

To what extent do student teachers have the values required for the profession?

The main objective of this study is to determine to what extent the values held by student teachers at the start of a university degree programme coincide with the values that practising teachers consider important for their profession. Our findings show that student teachers and practising teachers have different value profiles, and that there is a need for specific values education programmes that address student teachers' professional needs. Like other students, student teachers emphasise values that refer to the peer group, friendship and leisure.

Keywords: values; citizenship; student teachers; teacher education; professional teachers; university; professional needs

Introduction

The past few decades have seen increased interest in the study of moral values in the field of education. For a variety of reasons that justify values education—social problems (racism, terrorism, gender-based violence, etc.), the increase in violent behaviours, cultural diversity in the classroom, etc.—most studies in this area have focused on students in primary schools and high schools. However, values education is also an important challenge after high school, at University (e.g., Cochran-Smith 2004; Revell and Arthur 2007). The curriculum of any university degree programme should include value content so that students can develop a sensitivity to moral responsibilities, and become competent professionals and committed citizens who exhibit ethical professional conduct.

The present study examines the values of student teachers who are just starting their university degree programme, and compares them with those of students from other degrees. It also determines the extent to which the values of student teachers coincide with those which practising teachers consider important for the profession.

This information is necessary in order to develop values education programmes that address student teachers' professional profiles and future needs. There are several reasons why this study is both interesting and necessary. The most important, which are described in greater detail below, can be summarized thus: values are important in education and one of the teacher's roles is to provide a model of behaviour which, in turn, is related to teacher quality.

The concept of values and their importance in education

Although numerous authors have used the terms value and morality as equivalents, the term morality reflects only a part of what values are. According to some authors, the term morality focuses on the concepts of welfare, justice and rights (Tal and Yinon 2009; Turiel 2002). The term value, on the other hand, is wider since it refers to those characteristics of individuals that reflect what is important and desirable for them, and which guide their behaviour and decisions (Schwartz, 1992). In fact, Turiel (2002) points out that some values refer to social conventions or personal choices and bear little relation to justice or the welfare of others. Similarly, Schwartz (1992) stated that some values imply self-transcendence, and refer directly to a concern for others. However, other values involve self-enhancement and, therefore, imply an orientation towards oneself. In his model of values, *Achievement* illustrates this aspect since it involves personal success by demonstrating socially-accepted competence. Then, this value does not directly involve moral aspects. The present study focuses on values in general and, therefore, includes moral values. For this reason, the term moral has on occasion been used to directly describe this particular aspect of values.

According to Taylor (1994), the term values education is a wide-ranging concept that embraces terms such as citizenship education, civic education and moral education. Training citizens means teaching a set of values suitable for a democratic community

and structuring schools and classroom life around the processes of dialogue, decision-making, debates, etc., such that active participation helps to create the desired habits and virtues of citizenship. Under this conception, individuals are understood as social beings and citizens, and emphasis is placed on conditions that are conducive to a society and lifestyle based on freedom, justice, tolerance, respect and human dignity. From this point of view, values education should help to form socially-committed citizens, among other things. This goal cannot be achieved by teaching values content separately from the rest of the curriculum. Instead, it must be a constant part of the educational content of the various subjects.

Cawsey (2002) points out that values play a fundamental role in education, because if teachers limit themselves to teaching the technical content of the curriculum, without establishing links to values, it will be difficult for students to value the learning experience or the school itself. Neither will students find it easy to develop those values that sustain lifelong learning. According to Lovat (2009), it is important for students to be aware that they are part of a school community, and that they understand their responsibilities to themselves and to the school community. The personal relations between staff, students, parents and the community in general are fundamental because they create an atmosphere for learning that stimulates students to develop their capacities through commitment, respect, confidence and support to others (Cawsey 2002; Deakin-Crick and Wilson 2005). These positive values have an impact on the emotions of students and, as Lovat points out (2009), the emotional state of students has an important effect on their will and ability to learn.

