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# Sport Sciences Full Professors` assessment about the main aspects inside the Spanish faculty evaluation

Opinión de los Catedráticos de Educación Física y Deportiva sobre los aspectos más importantes de la evaluación del profesorado universitario

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#### **Abstract**

This study aims to know the Spanish Physical Activity and Sport Sciences Full Professors' opinion about Spanish National Habilitation and Evaluation Agency's faculty evaluation. The sample was composed of 17 full professors. The instrument used was a semi-structured interview. The qualitative analysis of the data obtained from the interviews indicates that in opinion of the Spanish physical activity and sport sciences full professors teaching and researching should have the same importance for the faculty evaluation. In addition, it is important to underline the need to improve and objectify both researching and teaching evaluation introducing for example qualitative evaluations of faculty's scientific productions.

**Keywords:** University faculty evaluation; science evaluation; teaching evaluation, Evaluation, Spanish University; university full professors

#### Resumen

Este estudio tiene como objetivo conocer la opinión de los catedráticos españoles de Ciencias de la Actividad Física y del Deporte sobre la evaluación del profesorado de la Agencia Nacional de Acreditación y Evaluación. La muestra estuvo compuesta por 17 catedráticos. El instrumento utilizado fue una entrevista semiestructurada. El análisis cualitativo de los datos obtenidos en las entrevistas indica que en opinión de los catedráticos españoles de ciencias de la actividad física y del deporte la docencia y la investigación deberían tener la misma importancia para la evaluación del profesorado. Además, es importante subrayar la necesidad de mejorar y objetivar la evaluación tanto de la investigación como de la docencia introduciendo, por ejemplo, evaluaciones cualitativas de las producciones científicas del profesorado.

**Palabras clave**: Evaluación del profesorado universitario; evaluación de la ciencia; evaluación de la docencia, Evaluación Universidad Española

# Introduction

Teachers' evaluation is one of the main aspects analysed and valued in the search for quality in higher education.

This evaluation of the faculty is taken into consideration in the ranking of universities (E. g. ARWU, The Leiden ranking, The World University Ranking) and in the evaluations carried out by the different worldwide agencies. In this sense, Buela-Casal et al. (2009) compared the indicators used by the agencies of different countries and obtained the following indicators as the most important: firstly, the most used was teaching and education process, and secondly indicators about libraries and documentary resources, student attention indicators and faculty indicators.

#### Spanish faculty evaluation

In Spain, this evaluation is carried out by ANECA (Spanish National Habilitation and Evaluation Agency) through its PEP and ACADEMIA programs. The first one refers to the hiring of Lecturers and the second one for the evaluation of the Senior Lecturers and Full Professors.

For the evaluation of the contracted personnel, three figures are differentiated: lecturer (Ayudante Doctor), lecturer (Contratado Doctor) and lecturer in private University (Profesor Universidad Privada) (you can see an equivalence for teachers figures in table 1). In all three cases the same aspects are evaluated: research experience, teaching experience, formation and professional experience and other merits.

On the other hand, and attending to the Spanish law (RD 415/2015, of 29th of May which establish the national habilitation access to university teaching staff) the following merits are indicated as valuable in the figures of Senior Lecturer (Titular de Universidad) and University Full Professor (Catedrático de Universidad): research activity, teaching activity, transfer of knowledge and professional experience, experience in educational, scientific and technological management and administration, and other merits. Academic formation will also be evaluated for habilitationas a Full Professor.

Table 1. Teacher's Figure Equivalence

Spain	United Kingdom	Unites States of America	
Catedrático de Universidad	Professor	Full Professor	
Titular de Universidad	Reader/Associate Professor	Associate Professor	
Contratado Doctor	Senior Lecturer	Adjunt Professor	
Ayudante Doctor	Lecturer	/ Adjunt 1 Totosoon	
Ayudante	Tutor	Instructor	

#### Reseach Activity evaluation

Firstly, attending to the evaluation of research activity, ANECA considers the following indicators: scientific publications, professional artistic creations, congresses, conferences, seminars, directed doctoral theses (if not claimed as merits of teaching activity), quality and number of competitive projects and research contracts with verifiable results, mobility: stays in research centres with verifiable results and other research merits.

