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A Study of Values in University Students from Teacher-Training Pedagogical Programs in Chile

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ABSTRACT

Value education for preservice university teachers is an unavoidable task, given the level of authority they exercise in the lives of children and young people. The objective of the current study was to understand the perception of values held by preservice teachers from a regional university in Chile set in a multicultural context. The aim was to analyze the opinions of Chilean university preservice teachers on a set of values. The research was designed within the quantitative framework using a Likert scale questionnaire, applied to 319 pedagogy university students. The participants' responses were analyzed with statistical tools, and the results revealed that the participating students valued more significant aspects of affectivity, morals, and ecology. As reported by the participants, the least preferred values were instrumental and religious. These findings are significant for decision-making and consistent implementation to improve pedagogical training in accordance with today's society's problems and educational needs. The article ends with a conclusion, implications, and limitations of the current research.

Keywords: Chile, preservice teachers, quantitative study, university students, value education

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Values organize human behavior from a cognitive-affective point of view for decision-making in daily life (Poorchangizi et al., 2019). Value education focuses on the development of all aspects of a person's life, leading to understanding how the concept of person, "the subject of integral education," is understood (Gervilla, 2010; González-Gijón et al., 2021, p. 121).

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Value is "everything aspired to because it is considered desirable, be it concrete objects or abstract ideals that motivate and guide human activity in a certain direction" (Garza & Patiño, 2000, p. 12). Human behavior finds in values a network to organize existence since "value is like a basic belief through which we interpret the world, give meaning to events and our existence" (Ortega & Mínguez, 2001, p. 12). This way, values are referents embodied in behavior when practiced (Chapa & Martínez, 2015). They play a fundamental role in making decisions and choices and constructing perceptions and attitudes in all aspects of life (Sagiv et al., 2017).

Value education provides an understanding to guide students in making decisions in the face of the multiple problems they encounter (Cano-Escoriaza et al., 2019; Fernández-Vega & Cárcamo-Vásquez, 2017). The formative pedagogical process is a privileged environment to make known a series of values that aim to resignify the same of the person and the integral development (Cívico-Ariza et al., 2021). For this, we consider the need to strengthen the formative processes, the context of school practices of future educators, and their academic reflection so that they can carry out specialized educational activities that allow them to respond to the needs of the student (Robson, 2019).

The formation of values in future teachers is of great importance for their professional performance (Gamage et al., 2021). This process must be implemented in the curricular itinerary of the graduate

programs (Garay et al., 2018). In this sense, the development of a formation plan must favor the configuration of an axiological matrix that illuminates the professional work and the training role for the integral development of people and their relationship with society's problems. In this respect, the study provides information for decisionmaking and consistent implementation to improve pedagogical training in accordance with today's society's problems and educational needs (Collier, 2013). In this context, the present study comprehensively examines the values of university students from teacher-training pedagogical programs at a university in the Maule region of Chile.

LITERATURE REVIEW

Values in Future Teachers

Values are "guiding principles in life" (Schwartz, 2012, p. 17) and are conceived as principles that guide human action, which is considered good or desirable (Cívico-Ariza et al., 2021; Gamage et al., 2021). Values provide guidelines for decision-making and are organized in networks fulfilling the activity of being a general plan for resolving conflicts in the different states of existence (Robson, 2019). Value education for future university teachers is an unavoidable task, given the authority they exercise in the lives of children and young people (Şahin, 2019).

Education is always linked to values since they are inherent to all educational activities (Clement, 2007). Educating is to optimize students' lives for active citizenship through self-reflection to live autonomously and responsibly.

In this sense, it is essential to design a transversal curricular plan for the study programs, making the epistemic sense visible in conceptualizing and appropriating these values in practice. Furthermore, developing an educational pathway for the inclusion of values, aptitudes, and personal skills to achieve comprehensive training and adequate incorporation of future teachers into the school environment is necessary. In this regard, the United Nations organization in the conference "Towards Universal Access to Higher Education: International Trends" (United Nations Educational, Scientific and Cultural Organization (The UNESCO International Institute for Higher Education in Latin America and the Caribbean [IESALC], 2020, p. 22) points out that the "values, attitudes, ethics and knowledge that higher education institutions can impart to students constitute the social capital necessary to build healthy civil societies and socially cohesive cultures."

Teachers, in the exercise of their profession, play a relevant role in transmitting values to students. This aspect is essential in education, where they carry out educational activities to achieve quality learning (Gamage et al., 2021). In this regard, the Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4 ensure inclusive and equitable education (UNESCO, 2016, p.33), which states, "quality education includes the development of those skills, values, attitudes, and knowledge that enable citizens to lead healthy and fulfilled lives, make

informed decisions and respond to local and global challenges."

