristics of a teacher (MO, BO, and E) condition the result expected by students in the subjects taught. Due to multilevel models' premises, two different multilevel models (satisfaction and grade) were used for each of the variables affecting level two and level one (MO, BO, E).

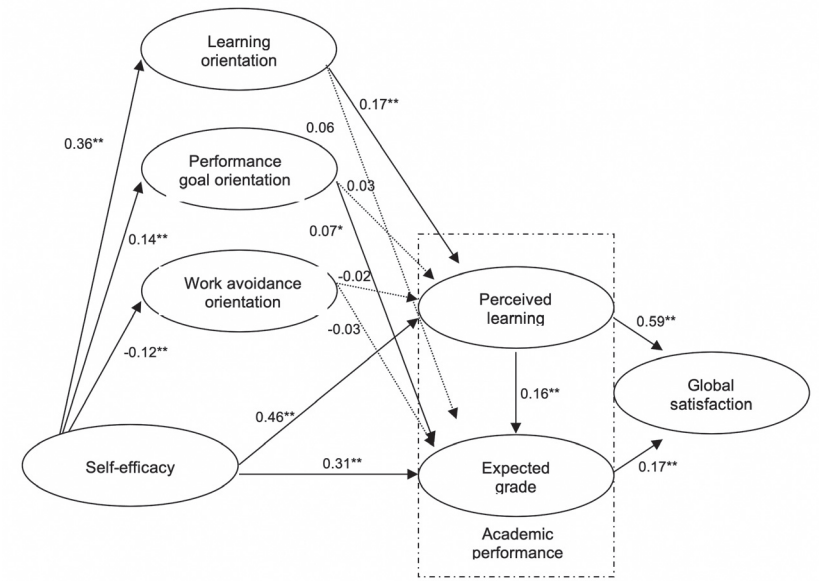
Results

As explained in the previous lines, the analyses were carried out sequentially as follows: (1) the analysis of level one (students); (2) the analysis of level two (teachers); and (3) the analysis of the cross-level effects.

1. Level 1: students. H1 to H7

Having analysed the psychometric characteristics, the structural model was estimated to test hypotheses H1 to H7 (Figure 2). The same procedure was followed as in the assessment of the significance of the parameters (a bootstrapping of 400 sub-samples of the original sample, 932 cases). Except for 4 cases (H3b, H4a, H5, and H5b), the standardized regression coefficients of the hypotheses are significant and allow their acceptance. However, the results show the opposite sign to the one proposed in H1c (the relationship between self-efficacy and outcome orientation).

Figure 2. Estimating the student's structural model



* p < 0.05; ** p < 0.01

R^2 (learning orientation) = 0.13; R^2 (outocome orientation) = 0.02; R^2 (orientation towads avoiding tasks) = 0.01; R^2 (perceived learning) = 0.31; R^2 (expected grade) = 0.22; R^2 (satisfaction) = 0.46

Q^2 (learning orientation) = 0.05; Q^2 (goal orientation) = 0.01; Q^2 (work avoidance orientation) = 0.01; Q^2 (perceived learning) = 0.15; Q^2 (expected grade) = 0.21; Q^2 (satisfaction) = 0.42

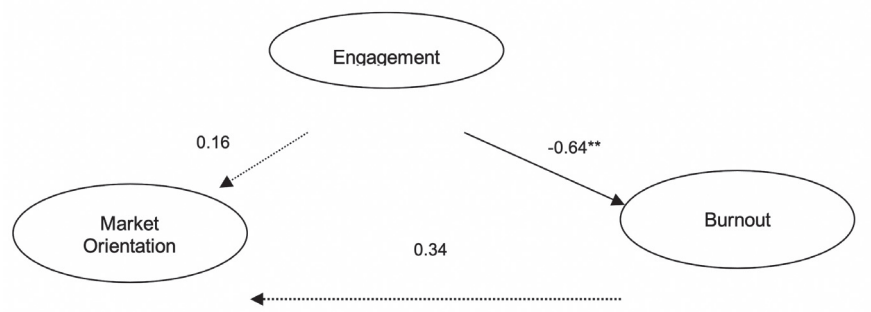
Figure 2 shows the variances of the dependent variable explained by latent constructs that are predicted by R2. Except in two cases (performance goal orientation and work avoidance orientation), the value 0.1 is exceeded. Thus, for a sample of 932 cases and an independent variable, R2 values of at least 0.001 were obtained, reaching a power of 80%. The predictive significance was estimated by a procedure of blindfolding (the statistical Q2 is positive in all cases).