The role of the teacher in values education

Campbell (2003) noted that a teacher's conduct is, in every sense, a moral issue, due to the importance of teacher-student interaction. In fact, it is through this interaction

that students learn such important values as honesty, respect and tolerance (Campbell 2003). It is therefore considered that part of being a good teacher is setting a good example for students through one's own professional conduct (Campbell, 2008).

Moreover, a classroom characterised by values such as respect, empathy, trust, etc., makes students feel that they are valued and increases the probability that they will be open to learning, thereby improving their academic performance (Hattie 2004; Brady 2005).

The influence of teachers' values on students can be either direct or indirect (Solomon, Watson and Battistich 2001). Programmes focusing on students' moral education—such as reading assignments that spark discussions of morality—are examples of a teacher's direct influence. Still, part of the teacher's influence on students is achieved without the students being aware of it (Osguthorpe 2009; Solomon, Watson and Battistich 2001). Sometimes, even the teachers themselves are unaware that they are transmitting values. Certain values—such as the importance of a job well done, perseverance in the face of difficulties, the need to listen to others, and the value of long-term rewards—can be transmitted in the course of activities that may appear to be free of value content (Slater 2008). According to Solomon, Watson and Battistich (2001), the indirect approach to values education consists in instilling values through the conduct of the teachers and the overall functioning of the school, as well as transmitting moral content through numerous subjects rather than reducing it to a specific programme or subject.

The results of the study carried out by Williams (1993) reveal that, according to the students themselves, teachers must follow the rules if they want to transmit values properly. According to this study, students regard teachers as “insincere and inconsistent” when their actions do not coincide with their intentions. In these cases,

students say that they feel obliged to show respect although they believe that their teachers do not deserve it. On the other hand, students describe teachers as sincere, consistent, clear and non-authoritarian if they behave in accordance with what they say. Williams (1993) points out that when teachers' behaviour does not coincide with what they teach, students may ignore or reject what they say. Teachers, then, need to be aware of the effect their behaviour has on students and internalize the values in such a way that they are reflected in their behaviour and they can provide a suitable model.

In short, being a good teacher requires more than a solid theoretical education. Teachers also need to adopt the principles that guarantee good professional practice and appropriate interaction with students and colleagues. In fact, the importance of values for teachers is more far reaching if they have to have good social relations with the rest of the educational community, work as part of a team, cooperate with other teachers and be flexible when the situation so requires. It is therefore important to determine whether universities are doing enough, in terms of value principles and moral behaviour, to prepare student teachers for their future as professional educators. Specifically, it is necessary to determine whether student teachers are being given adequate training in the values that will help them to become better professionals. Abrandt Dahlgren and Hammar Chiriac (2009) conducted a study aimed at determining whether universities were preparing future teachers for the functions they would be expected to carry out in schools. Focusing on a sample of Swedish student teachers in the final semester of a university programme, this study was based on the premise that learning, collaboration and responsibility are characteristics that allow teachers to work both independently and in collaboration with others. The results showed that student teachers in university programmes were confused about these three aspects and the relationships between them. Specifically, they tended to relate these values with their experiences at university

without applying them to the school environment, despite the fact that they were about to finish their studies.

Context of the current study

Of the various theoretical conceptions of values that are found in the literature, we decided to follow the Hall-Tonna Values Framework, which aims to describe reality rather than propose prescriptive principles regarding what should be said or done (Hall et al. 1986; Hall 1995). From this perspective, values are understood as ideals that lend meaning to people's lives, and which guide, orient and motivate their decisions and actions. Values include not only that which a person verbally acknowledges as a value, but also priorities, interests and concerns. This conception of values avoids the connotations of moral judgement—it does not distinguish between good and bad values; it only considers that combinations of values constitute people's way of seeing the world, although some such combinations entail more favourable results than others in terms of their impact on people's lives. This study is based on the 125 values that, according to the Hall-Tonna Values Framework, are present in the language of individuals and organisations across different cultures and places (Hall et al. 1986). This instrument has been used by organizations (e.g., Hall 2001), and also in education (e.g., Elexpuru and Medrano 2002; Elizondo-Montemayor 2004). The advantage of this instrument is that it includes not only the personal values, but also the values that are regarded as being useful for an organization to be run well: sufficient flexibility to adapt to new situations, collaboration with other people, teamwork, etc. These values are necessary if people are to work together and conflicts are to be negotiated. As has been mentioned above, values are important for teachers for two reasons: values education in the classroom and the need for teachers to have values in order to be able to interact

with the rest of the educational community. This instrument is useful to evaluate the values required by teachers in these two areas.

