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Sex Education Actions at Universities: The Creation, Validity and Reliability of a Satisfaction Scale

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Abstract: Higher education is key to developing a competent and engaged society. Therefore, holistic learning is a fundamental element. This study aimed to test the validity and reliability of a questionnaire for extracurricular teaching actions in higher education. The questionnaire was delivered online to nursing and teaching students participating in the extracurricular action organized by the universities participating in the EdSeX Project, in all cases worded in English. Reliability was measured through internal consistency provided by Cronbach's alpha coefficient, yielding a value of 0.638 for the 19 items. The internal consistency for each latent variable measured by Cronbach's alpha coefficient was 0.816 for F1 (N = 6) and 0.625 for F2 (N = 3). This means that in the applicable satisfaction questionnaire, the professor interactions and the quality of the organization of the teaching activity of the topic are the most influential elements in the training action. The questionnaire proved to have a good validity and is therefore a reliable instrument to measure the level of higher education students' satisfaction with learning.

Keywords: higher education; survey; nursing; student; teacher; satisfaction; quality education

1. Introduction

One of the main objectives of education is the acquisition of knowledge and the development of competencies or skills that can later be applied in the student's life outside the walls of a classroom, i.e., in their professional performance [1]. The inevitable change and constant evolution of our reality in the last decades force modifications and updates

within the education system, either within formal institutions like universities or in other areas that complement the official ones by promoting extracurricular learning, as is the case of the EdSex project [2]. The EdSex project is described as an Erasmus+ research project still under development, where EU countries, among others, join forces to shed light on sexuality education mainly at the university level. Most of the studies of the project are addressed to nursing and teaching students, and Spain is the country that leads the EdSex Project with the help of other team members from other countries, who make the multicentric research generating fruitful results for the scientific community possible [3]. Scientific literature has highlighted the fact that education today is undergoing change, reflecting that it is no longer restricted to transmitting only instrumental skills to students, such as reading and writing, but also includes the development of social and practical skills that are reflected in their daily lives [4].

Meaningful learning is achieved when, because of its cognitive and emotional impact, the learner considers that he/she has learned something special and relevant, attributing to the acquired information a set of meanings that only he/she can recognize [5]. Learners' expectations are complex constructs that have a significant impact on their ability to adapt, interact, and achieve goals and satisfaction. New research is increasingly highlighting the importance of addressing these expectations [6].

For this reason, a commitment on the part of educational institutions to promote the academic growth of students in a holistic way is expected, i.e., embracing different and diversified social and cultural areas of society and allowing for a broadening of the student's perspectives [7]. Thus, a wide range of extra-curricular activities, from talks in associations to workshops that provide them with new and different tools [8], can and should be considered as an added value to the student's education.

The effectiveness of a pedagogical activity concerning the development of students' learning is intrinsically linked to several factors, such as the learning environment, the teacher's pedagogy and the quality of the training as the organization of the activity [2].

The learning environment is a term used to refer to the environment experienced or perceived by learners in an educational setting which involves several areas, including the physical environment, the resources used and the organization of the lesson. Thus, the learning environment includes hygienic, aesthetic and comfort aspects (such as lighting, temperature, noise, integrity of infrastructure and furniture, among others); the resources mobilized, which refer to the technologies used and how they are implemented; and organization, which is linked to the appropriate management of time, space and resources [2,9]. Ultimately, the context in which learning takes place, which encompasses both physical and socio-emotional aspects, has a significant impact on the emotions, engagement and motivation experienced by students during the learning process. A welcoming, organized and supportive learning environment that promotes opportunities for interaction and integral development favors the academic excellence of students [10]. Studies on the learning environment, as well as knowledge of its dimensions and indicators, allows for improving it. This situation also facilitates the improvement in student engagement, i.e., the level of participation and intrinsic interest shown by students, which is considered an important predictor of their level of achievement and performance [2,10].

