

Profiles and functions of university tutors and their effects on students' tutorial needs

Perfiles y funciones del tutor universitario y sus efectos sobre las necesidades tutoriales del alumnado

Manuel DELGADO-GARCÍA, PhD. Assistant Professor. Universidad de Huelva (manuel.delgado@dedu.uhu.es).

Sara CONDE VÉLEZ, PhD. Assistant Professor. Universidad de Huelva (sara.conde@dedu.uhu.es).

Ángel BOZA CARREÑO, PhD. Associate Professor. Universidad de Huelva (aboza@uhu.es).

Abstract:

Large numbers of students on particular degrees and a progressive depersonalisation of the teaching and learning process are typical characteristics of higher education. This situation results in a need to analyse the tutorial activity processes currently in use. This work aims to investigate various factors associated with the main agents involved in this process: tutors (profiles and functions) and students (needs). It is based on a survey-type methodology creating an instrument for distribution among degree

students at the Universidad de Huelva. This is first subjected to validation processes to obtain a theoretical reference model with which to evaluate interactions among the emerging factors.

Notable results include a theoretical model with correlations between tutor profiles and regressions, or influences of these profiles on functions and student needs. Furthermore, it reveals two types of university tutor: those who prioritise the academic aspects of tutoring, and those who prioritise personal aspects. Both profiles are associated with

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types of function that react to the needs students display throughout their time at university, and support the thesis that university tutoring is developing towards an integral model in which the personal dimension is especially relevant.

Keywords: educational guidance, tutoring, higher education, student guidance needs, competence profile of tutors.

Resumen:

La educación superior se caracteriza por una masificación de estudiantes en determinadas titulaciones y una progresiva despersonalización del proceso de enseñanza y aprendizaje. Esta realidad justifica la necesidad de analizar los procesos de acción tutorial que se desarrollan en la actualidad. Este trabajo tiene como objetivo indagar en varios factores asociados a los principales agentes implicados en dicho proceso: tutor (perfiles y funciones) y alumnado (necesidades). Se parte de una metodología tipo encuesta en la que se construye y se somete a procesos de validación un instrumento

distribuido entre los estudiantes de grado de la Universidad de Huelva, con el objetivo de obtener un modelo teórico de referencia desde el que valorar las interacciones entre los factores emergentes.

Como resultados, cabe destacar un modelo teórico en el que existen correlaciones entre el perfil del tutor, y regresiones o influencias de estos perfiles sobre las funciones y las necesidades de los estudiantes; de la misma manera, se visibilizan dos tipologías de tutor universitario que priorizan los aspectos académicos y personales de la tutoría respectivamente. Ambos perfiles llevan asociados unos tipos de funciones que vendrán a dar respuesta a las necesidades que presentan los estudiantes a lo largo de su paso por la universidad y que apoyan las tesis del avance de la tutoría universitaria hacia un modelo integral en el que la dimensión personal cobra una especial relevancia.

Descriptores: orientación educativa, tutoría, educación superior, necesidades de orientación del alumnado, perfil competencial del tutor.

1. Introduction

Tutoring in higher education is regarded as a function that forms an integral part of the teacher's role. It is a personalised model for education that provides comprehensive support for students and

helps to «reduce anxiety, encourage integration in the new institution, and improve conditions for learning» (Fernández-Salinero, 2014, p. 163). As well as these factors, there are other elements associated with 21st century university (a

diverse student body, curriculum diversification, uncertainty about the future and finding work, and constant social, educational, and professional changes) that lead to a need to integrate tutoring into the curriculum and for institutional policies to promote it (Álvarez González, 2017; Martínez Clares, Pérez Cusó, & González Morga, 2019).

Several definitions are currently used for tutoring action or tutoring (Álvarez González & Álvarez, 2015; Álvarez González & Bisquerra, 2012; Álvarez-Pérez, 2014; González-Benito & Vélaz de Medrano, 2014; Hagenauer & Volet, 2014; Pantoja, 2013; García Nieto, 2011; McFarlane, 2016; Yale, 2019), from which multiple dimensions of analysis derive. In this respect, works such as those by López-Gómez (2015, 2017), León (2018), and Martínez Clares, Martínez Juárez, and Pérez Cusó (2016) provide a broad review and clear vision of the future of the term in order to consider how it is understood and how it evolves. This allows us to find the definition of "tutoring" as an educational process university teachers, based on the premises of orientation that reacts integrally to students' needs (academic, social-personal, and/or professional) with the objective of fostering the optimal teaching and learning process.

On the basis of this conception, we can identify three clearly defining dimensions to which this work contributes, which relate to the tutor's work (profile and functions) and to students' tutorial needs.