2. Level 2: teachers. H11 to H13

After analysing the model of level one, the relationships were evaluated in the model corresponding to level two for teachers. To test the psychometric properties, the relationships established in hypotheses H11 to H13 were analysed. A bootstrapping test of 400 sub-samples, with an original sample size of 45 cases was performed.

As shown in Figure 3, the results support hypothesis H13 (a negative relationship between BO and E). However, it is not possible to accept hypotheses H11 and H12, that is, the direct relationship between the level of BO and the teacher MO (H11) and the level of E and the teacher MO (H12). Additionally, the R2 obtained for the MO has a value less than 0.1 (the explanatory power is reduced), although the positive statistical Q2 indicates that, even when leaving out important variables, the prediction of the teacher MO variable that arises is significantly better than random prediction based on the mean values of each variable. The justification can be found in the MO must be explained by other variables. It is also possible that this orientation may be resistant to both the decay process (burnout) and the reverse process (engagement).

Figure 3. Estimating the teacher's structural model



R^2 (MO) = 0.03; R^2 (burnout) = 0.40
Q^2 (MO) = 0.01; Q^2 (burnout) = 0.21

3. Teachers' cross-level effect on students. H8 to H10

Prior to the study of the cross-level effect (H8 to H10), the variability between and within groups (model one ANOVA) and the relationships established at level one (students) between the concepts overall satisfaction, perceived learning, and expected grade (model two was analysed with random coefficient regression) were determined. The results advocated the continuation of the study. Additionally, the model fit's results show that models 2 represent a significant improvement over models 1. Finally, we analysed models 3 that introduce the cross-level effect. Because of the hypotheses raised and the existing relationships between the variables in level one, twelve models 3 were required (Table 1).

Table 1. Models 3 (Intercepts as results)

	M2 DESVIANCE (PARAMETERS)	M3 DESVIANCE (PARAMETERS)	DIFER DESVIANCE (PARAMETERS)	CHI-SQUARE (P=0,01)
H8a. MO -> PL	1863.72 (3)[a]	1860.78 (4)	2.94 (1)	6.63 (1df)*** 2.70 (1df)*
H8b. MO -> Grade	1816.12 (5)	1814.72 (5)	--	--
H8c. MO -> GS	1685.77 (5)	1679.38 (5)	--	--
H8'c. MO -> GS	2022.11 (5)	2010.07 (5)	--	--
H9a. BO -> PL	1863.72 (3)[a]	1863.31 (4)	0.41	6.63 (1df)*** 2.70 (1df)*
H9b. BO -> Grade	1816.12 (5)	1815.35 (5)	--	--
H9c. BO -> GS	1685.77 (5)	1685 (5)	--	--
H9'c. BO -> GS	2022.11 (5)	2021.34 (5)	--	--
H10a. ENG -> PL	1863.72 (3)[a]	1863.31 (4)	0.41	6.63 (1df)*** 2.70 (1df)*
H10b. ENG-> Grade	1816.12 (5)	1815.68 (5)	--	--
H10c. ENG -> GS	1685.77 (5)	1685.16 (5)	--	--
H10'c. ENG -> GS	2022.11 (5)	2021.19 (5)	--	--

* $p < 0.1$, ** $p < 0.05$; *** $p < 0.01$

a. It has taken the desviance of the model 1, because this does not exist in model 2.

Discussion

Different conclusions and implications of the results were derived, but they must be interpreted in the context and nature of the research carried out, limiting the generalizability of the results. Thus, the research has an exploratory nature.