Nowadays, due to the extreme exposure of young people to a great diversity of information in diverse subjects, the teacher must be perceived not only as a transmitter of knowledge, but also as a mediator of learning, i.e., a guide who contributes to meaningful, directed learning and the model of values for the student's life [11,12]. The role of the teacher is to provide learners with new knowledge and concepts, and to promote competency in the subject that he/she intends to present. Therefore, he/she must be an expert in the area to be addressed, sharing his/her knowledge and skills as deeply as possible [11,13]. Thus, it is essential to bear in mind that the teacher is an important socialization agent and that through their teaching, they transmit various values that directly or indirectly influence the education of young people, so they must be fully aware of their educational commitment to their students [13]. At this point, it is essential to understand that in the

learning process, the learner is not a passive agent. On the contrary, he/she is an active agent, so that the type of interaction between the teacher and the students, their participation and the dynamic processes that develop during the educational moment are the basis of a two-way relationship. This fact will allow students the acquisition of the topics addressed more easily and integrated with their previous knowledge. This interaction must be proactive and dynamic in order to be more effective [12,13]. It is therefore crucial that teachers be competent, up-to-date, innovative professionals who demonstrate an essential ability to motivate students' interest in the learning process, adapting their pedagogy to the students' sociocultural and family context [12,14].

Because of such relevance of the teacher, the approach of the teaching methods they develop, as well as their ability to interact with the audience are crucial in the communication process. In the same line of importance are their posture, their verbal and non-verbal communication skills, and their ability to express themselves clearly, taking into account any doubts that may arise, as these aspects allow students to effectively integrate the new content addressed by the teacher into their own knowledge [12]. During the process of learning, students make an attempt to relate the new information that is being transmitted to their previous knowledge and experiences, to globally integrate new content taking into account their environment, previous experiences, cognitive skills and values, among other aspects [12]. Alongside that, while it is true that effective and positive learning depends on the quality and effort that the teacher puts into the transmission of information, it is also recognized that the interest, knowledge, skills and values previously acquired by the students have a significant impact on this educational process [15]. Each person has a peculiar way of appropriating the information that is transmitted to him/her, which can be seen, for example, in a student with a humanistic profile, who develops an interest in disciplines related to other areas [16].

The interest in a certain subject arises from a need, either because of experiences in a certain context or because of a confrontation with a particular reality. This interest, combined with the motivation to face the challenge of the learning process, is what leads the learner to integrate the new content that is transmitted [15]. Thus, interest in the subject to be addressed during the educational process is considered essential. Likewise, in order for this interest to be well-received, the nature of the exposed content must be so clear that it allows for an intentional and transcendent relationship to be established with that educational moment, relating to the learner's surrounding socio-cultural context, with his or her experiences. This new information must allow for the development of a relationship between the learner's previous experiences, interests, needs and possibly even the previous problem solved [12].

The quality of the training and/or the organization of the teaching activity, i.e., how and in what way the content is worked on during the educational action, is an elementary aspect, as the learner's interest in the subject is involved in his or her motivation to learn, and this aspect is reflected in his or her performance. This has a multiplicity of aspects to consider, from its application to everyday life to the way and depth in which it is approached [15]. The perception and understanding of learners' expectations, as well as the validation of their satisfaction with the content taught, can considerably improve how knowledge is transmitted and, consequently, how it will be integrated into learners' lives. Thus, studies underline that there is a clear relationship between learner expectations, learner satisfaction and learner outcomes/performance [16].

In this vein, it is not easy to find an instrument that measures the degree of satisfaction with the educational environment in higher education students in the field of health, especially in the nursing degree. Satisfaction is a feeling of well-being that is felt when the need that concerns us is covered. Some studies state that being a nursing student generates satisfaction and quality of life due to the connotations that it entails in itself [17], as well as that the degree of satisfaction increases with each academic year [18]. Therefore, studies indicate that student satisfaction will depend on the effectiveness of professors in developing technology competencies, content area mastery and university-wide technology

support systems and resources [19]. Authentic learning with motivation, resilience, support, and collaboration with other disciplines creates a higher level of student satisfaction because students feel included and supported in the learning process [20]. In addition, other factors to consider in the learning environment that create the educational environment addressing to better student satisfaction are a comfortable, pleasant and supportive atmosphere, which is considered a key aspect at the curricular level in higher education studies [21,22].