2. Functions and profiles of the university teacher-tutor

At a regulatory level, section 8 of Spain's University Students' Charter (Royal Decree 1791/2010, of 30 December) establishes a right to «receive personalised orientation and tutoring to facilitate workplace integration, professional development, and, where applicable, the continuity of university education.» Section 20 expressly states that the teacher-tutor is responsible for this service and must provide it on three levels (when starting university, during university studies, and in the transition to the world of work). Based on this, multiple works consider and evaluate the tutor's professional activity with the aim of laying the foundations for appropriate tutorial action (Álvarez-Pérez, López, & Pérez, 2016; Arza, Salvador, & Mascarenhas, 2014; Bisquerra, 2013; Gaitán, 2013; García-Valcárcel, 2008; López-Gómez, 2017; Martínez Clares et al., 2016; Torrecilla, Rodríguez, Herrera, & Martín, 2013; Troyano & García, 2009; Urbina, de la Calleja, & Medina, 2017).

Having considered the focuses on tutorial action that derive from these works, we use the structure proposed by Lobato and Guerra (2016), which identifies seven categories of university tutoring, five of which are explicitly carried out by university teachers. In turn, following on from the work of Rodríguez Espinar (2004), complemented by Álvarez González (2013, 2014) and Álvarez González and Álvarez (2015), we believe that the set of duties of a university tutor are based on three models of tutorial action (Table 1).

TABLE 1. Types of tutoring in universities

Type	Definition of functions	Figure	System
Academic tutoring	Monitoring and supporting the learning process in a module or subject (dealing with problems that arise; making working methodologies more flexible; developing evaluation products; promoting the development of research work; establishing effective communication; making use of critical behaviour and engagement, etc.).	Teacher	Tutorial Action Plan (TAP) of the university or faculty.
Work placement tutoring	Advising students during their work placement period.		Work placement programme
Research tutoring	Individualised guidance for preparing a research project during undergraduate studies and all levels of postgraduate study.		Planned between teacher and student
Personal tutoring	Individualised and specialised attention to resolve personal difficulties that affect academic performance (helping students with the process of developing self-knowledge; guidance with the process of taking personal decisions; help with conflict resolution; encouraging the development of personal skills; etc.).	Specialist professional / teacher	At student's request
Degree or course tutoring	Intervention to support personal, academic, and professional development throughout the student's time at university (knowledge of the student's profile; supporting the student's process of integration; contributing to the student's academic-social integration; providing curriculum information and orientation; etc.).	Teacher	TAP
Peer tutoring	Experienced student who supports students on same course.	Student	TAP
Service tutoring	Support comprising academic and careers information and guidance for all of a university's student body.	Specialists	Institutional service

Source: Adapted from Lobato and Guerra (2016, p. 385).

To implement these functions, García Cabrero et al. (2016) suggest that the tutor must acquire skills while simultaneously being familiar with institution-

nal information, as providing a service in line with the needs of students will largely require this level of professionalisation. Therefore, it is necessary to

consider the role adopted by university teachers (attitudes) with regards to the importance attributed to tutorial activities, being clear, as Más Torelló (2012, p. 303) notes, that «tutoring the student's learning process by facilitating actions that allow him or her greater autonomy» must be one of the basic competences in the tutor's professional profile.

In this regard, educational research (Fernández-Salineró, 2014; González-Benito & Vélaz de Medrano, 2014; González-Lorente & González-Morga, 2015; Herrera Rodríguez, 2017; López, González, & Velasco, 2013; Martínez Clares, Martínez Juárez, & Pérez Cusó, 2014; Martínez-Mínguez & Moya, 2017) has identified common features relating to this role and contributed to shaping recognisable professional profiles, which have specific attributes relating to competences that include «certain skills, appropriate knowledge, and a particular attitude, guided by ethical principles» (Giner, 2012, p. 28). This shapes a broad spectrum of approaches to tutorial activity in universities, synthesised in the paternalistic model (pastoral care) and a more distant model (*laissez-faire*) as the extremes from which different degrees of involvement, action, and commitment are assumed (Cid & Pérez, 2006).

In general terms, in accordance with works by Echeverría (2002), García Nieto, Asensio Muñoz, Carballo Santaolalla, García García and Guardia González (2004), and Lázaro (2003), we can establish a classification that considers the

tutor's areas of activity and which, depending on how a given tutor is positioned on the continuum between the models identified, enables us to speak of a human profile and professional profile. The former includes the tutor's being and knowing how to be, encompassing desirable personal qualities such as:

- a) A balanced healthy mature personality through which positive attitudes are developed and target actions are proposed to ensure equanimity and fairness in decisions (without apparent preferences or aversions in treatment).
- b) A sensitivity that makes it possible to perceive and understand youth problems, fostering empathetic and affective behaviour patterns, creating an atmosphere of positive care, and making respect for the student apparent, accompanied by a calm attitude in the decisions taken.
- c) The ability to establish friendly and cordial relationships with students from which the tutor can glean knowledge of the group and the individuals, making it possible to have a positive influence on their opinions and attitudes.

The professional profile relates to the tutor's knowledge and know-how in his or her command of this comprehension and exercise of the tutorial action. Regarding comprehension of the tutorial activity, it is desirable to have:

- a) A subject knowledge that allows the tutor to explain competently the subjects he or she delivers.
- b) Theoretical knowledge of education and related sciences. In particular, an in-depth knowledge of the general features of the university system (pathways, specialisms, career prospects, etc.) and also the characteristics of those academic fields that comprise it (psychology, teaching, philosophy, sociology, etc.) is desirable.
- c) A theoretical-practical comprehension of interpersonal relationships and of leading and encouraging groups so that the tutor can identify structures, roles, factors, or forces that affect the development of the group of students.
- d) A knowledge of techniques for educational diagnosis and intervention to provide more personal attention, foster motivation, and promote initiatives-programmes relating to attention to diversity.