Regarding level 1, students, the results reinforce the idea that the perceived perception of students is a key to the successful development of actions that are conducive to personal success (Caballero, 2006). Thus, in line with previous studies, a positive relationship between self-efficacy and learning orientation and a negative relationship with task avoidance orientation occur. The relationship between self-efficacy and performance orientation has proved significant in this study, even more strongly than that obtained between self-efficacy and work avoidance orientation. The reason could be competitive students; students with high perceptions of their ability to carry out their tasks successfully are highly motivated to achieve more and better performance than their peers. Additionally, self-efficacy has been revealed to be beneficial to improving student achievement (perceived learning and expected grade), supporting the argument given by Caballero (2006). It can be concluded that students' confidence in their own abilities allows them to make better use of their knowledge and skills related to the subject in question and therefore to consider that their academic performance is higher (Seifert and O'Keefe, 2001).

As for the orientations/student motivations, we only found two significant relationships against the proposition: (1) orientation or motivation to learn influences directly the perceived learning and indirectly through the expected rating of perceived learning; and (2) performance goal orientation has a positive and significant effect on students' expected grade. It can be concluded that the orientation towards learning and the results-oriented approaches do not oppose the motivation approach. That is, an individual can be simultaneously learning-oriented and goal-oriented (Harris, Mowen and Brown, 2005).

Alongside these two orientations, work avoidance orientation is envisaged. However, the results show a negative relationship with perceived learning and expected grade, although these relationships are not significant. The justification can be found in the conclusions drawn by Meece and Holt (1993), who found that these orientations are not exclusive. Moreover, a work avoidance orientation implicitly can occur in students with low learning orientation and/or low goals orientation.

Finally, the results show that perceived learning has a positive and significant effect on the expected grade and on the overall student satisfaction with the course. Similarly, the expected grade shows a positive and significant relationship with such satisfaction. Thus, a student who is aware that he is learning will be more convinced that it is possible to obtain a higher rating and this will lead to greater satisfaction with the course. However, the results still reveal something else: the fact that learning can generate student satisfaction, regardless of the expected grade.

Regarding level two, teachers, Elzinga (2001) noted that teachers are aware of strategies to improve their teaching, but do not use them, as the yields from such

efforts are not high enough. However, the overall conclusion of this study is that the teachers analysed strive to direct their activities towards the environment in which they work, developing behaviours aimed at satisfying the wants and needs of their students.

Similarly, the teachers surveyed showed reduced burnout, with high levels of engagement. Because of the characteristics of the work of teachers and the diversity of activities throughout the academic year, it is normal to find times when teachers are more stressed than others. Thus, the time course can be predetermined, and time is spent very unevenly among teachers (Moriana Elvira and Herruzo Cabrera, 2004). The period of data collection took place between October and November, which are less stressful than July, September, or December, coinciding with the beginning and end of semester periods. Additionally, the difficult economic situation and the civil service provide some security and stability conducive to the job satisfaction of university teachers.

The description, together with the small sample size and the high concentration of scores, may have caused the lack of a significant relationship between MO and teacher burnout and between MO and teacher engagement. However, according to the literature (González-Romá, Schaufeli, Bakker and Llorens, 2006), burnout has proven to be opposed to the level of engagement of teachers. Therefore, energy turns into exhaustion, dedication into cynicism, and self-efficacy into ineffectiveness (Knight, 2007).

In short, the teachers interviewed, on average, can be defined as teachers who, regardless of whether they have support or not from the institution concerned, direct their activities to meet student needs and create an offer of educational value. They have not lost interest in their work nor are emotionally exhausted. They have high doses of vigour and dedication; this is engagement or commitment to the task. However, the results should be interpreted with caution considering the sample size.

Finally, it was found that the teacher's role is indeed a determinant of the results achieved by the students (cross-level effect). Thus, the efforts of teachers to orient their tasks translate into higher perceived learning by the students and greater satisfaction. Regarding the expected grade, the effect of OM occurs indirectly through the relationship of teacher MO with perceived learning. By its action, the faculty becomes responsible for realizing the achievements of groups and individuals (Scott and Dinham, 2003).