This evaluation of the research aspect of the university teaching staff is the most valued section in the different existing habilitation. In this sense, Buela-Casal & Sierra (2007) surveyed 1,294 university Professors and obtained as results that the indicators with the greatest weight were those referring to research, especially the articles published in journals included in the Journal Citation Report (JCR), even in fields of knowledge such as Art and Humanities and in

Social and Legal Sciences. Along the same line, the Resolution of November 24th 2016 of the National Commission for the Evaluation of Research Activity (CNEAI), which publishes the specific criteria approved for each of the fields of evaluation. CENEAI uses as main criteria in the area of Social, Political, Behavioral and Educational Sciences, articles published in renowned journals. Accepting those journals included in the lists by scientific fields of the "Journal Citation Reports (Social Sciences Edition)" and "Journal Citation Reports (Science Edition)" of the "Web of Science". This use of the impact factor for the evaluation of research articles is an aspect with many criticisms in the bibliography (Alberts, 2013; Callaway, 2016; Giménez-Toledo, 2015; Stephan et al., 2017). In this sense, Giménez-Toledo (2015) carries out a historical review of the process of evaluation of scientific production. Obtaining as a conclusion of its work that the Web of Science and its JCRs will persist as reference sources in the evaluation of scientific production. However, he also points out that in some countries they combine the use of these bibliometric indicators with the qualitative judgement of a panel of experts in the field that evaluates that production. The latter type of evaluation could be better accepted than quantitative assessment alone through bibliometric indicators.

On the other hand, differing from scientific journals, the books' valuation has few instruments and indicators to evaluate their quality (Giménez Toledo, 2016; Giménez-Toledo & Tejada-Artigas, 2015; Gómez-Hernández, 2015; Salado & Ortega, 2019). Although there are some quality indices of publishers such as SPI (Scholarly Publishers Indicator), Book Citation Index and Publisher Scholar Metrics. In the evaluations of the different agencies the prestige of the publishers is usually used as a quality index. Although it is not clear what the criteria are to determine a publishing house as one with recognized prestige. In this sense, Giménez-Toledo & Tejada-Artigas (2012) surveyed 3045 Full Professors and researchers who chose as characteristics of editorial quality: to have a continuous trajectory, an evaluation system with external reviewers, presence in specialized libraries, presence in international databases of the monographs published by the publisher, and a publisher with specialized collections present in specialized national and foreign bookstores.

## Teaching evaluation

Secondly, in relation to the teacher's evaluation, ANECA considers indicators such as teacher dedication, quality of teaching activity, quality of teacher training and other merits. Teaching is a very complicated aspect to evaluate since there is no consensus on how to carry it out (Alvarado et al., 2012). In this sense, Calderón Patier & Escalera Izquierdo (2008) propose that correct teacher's evaluation should include the points of view of evaluation experts, of experts in the subject matter of teaching and pedagogy experts. In any case, in the bibliography there are studies from all these perspectives. (Eg. Alpay & Verschoor, 2014; Bain, 2005; Chen et al., 2015; Korthagen, 2004; Samples & Copeland, 2013; Tejedor, 2012). In most cases it is appreciated that: a) an adequate teacher evaluation must be multifactorial, in other words, it must be evaluated from different perspectives; b) the teachers' evaluation must have greater importance in the ranking and general evaluations of the university staff; and c) an adequate teacher must be concerned about helping his students, be motivated, being a good communicator and have a wide knowledge of his subject.

#### Management evaluation

Finally, the evaluation of university management considers the single-person positions held, performance of positions in the educational, scientific or technological environment within the General Administration of the State or autonomous communities and other merits in management. This aspect is the least valued by ANECA in faculty evaluations. In fact, RD 415/2015, of 29th May, modifying RD 1312/2007, of 5th of October, has become a complementary dimension, while teaching and research have increased their importance in the habilitations for Holder and University Full Professor. This status may be one of the factors influencing the existing carelessness in the teaching staff to carry out management tasks at the university (Sánchez-Moreno and Altopiedi, 2016).