In this respect, there are satisfaction assessment surveys in distance studies, which underline that good pedagogy is important for the satisfaction perceived by these students [23]. Satisfaction with distance or online learning was particularly relevant during the COVID-19 period, whereby previous experience with new technologies was very important, as well as the readiness for the electronic approach [24]. When it comes to assessing student satisfaction with learning based on new technologies [24–27], Z-Generation students and those in doctoral programs emphasized their satisfaction with the teaching content provided online, perceiving that online teaching made them more likely to complete their studies successfully [27]. Also reported in the literature is the need to generate innovative knowledge that provides a stronger basis for addressing health challenges [28].

Satisfaction with the educational environment in health sciences is a construct, which every student of nursing and master's degree creates, where emotions are a basic pillar to shape it. On the one hand, there are scales reported for this purpose in different contexts. For instance, a scale was designed in Australia that evaluates them in this field [29]. Alongside that, there is research that highlights emotional intelligence as a protective factor against stress perceived by the student [30], which helps to have more adaptive and successful responses to the environment in which they occur [31]. Emotional intelligence and resilience are traits that increase the student's resilience and allow for future nurses to face the challenges of clinical practice effectively [32]. Further, there is a positive association between emotional intelligence in nurses and increased leadership, practice performance and patient safety [29].

On the other hand, there are instruments that help to assess satisfaction in the field of clinical nursing practice [18,33–35] or in simulations carried out in the classroom that come to describe the experiences of a real clinical practice [25,34,36] or with cultural connotations [37]. Studies underline that nursing student satisfaction is linked to the clinical practice environment and motivation to choose nursing as a future career path [35], forming clinical skills that can be extrapolated to other educational settings [33]. Aligned with it, classroom simulations are associated with a good learning process that increases student self-confidence and generates satisfaction [34,36,37]. From another perspective, older learners, who are the so-called adult recipients of knowledge, define satisfaction according to learning priorities, giving importance to effective academic counselling [38].

Other cases where nursing student satisfaction has been studied were when they reach the end of their degree and have to enter the labor market in Finland and Slovenia. For this construct, the Job–Demand–Control–Support Model was used, which is a model suitable for increasing the well-being of nursing students and projecting them toward a quality working future [39]. A systematic review of the three-dimensional construct of physical activity, stress and academic performance was also assessed, quantifying the relationships between these variables [40].

All of these instruments measure the degree of satisfaction of health science students in many areas. Nonetheless, these instruments are not focused on sexual education, formal or informal, which subsequently generates a more holistic approach to the health recipient in students [7]. With this aim of providing sexual education in a holistic way in extracurricular activities to nurse students, pre-university students, women and migrant people, the EdSex project was created [3]. For the researchers involved in this project, evaluation of aspects such as the learning environment, the professor presenting the educational content and the topics addressed in the project is extremely relevant [2]. Therefore, for the training workshops on sexual education in this project and to fill the gap of satisfaction scales on

sexual education for extra-curricular actions, a satisfaction scale creation and validation is presented in this paper.

2. Materials and Methods

A multi-centered, cross-country, quantitative study was conducted with an online survey distributed to nurse students in each of the participating universities in the European EdSex project in 2022–2023.

2.1. Participants

The sampling was a convenience sample, including students from higher education degrees of nursing (2nd–4th year) from each of the partner universities involved in the EdSex project [3]. Inclusion criteria were: (1) students belonging to the 2nd to 4th year of a Nursing degree, (2) understanding of the English language to complete the satisfaction survey and (3) participation in the workshops. Exclusion criteria were: (1) students belonging to higher education who were from other degrees, (2) students who did not have sufficient English language comprehension to complete the questionnaire and (3) postgraduate students. After applying the criteria, the sample consisted of a total of 132 students.

2.2. Survey Creation

A questionnaire involving the ambience, professors and topics was used in combination with previous questions on socio-cultural aspects. In order to create a questionnaire suitable for nursing students, a literature review was previously carried out by different working groups involved in the project to gather knowledge based on experience and evidence. The questionnaire is based on previous analyses carried out by other authors, who have already shown interest in measuring the impact of different factors on the learning process of higher education students [2,3,9]. During the development process, aspects reflecting the environment, the characteristics of the teacher and the subject of the training, both positively and negatively, were included in the wording of the questions. Accordingly, the resulting questionnaire consists of 3 thematic blocks comprising 19 items measured on a 5-point Likert-type scale ranging from 1 (disagree) to 5 (strongly agree), including 3 (neither agree nor disagree). The items are grouped into 3 categories that include aspects related to the ambience (5 items), professors and organization of the training (10 items), and the topics (4 items).