We could not find an effect of the burnout and engagement of teachers on the academic performance expected by the students or on their overall satisfaction. A possible explanation is that teachers tend to hide their level of motivation, whether

high or low, compared with the classroom motivation. Their level of responsibility towards their work leads them to design and update the contents of the subjects that they teach, to meet with colleagues, and to contemplate the training needs of enterprises, among others. Therefore, the results have shown that teachers, whatever their mood, strive to bring orientation and added value to student behaviour.

Future studies could analyse the qualities a teacher should have, following previous studies (i.e. Cañadas and Cuétara, 2018), not only in distance learning, but also in other contexts.

Fecha de recepción del original: 10 de junio 2020
Fecha de aceptación de la versión definitiva: 1 de diciembre 2020

References

Ackerman, D. S. and Hu, J. (2011). Effect of type of curriculum on educational outcomes and motivation among marketing students with different learning styles. *Journal of Marketing Education*, *33*(3), 273-284. https://doi.org/10.1177%2F0273475311420233

Aldás, J. and Uriel, E. (2006). *Análisis multivariante aplicado: aplicaciones al marketing, investigación de mercados, economía, dirección de empresas y turismo*. Madrid: Thomson.

Cabrera, B. and Báez de la Fe, B. F. (2003). *Profesores por omisión: reforma, burocracia, lealtad y vocación en la docencia universitaria*. La Laguna: Resma.

Caballero, C. (2006). Burnout, engagement y rendimiento académico entre estudiantes universitarios que trabajan y aquellos que no trabajan. *Revista Psicogente*, *9*(6), 11-27.

Cañadas, I. and Cuétara, I. D. (2018). Estudio psicométrico y validación de un cuestionario para la evaluación del profesorado universitario de enseñanza a distancia. *Revista de Estudios de Investigación en Psicología y Educación*, *5*(2), 102-112. https://doi.org/10.17979/reipe.2018.5.2.3701

Capelleras, J. L. and Veciana, J. M. (2004). Actitudes del personal hacia el trabajo y la organización. Una aplicación empírica en la Universidad. *ESIC Market*, 119, 47-74.

Chin, W. W. (1998). The Partial Least Squares Approach to Structural Equation Modeling. In G. A. Marcoulides (Ed.), *Methodology for business and management. Modern methods for business research* (pp. 295-336). New Jersey: Lawrence Erlbaum.

Costa, C., Cardoso, A. P., Lima, M. P., Ferreira, M. and Abrantes, J. L. (2015).

Pedagogical Interaction and Learning Performance as Determinants of Academic Achievement. *Procedia-Social and Behavioral Sciences*, 171, 874-881.

Danko, W. D. and Schaninger, C. M. (1988). Applying Marketing Techniques to Improve Students' Perceptions of Marketing. *Journal of Marketing Education*, *10*(2), 34-37. https://doi.org/10.1177/027347538801000207

de Vries, W. and Ibarra, E. (2004). La gestión de la universidad. *Revista Mexicana de Investigación Educativa*, *9*(22), 575-584.

Elliot, A. J., Shell, M. M., Henry, K. B. and Maier, M. A. (2005). Achievement goals, performance contingencies, and performance attainment. An experimental test. *Journal of Educational Psychology*, *97*(4), 430-440. https://doi.org/10.1037/0022-0663.97.4.630

Elzinga, K. G. (2001). Fifteen theses on classroom teaching. *Southern Economic Journal*, 68, 249-257. https://doi.org/10.2307/1061593

Fenollar, P., Cuestas, P. J. and Román, S. (200W8). Antecedentes del rendimiento académico. aplicación a la docencia en marketing. *Revista Española de Investigación de Marketing*, *12*(2), 7-24.

Flavián, C. and Lozano, F. J. (2003). Diseño de una escala para medir la orientación al entorno de la nueva formación profesional. *Cuadernos de economía y dirección de la empresa*, 15, 157-187.