With regards to the practical exercise of tutoring activities, it would also be desirable to implement techniques relating to evaluation, carrying out interviews, invigorating groups, promoting social skills, motivating, etc.

We believe that the best university tutor profile will combine a balance of the different competences, creating what Hagenauer and Volet (2014) call the support dimension or atmosphere of su-

port, in which the student perceives a personalised process of accompaniment throughout his or her time at university and, at the same time, feels that his or her needs are being met.

3. Tutorial needs of university students

The orientation needs that university tutoring must meet could be analysed on the basis of the three phases associated with students' time at university (entry, performing their studies, and the transition to the world of work).

If we start by considering the moments when the student first comes into contact with university-level education, we find many studies (Da Re & Clerici, 2017; Esteban, Bernardo, & Rodríguez-Muñiz, 2016; García-Ros, Pérez-González, Pérez-Blasco, & Natividad, 2012; García, Carpintero, Biencinto, & Núñez, 2014; López Gómez, 2015; Lorenzo Moledo, Argos, Hernández García y Vera Vila, 2013; Manzano-Soto & Roldán-Morales, 2015; Pujol & Durán, 2013; Rebollo & Espiñeira, 2017; Soares, Almeida, & Guisande, 2011; Torrecilla et al., 2013). These studies can form the basis for a focus on the demands associated with three dimensions:

Academic (unfamiliarity with the institution; skills imbalances when faced with high demands; problems managing study time; stress in especially busy periods; etc.).

Personal (lack of self-regulation skills; shortcomings in the development of de-

cision making; lack of autonomy; strengthening metacognitive strategies; boosting motivation to study; etc.).

Social (difficulties creating new social networks; coping with separation from family ties; difficulties combining studying and work; improving social skills, and managing conflict in the classroom; etc.).

Some of the needs identified here might continue in later phases (carrying out studies and transition to the world of work) and other new needs can emerge (Figuera & González, 2014; Martínez Clares et al., 2019; Pérez, González, González, & Martínez, 2017; Solaguren-Beascoa & Moreno, 2016):

- At an academic level, demands focus on two main related areas for supporting the teaching-learning process (knowledge of study techniques; orientation in final degree projects; knowledge of the working dynamics-methodologies of teaching staff; better understanding of syllabuses, such as optional courses, characteristics of the modules, system of credits; problems with the range of evaluation systems, etc.) and for supporting professional development and social and job market inclusion (lack of knowledge of career prospects; guidance with decision making when facing the transition to the job market; the demand for opportunities for developing professional skills; better knowledge of postgraduate training, etc.).

- At a personal level, the need to build a consolidated identity intensifies (managing emotions; acquiring transversal competences; support with the process of personal maturation and in setting future goals; etc.).
- At a social level, it affects aspects pertaining to the development of interpersonal relationships (help-mediation with conflict management; improving communication skills; guidance in developing social skills; facilitating strategies for team working; etc.).

In summary, we believe that to offer an optimal response to these needs, university tutoring must be considered from a holistic and integral position which, at the same time, is adapted to the contexts in which the students find themselves (López & González, 2018).

4. Research approach, aims, objectives, and hypothesis

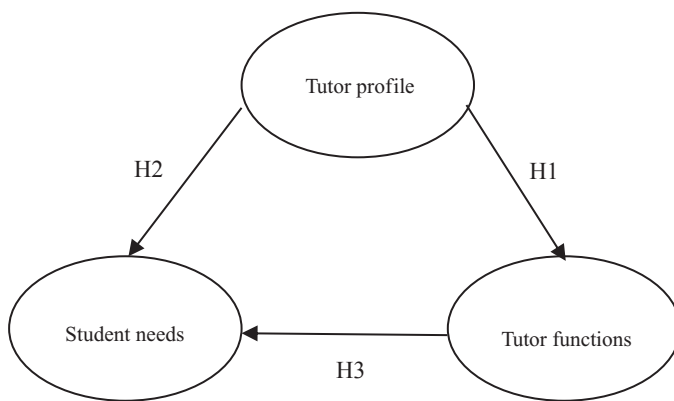
As a general aim, we intend to analyse the effect of the profile and functions of the tutor on higher-education students' tutorial needs. To achieve this, we propose the following objectives:

- Validation of a scale for evaluating tutoring in higher education.
- Validation of the construct of the interrelation of factors associated with tutoring in higher education (tutor profile, tutor functions, and tutorial needs).

- Confirmation of the positive influence of the factors associated with a tutor's profile on his or her functions and on the tutorial needs of higher-education students, and the influence of these tutor functions on the tutorial needs of the student.

In addition, based on the theoretical foundations, and as a consequence of the proposed objectives, we design a model which we subject to empirical evaluation (Graph 1):

GRAPH 1. Structural model to be confirmed.