#### **Objective**

One of the most important factors in carrying out the evaluation is that they were adjusted to the reality of each area. In this sense, Giménez Toledo (2016) in his work indicates that the researchers of Humanities and Social Sciences make

calls to consider that each discipline has its own ways of researching and its own ways of publishing so it should have its own forms of evaluation.

Therefore, different questions emerge that need to be answered, such as: the evaluation systems of the faculty adjusted to the demands? And Do they allow the formation of better scientists? Answering this question will allow discussions to improve the Spanish systems particularly and other international systems in general. It will also allow researchers to plan their scientific careers to long-term.

For this reason, the objective of this work is to know the opinion of the Full Professors in Sports Sciences on the evaluation carried out by ANECA of the research, teaching and management aspects of the faculty.

# **Materials y Methods**

# **Participants**

The participants were a total of 15 Full Professors from Physical Education and Sports area. Also, two Full Professors of Didactics of Self Expression who taught the degree of Sciences of Physical Activity and Sport were interviewed. The election of the sample was intentional. Of the 17 Full Professors interviewed, two were women and 15 were men, belonging to eight Spanish public universities. All participants gave their consent to participate in the study after being informed about the objectives, methodology and treatment of the data in an anonymous way.

#### Instruments

The instrument used for data collection was a semi-structured interview. This interview has an intermediate design between the structured interview, which follows a rigid script regarding the design, order and presentation of the questions, and the unstructured interview, characterized by its flexibility and the interviewer's freedom to act.

From a bibliographic review, and at the proposal of this work researchers, an initial interview outline was designed that was composed of six blocks of questions. The first block contained personal questions about the experience and opinion of general aspects related to the evaluation of the quality of the faculty in the Spanish university. In second place were the questions that belong to the block of the teaching aspect of the faculty, in which the Full Professors are asked their opinion on what they consider a good teacher is, and how they consider how ANECA evaluate this aspect. The third block of questions corresponds to the research aspect of the faculty, in which the Full Professors are asked for their opinion on what an excellent researcher is to them, and on how this aspect is evaluated by ANECA. Fourthly, there is the block of questions about the profile of the academic manager, in which Full Professors are asked to provide their opinion on what a good university manager should be and how they consider that ANECA evaluate this aspect. Fifth, they were asked two questions about what a good research intern is. And finally, as a summary, the Full Professors were asked the following question: What are the general characteristics that an excellent faculty should have at Sport Science.

# Data analysis

The data analysis process was carried out following the recommendations of Almagro et al. (2015): 1. Interview transcription; 2. Reading and getting familiar with the transcripts; 3. Coder training; and 4.-Definition and description of the codes and grouping them into dimensions.

To make text processing more objective, the literature recommends that this process be carried out by different coders (Almagro et al. 2015; Guest & MacQueen 2008; Schreier 2012). The group of coders in this study were three professionals with experience in content analysis. Training between the coders was carried out in the following steps: 1.-Describe and learn the codes; 2.-Co-coding practice; and 3. Two separate interviews were conducted and the intercoder agreement was above 92% (Saldaña 2015).

All this data analysis was carried out with the help of the MAXQDA program

# Results

Table 2 shows the frequency of comments made by Full Professors in relation to the codes of the four dimensions analysed. It can be seen that the dimension most dealt with in the interview is the research one, followed by management and teaching, and finally experience.

Table 2. code frequency.