Fornell, C. and Larcker, D. F. (1981). Evaluating Structural Models with Unobservables Variables and Measurement Error. *Journal of Marketing Research*, 28, 39-50.

Gao, Z. and Xiang, P. (2007). Exploring the Mediating Effect of Self-Efficacy on the Relationships Between Achievement Goals and Fitness Testing Scores Among Secondary Physical Education Students. *Research Quarterly for Exercise and Sport*, *78*(1), A56-A57.

González-Romá, V. (2008). Modelos multinivel en la investigación psicosocial. In J. F. Morales Domínguez, C. Huici Casal, A. Gómez Jiménez y E. Gaviria (Coords.), *Método, teoría e investigación en psicología social* (pp. 69-84). Madrid: Pearson Educación.

González-Romá, V., Schaufeli, W. B., Bakker, A. B. and Llorens, S. (2006). Burnout and work engagement: Independent factors or opposite poles? *Journal of Vocational Behavior*, *68*(1), 165-174. https://doi.org/10.1016/j.jvb.2005.01.003

Greene, B. A. and Miller, R. B. (1996). Influences on achievement: goals, perceived ability, and cognitive engagement. *Contemporary Educational Psychology*, 21, 181-192. https://doi.org/10.1006/ceps.1996.0015

Gullason, E. T. (2009). A compilation and synthesis of effective teaching strategies in the economics discipline. *Journal of Business & Economic Studies*, *15*(2), 83-105.

Hair Jr, F., Sarstedt, J., Hopkins, M. and Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM). An emerging tool in business research. *European Business Review*, *26*(2), 106-121. https://doi.org/10.1108/EBR-10-2013-0128

Harris, E. G., Mowen, J. C. and Brown, T. J. (2005). Re-examining salesperson goal orientations, personality influencers, customer orientation, and work satisfaction. *Journal of the Academy of Marketing Science*, *33*(1), 19-35. https://doi.org/10.1177/0092070304267927

Ibarra, E. (2005). Origen de la empresarialización de la universidad. El pasado de la gestión de los negocios en el presente del manejo de la universidad. *Revista de la Educación Superior*, *33*(134), 2. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0185-27602005000200013&lng=es&nrm=i&tlng=es

Keith, K. (1998). The responsive university in the twenty century. In W. G. Tierney (Ed.), *The Responsive University*: *Restructuring for High Performance* (pp. 48-61). Baltimore: The John Hopkins University Press.

Knight, P. (2007). Fostering and assessing 'wicked' competences. https://docplayer.net/99662287-Fostering-and-assessing-wicked-competences.html.

Lackritz, J. R. (2004). Exploring burnout among university faculty: Incidence, performance, and demographic issues. *Teaching and Teacher Education*, 20, 713-729. https://doi.org/10.1016/j.tate.2004.07.002

Leiter, M. P. and Maslach, C. (1999). Six areas of worklife: a model of the organizational context of burnout. *Journal of Health and Human Services Administration*, (Spring), 472-489.

Loureiro, S. M. C. and Miranda, F. J. (2011). Brand equity and brand loyalty in the internet banking context: FIMIX-PLS market segmentation. *Journal of Service Science and Management*, *4*(4), 476. https://doi.org/10.4236/jssm.2011.44054.

Marks, H. and Seashores, K. (1997). Does teacher empowerment affect the classroom? The implications of teacher empowerment for instructional practice and student academic performance. *Educational Evaluation and Policy Analysis*, *19*(3), 245-275. https://www.jstor.org/stable/1164465?seq=3#metadata_info_tab_contents

Marks, R. B. (2000). Determinants of Student Evaluations of Global Measures of Instructor and Course Value. *Journal of Marketing Education*, *22*(2), 108-119.