Source: Own elaboration.

Following the reference model, the proposed hypotheses are:

- Hypothesis 1 (H1): the tutor profile predicts the type of functions he or she performs (Álvarez González, 2013, 2014; Cid & Pérez, 2006; Rodríguez Espinar, 2004).
- Hypothesis 2 (H2): the tutor profile predicts the effect he or she has on students' tutorial needs (García Nieto et al., 2004; López & González, 2018; Martínez Clares, et al., 2019).
- Hypothesis 3 (H3): the tutor functions have a direct influence on the effect on the tutorial needs of the students

(Amor Almedina, 2016; López & González, 2018; Urbina et al., 2017).

5. Methodology

This research uses a survey-type methodological design intended to verify a theoretical model of the interrelation of different factors associated with tutoring in higher education. We used the structural equation technique for this purpose, using the Amos 18.0 program.

5.1. Participants

We carried out convenience non-probability sampling on the study population (students enrolled on undergraduate

degree courses at the Universidad de Huelva) in which we identified the representativeness of students enrolled on courses in different areas of knowledge and gender diversity as quotas. We performed this procedure on a sample of 581 students (49.1% male; 50.9% female, mean age 22.94 years) enrolled in various academic years (35.5% in the first year; 27.5% in the second year; 28.1% in the third year; 9% in the final year) in 30 different degree courses (arts and humanities [4.13%], sciences [3.09%], health sciences [8.77%], social and legal sciences [61.27%], and engineering and architecture [22.71%]). This size is sufficient (95% confidence level; 5% sampling error), although it is not optimal for initial validation.

5.2. Instrument

For data collection we used an *ad hoc* scale (see Table 2) with three dimen-

sions (Tutor Functions [TF], Tutor Profile [TP], and Students' Tutorial Needs [TN]) with 26, 13, and 21 items respectively, set out on a Likert-type scale with values from 1 to 7, with 1 being not at all important and 7 very important. We prepared the instrument based on the reference theoretical foundations from the literature we consulted (Álvarez González, 2013, 2014; Amor Almedina, 2016; Cid & Pérez, 2006; Echeverría, 2002; García Nieto et al., 2004; Lázaro, 2003; López & González, 2018; Martínez Clares et al., 2019; Rodríguez Espinar, 2004, among others) and which sketch out the profile of the tutor and the functions he or she performs as factors associated with satisfactory tutoring. From this, we can establish the tutorial needs of university students and react to them.

TABLE 2. Scale for evaluating tutoring in higher education.

I. Tutor (and tutoring) functions for students (TF)
F1. Informing students about institutional academic questions (administrative organization, syllabus, modules, regulations governing progression, pathways, etc.).
F2. Providing institutional support to newly enrolled students.
F3. Guaranteeing personalised academic attention.
F4. Orientation and guidance on teaching-learning strategies.
F5. Orientation and guidance on learning styles, intellectual working techniques, and study habits.
F6. Orientation about developing individual study plans.
F7. Orientation about developing generic competences.
F8. Monitoring and evaluation of students, giving them information and guidance on their results and performance.
F9. Guidance on preparing course work.
F10. Guidance on and recommending bibliographies for the subject in his or her specialist area.
F11. Guidance on taking part in university life.
F12. Mediation in cases of conflict (teacher/student; student/student; student/institution).
F13. Orientation about social and communication skills.

F14. Orientation about interpersonal competences.
F15. Orientation about solving personal, family, health, social, etc. conflicts.
F16. Guidance on affective relationships.
F17. Orientation about decision making.
F18. Orientation about career prospects, workplace integration, and the job market.
F19. Guidance on developing professional skills.
F20. Providing professional references.
F21. Orientation and guidance about social questions (housing, grants, cultural context, etc.).
F22. Diagnosing and evaluating individual and group educational needs.
F23. Coordinating or liaising with the teaching team.
F24. Coordinating with faculty/university authorities and with support staff (administration and service staff, scholarships assistants, etc.).
F25. Supporting students with Erasmus/Socrates grants.
F26. Coordinating and supervising students' work placements in businesses/institutions.

II. Human and professional profile of the tutor (TP)

P1. Affectivity.
P2. Empathy.
P3. Personalisation (personally knowing each student).
P4. Fairness, equanimity (no preferences or aversions).
P5. Calm authority (ability to control a group, command respect, not authoritarianism).
P6. Respect for students.
P7. A personality that can positively influence and convince.
P8. Capacity to relate to others.
P9. Ability to listen.
P10. Receptive attitude and willingness to dialogue.
P11. Subject knowledge (academic knowledge).
P12. Knowledge of educational sciences (knowledge of teaching).
P13. Knowledge of social relationships and group dynamics.

III. Tutorial needs of students (TN)

N1. Orientation for the transition from secondary education to university.
N2. Orientation on arrival at university (first year).
N3. Helping students combine work and studying.
N4. Orientation for exams.
N5. Reviewing exams.
N6. Orientation after evaluations.
N7. Orientation during the progress of modules.
N8. Assistance with doubts about the subject.
N9. Orientation about improving academic performance.