The implementation of the new university degrees in accordance with the dictates of the Bologna Process involves revising the curricula, so the now is the ideal time to make changes to values education undertaken by European universities. The Declaration of Bologna, signed on 19 June 1999 by the education ministers of 29 European states, aims for their higher education systems to converge into the so-called European Higher Education Area (EHEA). In the quest for common academic and professional profiles in European countries, the Declaration of Bologna bases itself on studies such as the Tuning Project (González and Wagenaar 2003), the DeSeCo Project (OECD 2002) and the Delors Report (Delors 1996) in order to define the general competencies that need to be acquired by students on degree programmes. Some of these competencies, particularly the interpersonal and the systemic ones, are related to values because they involve training professionals and citizens to act with responsibility, freedom and commitment (Boni and Lozano 2007). For example, some of the competencies refer to collaboration and teamwork, concern for quality, ability to work in an interdisciplinary team, ethical commitment, the understanding of cultures and customs of other countries, interpersonal skills, etc. The current study has been taking into account this Bologna Plan's attempt to establish transversal values education at the European level. Moreover, considering the importance of moral values to professional educators, it is essential to know what values student teachers hold at the beginning of their university studies so that programmes that address their needs may be designed. The main objective of this study, therefore, is to identify the values that first-year student teachers consider important in order to determine whether they are the

same as the set of values that practising teachers consider essential for optimal professional performance.

A second objective of the study is to determine whether the student teachers' values simply reflect the fact that they are university students (in which case their values would be similar to those of students pursuing other types of degrees), or if they exhibit a unique pattern of values. We therefore compare our results with those obtained for a sample of university students in the first year of a psychology degree.

The final objective of the study is to determine whether the student teachers' values coincide with those of students in other education-related disciplines, specifically pedagogy and social education. While student teachers focus especially on formal education, particularly that which takes place in schools, these other two disciplines also encompass non-formal education (e.g. within families, in communities, the influence of the media, and so on). It is therefore essential to determine to what extent the values of students in these disciplines coincide with those of student teachers.

This study forms part of a project on values education, personal attitudes and professional ethics in the European Higher Education Area (EHEA) conducted from 2004 to 2008 at the Faculty of Education Sciences and Psychology of X University. This project aims to promote an innovative educational model, transversal to all degree programmes, that is adapted to the characteristics of the EHEA in order to foster the comprehensive training of students as competent professionals and responsible citizens. It also promotes the development of interpersonal skills, participatory skills (i.e. 'knowing how to act') and personal skills (i.e. 'knowing how to handle oneself') and addresses the United Nations' recommendations on human rights education.

Method

Participants

This study involved the participation of 446 first-year university students. Of these, 243 (55%) were student teachers (hereinafter referred to as Future Teachers or FTs), 98 (21%) were pedagogy students (professional educators specialised in formal settings who study how to improve the organization of education programs and systems, and the principles and methods of instruction) or social education students (professional educators specialised in non-formal settings) (hereinafter referred to as Future Social Educators or FEs), and 105 were psychology students (hereinafter referred to as Future Psychologists or FPs). Of the students, 391 (88%) were female and 55 (12%) were male, and the average age was 20.55 (SD = 4). The high percentage of female students does not reflect a problem with the study, but rather the fact that most student teachers, pedagogy students, social education students and psychology students are women.

This study also involved the participation of 54 practising teachers (hereinafter referred to as Professional Teachers or PTs) who taught at various types of schools. Of these, 44 (82%) taught at public primary schools, 4 (7%) taught in rural school zones and 6 (11%) taught at private primary schools that receive public funds. It was essential that the practising teachers represent various types of schools in order to identify the values that are important to working at any kind of school. Of the teachers, 45 (83%) were female and 9 (17%) were male, and the average age was 42.55 (SD = 7.8). The average number of years of teaching experience was 21.59 (SD = 11.9). As with the sample of students, the high percentage of female teachers simply reflects the fact that most teachers at Spanish schools are women. It does not reflect any problem with the study.