2.3. Data Collection

For data collection, students from the nursing degree were invited to participate in four training workshops. To reach the target audience, they were informed by the principal investigators on each campus and an online dissemination was made at each of the partner universities and the students registered digitally in each of them. Students were informed about the voluntary nature of participation and their right to leave the project at any time, and gave their informed consent by continuing to fill in the form. This training activity did not affect the official academic year; however, participation was rewarded with ECTS training credits.

All the students at each of the partner universities received a previous training of approximately 1 h and 30 min by a teacher who was an expert in the subject and who belonged to the project. At each HE center, the same subject was developed within the training workshop, which was given by different teachers, and this was the reason why one of the categories evaluating the created survey was the teacher/professor. For the data collection process, an online questionnaire using Microsoft Forms was used. However, in order not to make any discrimination in the absence of electronic devices, paper forms were also available. Pre-registration for the workshops included information about the research project and indicated that participation was voluntary and could be withdrawn at any time. This procedure was approved by the Social Research Ethics Committee of the University of

Castilla-La Mancha with registration number CAU-661803-V4Z4 as an independent entity unrelated to the project.

2.4. Data Analysis

Data analysis was performed both on the full questionnaire and on the main factors that emerged from the factor analysis. Internal consistency and reliability were analyzed with Cronbach's alpha [41] and construct validity was analyzed by exploratory factor analysis by assigning items to factors with the highest loadings with principal component analysis and the varimax rotation method [42–44], and confirmatory factor analysis to guess the possible relationships between latent variables [45–47]. Descriptive statistics, Cronbach's alpha and exploratory factor analysis were performed using Statistical Package for Social Sciences, SPSS, version 29 (IBM Corp, Armonk, NY, USA), and confirmatory factor analysis using AMOS version 29 (IBM Corp, Armonk, NY, USA).

3. Results

This section shows the survey created and the statistical analysis in terms of reliability and construct validity.

3.1. Survey Creation

A revision of the items to validate the content and semantics was performed by eight experts, four experts in nursing and four in education [48].

Ambience:

- A.1. Was the place chosen for the training comfortable and adequate?
- A.2. The lighting and temperature of the room was pleasant.
- A.3. Did you find the furniture used comfortable?
- A.4. The training scenario took place in an unfavorable space.
- A.5. Has there been any external interruption during the training?

Professor and training

- P1. The professor introduced him/herself and explained the subject and objective of the meeting.
- P2. The professor maintained a relaxed posture during the meeting.
- P3. Do you think that the non-verbal language used by the professor was in line with the verbal language used by the professor?
- P4. During the training, did you feel listened to by the professor/expert?
- P5. Did you perceive when the professor's movements or sounds indicating disagreement?
- P6. Do you consider that the language used was respectful and understandable?
- P7. Did you feel little empathy and/or acceptance from the professor/expert during the dialogue?
- P8. Do you think that the professor/expert and the training given have been adjusted for the established time?
- P9. Has the professor/expert allowed you to develop your points of view in reference to the questions asked?
- P10. In general, are you satisfied with the development of the training?

Topic

- T1. I consider that the topics covered have increased my knowledge in this area.
- T2. I believe that topics that can be applied on a daily basis in your future profession have been addressed.
- T3. I think the approach to the subject was repetitive.
- T4. In my opinion, a more in-depth approach to the topics discussed is necessary.

3.2. Validity and Reliability

The validity for the items was measured by reviewing the content and wording of the items [49] by three different experts, reaching an agreement above 99%.

The reliability was measured through internal consistency provided by the Cronbach alpha coefficient, yielding a value of 0.638 for the 19 items, which is low according to George and Mallery [45,50]. Providing the low value, the coefficient with the extracted items was calculated and is shown in Table 1.

Table 1. Correlation and Cronbach alpha coefficient with suppressed elements for all items.