	CODE		QUANTITY (n)
	CAT	Aspects that have led him to become a Full Professor	14
BACKGROUND	ACRED	Opinions about the current habilitation system	15
	<b>EVCAFD</b>	Opinion about different evaluation from other areas of knowledge	14
	CPDI	Characteristics of a good faculty	12
	TOTAL		55
V TEACHING E	BDOC	Characteristics of a good teacher	14
	VDOCAN	Evaluation of ANECA criteria on teaching	25
	<b>EDOCUNI</b>	Evaluation of teaching at your university	21
	IMPDOC	Importance of teaching in the evaluation of the faculty	22
	TOTAL		82
	BINV	Characteristics of a good researcher	13
	VINAN	Evaluation of the ANECA criteria on the evaluation of book, articles and research projects	59
	CNEAI	Opinion on the Sexennial System	12
	EVINU	Evaluating research at your university	18
	IMPINV	Importance of research in faculty evaluation	22
	TOTAL		124
UNIVERSITY MANAGEM ENT	BGES	Characteristics of a Good university manager	13
	VGAN	Assessment of the ANECA management criteria	10
	IMPG	Importance of management in the evaluation of the faculty	19
	VGEST	Valuation of management by other faculty	13
	<b>ESTGES</b>	Strategy to evaluate the management carried out by other faculty	9
	SISTDEC	Opinion of the system of election of deans	12
	EGESUNI	Assessment of management at your university	18
	TOTAL		85

# **Background Dimension**

The Full Professors interviewed point out as the most important aspects which have led them to achieve that academic level are work and effort. For example, Interviewed 16 pointed out that: "I believe that the work that it have been done in a very intense way" while Interviewed 14 pointed out that "In order to have reached this level, what has characterized me for a long time is the continuous work I have been done, effort and the capacity to improve". Another of the aspects indicated by the Full Professors as the main one on their way to habilitation is to have good scores in the three valuable aspects. In this way Full Professor 12 explained that "I have gone through the three main aspect: management, research and teaching". To a lesser extent, some Full Professors emphasize that they have achieved habilitation as a result of their excellent outcomes in the research area, in this way the interviewed three comments "I believe that fundamentally the research work, the published papers in high impact journals". In this sense, there is a slight superiority in the importance of research over teaching in the opinion of the interviewed.

According to the opinion of the Full Professors, the most referenced aspect within the Experience dimension is the adequacy of the habilitation system followed by ANECA. Specifically, 66.6% of those interviewed thinks that it is adequate, or that it improves the rating system that existed before. In this sense, interviewed nine states that "this

system is better, I think it is good that there are some criteria". Another of the aspects most discussed by the Full Professors in the criticisms of this system focuses on the permissiveness of the criteria and the lack of objectivity of some of them, for example Full Professor 11 points out that "my impression as a user of ANECA is that it is very permissive". On the other hand, one of the aspects of this habilitation system that some Full Professors consider very important is the in-depth knowledge of the habilitation process, criteria and importance of the different aspects. Thus, the interviewed 17 thinks that "the most important thing is that everyone knows the method used and that's it, the best method is the constancy of the method".

For all those interviewed, the area of Physical Activity and Sport Sciences should not have a different assessment than the other areas, for example, Full Professor 14 states that "we cannot ask for a different measuring stick from our colleagues who are in university".

For all those interviewed, the area of Physical Activity and Sport Sciences should not have a different assessment than the other areas, for example, Full Professor 14 states that "we cannot ask for a different measuring stick from our colleagues who are in university".

Regarding the faculty characteristics, two important characteristics stand out from the opinion of the Full Professors. One is the formation, giving greater importance to the knowledge of the subject taught and to the research formation, "good formation, experiences in international stays, getting involved in teaching and train in it" (interviewed 9). And the other faculty characteristic that stand out are personal characteristics, such as dedication, critical capacity, sacrifice, be capable of transmitting, "Motivation towards work, implication towards work, professionalism, enthusiasm, desire to continue improving, fundamentally it is personal factors that make one become a good professional" (interviewed 14). Another of the important aspects commented by the interviewees is the ability to team working, "that is involved, that is cooperative and that is capable of working in a team" (interviewed 11).