In this sense, the need to identify the different human values declared by future teachers is a timely requirement since professional values are based on the internalization of the same as their own, with the understanding that values offer a model of thought and way of proceeding. This identification of values helps shape the decision-making, choice, and elaboration of perceptions and attitudes (Sagiv et al., 2017). Therefore, implementing values has become the most important challenge in education. Value education acquires importance in today's contemporary educational field to safeguard the sustainability of societies (Santhi, 2016). Future teachers have an essential role since they shape the student body's spiritual, ethical, and socio-cultural life through educational actions. These educational tasks aim to train children and young people to face the complexities of the present and future life (Şahin, 2019).

In this context, universities are responsible for the formation of their students. It is an educational space where the human potential for innovation and social development is generated. Its task is oriented toward training professionals and people in general (Thornberg, 2008). In this way, a university is where people learn and promote inclusion, social justice, equity, and democracy, not only understood as knowledge management but also as a context of inclusive citizenship (Gómez & González, 2017).

The pedagogical formation of future teachers in cultural and technological knowledge must overlap with elements of citizenship training that enable them to understand and transform the different sociocultural situations (García, 2008; Gómez & González, 2017; Legendre, 2007; Martínez & Esteban, 2005). The imprint of responsible citizenship in professional performance is not obtained spontaneously but is learned in contexts that favor the ethical construction of the person. This process of knowledge construction is carried out in the university to engage with the local and international context (Lind, 2007; Martínez & Esteban, 2005; Martínez & Hoyos, 2006; Moreno, 2008; Quintana, 2005; Ríos & Ruiz, 2011; Touriñán, 2008).

University is a fundamental formative space for acquiring and modifying values and attitudes through horizontal dialogical experiences with teachers and classmates (Magaña et al., 2016). In this sense, the university's proposal of practical in the pedagogical formation is a privileged space for learning professional competencies and skills that allow for significant learning for the development of ethics and citizenship (Zepke, 2013). United Nations organization on the world conference on higher education refers to the same idea mentioned above.

Higher education must not only give solid skills for the present and future world but must also contribute to the education of ethical citizens committed to the construction of peace, the defense of human rights, and the values of democracy. (UNESCO, 2009, p. 2).

Martínez et al. (2002) in their study proposed the need for pedagogical formation that integrates ethical learning as an area of knowledge or otherwise transversal to the learning of scientific or cultural knowledge. Training for a dignified life from the personal and community sphere and the ability to face personal and social circumstances by offering reasoned solutions require an organized and systematic educational practice. On the other hand, UNESCO, in the text "Education Encloses a Treasure," states:

Education must contribute to the overall development of each person: body and mind, intelligence, sensibility, aesthetic sense, individual responsibility, spirituality... The essential function of education is to confer on all human beings the freedom of thought, judgment, feeling, and imagination that they need to bring their talents to fulfillment and to remain, as far as possible, the architects of their destiny. (UNESCO, 1996, pp. 106-107)

In this sense, it is hoped that the formation of future teachers will include theoretical and practical knowledge, which will allow the development of the professional from an axiological matrix "since the contribution of teachers and professors is essential to prepare young people not only to approach the future with confidence but also to build it themselves" (UNESCO, 1996, p. 161). Therefore, it is imperative to install a pedagogical formation model that integrates education for autonomy in decision-making from an axiological matrix as part of the

scientific-cultural knowledge for the shaping of democratic and multicultural societies (Karataş & Oral, 2015; Martínez et al., 2002; Martínez & Esteban, 2005).

Thus, it is impossible to conceive an education that does not encompass training in values (Gervilla, 2000; Ibáñez, 1993; Ortega & Mínguez, 2001). Education is not limited to instructing knowledge and skills but to educating the person. Therefore, it is a fundamental theme for education in the 21st century. Investigating future teachers' values provides significant knowledge regarding present and future problems that must be elucidated to educate the citizens of the 21st century. Thus, we affirm the need to discover or name a series of values that allow us to give personal and social meaning to be able to perform as pedagogues at different educational levels. In response to this need, the study aims to delve into the perception of values held by student teachers at a university in the Maule region of Chile.

In view of the above discussion, the present study has general and specific objectives.

General Objective

To understand the perception of values held by preservice teachers from a regional university in Maule set in a multicultural context.

Specific Objectives

The specific objectives of this research are as follows:

1. To identify the values of preservice teachers from a pedagogy program at a regional university in Maule.

- 2. To determine the axiological hierarchy of the preservice teachers from a pedagogy program at a regional university in Maule.
- 3. To determine if there are significant differences in the hierarchy according to the gender variable.
- 4. To determine if there are significant differences in the hierarchy of values in preservice teachers according to the faculty in which they study.