Materials and procedure

We used a Catalan-language adaptation of the list of 125 values included in the Hall-Tonna Inventory of Values (Hall et al. 1986). Since Catalan and Spanish are very similar, the adaptation was done by translating the Spanish version of the instrument, which was developed by Eléxpuru and Medrano (2002). The translation was carried out by an expert in the Catalan language (specifically, a Catalan philologist).

In the original version of the instrument, the name of each value is followed by its definition. For example, the value *Collaboration* is defined as ‘Cooperating with other people and sharing responsibilities’. In this study, however, we chose to use only the definitions, without the names of the corresponding values, in order to ensure that the participants would respond to the true meanings of the concepts. Terms such as *justice* and *freedom* are used so frequently in day-to-day life that they can give rise to stereotyped responses. This problem can be avoided by using the definitions by themselves.

In the questionnaire, the students were asked to indicate the ideological or moral principles with which they strongly identified. The students were allowed to indicate as many of the 125 principles as they liked, although they were asked to choose only those which were truly essential. The practising teachers followed same procedure, but were asked to indicate the principles that were essential to their profession.

The students completed the questionnaire as a group during class time. They were informed that their participation was voluntary and that the questionnaires were anonymous. They were given as much time as they needed to fill out the questionnaires.

The sample of practising teachers was generated by means of a random drawing of schools in X province. Each randomly selected school was asked to have a teacher with at least 10 years’ experience complete the questionnaire. In this case, the

professionals were asked to indicate the principles that were essential to their profession. The anonymity of the participants was guaranteed at all times.

All of the values were selected at least once by some individual (a student or professional teacher). However, only 20 values were selected by at least half of the individuals in a given group. For example, Sensory Pleasure (SP) was chosen by 57 FPs (i.e. 54% of the individuals in this group chose this value). We selected these 20 values, whose definitions are shown in Table 1, for further analysis. Table 2 shows the cross-tabulated frequencies (i.e. contingency table) between the values and the groups of individuals.

PLEASE INCLUDE TABLES 1 AND 2 AROUND HERE

We conducted a correspondence analysis of the contingency table in order to interpret potential underlying dimensions. In fact, correspondence analysis is a method for analyzing the relations between the categories of two or more discrete variables. The main purpose of this analysis, like that of Factorial Analysis, is to reveal the dimensions that explain the relations between the variables. It analyses the contingency table and calculates the contribution that the categories make to each dimension. The dimensions can be graphically displayed in a multidimensional space that provides a more intuitive understanding of these relations. The distance between a category and a dimension in the graph indicates the contribution the category makes to the dimension. The shorter the distance is, the greater the contribution. We were interested in the relationships between the row and column variables (*value* and *group of individuals*, respectively), so we computed symmetrical coordinates. We orthogonally rotated the symmetrical coordinates following the procedure proposed by Van de Velden and Kiers (2005) in order to obtain a simple interpretation. To perform this analysis, we used the CAR package (Lorenzo-Seva, Van de Velden and Kiers 2009).

Results

The Cramer's V index of association for the contingency table was .35. The first two dimensions explained 91.8% of the variance, so two dimensions were retained.

Tables 3 and 4 show the orthogonal coordinates for the values and groups of individuals.

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PLEASE INCLUDE FIGURE 1 AROUND HERE

The first dimension can be characterised by the values with salient coordinates in this dimension (see Table 3): Administration/Control (A/C), Adaptability/Flexibility (A/F), Unit/Diversity (U/D) and Complementarity (CP). The opposite values in the analysis included values like Sensory Pleasure (SP) and Leisure (LE). This dimension helped to distinguish the PT group of individuals (which also had salient coordinates in this dimension) from the future professionals (i.e. FTs, FEs and FPs) at the opposite pole of the dimension.