#### Research dimension

Then, with regard to the research dimension, ten of the Full Professors consider dedication, leadership ability and vocation the most important characteristics for being a good researcher: "I believe that leadership ability is very important" (Full Professor 12). Another of the aspects highlighted by the majority of those interviewed is to know the method: "To know the method and the instruments of specialized knowledge, each one of its area" (Full Professor 17). Another of the aspects that appears in the interviews refers to creativity and innovation that allow new ideas to be generated, so Full Professor one states that "He has to have intellectual skills, as innovation or creativity". To a lesser extent they also comment on the importance of team working and transmitting knowledge, "It is quite relevant for Full Professors to set up teams and transmit knowledge". The last aspect commented by some of the Full Professors with respect to being a good researcher is to design top researching projects, know how to obtain the necessary resources and make quality scientific publications, "design projects, know how to obtain resources and pass the knowledge to scientific publications, in addition to transmitting these results to the general public" (interviewed 9).

Focusing the evaluation of the research activity carried out by ANECA, 47.06% of Full Professors agree with how the evaluation is carried out: "It is a correct system, it marks criteria that are made public. It seems to me that it is much better than the previous one" (interviewed 12). On the other hand, criticisms of the system are focused on the fact that it only takes care about merits quantification "It is the quantification of merits not the quality of these merits or the applicability of these" (Full Professor 8).

There is different opinion about how research articles, editorials and research projects should be evaluated. In the first place, about the research articles, Full Professors indicate, on the one hand the impact factor and number of citations, "The level of impact, I think is a very valid international criteria" (interviewed 7) and the transfer or applicability "Applicability for me is the most important value, the transfer of those results to the real field" (interviewed 9). On the other hand, they also comment on the importance of the position of the authors in the articles as an aspect to be

assessed in the articles, "The impact of the publication associated with the position of each of the researchers within the authorship of the works" (Full Professor 12). Another aspect commented on in the evaluation of articles is that there are important journals in our area that do not belong to JCR and the prestige of the journal should be assessed regardless of whether it is indexed in any database. In this sense, Full Professor eight thinks that "it depends on the journal where you publish, you don't necessarily have to talk about JCR, there are journals with a lot of international prestige that are not in JCR".

The next aspect that was asked about was the evaluation of the books and the proposals were focused on the evaluation of the scientific rigor of the book "Basically scientific rigor" (interviewed 4), and like the previously commented research articles, on the transfer of knowledge "The first thing they must have is a review process, sometimes they do not go through any review criteria. Firstly, they go through a review process and then the transfer of knowledge" (interviewed 9). Another form of evaluation the books obtained from the analysis of the interviews is seeing the place they occupy in the different ranking of publisher that exist, "I would go to a ranking of international publishers" (Full Professor 11). On the other hand, and to a lesser extent, there are Full Professors who propose the sale of a book as an evaluation criterion for these; for example, Full Professor seven points out that "above all, the sale of this book says a lot about its quality".

Finally, for the evaluation of researching projects, transference aspect evaluation is the most commented by the interviewed: "Applicability and transfer of knowledge is what I would value" (interviewed 2). Other aspect to evaluate about the projects according to the Full Professors are the structure of the projects, for example, "to see if the problem is well posed, adequate methodology, to check if the data and its interpretation are well analysed" (Full Professor 16). Evaluating projects at three levels: international, national and regional is another proposal obtained from the analysis of the interviews. In this sense, Full Professor 12 comments that "good projects are simple there are three levels: at the international level there are European projects, then there is national plan projects and regional projects". Other factors that appear in the interviews to be considered are: the background of the research group, which is feasible, the competitiveness regime of the project, in this way interviewed eight states that "the project feasibility that it contributes something and that it is formed by a competent research group".

The transfer of knowledge is appreciated as the most valued item by Full Professors in the valuation of research articles, research projects and books, for example interviewed 14 indicates that "all research should try to have an applicability and sometimes we do research that does not have any transfer to the practical field".

Regarding the CNEAI's evaluation of the research activity, 70.59% of the interviewed think that the system is too permissive "There are researchers who in one year get the necessary work and that is sometimes unreasonable " (interviewee 4). Other aspects commented about this evaluation is with respect to the evaluation commissions since some Full Professors think that they are not adequate "Applications have a problem in who evaluates them" (interviewee 11). They also comment on the difference in evaluation criteria between social sciences and health sciences. In this sense, Full Professor 16 believes that "we are favored by the system since if we were placed in health sciences' things would change".