N10. Orientation about factors linked to age (young people, adults, older people, etc.).
N11. Orientation about questions of cultural diversity (ethnicity, country, social group, etc.).
N12. Orientation about questions of linguistic diversity.
N13. Orientation for gifted and talented students.
N14. Orientation about special educational needs.
N15. Orientation about visual, auditory, motor, etc. disabilities.
N16. Orientation and evaluation of aptitudes (capacities).
N17. Orientation and evaluation of attitudes and personality.
N18. Orientation and evaluation of learning styles.
N19. Orientation and evaluation of cognitive strategies.
N20. Orientation and evaluation of professional interests.
N21. Orientation and evaluation of motivation.

Source: Own elaboration.

To collect data, we distributed the instrument to students individually for a duration of approximately 15 minutes. We informed the students that participation was voluntary and explained the instructions and objectives of the survey to them. We also told them it was confidential. We used the cross-sectional bands of tutorials so that we could access the population without having to interfere in academic rhythms. Finally, we used the SPSS 23 computer program for statistical analysis of the data obtained.

6. Results

6.1. Validation of the instrument

As mentioned above, we designed the instrument specially for this piece of research based on the works cited. We then submitted it for expert evaluation (six academics specialising in education at the Universidad de Huelva). This enabled us to evaluate the pertinence and clarity of the items. Modifications to the initial ver-

sion were minor. Both processes contributed to the theoretical validity.

6.1.1. Reliability

Applying Cronbach's Alpha to estimate the internal consistency of the scale, which has 60 variables and a sample of 581 subjects, showed a high level of reliability ($\alpha = .953$) for the complete scale. We also found high partial correlations for each dimension (TF, $\alpha = .919$; TP, $\alpha = .889$; TN, $\alpha = .921$). Next we identified the less consistent items to revise the scale (items F6 and item N1) and improve it for future applications. When we excluded these, the total alpha value was .958 and two of the three dimensions also improved (TP, $\alpha = .928$; TN, $\alpha = .929$).

6.1.2. Construct validity

We performed an exploratory factor analysis (EFA) with the aim of concentrating the relevance of the items on one factor and so better discriminating between factors. We performed a factorial reduc-

tion applying an orthogonal rotation using the varimax method. Furthermore, in view of the high KMO values for the scales — between .908 and .937 — and the level of significance of $< .001$ obtained in the Bartlett sphericity test, we can confirm that factor analysis is relevant, suitable, and applicable.

The results for each of the dimensions considered are set out below:

D1. Tutor's functions regarding students: we identified three factors that explain 53.33% of the variance in the set of items (Table 3):

- Factor 1: general guidance and orientation functions. The items saturated by this factor include: those relating to orientation about skills, competences, career prospects, conflict resolution, decision making, social questions, and learning styles; and those that refer to guidance in professional competences, affective relationships, teaching — learning strategies, and university participation. They also include functions regarding evaluating and diagnosing educational needs and functions related to coordinating the teaching team and coordinating with authorities (faculty/university).

TABLE 3. Factorial analysis of tutor functions.

Items	Components		
	F1	F2	F3
F13	.741	-.276	-.140
F14	.722	-.352	-.063
F19	.716	-.200	-.069
F20	.710	-.183	-.075
F18	.704	-.115	-.192
F7	.692	-.038	.056
F15	.691	-.471	-.050
F11	.675	-.107	-.196
F16	.669	-.382	.054
F23	.666	-.094	.248
F2	.653	.049	-.026
F12	.639	-.123	-.175
F22	.635	-.038	.261
F21	.634	-.256	.049
F17	.627	-.041	-.217
F5	.590	.304	-.129
F24	.578	-.118	.544

F4	.541	.472	-.208
F1	.514	.436	-.041
F10	.466	.403	-.118
F9	.384	.667	-.114
F8	.422	.590	-.163
F3	.480	.523	-.033
F26	.452	.287	.561
F25	.417	.360	.498
Variance explained by factor	37.236	10.892	5.210

Rotated component matrix (KMO = .917; Bartlett. Sig = .000).

Source: Own elaboration.

- Factor 2: personalised student monitoring functions. This factor saturates variables that illustrate the functions of the tutor such as guidance on coursework, monitoring and evaluation of students, and personalised academic attention.
 - Factor 3: functions relating to work placements and Erasmus grants. This factor saturates variables that illustrate the coordination and supervision of work placements and support for students with Erasmus/Socrates grants.
- D2. Tutor profile:* we identified two factors that explain 56,254% of the variance in the set of items (Table 4). Namely:
- Factor 1: professional profile. This factor illustrates variables relating to the capacity to listen and relate to others, characteristics such as empathy, leadership, equanimity, and authority, while also showing knowledge of education and subject knowledge.

TABLE 4. Factorial analysis of the tutor profile.