The second dimension can also be characterised by the values with salient coordinates in this dimension (see Table 3): Sensory Pleasure (SP), Unit/Diversity (U/D), Equilibrium (EQ) and Limitation/Celebration (L/C). The opposite value in the analysis was Complementarity (CP). This dimension also helped to distinguish the psychology-related group of individuals (i.e. FPs) from the professionals (or future professionals) in the field of education (i.e. PTs, FTs and FEs) at the opposite pole of the dimension.

For a more intuitive understanding of Tables 3 and 4, Figure 1 also shows the coordinates. The first dimension is located on the horizontal axis and the second dimension on the vertical axis. The horizontal axis shows that the values of PT are different from those of future professionals (categories FT, FE and FP). The category

PT is on the right (with the salient values A/F, A/C, CP and U/D also on the right) and the categories FT, FE and FP on the left (with the salient values SP and LE also on the left). The vertical axis shows the differences between the future professionals, who are located high up (as well as the salient values SP, EQ, LC, U/D) and the rest of future professionals who are low down (as well as the opposite salient value CP).

Discussion

The main objective of this study was to determine whether the values that student teachers consider important were the same as those that experienced teachers (PTs) consider relevant to their professional careers. According to practising teachers who participated in the study, the following are the main values that are important to teaching: adapting to changing conditions and situations (Adaptability/Flexibility), appropriately administering available resources (Administration/Control), the ability to work in a team (Complementarity), and accepting the enrichment provided by multiple viewpoints and opinions (Unit/Diversity). These are the values that best define the group of teachers, although they chose other values as well, such as cooperating with other people and sharing responsibilities (Collaboration) and being sincere with oneself and with others, being aware of one's own possibilities and limitations, and acting independently or cooperatively, as necessary (Being Self). In general, these values correspond with the personal and professional competencies that various authors consider important to values education in schools. For example, some of the competencies highlighted by Martín and Puig (2007) are as follows: working in a team, being oneself (clear awareness of oneself, integration of biographical experiences and future projection, and the capacity to self-regulate personal autonomy) and school-building (the set of elements that make it possible to develop a collective project that can only move forward thanks to individual contributions).

The correspondence analysis revealed that the pattern of values of the practising teachers was different from that of the group of student teachers. As a rule, the values mentioned above were not considered as important by the first-year student teachers or by the other participating students. The one exception was Complementarity, which was chosen by the students in the education-related disciplines but not by the psychology students.

The results of the correspondence analysis show that student teachers are not characterised by any unique set of values that sets them apart from other students. In fact, the two groups of students in disciplines directly related to education (the student teacher group and the group of pedagogy and social education students) have similar value patterns. As mentioned above, these students especially value the ability to work in a team (Complementarity), although they also recognise the importance of other values, such as having a group of people with whom to share day-to-day experiences (Friendship/Belonging) and having colleagues who offer support in both the good times and the bad (Support Peer). Moreover, the correspondence analysis shows that the group of students as a whole is characterised by emphasis on values related to friendship and mutual support, by the need to belong to a group, and by the need for love and recognition. These values could be described as characteristic of adolescence; and in fact, due to their age, the students are not far removed from this stage of development. This would explain the students' need to belong to a group of people in whom they can trust and with whom they can share experiences (Friendship/Belonging), to whom they can express their thoughts and feelings (Sharing/Listening/Trust), with whom they can give and receive physical and emotional support (Care/Nurture, a value that also encompasses family), and who provide support in both the good times and the bad (Support Peer). They also value physical expressions of affection in the forms of

friendship, loyalty and respect (Physical Affection). In their free time, they value hobbies and pastimes that relieve them from the anxiety of daily life and provide refreshing rest (Leisure). According to Bigelow and La Gaipa (1975), friendship expectations develop with age, and in adolescence they are characterised by the importance of common interests, intimacy, acceptance, genuineness, loyalty and commitment. This shows that teenagers understand friendship as sharing affection, feelings, preferences, interests, desires and ideals, all aspects which refer to the values chosen by these students.