Item	Mean with Item Suppressed	Variance with Item Suppressed	Total Correlation of the Elements Corrected *	Cronbach Alpha with the Elements Suppressed *
A1	75.88	29.375	0.497	0.501
A2	76.05	29.861	0.272	0.521
A3	76.04	29.808	0.268	0.521
A4	76.50	28.893	0.111	0.560
A5	76.18	28.379	0.281	0.514
P1	75.67	31.048	0.458	0.524
P2	75.71	31.321	0.239	0.532
P3	75.77	30.593	0.347	0.521
P4	75.77	30.024	0.445	0.511
P5	78.55	34.296	−0.208	0.636
P6	75.74	30.040	0.445	0.511
P7	78.71	33.336	−0.152	0.621
P8	76.08	29.582	0.206	0.529
P9	75.98	29.099	0.416	0.503
P10	75.75	30.082	0.503	0.510
T1	75.80	29.564	0.528	0.503
T2	75.77	29.383	0.582	0.499
T3	76.63	29.960	0.111	0.551
T4	77.52	29.763	0.093	0.559

* Bold values are retained for the instrument.

Although the criteria to remove items are not unique, provided that [51] recommends keeping items of which the correlation is smaller than 0.3, the current criterion to remove the item is a correlation coefficient lower than 0.3 and an improvement in the Cronbach alpha coefficient of more than 0.2 with the element removed [45]. As a result, the items A1, P1, P3, P4, P6, P9, P10, T1 and T2 were kept. A rise in the Cronbach alpha coefficient is observed, since for nine items, it became 0.827.

Construct validity of the remaining items was measured with explorative factor analysis (EFA) with principal component as the extraction method and varimax rotation, with Kaiser normalization for factor rotation [43]. The convenience of the study was supported by a Kaiser–Meyer–Olkin coefficient of 0.814, with Bartlett’s test of sphericity ($\chi^2 = 382.532$; $df = 36$; $p < 0.001$).

Items with high factor loadings define each dimension. We considered loadings above 0.5 to be a meaningful item in one of these factors, in accordance with Hair et al. [52] and Field [45]. The EFA for the set of retained items is shown in Table 2.

Table 2. Factor loadings for each item in the EFA analysis.

Item	Factor 1 *	Factor 2 *
A1	0.504	0.433
P1	0.500	0.423
P3	0.120	0.711
P4	0.134	0.831
P6	0.674	0.142
P9	0.306	0.619
P10	0.743	0.182
T1	0.836	0.151
T2	0.780	0.242

* Bold values: loadings greater than 0.5 for each factor.

The total explicated variance for each factor is depicted in Table 3.

Table 3. Sums of loads squared by rotation in the EFA.

Component	Total	Percentage	Accumulated
Factor 1	2.944	32.707	32.707
Factor 2	2.080	23.110	55.816

Since the accumulated variance is above 50% [45], as shown in Table 3, the model of the instrument for the two factors can be considered a good fit.

The two factors are F1, comprising items A1, P1, P6, P10, T1 and T2; and F2, composed of items P3, P4 and P9. This means that the professor is the most influencing element in the formative action, because six items relate to this category, while only one relates to ambience and just two to the topic.

The internal consistency for each latent variable measured by Cronbach alpha coefficient is 0.816 for F1 (N = 6) and 0.625 for F2 (N = 3). Since F2 has only three items, the lower internal consistency could be affected by that [45,53,54].

To test the possible relations between the latent variables that could result in collinearity, three models were tested via confirmatory factor analysis (CFC). The models assumed the relation between the factors (M1), that there is only one factor (M2), and that there is no relation at all between the latent factors (M3) (Table 4).

Table 4. Test statistics for the CFC for M1 (F1–F2 related), M2 (just one factor, F) and M3 (F1–F2 unrelated).

Model	Absolute Fitting Measure				Incremental Fitting Measure		Parsimony Fitting Measure	
	χ^2	<i>p</i>	df	RMSEA	CFI	TLI	PCFI	AIC
M1	55.201	0.001	26	0.083	0.918	0.887	0.663	93.201
M2	73.283	<0.000	27	0.114	0.871	0.828	0.653	109.286
M3	91.894	<0.000	27	0.135	0.819	0.758	0.614	127.894

Note: df, degrees of freedom; RMSEA, root mean squared of approximation error; CFI, comparative fitting index; TLI, Tucker–Lewis index; AIC, Akaike information criterium.