## Teaching Dimension

The second dimension analysed is referred to Teaching. In this dimension for most of the interviewed, a good teacher stands out on the one hand for his personal characteristics such as being a good communicator and being *empathetic "I believe that there are some independent characteristics that are: knowing how to communicate, having empathy with the students"*, (Interviewee 8), and on the other hand the knowledge of the subject to be taught, "Knowing what you are talking about is very important, having a good basic training about what you are explaining" (Interviewee 6). Another aspect of teaching that appears in the opinions of Full Professors is the ability to motivate students, so interviewee 12 states that "it is necessary to have the ability to generate concern and interest in students". Finally, the mastery of

technology for use in classes is an aspect proposed by some of the Full Professors interviewed, "who master the basic technologies, image presentation and virtual communication technology" (Full Professor 3).

When analysing ANECA's evaluation of the teaching aspect of the faculty, 58.82% thinks that the evaluation carried out is not objective: "I would like a system more objective than the one we have at the moment, more based on criteria that are more in line with what is being done and it have to be done by a more independent group" (Interview 12). In this sense, a majority of the Full Professors interviewed propose the creation of more objective criteria for evaluating teaching "A homogeneous system should be established to evaluate the quality of teaching, just as if it exists in research, there should be a series of criteria for evaluating university teaching", (Interviewed 5). Another aspect that appears in the analysis of the interviews is the students teaching evaluation. In this sense, the majority of Full Professors think that it is interesting and should be used in teaching evaluations. Thus, Full Professor 11 is of the opinion that "student assessment may be one of the factors to be assessed, but not the only one". Other proposals for possible evaluations of teaching obtained from the analysis of the interviews are, on the one hand, to evaluate the mobility of the teaching staff, "I believe that valuing mobility is fundamental" (Full Professor 11), on the other hand, they also propose to count the number of students who get a job related to their subject, "being able to evaluate whether the student who has left gets a job related to this subject is their main objective" (Full Professor 5). Another of the proposals taken from the analysis is the evaluation of invitations to talk and conferences, so Full Professor one states that "it is important for example the talks and conferences to which a teacher is invited and if you hurry me if they pay".

### University Management Dimension

The university Manager aspect is the last dimension that is asked to the Full Professors. In this dimension and in response to the question that refers to the characteristics of a good manager should have, the opinion of the Full Professors focuses on personal characteristics such as the ability to work in a group, reach agreements, dedication, motivation "It has to be a person who dynamizes, who motivates and who works with groups", (Interviewed 12). On the other hand, the lack of formation in management is also highlighted "They should have training in management, it should be obligatory" (interviewee 9). According to what has been analysed, this training has to be both in management of human teams and in administrative matters, "it should be obligatory to take a course in both administrative management and management of human groups" (Full Professor 5).

With respect to whether management is valued by the rest of the faculty, 64.71% of the interviewees think that it is not valued "It is not valued among other things because the faculty does not know how long it takes and how many conflictive situations it has" (interviewed 7). In this sense, the proposals provided for the rest of the faculty to value it are centered on making the rotating positions "Make the faculty rotate for unipersonal positions with obligatory" (interviewed 8) and another proposal is centered on being transparent and providing information on what is done "The only strategy is to be very scrupulous in showing what you do" (interviewed 15).

The democratic choice of the deans is the one option chosen by all the interviewees when they are asked which they think is the best. For example, "Best choice than designation" (interviewed 8). There is also some discussion regarding the percentages of electing deans. Thus, Full Professor 9 thinks that "the election of the department directors who are elected by those who belong to that department seems good to me. With regard to the deans, there are the percentages, although I don't know how to solve it".

Another of the aspects analysed with regard to the university management dimension is whether the work of management on the part of the faculty is valued positively. In this sense a great majority of the interviewees think that it is not valued properly because they do not know the effort and work associated with the single-person position. In this way, Full Professor 15 states that "few know the effort involved in management". As a strategy to improve this negative evaluation of management, the Full Professors propose transparency in what is done, "to be very scrupulous with what is done" (Full Professor 15). Another outstanding aspect for the improvement of the opinion of the faculty with regard to

management, is to increase the importance of management in evaluations, in this sense the Full Professor 12 proposes "the fact that it is recognized in score makes that there are more interested people". The last proposal obtained from the analysis is to rotate the unipersonal positions, "to rotate the faculty for the unipersonal positions with obligatory". This proposal is in line with getting the entire faculty to know the effort and time involved in holding a management position.