Items	Components	
	F1	F2
P6	.783	.177
P9	.763	.182
P11	.759	.038
P12	.736	.030
P4	.710	.314
P5	.692	.159
P7	.641	.242
P10	.570	.374

P2	.540	.439
P8	.497	.457
P1	.051	.882
P3	.100	.873
P13	.435	.459
Variance explained by factor	44.591	11.663

Rotated component matrix (KMO = .908; Bartlett. Sig = .000).

Source: Own elaboration.

- Factor 2: human and social profile. This factor characterises a sensitive tutor profile, concerned with getting to know each student individually and knowledge of social relationships and group dynamics.
- Factor 1: needs that focus on personal and/or professional aspects. This factor brings together a group of items that emphasise the importance of needs for orientation and guidance on learning styles, attitudes, and personality, cognitive strategies, motivation, and professional interests and aptitudes.

D3. Students' tutorial needs: three factors are identified that explain 61.029 % of the variance in the set of items (Table 5). Namely:

TABLE 5. Factorial analysis of students' tutorial needs.

Items	Components		
	1	2	3
N18	.763	.180	.176
N17	.733	.371	.113
N19	.717	.254	.220
N21	.707	.394	.093
N20	.698	.330	.146
N16	.615	.465	.133
N12	.259	.795	.169
N11	.197	.761	.053
N13	.328	.716	.100
N10	.410	.626	.012

N3	.312	.585	.279
N15	.462	.575	.246
N14	.506	.554	.154
N2	.359	.483	.402
N5	.037	.129	.802
N8	.067	.158	.770
N6	.157	-.020	.743
N7	.264	-.006	.743
N4	.047	.225	.736
N9	.309	.353	.536
Variance explained by factor	43.446	12.588	5.001

Rotated component matrix (KMO = .937; Bartlett. Sig = .000)

Source: Own elaboration.

- Factor 2: needs that focus on attention to diversity. This factor illustrates needs that relate to attention to diversity: linguistic, cultural, age, disabilities, and special educational needs.
- Factor 3: needs that focus on evaluation and performance in modules. This factor saturates a series of needs whose importance centres on reviewing exams, doubts about the subject, and needs for orientation focussing on the evaluation processes (before, during, and after) with orientation for improving academic performance.

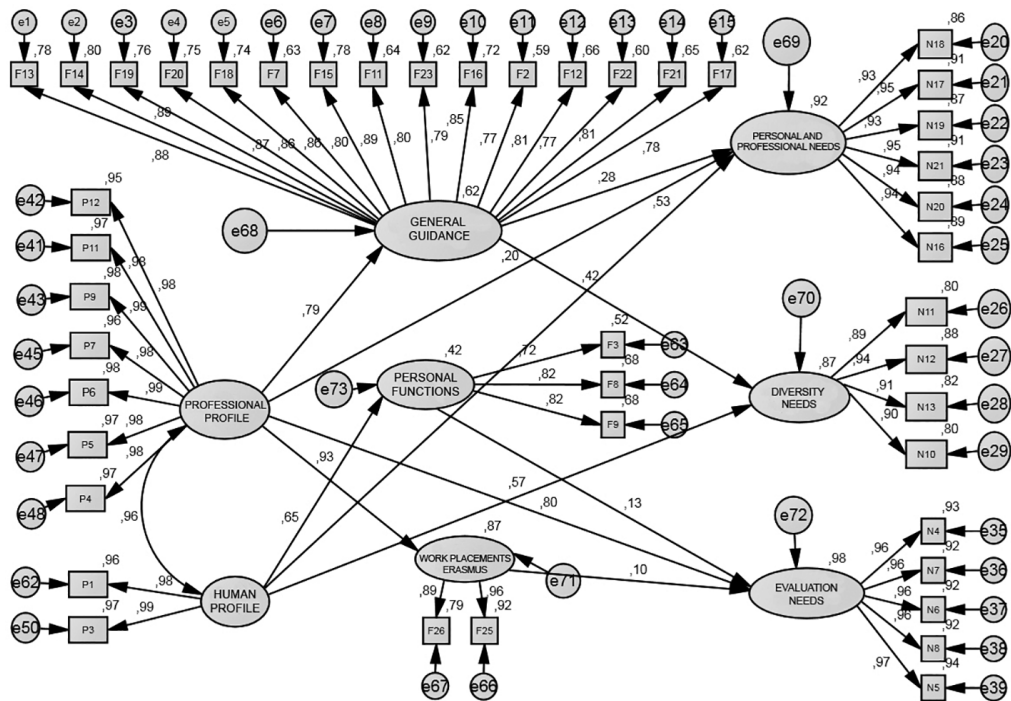
6.2. Confirmation of the model

After the preliminary reduction of the number of factors, we attempted to

empirically test the factors extracted. To model the structural equation, we took as reference points the hypotheses stated in the theoretical model that guides the research (Graph 1).

The high rates of variance explained in the factors relating to the general orientation and guidance functions (62%), personalised student-monitoring functions (42%), functions relating to work placements and Erasmus grants (87%), needs centred on personal and/or professional aspects (92%), needs centred on attention to diversity (87%), and needs centred on evaluation and performance in modules (98%), and the regression and correlation indexes between the factors included in the equation allow us to accept the model (Graph 2).

GRAPH 2. Structural Equation Model.