METHOD

The methodology used in this study is quantitative, wherein it aims to analyze the opinion of the participants on a set of values. The value test (Casares, 1995) instrument was applied to assess values in university students.

Participants

The participants were selected from the one renowned university in Chile, imparting full-time courses in different educational pedagogy programs. The study was directed toward knowing final-year university students' perceptions of the values of education. They were selected because they are on the verge of completing their degree and starting their professional practice in different schools. Thus, this group would also show the impact of university education on their value system. They pertained to three faculties: The faculty of Basic Sciences, the Faculty of Educational Sciences, and the Faculty of Religious and Philosophical Sciences. The study's sample group comprises all final-year pedagogy

program students from the three Faculties mentioned above at this Chilean university. The study followed non-probabilistic convenience sampling. The total universe was 2224 enrolled students in the ten pedagogy programs. Out of the total number of students, those enrolled in the final year

of each program add up to 338. The sample was then set to 319 students from three faculties and ten graduation cohorts from the university's trainee-teacher programs (Table 1). In terms of gender, 30% of the participants were male and 70% female.

Table 1

Participants of the study

Faculty	Degree	Number of Students
Faculty of Basic Sciences	Pedagogy in Mathematics and Computer Science	31
(F. Basic Sciences)	Pedagogy in Science	29
	Differential Education	30
	Physical Education	38
	Elementary Education Pedagogy	39
Faculty of Educational Sciences (F. Education)	Elementary Education pedagogy with majors	47
Sciences (F. Education)	Pedagogy in English	29
	Pedagogy in Language	28
	Early Childhood Education	35
Faculty of Religious and Philosophical Sciences (F. Religion & Philosophy)	Pedagogy in Religion and Philosophy	13
Total		319

Instruments

The instrument used to collect the information is a questionnaire to point out values in university students (Table 2). It has also been applied by Casares (1995) and Casares and Collados (1998). Furthermore, this instrument underlies Gervilla's (2000) integral model of the human being, which is organized into ten categories of values:

bodily, intellectual, affective, individual, aesthetic, moral, social, ecological, instrumental, and religious. By following up on previous studies of the instrument, we realized that it had been used on different occasions (Álvarez et al., 2012; Casado & Sánchez-Gey, 1999; Rodríguez et al., 2008); likewise, Cronbach's alpha statistic (0.96) was used, which is recognized as reliable.

Table 2
Instrument used: Test of values (Casares, 1995)

1–25	Bodily values	126-150	Moral values
26-50	Intellectual values	151-175	Social values
51-75	Affective values	176-200	Ecological values
76–100	Aesthetic values	201-225	Instrumental values
101-125	Individual values	226-250	Religious values

RESULTS

A 20.0 version of the statistical software SPSS was used to analyze the data. A descriptive analysis was carried out along with an approach to inferential statistics to determine the influence of the independent variables on the dependent ones represented by the collection in the ten categories.

Values Reported by Category

The values are presented descriptively according to the 250 items in the ten categories. The results are shown globally for each category and ordered hierarchically according to the means (Table 3).

Table 3
Hierarchy of value: Descriptive statistics for each category of values in descending order from most preferred to least preferred values as reported by the participants

Categories of Values	N	Mean	SD	Min	Max
Affective	319	42.17	8.322	-8	50
Moral	319	40.75	9.888	-9	50
Ecological	319	40.64	11.122	-5	50
Individual	319	37.42	10.820	-19	50
Social	319	33.35	10.980	-12	50
Bodily	319	31.63	8.167	6	49
Intellectual	319	29.71	10.045	0	50
Aesthetic	319	28.89	12.003	-7	50
Instrumental	319	21.60	14.612	-22	50
Religious	319	22.35	22.201	-50	50

An overall view of each category facultywise is displayed in Table 4.