Marsh, H. W. (1987). Student evaluations of university teaching: Research findings, methodological issues, and directions for future research. *International Journal of Educational Research*, *11*(3), 253-388. https://doi.org/10.1016/0883-0355(87)90001-2

Marsh, H. W. and Hocevar, D. (1991). Students' evaluations of teaching effectiveness: the stability of mean ratings of the same teachers over a 13-year period. *Teaching & Teacher Education*, 7(4), 303-314. https://doi.org/10.1016/0742-051X(91)90001-6

Maslach, C. (2003). Job burnout. New directions in research and intervention. *Current Directions in Psychological Science*, *12*(5), 189-192. https://doi.org/10.1111/1467-8721.01258

Maslach, C. and Leiter, M. P. (2001). Teacher burnout. A research agenda. In R. Vandenberghe and A. M. Huberman (Eds.), *Understanding and preventing teacher burnout* (pp. 295-303). Nueva York: Cambridge University Press.

Maslach, C., Schaufeli, W. B. and Leiter, M. P. (2001). Burnout. *Annual Review of Psychology*, 52, 397-422. https://doi.org/10.1146/annurev.psych.52.1.397

Mateo, J. and Vlachopoulos, D. (2013). Evaluación en la universidad en el contexto de un nuevo paradigma para la educación superior. *Educación XX1*, *16*(2), 183-208. https://doi.org/10.5944/educxx1.16.2.2639

Meece, J. L. and Holt, K. (1993). A pattern analysis of students' achievement goals. *Journal of Educational Psychology*, *85*(4), 582-590. https://doi.org/10.1037/0022-0663.85.4.582

Midgley C., Kaplan, A., Middleton, M., Maehr, M. L., Urdan, T., Anderman, L. H., Anderman, E. and Roeser, R. (1998). The development and validation of scales assessing students' achievement goal orientations. *Contemporary Educational Psychology*, *23*(2), 113-131. https://doi.org/10.1006/ceps.1998.0965

Moriana Elvira, J. A. and Herruzo Cabrera, J. (2004). Estrés y burnout en profesores. *International Journal of Clinical and Health Psychology*, *4*(3), 597-621.

Murphy, P. K. and Alexander, P. A. (2000). A Motivated Exploration of Motivation Terminology. *Contemporary Educational Psychology*, 25, 3-53. https://doi.org/10.1006/ceps.1999.1019

Nunnally, J. C. (1978). *Psychometric Theory*. New York: McGraw-Hill.

Nurmi, J. E., Onatsu, T. and Haavisto, T. (1995). Underachievers' cognitive and behavioral strategiess-self-handicapping at school. *Contemporary Educational Psychology*, 20, 188-200. https://doi.org/10.1006/ceps.1995.1012

Olivares, O. J. (2001). Student interest, grading leniency, and teacher ratings. A conceptual analysis. *Contemporary Educational Psychology*, 26, 382-399. https://doi.org/10.1006/ceps.2000.1070

Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, *66*(4), 543-578. https://doi.org/10.3102%2F00346543066004543

Pajares, F., Hartley, J. and Valiante, G. (2001). Response format in writing self-efficacy assessment. Greater discrimination increases prediction. *Measurement*

and Evaluation in Counseling and Development, *33*(4), 214-221. https://doi.org/10.1080/07481756.2001.12069012

Petruzzellis, L., D'Uggento, A. M. and Romanazzi, S. (2006). Students satisfaction and quality of service in Italian universities. *Managing Service Quality*, *16*(4), 349-364. https://doi.org/10.1108/09604520610675694

Phillips, J. M. and Gully, S. M. (1997). Role of goal orientation, ability, need for achievement, and locus of control in the self-efficacy and goal-setting process. *Journal of Applied Psychology*, *82*(5), 792-802. https://doi.org/10.1037/0021-9010.82.5.792

Schaufeli, W. and Bakker, A. (2004). Job demands, job resources, and their relationship with Burnout and Engagement. A multi-sample study. *Journal of Organizational Behavior*, *25*(3), 293-315. https://doi.org/10.1002/job.248

Schaufeli, W. B., Salanova, M., González-Romá, V. and Bakker, A. B. (2002). The measurement of engagement and burnout. A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71-92. https://doi.org/10.1023/A:1015630930326