Source: Own elaboration.

The goodness of fit indexes (Table 6) indicate that the model fits the data reasonably well (Chi-square/df = 4.76; $p > .01$; CFI = .93; IFI = .93; NFI = .98; RMSEA = .04).

TABLE 6. Fit indices of the model.

Fit indices		Recommended values	Observed values
Absolute fit index	χ^2/df (Chi-squared/df)	≤ 5.00	4.76; $p < .001$
Comparative fit index	IFI (incremental fit index)	$\geq .90$.93
	NFI (normalised fit index)	$\geq .90$.98
	CFI (comparative fit index)	$\geq .90$.93
Error of approximation	RMSEA (Root Mean Square Error of Approximation)	$\leq .06$.04
Sample fit	HOELTER .05	> 200	480

Source: Own elaboration.

In the model we can see three groups of elements: firstly, the independent factors that relate to the tutor profile (social and professional); secondly, as dependent variables, the functions tutors perform measured in three types (general orientation and guidance, personalised orientation and guidance, and orientation and guidance relating to work placements and Erasmus/Socrates grants); and thirdly, the tutorial needs of the students (regarding personal and/or professional aspects; focussed on attention to diversity; relating to evaluation and performance in modules).

The model proposes correlations between the tutor profile, and regressions of the influences of these profiles on the functions and needs. Therefore, starting with the correlations between the independent factors, we identified a strong correlation between the human and social profile and the professional profile ($r = .96; p \leq .01$) and, analysing in more depth the regression indices between factors, we found the following results:

Depending on the type of profile associated with the tutor, we can predict the type of functions he or she performs, as well as the tutorial needs of the students he or she looks after; accordingly, in the model we can see how a more professional tutor profile has a significant positive influence on the general guidance and orientation functions ($\beta = .79; p \leq .01$) and

Erasmus placement function ($\beta = .93; p \leq .01$), and reacts to a type of needs focussed both on personal/professional aspects ($\beta = .20; p \leq .01$) and on the students' needs relating to evaluation and performance ($\beta = .80; p \leq .01$). We also see how a more human/social profile predicts more personalised functions relating to the monitoring of students ($\beta = .65; p \leq .01$) and taking care of personal, professional ($\beta = .53; p \leq .01$) and diversity needs ($\beta = .57; p \leq .01$).

With regards to functions, we can see how, depending on the typology developed, their influence on tutorial needs is positive, and on a different level, these needs are also shaped by the profile that defines the tutor. In this way, we can see how the general orientation and advising functions have a positive and significant influence on needs that centre on personal and/or professional aspects ($\beta = .28; p \leq .01$), and on those connected to attention to diversity ($\beta = .42; p \leq .01$).

Furthermore, the needs that focus on evaluation and monitoring of modules are predicted by personalised functions relating to monitoring students ($\beta = .13; p \leq .01$) and, at a lower level, by functions relating to work placements and Erasmus grants ($\beta = .10; p \leq .01$).

Finally, regarding the measurement model, for those factors that saturate a large number of indicators, we decided to include the items with factor loadings above .6 as a better fit is achieved (Table 7):

TABLE 7. Factor loadings of the measurement model.

Indicator	Estimate
GENERAL ADVICE	
F13	.885
F14	.893
F19	.870
F20	.863
F18	.858
F7	.796
F15	.886
F11	.801
F23	.785
F16	.851
F2	.768
F12	.813
F22	.772
F21	.806
F17	.785
PERSONAL AND PROFESSIONAL NEEDS	
N18	.926
N17	.955
N19	.935
N21	.952
N20	.937
N16	.942
DIVERSITY NEEDS	
N11	.893
N12	.938
N13	.906
N10	.896

EVALUATION NEEDS	
N4	.965
N7	.959
N6	.957
N8	.961
N5	.972
PROFESSIONAL PROFILE	
P11	.983
P12	.977
P9	.987
P7	.979
P6	.990
P5	.983
P4	.985
HUMAN PROFILE	
P3	.987
P1	.980
PERSONAL FUNCTIONS	
F3	.720
F8	.824
F9	.824
ERASMUS PLACEMENTS	
F26	.888
F25	.960

Source: Own elaboration.

7. Discussion and Conclusions

The aim of this work was to analyse how tutor profiles and functions impact the tutorial needs of higher education students. To this end, we identified two specific objectives that constrained the va-

litation of an instrument and of the construct being studied, in order to achieve a valid and reliable analysis of the results obtained, which the EFA confirmed. The model was then confirmed using the structural equations procedure, which leads us

to identify the existence of correlations between the tutor profile, and regressions or influences of these profiles on their own functions and on the needs of the students.