Table 4

Descriptive statistics for each category of values faculty wise

Value Categories	Faculty	N	Mean	SD	Min	Max
	F. Basic Sciences	60	30.07	8.320	6	47
Bodily	F. Education	246	32.01	8.112	6	49
	F. Religion & Philosophy	13	31.69	8.280	19	45
	Total	319	31.63	8.167	6	49
	F. Basic Sciences	60	28.47	10.471	3	49
	F. Education	246	29.74	9.982	0	50
ntellectual	F. Religion & Philosophy	13	34.85	8.009	15	46
	Total	319	29.71	10.045	0	50
	F. Basic Sciences	60	41.23	9.093	6	50
A ffactive	F. Education	246	42.57	8.156	-8	50
Affective	F. Religion & Philosophy	13	39.00	7.200	25	49
	Total	319	42.17	8.322	-8	50
	F. Basic Sciences	60	24.70	11.451	2	50
۱ 41 4: -	F. Education	246	29.95	12.092	-7	50
Aesthetic	F. Religion & Philosophy	13	28.31	8.779	18	47
	Total	319	28.89	12.003	-7	50
	F. Basic Sciences	60	33.52	11.933	-19	50
411	F. Education	246	38.43	10.441	-15	50
ndividual	F. Religion & Philosophy	13	36.38	8.846	21	49
	Total	319	37.42	10.820	-19	50
	F. Basic Sciences	60	38.70	11.216	-4	50
M1	F. Education	246	41.47	9.476	-9	50
Moral	F. Religion & Philosophy	13	36.62	9.421	13	50
	Total	319	40.75	9.888	-9	50
	F. Basic Sciences	60	30.73	12.175	-12	50
Social	F. Education	246	34.01	10.719	-8	50
ociai	F. Religion & Philosophy	13	32.85	8.745	18	48
	Total	319	33.35	10.980	-12	50
	F. Basic Sciences	60	38.43	12.750	2	50
7.00100i1	F. Education	246	41.15	10.833	-5	50
Ecological	F. Religion & Philosophy	13	41.08	7.274	28	49
	Total	319	40.64	11.122	-5	50

Table 4 (Continue)

Value Categories	Faculty	N	Mean	SD	Min	Max
	F. Basic Sciences	60	22.70	11.359	-3	45
T 4 4 1	F. Education	246	21.61	15.310	-22	50
Instrumental	F. Religion & Philosophy	13	16.38	14.228	-14	38
	Total	319	21.60	14.612	-22	50
	F. Basic Sciences	60	21.13	24.184	-50	50
D 1' '	F. Education	246	22.37	21.990	-44	50
Religious	F. Religion & Philosophy	13	27.69	16.575	-8	48
	Total	319	22.35	22.201	-50	50

Performing a general axiological analysis, we find that the most chosen categories are those that concern affective values (M = 42.17) with words such as happiness, loving, friendship, self-esteem, kiss, and good mood, followed by moral values (M = 40.75) with words such as goodness, duties, dignity, honesty and ecological values (M = 40.64) with words such as water, animals, trees, ecological biosphere, environment (Table 4).

Followed by those above are individual values (M = 37.42) and words such as authenticity, self-affirmation, self-awareness, self-control, social values (M = 33.35), and words such as kindness, association, commonweal, civics, politicand bodily values (M = 31.63) with words such as getting warm, eating food, body, health, sexuality, vitality.

The category of intellectual values obtained a mean of 21.60, and words such as abstraction, analyzing, giving arguments, attention, research, and knowledge. The category of aesthetic values had a mean of 28.89, and words such as harmony, arts, beauty, cinema, literature, and poetry.

The category of instrumental and religious values was found at the lowest levels. A mean of 21.60 was found for the former with words like applying, automatic, money, saving, and efficacy. At the same time, the latter obtained a mean of 22.35 with words like soul, baptism, believer, God, doctrine, praying, and commandments. Special attention must be drawn to the results for the category of religious values, which reach a mean of 22.35 out of 50. This category was the only one with a minimum value of -50.

In terms of an overall estimation made by the preservice teachers, the religious values were those in which the lowest level of agreement was found, with the highest standard deviation at 22.20. On the other hand, the least unstable category was that of bodily values, which displayed a standard deviation of 8.16, with the highest level of agreement among the participants.

These results confirm that students from the teacher-trainee programs in the three faculties revealed values related to the development of emotional intelligence, decision-making, and especially the caretaking of the environment more significantly than others. On a second level are those aspects that refer to personal identity, bodily dimension, and their permanent relationship with other human beings. On the next level, appearing as significant, are intellectual knowledge development and appreciating aesthetics.

Finally, religious and instrumental values are the least appreciated by students. The instrumental values are the second last in the preferences and are located considerably from the previous ones. These instrumental values having scores below the average, prove that a student is not very

materialistic. Religious value is found in the lowest preference, reflecting a clear indifference and lack of knowledge about religion. Preservice teachers' appreciation for religious values is indifferent.

Relationship of the Variables: Faculty, Gender, and Pedagogy Program with the Categories of Values. The variables of characterization, faculty, gender, and degree and their relationship with the variables referring to the categories of values contemplated in ten categories are presented in Table 5. For this purpose, several analyses of variance were carried out.