Another objective of the study was to determine whether the values held by the first-year student teachers could be simply explained by the fact that they are university students. If this hypothesis were true, the same values would be held by all students, regardless of their course of study. The results show that the psychology students have, to a certain extent, their own value profile. Like the other students, they chose values having to do with friendship, sharing, and belonging to a group, but they also mentioned other aspects, such as maintaining a peaceful social environment, defusing disagreements and avoiding conflicts (Equilibrium), acknowledging that, in order to develop talent, one must recognise his or her own limitations and learn from his or her mistakes (Limitation/Celebration), accepting the enrichment provided by multiple viewpoints and opinions (Unit/Diversity), and satisfying sensual desires and experimenting with one's own sexual identity (Sensory Pleasure). These values are related to self-knowledge, interest in other people and conflict avoidance, all of which are aspects relevant to psychology. In short, the first-year psychology students appear to have a value profile that is, to a certain extent, aligned with the degree programme they have chosen. Nevertheless, the fact that all of the students said that they value aspects related to friendship and peer groups suggests that the student teachers' reported values

are more closely linked to the fact that they are university students and to their stage of development (close to adolescence) than to the type of degree they have chosen to pursue.

Considering that the students in education-related disciplines (student teachers, pedagogy students and social education students) report the same kinds of values, a new line of research would be to compare these values with those considered important by experienced pedagogy professionals and social educators. This new line of research would make it possible to determine to what extent the values education that student teachers need would be equivalent to the values education required by pedagogy students and social education students.

Another future line of research would consist in determining the relationship between students' values and their beliefs about education. A study conducted by Shkedi and Laron (2004) showed that students begin their studies with idealistic beliefs about education and become more pragmatic towards the end of their studies. Rather than viewing idealism as a sign of immaturity, the authors contended that this shift is more of a regression than a progression, since idealism is a desirable quality in a teacher. It would be interesting to determine how students' values evolve over the course of a degree programme and how these changing values influence their beliefs about education.

Conclusion

Acknowledging the moral nature of teaching, Willemse, Lunenberg and Korthagen (2005) noted the importance of encouraging student teachers to develop their values and norms so they can be aware of how they express these values when teaching in the future. Universities, and teacher educators in particular, are the agents responsible for offering students appropriate values education, which includes educating them in the

moral aspects of teaching and instilling the values they need to work as teachers (Abrandt Dahlgren and Hammar Chiriac 2009; Willemse, Lunenberg and Korthagen 2005).

There are various reasons why university-level values education should not be the same for all degree programmes. First of all, the same moral and ethical profile is not required for the optimal practice of all professions. Second, as shown by the results of this study, university students in different degree programmes may hold different types of values, even when they are just starting their studies. Therefore, before a university-level values education programme is implemented, it is essential to determine what values are held by the targeted students. This study found that student teachers, in particular, have value profiles that do not correspond with the requirements of their chosen profession. Instead, their values appear to be determined by their stage of development (having recently emerged from adolescence), and by the fact that they are university students. Because of these two elements, they place greater importance on the peer group and friendships.

In conclusion, the results of this study confirm the need to provide university-level student teachers with education in the values that will be essential to their future professional practice in school environments. Specifically, these values include teamwork, the acceptance of multiple viewpoints and opinions, the proper administration of available resources, and adaptation to changing conditions and situations. It could be argued that these students acquire these values for themselves during their university studies thanks to the maturing processes typical of the early years of youth and have no need for specific values education. However, the study by Shkedi and Laron (2004) mentioned in the introduction to this article shows that this evolution is not necessarily ideal for future teachers, so their evolution needs to be guided by the

University. Also, as McNeel points out (1994), the University can play an important role in the development and consolidation of moral values after adolescence, and the values related to their profession. This is also one of the principles of the Bologna Plan, in which the present study is framed.