In Table 4 the best coefficients are highlighted in bold and correspond to M1, which has the lowest AIC and a CFI closer to 1, with a smaller RMSEA (<0.1). It reinforces the EFA structure with two factors with small collinearity, which supports the EFA performed assuming varimax rotation. The structure provided by M1 from the CFC is depicted in Figure 1.

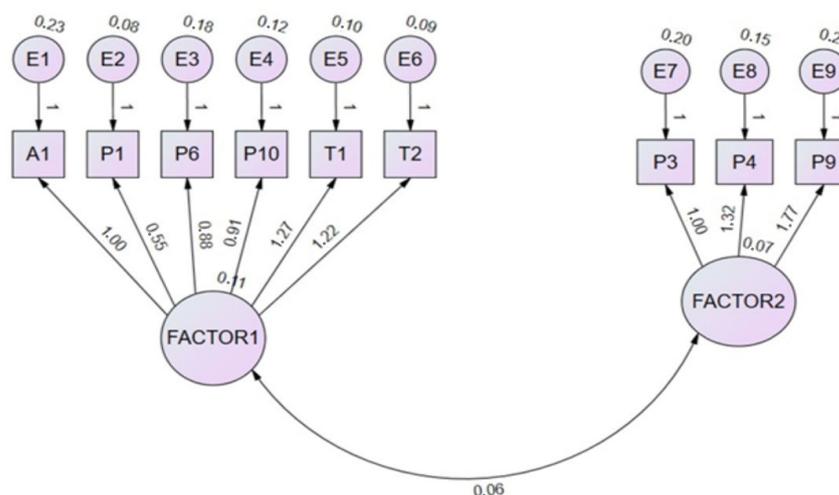


Figure 1. Model of the two related factors, with the correlation between the factors and loadings of each item factor, and the error for each item.

The descriptive statistic in the format of mean (SD) is 4.79 (0.36) for F1, and 4.72 (0.45) for F2. They are very close to the maximum value, 5, and the low SD shows values crowded around the mean and not spattered in the possible range of values. Providing the wording of the items included in each factor, factor 1 encloses three elements considered in the scale creation, but with a focus on the *quality of the organization of the sexual education activity*, and factor 2 deals with *professor interactions*.

4. Discussion

This paper had the aim to create a satisfaction survey for a formative action regarding sexuality in higher education. For that purpose, 132 participants who received the formation answered the created survey. On the one hand, content validity was provided by experts, and reliability was analyzed through the Cronbach alpha coefficient. On the other hand, construct validity was analyzed by EFA and CFA. These factor analyses are indicated as util in health sciences studies [55], with varied sample sizes [46], and have been used with instruments on the same topic, i.e., sexuality, by Areskoug-Josefsson et al. [56].

The inevitable change in and constant evolution of our reality in the last decades force modifications and updates within the educational system, either within an official context or in other areas that promote learning, as is the case of the EdSex project [2]. Furthermore, students' learning expectations are complex constructs that have a significant impact on This is correct and should be left as it appears.their ability to adapt, interact, and achieve goals and satisfaction [6], hence the importance of developing instruments that indicate the degree of student satisfaction with higher education. The scientific literature has highlighted the fact that education today is in a process of change, reflecting the fact that it is no longer limited to transmitting only instrumental skills to students, such as reading and writing, but also includes the transmission of social and practical skills that are reflected in their daily lives [4].

Higher education student satisfaction has previously been measured in the field of clinical practice and/or classroom simulations [18,25,33–37,39], distance education [19,23] or web-based education [24,25,27]. The environment [17,21,25] or the pedagogy involved in the field of higher education [18,20,22,23,28,30,38], or psychological constructs that have an impact on university students (emotional intelligence, resilience, etc.) [29–32] were also used for measurements, but there was still a lack for extracurricular actions in sexual education.