With regard to the importance that each of the aspects must have when applying for habilitation, the majority of Full Professors believe that there should be a balance between teaching and research and little importance to university management. "I believe that the best model is the one that fundamentally evaluates research and teaching and is complemented by management for those who have exercised this responsibility to compensate for the deficit" (interviewed 5). On the other hand, there is a small group of Full Professors who, depending on the habilitation requested, give more importance to research or teaching. The analysis of the interviews shows that the opinion on the importance of teaching is defined by the subjectivity of its evaluation. For example, Full Professor 17 believes that "those who do badly the teaching are not evaluated if they have done badly that teaching and should be a demerit but as this does not happen, their weight must be less than research aspect". With regard to the importance of management, there are opinions in the line that it should only be taken into account as a complement to those who decide to exercise it. In this sense, interviewee 12 states that "management, being a personal option, although it must be within the scale, is not a point of discrimination in those who do not have this experience in management".

As a summary, the importance of the different aspects of the faculty has to vary with respect to the habilitation that is requested. In the first place, for University Full Professor, teaching would be the most important aspect, followed by research and finally a management complement if it has been carried out. With regard to the habilitation of University Full Professor, there should be a balance between teaching and research and a small contribution of experience in university management.

#### Discussion

The aim of this study is to know the opinion of the Full Professors on the evaluation carried out by ANECA of the research, teaching and management aspects of faculty. In the first place, it should be noted that in order to reach the highest academic level, the majority of the Full Professors interviewed refer to the great effort made during their careers. This coincides with the idea, especially in sports that hard work leads to success. In this sense, Van Rossum (2009) in the conclusions of his work on talent in sports, presents three facilitators of talent: the motivation towards achievement, the coach and the amount of practice.

Another aspect to highlight of the results is that the Full Professors are of the opinion that it is not necessary to have a different evaluation from those of the rest of the areas of knowledge. This is not in line with what Gimenez (2016) states in his work, where researchers in the Humanities and Social Sciences make calls to consider that each discipline has its own ways of researching and its own ways of publishing, so that it should have its own forms of evaluation.

# Research Aspect of the faculty

With regard to the research aspect, first of all, the opinion of using the impact factor as an index of quality of research articles stands out. This index is highly criticized in the bibliography (Alberts, 2013; Callaway, 2016; Stephan et al., 2017). These criticisms are aimed at the fact that the impact factor was created to evaluate the quality of journals and is used for the individual evaluation of articles and their authors. In this sense, and for the improvement of the evaluation of research articles and researchers Hicks et al. (Hicks et al., 2015) present the Leiden manifesto where they explain 10 principles for the evaluation of research: 1.-Quantitative evaluation must support qualitative evaluation by experts; 2.-Performance should be measured according to the research missions of the institution, group or researcher; 3. Excellence in research of local relevance should be protected; 4. Recovery processes and data analysis should be open, transparent and simple; 5.-The individual evaluation of researchers should be based on the qualitative evaluation of their

research portfolio; 8.- Inappropriate concretion and false precision should be avoided; 9.- The systemic effects of the evaluation and the indicators should be recognized; and 10.- The indicators should be periodically reviewed and updated. The results of this study are related to principles 1, 5 and 10 of the Hick et al. (2015) criteria. In this way, the professors pointed out that it is necessary to introduce qualitative evaluations of faculty's scientific productions and not only use bibliometric data to evaluate them.

Attending to the evaluation and evaluation of books, it should be noted that Full Professors attach importance to processes similar to those used for the evaluation of articles (citations received, indexes of publishing houses, etc.). In this sense, there are several studies that coincide in their results (Giménez-Toledo & Tejada-Artigas, 2015; Salado & Ortega, 2019). Specifically, Giménez-Toledo & Tejadas-Artigas (2015) conclude that there is a high demand on the part of authors for the evaluation processes of books to be more similar to those carried out with quality research journals.