Scott, C. and Dinham, S. (2003). The development of scales to measure teacher and school executive occupational satisfaction. *Journal of Educational Administration*, *41*(1), 74-86. https://doi.org/10.1108/09578230310457448

Seifert, T. L. and O'Keefe, B. A. (2001). The relationship of work avoidance and learning goals to perceived competence, externality and meaning. *British Journal of Educational Psychology*, 71, 81-92. https://doi.org/10.1348/000709901158406

Skaalvik, E. M. (1997). Self-enhancing and self-defeating ego orientation: relations with task and avoidance orientation, achievement, self-perceptions, and anxiety. *Journal of Educational Psychology*, *89*(1), 71-81. https://psycnet.apa.org/doi/10.1037/0022-0663.89.1.71

Sullivan, J. R., War, S. and Hsieh, P. (2007). A Closer Look at College Students. Self-Efficacy and Goal Orientation. *Journal of Advanced Academics*, *18*(3), 454-476. https://doi.org/10.4219/jaa-2007-500

Summers, J. J., Davis, H. A. and Hoy, A. W. (2017). The effects of teachers' efficacy beliefs on students' perceptions of teacher relationship quality. *Learning and Individual Differences*, 53, 17-25. https://doi.org/10.1016/j.lindif.2016.10.004

Usher, E. L. and Pajares, F. (2006). Sources of academic and self-regulatory efficacy beliefs of entering middle school students. *Contemporary Educational Psychology*, 31, 125-141. https://doi.org/10.1016/j.cedpsych.2005.03.002

Vila, N., Küster, I. and Pardo, E. (2012): Antecedentes y efectos del burnout-engagement del vendedor. *Cuadernos de Economía y Dirección de la Empresa*, *15*(3), 154-167. https://doi.org/10.1016/j.cede.2012.02.001

Wold, H. (1982). Soft modeling: the basic design and some extensions. In K. G. Joreskog and H. Wold (Eds.), *Systems under indirect observation. Causality, structure and prediction*. Part II (pp. 1-54). Netherlands. Amsterdam: North-Holland.

Appendix 1

Scales used in the research: The Students

CONSTRUCT/SOURCE	FACTOR	INDICATOR	ITEM
Learning orientation Midgley, Kaplan, Middleton, Maehr, Urdan, Anderman, Anderman and Roeser (1998)	OA	OA1	I like class work that I'll learn from even if I make a lot of mistakes
		OA2	An important reason why I do my class work is because I like to learn new things
		OA3	I like class work best when it really makes me think
		OA4	An important reason why I do my work in class is because I want to get better at it
		OA5	I do my class work because I'm interested in it
Performance goal orientation Midgley, Kaplan, Middleton, Maehr, Urdan, Anderman, Anderman and Roeser (1998)	ORDO	ORDO1	I want to do better than other students in my class
		ORDO2	I would feel successful in class if I did better than most of the other students
		ORDO3	I would feel really good if I were the only one who could answer the teacher's questions in class
		ORDO4	I'd like to show my teacher that I'm smarter than the other students in my class
		ORDO5	Doing better than other students in class is important to me
Work avoidance orientation Skaalvik (1997)	OET	OET1	At school I hope that we do not get any homework
		OET2	I like school best when there is no hard work
		OET3	At school I like to do as little as possible
Self-efficacy Greene and Miller (1996)	AUTO	AUTO1	I'm sure I can get good results with this subject if I put my mind
		AUTO2	If I do not understand any aspect of this subject, I persist until you understand
		AUTO3	Just knowing that there are people who have not pass the subject, makes me more determined to get good exam results
		AUTO4	I hope to be sufficiently prepared to successfully face this exam
		AUTO5	I tend to postpone handling problems related to this subject when they appear
		AUTO6	No matter how hard I try, I do not get progress on this subject

[CONTINÚA EN LA PÁGINA SIGUIENTE]