With the development and validation of the questionnaire in combination with previous questions on socio-cultural aspects, it is possible to measure learning in higher education as a single, inseparable process, thus avoiding separate measures with different

instruments, which, although acceptable, are often developed in different contexts and have unequal psychometric properties. The fact that it is possible to measure all three learning factors (environment, teacher and subject) using a single instrument is one of the strengths of this study. It generates a comprehensive and feasible measure of student satisfaction to project possible changes in higher education.

With regard to the results of the questionnaire, organization of the training activity in sexuality, which takes into account the pedagogical methodology of both the environment and the content of the activity itself, and the interactions of the teacher with the student generate scores that show the satisfaction of higher education students in nursing and teaching degrees. Based on the three factors studied that affect learning (environment, teacher and subject), the teacher is the most influential element in the training action, both in the interaction with the student and in the educational methodology to be followed. This finding is particularly relevant for the educational community.

The pedagogy used by the teacher and their ability to interact with the audience, gestures, verbal and non-verbal communication skills and ability to express themselves clearly are aspects that enable students to effectively integrate the new content addressed by the teacher into their own knowledge [12]. Thus, it is essential to bear in mind that the teacher is an important agent of socialization and that through their teaching, they transmit various values that directly or indirectly influence the education of young people, so they must be fully aware of their educational commitment to their students [13]. It is therefore essential that teachers are characterized as competent, up-to-date, innovative professionals who demonstrate a primary ability to motivate pupils' interest in the learning process, considering their socio-cultural and family context [12,14], which supports our consideration of the evolution of pupil satisfaction.

The results also show that the level of satisfaction was high in two dimensions. For this reason, we need to see a commitment on the part of educational institutions to promote the academic growth of students in a holistic way, i.e., embracing different and diversified social and cultural areas of society and allowing for a broadening of students' perspectives [7].

5. Conclusions

The main contribution of this international research is the creation and validation of a questionnaire that brings together a basic construct in higher education: teacher–environment–topic, to measure student satisfaction with training from a holistic perspective.

The environment was set up as a changing learning environment by new technologies and infrastructures designed to adapt to the most suitable environment for the student, where the economic investment in education and the ergonomics of the construct are the basis for success, seeking to optimize the well-being of the student and the overall optimal outcome of the transit by the university. The teacher was a factor of the instrument that most determined the questionnaire results, in large part due to the importance that the students placed on him/her, with regard to their education in sexuality. Through their methodology, the teacher brings the content of sexuality education into the university educational environment, generating an interaction of trust in the student and dealing with sexuality from a perspective of respect and inclusion. The subject or content of the subject was considered in accordance with the basic legal standards of each country, and the innovative educational methodology was validated as the basis of a construct heading toward excellence. Sex education is important for an individual, but it is also important for society as a whole. At a social level, sexuality has been relegated to biological concepts that are far removed from affective sexual education that a person needs to grow as a healthy human being due to the fact that it is a socially sensitive subject and not very well accepted in some cultures where taboos still exist. Overcoming these obstacles has been of great importance in the instrument created in the study, where the organization of university activity in sexuality education and the teacher's interactions form the basis of the study. Social taboos regarding sexuality have a strong impact on the teacher/student interaction

and the way of transmitting knowledge according to respect and inclusion, but this fact gives strength to the instrument created and to the role of the teacher in the end, as both should aim for excellence in order to achieve the final satisfaction of the students surveyed.

The instrument proved to have satisfactory psychometric properties, confirming that it adequately measures the intended construct. The created questionnaire serves to measure student satisfaction with higher education and is therefore a comprehensive and reliable tool, which can help guide new educational policies within this field.

5.1. Limitations of the Study

This study has limitations. The most remarkable is the use of a convenience sample which is not representative except of the participants in the EdSex project, limiting the study's validity. Future research to measure the validity with samples of other HE majors related to sexual education must be checked to account for the generalization in the use of the created scale, such as physiotherapy, medicine, dentistry, psychology, podiatry and other health majors.

5.2. Future Contributions

The main contribution of this study to the body of knowledge in this area is that it provides a validated tool for assessing learning processes within higher education as part of the international framework of the Edsex project, thus filling the current gap given the lack of validated and adapted instruments for assessing learning from the three factors mentioned above in extracurricular higher education settings.

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