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Figure 1. Graphical presentation of rotated coordinates

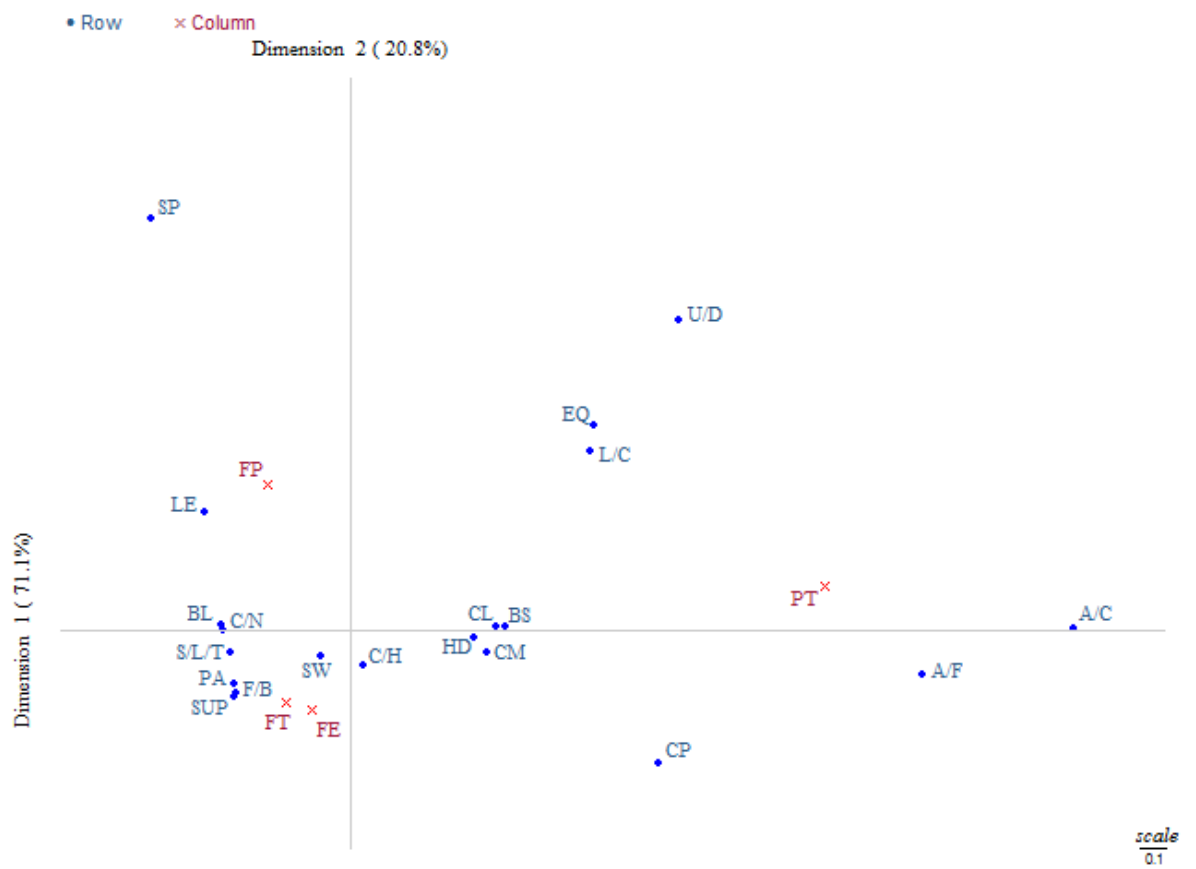


Table 1. Definitions of values.

Values	Definitions
Adaptability/Flexibility (A/F)	Dynamically adapting to changing conditions and situations.
Administration/Control (A/C)	Properly administrating the available resources.
Being Liked (BL)	Receiving and feeling the affection of those around oneself.
Being Self (BS)	Being sincere with oneself and with others, being aware of one's own possibilities and limitations, and being able to act independently or cooperatively, as necessary.
Care/Nurture (C/N)	Giving/receiving physical and emotional support to/from family and friends.
Collaboration (CL)	Cooperating with other people and sharing responsibilities.
Competition (CM)	Being eager to improve and give the best of oneself in a particular area or profession.
Complementarity (CP)	Being able to work in a team in such a way that the team members' skills mutually complement, support and enrich one another.
Courtesy/Hospitality (C/H)	Being welcoming and treating others with good manners and respect.
Equilibrium (EQ)	Maintaining a peaceful social environment, defusing disagreements and avoiding conflicts.
Friendship/Belonging (F/B)	Having a group of people to trust and with whom to share day-to-day experiences.
Human Dignity (HD)	Supporting every human being's right to be respected and have his or her basic needs met so that he or she may fully develop his or her potential.
Leisure (LE)	Having a hobby or pastime that offers relief from the anxiety of daily life and provides refreshing rest.
Limitation/Celebration (L/C)	Acknowledging that, in order to develop talent, one must recognise his or her own limitations. This involves facing one's imperfections with a sense of humour and learning from one's mistakes.
Physical Affection (PA)	Physically expressing affection in the forms of friendship, loyalty and respect.