Finally, within the research aspect, if we look at the evaluation of researching projects, the aspect most commented on as a quality index is the transfer of knowledge, giving it great importance also within the other evaluable sections. These results coincide with those obtained by Ortega & Salado (2018) in which the Full Professors surveyed in Physical Activity and Sport Sciences give great importance to transfer as the main aspect when evaluating a research project. In this sense, RD 415/2015 introduces the transfer of knowledge as an evaluable merit for obtaining the habilitations of Senior Lecturer and University Full Professor. On the other hand, and in line with increasing the importance of knowledge transfer, the CNEAI at the end of 2018 has created a call for evaluation of merits (BOE Nº 285, Resolution of 14 November 2018) which introduces the evaluation of the activity of transfer of knowledge and innovation for university teaching staff and researchers to obtain an incentive equivalent to the six-year period of research.

#### Teaching aspect of the faculty

Considering the teaching aspect, which is together with the research aspect, the two fundamental pillars of the faculty. First, it is difficult to evaluate university teaching staff as there is no consensus on what a "good teacher" is, especially in the university stage (Tejedor, 2012). The results of this study highlight fundamental aspects of the university teacher: first knows the subject to be taught and then has personal characteristics such as knowing how to communicate, being empathetic, motivating, etc... Some of these aspects coincide with what Bain (2005) highlights in his definition of extraordinary teachers, defining them as comprehensive, prepared and updated teachers who assume their profession with capacity and commitment, and are concerned about the way in which their students learn and share their concerns as professionals.

Focusing to the evaluation of the teaching aspect, the predominant opinion is that measuring teaching in years of experience is subjective, and they request an evaluation of the quality rather than the quantity of teaching. In this sense, Calderón & Escalera (2008) propose that correct teacher evaluation should include the points of view of experts in evaluation, of experts in the subject matter of teaching, and of experts in pedagogy. Another aspect of the results of this study is the validity of the evaluation carried out by the students. In this sense, Bain (2005) believes that if you ask students the right questions, they can help in evaluating the quality of teaching.

#### Management aspect of the faculty

The last aspect to treat of the faculty is the managerial aspect of it. Emphasize the importance of the need for formation in university management to access the single-person positions like Dean or department head. In this sense, Sánchez-Moreno and Altopiedi (2016) designed a training program in management where they emphasized the analysis of the social aspects of organizational functioning, social skills, emotional management capacity and leadership. Another problem with the managerial aspect is that academics are not interested in governing the university since their motivation is fundamentally oriented towards tasks related to teaching and research (Castro & Tomás, 2010).

## ANECA acreditation

Finally, attention should be paid to the importance that each of the aspects should have in the evaluations in order to gain access to habilitation. If teachers' opinions are considered, there should be a balance between teaching and research and that can be complemented with merits in the managerial section, if it has been decided to accede to positions of academic management. In this sense, the ANECA in its program of evaluation of the teaching staff for access to the habilitations of Titular Full Professor of University and Full Professor of University, allows to compensate the deficiencies of the research and teaching aspects with merits in other facets such as academic management, training or transfer of knowledge.

It is important to highlight the importance of this type of work so that the evaluations adjust as much as possible to each area of knowledge, paying attention to its particularities. In this sense, it is necessary to continue considering changes in the evaluations of the different aspects.

# **Conclusions**

According to the results of this study, and from its discussion and analysis, the following three main conclusions can be drawn: 1) An excellent faculty must have an in-depth knowledge of the subject he or she is teaching and have extensive research training, as well as personal characteristics, such as dedication, critical capacity, sacrifice, being able to transmit and having the ability to work in a group; 2) The need to introduce qualitative evaluations of faculty's scientific productions and not only use bibliometric data to evaluate them; 3) The evaluation of teaching is not objective, so it would be interesting to create objective criteria that really evaluate whether teaching is good or not.

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