By specifying the objectives and examining the stated hypotheses, the results allow us to confirm these hypotheses through various demonstrated correlations. The following conclusions stand out:

- a) There is a university teacher *professional profile* that prioritises the *academic area* of the tutorial activity with the aim of meeting students' needs that relate to academic evaluation and performance; this requires the tutor to demonstrate certain *professional competences* (the ability to listen and relate to people, and to display knowledge of education and the subject he or she delivers) and personality traits (empathy, leadership, equanimity, and authority) which are also illustrated in other pieces of research (Fernández-Salinerro, 2014; García Cabrero, et al., 2016; Martínez Clares et al., 2014; Más Torelló, 2012; Torrecilla et al., 2013). This tutor profile is also linked to performing functions that are personalised and relate to monitoring of students (guidance with coursework, monitoring and evaluating the student body, and personalised academic attention), and to those functions linked to guidance in work-placement periods and/or on grant programmes (Erasmus/Socrates).

- b) There is also a *humanitarian profile* of a university teacher who carries out the *personal and social area* of the tu-

torial activity more intensely, in order to react to student needs that are closely linked to highly personal aspects of their personality, taking professional decisions, and ensuring attention to diversity; this requires the tutor to display sensitive behaviour, an interest in the personalisation and individualisation of teaching, and also to be involved in the social and dynamic relationships of groups. This tutor profile carries out functions relating to orientation and general guidance (orientation about skills, competences, career prospects, conflict resolution, decision making, social questions, learning styles, guidance on professional competences, affective relationships, teaching-learning and university participation strategies). Although this profile does not have the same long history in Spain as it does in some other places like the English-speaking world (Cashmore, Scott, & Cane, 2012, analysed the importance of the role of the tutor in creating a feeling of belonging to the institution and avoiding early university leaving), it is currently emerging as one of the central functions in university tutoring, and so it is necessary to consider in greater depth the principles that should guide its implementation (Haya, Calvo, & Rodríguez, 2013; Herrera Rodríguez, 2017; López & González, 2018; López et al., 2013; Manzano-Soto & Rol-dán-Morales, 2015; Martínez Clares et al., 2019; Yale, 2019).

Two models of tutorial action are apparent: academic-professional (teaching) and

personal (counselling). These are defined by the needs students display, which polarise the work and profile of university tutors, and so this piece of work supports the existing theoretical theses that shape the different classifications of university tutoring models (Álvarez González, 2013, 2014; Álvarez González & Álvarez, 2015; Lobato & Guerra, 2016) and it also underlines the need to take students' needs into consideration as a starting point from which to design and implement the tutorial practices included in the different services and/or programmes offered by the university.

To meet this challenge, the study presented here agrees with other recent works (Martínez Clares et al., 2019; Waltz, 2019) on the importance of providing teachers with information and practical training to create a «professional awareness» that can form the basis for acquiring a commitment to a function that is inherent to teaching practice and «must not be based solely on technical and methodological aspects, but also on the personal and participatory competences that tutoring demands» (Martínez Clares et al., 2016, p. 95). Faced with crowded settings that can tend to depersonalise the process of teaching and learning, students clearly express concerns about this, and works such as those by Amor Almedina (2016), Cashmore et al. (2012), López Gómez (2017), and Pérez et al. (2017) show that tutors being *closer* to the students results in a process whereby students better adapt to the university, develop a sense of belonging at the institution, and increa-

se their expectations of academic success and achievement.

In short, the proposed integral tutorial activity (Álvarez González, 2017) must be incorporated into the work of the university tutor, something demonstrated in much of the theory which acts as a foundation for the present study and in the results obtained in this study.

8. Limitations and future lines of research

Among this study's limitations, we should note the need to compare the opinion of students with that of the university tutor to achieve a better fit between, and significance of, the proposed objectives. Also, increasing the size of the final sample in some of the subject areas would make for more generalisable information that starts from a concrete reality but is similar to other contexts analysed in the rationale for the study.

Looking to the future, this work supports the need to continue to investigate the needs of university students and teachers' work as tutors, to create a meaningful teaching and learning context for both actors. We can contribute to this through the construction and validation of instruments that relate to constructs and variables associated with tutorial activity in higher education, as well as by transferring information deriving from other international settings that have long experience of implementing university tutoring.

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Authors' biographies

Manuel Delgado-García holds a Degree and Doctorate in Educational Psychology from the Universidad de Huelva, and a Degree in Pedagogy from the Universidad Nacional de Educación a Distancia (UNED). He is Assistant Professor in the Department of Pedagogy of the Universidad de Huelva and collaborator with the Universidad Internacional de la Rioja (UNIR). His research interests focus on orientation, tutorial activity, and teachers' professional development.

 <https://orcid.org/0000-0001-6157-0494>

Sara Conde Vélez holds a Degree and Doctorate in Educational Psychology from the Universidad de Huelva. She is Assistant Professor in the Department of Art and Architecture of the Universidad de Huelva. Her main research interests revolve around school relations, school bullying, and the design and validation of evaluation instruments.

 <https://orcid.org/0000-0002-7950-5866>

Ángel Boza Carreño holds a Degree in Education and Doctorate in Educational Psychology from the Universidad de Huelva. Educational guidance counsellor (1983-1997) and Associate Professor in the Research and Diagnosis Methods in Education Area, which forms part of the Department of Pedagogy of the Universidad de Huelva. His research interests focus on educational orientation and tutorial activity as well as research methods in education.

 <https://orcid.org/0000-0002-3395-421X>

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