Self-Worth (SW)	Feeling valued by those whom one respects and holds in high esteem.
Sensory Pleasure (SP)	Satisfying sensual desires and experimenting with one's own sexual identity.
Sharing/Listening/Trust (S/L/T)	Listening to other people's thoughts and feelings and expressing one's own thoughts and feelings in a climate of mutual trust in each person's honesty.
Support Peer (SUP)	Having colleagues who offer support in both the good times and the bad.
Unit/Diversity (U/D)	Recognising and accepting the enrichment provided by multiple viewpoints and opinions.

Table 2. Cross tabulation of frequencies of values among groups of individuals.

Values	Future teacher (FT)	Future Psicologist (FP)	Future Educator (FE)	Professional teacher (PT)
Adaptability / Flexibility (A/F)	18	0	0	34
Administration / Control (A/C)	7	0	0	28
Being Liked (BL)	99	64	34	0
Being Self (BS)	54	29	16	36
Care / Nurture (C/N)	113	75	47	0
Collaboration (CL)	32	27	30	30
Competition (CM)	45	29	37	35
Complementarity (CP)	37	0	31	42
Courtesy / Hospitality (C/H)	162	72	49	41
Equilibrium (EQ)	14	31	0	28
Friendship / Belonging (F/B)	129	63	70	0
Human Dignity (HD)	23	27	43	27
Leisure (LE)	49	66	26	0
Limitation / Celebration (L/C)	0	30	17	27
Physical Affection (PA)	134	66	64	0
Self-Worth (SW)	157	75	44	27
Sensory Pleasure (SP)	11	57	0	0
Sharing / Listening / Trust (S/L/T)	113	76	71	0
Support Peer (SUP)	169	72	67	0
Unit / Diversity (U/D)	0	34	0	31

Table 3. Rotated coordinates related to values.

Values	First dimension	Second dimension
Adaptability / Flexibility (A/F)	2.35	-0.24
Administration / Control (A/C)	2.97	0.01
Being Liked (BL)	-0.53	0.04
Being Self (BS)	0.64	0.02
Care / Nurture (C/N)	-0.52	0.01
Collaboration (CL)	0.60	0.03
Competition (CM)	0.56	-0.11
Complementarity (CP)	1.26	-0.73
Courtesy / Hospitality (C/H)	0.05	-0.19
Equilibrium (EQ)	1.01	1.13
Friendship / Belonging (F/B)	-0.46	-0.34
Human Dignity (HD)	0.51	-0.04
Leisure (LE)	-0.59	0.65
Limitation / Celebration (L/C)	0.99	0.99
Physical Affection (PA)	-0.47	-0.30
Self-Worth (SW)	-0.12	-0.14
Sensory Pleasure (SP)	-0.81	2.26
Sharing / Listening / Trust (S/L/T)	-0.49	-0.12
Support Peer (SUP)	-0.47	-0.36
Unit / Diversity (U/D)	1.35	1.71

Bold: Positive salient values

Italics: Opposite salient values

Table 4. *Rotated coordinates related to groups of individuals. Salient values are printed in bold face*

Participants	First dimension	Second dimension
Future Teacher (FT)	-0.26	-0.40
Future Psychologist (FP)	-0.33	0.81
Future Educator (FE)	-0.16	-0.43
Professional Teacher (PT)	1.95	0.25