CONSTRUCT/SOURCE	FACTOR	INDICATOR	ITEM
Self-efficacy Greene and Miller (1996)	AUTO	AUTO7	At the end, I am convinced that will understand the aspects of this subject not yet in control
		AUTO8	I hope to give the best in my examination
Perceived learning Marsh (1987), Marsh and Hocevar (1991)	AP	AP1	What I learn in this course is important
		AP2	This subject is very useful
		AP3	This is a very interesting subject
		AP4	This subject is stimulating and challenging
		AP5	I learned things on this subject that I consider valuable
		AP6	My interest in the contents of this subject has increased as a result of having completed
		AP7	I have learned and understood the contents of this subject
		AP8	Since the beginning of the course to date, how has your interest evolved for this subject? (Think of the teacher's work, content, etc.)
Expected graede Fenollar, Cuestas and Román (2008)	NE	NE	Which grade you expect to get in this subject?
Global satisfaction	SG	SG	Which is your global satisfaction with this subject?

Scales used in the research: The Teachers

CONSTRUCT/SOURCE	FACTOR	INDICATOR	ITEM
Burnout Maslach Burnout Inventory-General Survey (MBI-GS)	AGOT	AG1	I feel emotionally drained from my work
		AG2	I feel used up at the end of my workday
		AG3	I feel tired when I get up in the morning and have to face another day on the job
		AG4	Working all the day is a tension for me
		AG5	I am 'burned' for my work
	CIN	CIN1	I lost interest in my work since I started in this job
		CIN2	I have become less enthusiastic about my work
		CIN3	I've become more cynical about the usefulness of my work
		CIN4	I doubt the importance and value of my work
Engagement Utrecht Work Engagement Scale-UWES	VIG	VIG1	At my work, I feel bursting with energy
		VIG2	I can continue working for very long periods of time
		VIG3	When I get up in the morning, I feel like going to work
		VIG4	I'm very persistent in my work
		VIG5	At my job, I feel strong and vigorous
	DEDIC	DEDIC1	My work is challenging
		DEDIC2	My job inspires me
		DEDIC3	I am enthusiastic about my job
		DEDIC4	I am proud of the work that I do
		DEDIC5	My work is full of meaning and purpose
Market orientation (Flavián and Lozano, 2003)	OM_GI	OM_GI1	Often I analyze information on the environment, to adapt the topics of my courses
		OM_GI2	I am receptive to suggestions made by firms in our environment, about the contents of the courses that I impart
		OM_GI3	Often I analyze the future needs of businesses to be covered by my trainees
		OM_GI4	I analyze the results obtained by my students during the development of their internships
		OM_GI5	I know the degree of difficulty and the interest that each course has for the student

[CONTINÚA EN LA PÁGINA SIGUIENTE]

CONSTRUCT/SOURCE	FACTOR	INDICATOR	ITEM
Market orientation (Flavián and Lozano, 2003)	OM_DI	OM_DI1	I keep formal and regular contacts with other teachers to discuss the development of our educational work in the institution
		OM_DI2	I spend time discussing with other teachers about the needs of students in terms of specialized courses, seminars, company visits, etc.
		OM_DI3	Regularly, I spread among my colleagues and / or students information about changes in the socio-cultural environment
		OM_DI4	When something important happens to a student in my class, I make of his knowledge the person concerned in a short time
		OM_DI5	I show a positive attitude to the possibility of making changes in my educational services (schedules, content, etc.)
	OM-RI	OM_RI1	Periodically I review and update the content of my courses to adapt to the changing socio-economic environment
		OM_RI2	Periodically I check my way of giving classes to adapt to the training needs of students
		OM_RI3	Overall, my response to the changing environment is fast
		OM_RI4	I worry about my daily activities to develop coordination with teachers that match my area
		OM_RI5	Thoroughly I analyze the suggestions and demands made by the public authorities, for possible inclusion in my subjects
		OM_RI6	I study in detail the suggestions and demands made by companies, for possible inclusion in my courses
		OM_RI7	Thoroughly I analyze the suggestions and demands made by students, for possible inclusion
		OM_RI8	At the beginning of the academic year, I have formalized in writing the thematic content of each of my subjects