Table 5

ANOVA test results from a comparison between the variable faculty and the ten categories of values

				-	0 ,	
Value Categories	Source of Variance	Sum of Squares	GI	Quadratic Mean	F	Sig.
Bodily	Int. gr Intr. gr.	182.622 21027.466	2 316	91 67	1.372	.255
Intellectual	Int. gr Intr. gr.	435.912 31651.975	2 316	218 100	2.176	.115
Affective	Int. gr Intr. gr.	222.459 21799.059	2 316	111 69	1.612	.201
Aesthetic	Int. gr Intr. gr.	1332.694 44481.682	2 316	666 141	4.734	.009*
Individual	Int. gr Intr. gr.	1179.483 36050.385	2 316	590 114	5.169	.006*
Moral	Int. gr Intr. gr.	602.458 30486.978	2 316	301 96	3.122	.045*
Social	Int. gr Intr. gr.	521.987 37814.389	2 316	261 120	2.181	.115
Ecological	Int. gr Intr. gr.	359.756 38979.786	2 316	180 123	1.458	.234
Instrumental	Int. gr Intr. gr.	426.225 67466.214	2 316	213 214	.998	.370
Religious	Int. gr Intr. gr.	459.932 156273.040	2 316	230 495	.465	.629

Note: *The difference in averages is significant at the 0.05 level.

Intergroup: Int. gr. Intra group: Intr. gr. There are statistically significant differences in aesthetic, individual, and moral values. However, the students surveyed in the three faculties did not show significant differences in the other value categories. Therefore, a more careful analysis is made of the three value categories with relevant differences.

The first category refers to aesthetic values. A comparative analysis of the three faculties revealed that the students of the Faculty of Basic Sciences (M = 24.70) value

less the aspects referring to the aesthetic dimension than those of the Faculty of Educational Sciences (M = 29.95) and the Faculty of Religious and Philosophical Sciences (M = 28.31) (Table 4).

Regarding post-hoc results, differences were found between the Faculty of Basic Sciences and the Faculty of Education (Table 6). However, no differences were found between the Faculty of Education and the Faculty of Religion and Philosophy.

Table 6

Post-hoc contrasts for the category aesthetic values (Test: Tukey HSD)

Faculty (I)	Faculty (J)	Mean difference (I-J)	Sig. (p)
	F. Education	-5.247	.007*
F. Basic Sciences	F. Religion & Philosophy	-3.608	.581
	F. Basic Sciences	5.247	.007*
F. Education	F. Religion & Philosophy	1.639	.878
F. Religion &	F. Basic Sciences	3.608	.581
Philosophy	F. Education	-1.639	.878

Note: *The difference in averages is significant at the 0.05 level

In second place are individual values. In this category, the Faculty of Basic Sciences, with a mean of 33.52, differs from the Faculty of Education (M = 38.43) and the Faculty of Religion and Philosophy (M = 36.38). In this way, words related to *authenticity, self-affirmation, self-awareness, autonomy, identity, originality, liberty*, and those similar to these are appreciated by the

students from the Faculty of Education and the Faculty of Religion and Philosophy with a certain nuance of a higher influence as compared to their peers from the Faculty of Basic Sciences, for whom these are less important. Nevertheless, it is crucial to mention that there are no significant differences between their means. The posthoc results are displayed in Table 7.

Table 7

Post-hoc contrasts for the individual category values (Tests: Tukey HSD)

Faculty (I)	Faculty (J)	Mean difference (I-J)	Sig. (p)
	F. Education	-4.914	$.004^{*}$
F. Basic Sciences	F. Religion & Philosophy	-2.868	.655
	F. Basic Sciences	4.914	.004*
F. Education	F. Religion & Philosophy	2.046	.779
F. Religion &	F. Basic Sciences	2.868	.655
Philosophy	F. Education	-2.046	.779

Lastly, there is the category of moral values. For this category, the results obtained for each of the faculties are as follows: Faculty of Basic Sciences, 38.7; Faculty of Education, 41.47; and Faculty of Religion and Philosophy, a mean of 36.62,

which is worth mentioning as the second highest. The post-hoc tests did not result in any statistically significant differences in the means among faculties, which is also reflected in their low standard deviation across the data (Table 8).

Table 8

Post-hoc contrasts for the category moral values (Tests: Tukey HSD)

Faculty (I)	Faculty (J)	Mean difference (I-J)	Sig. (p)
F. Basic Sciences	F. Education	-2.772	0.124
	F. Religion & Philosophy	2.085	0.767
F. Education	F. Basic Sciences	2.772	0.124
	F. Religion & Philosophy	4.856	0.193
F. Religion &	F. Basic Sciences	-2.085	0.767
Philosophy	F. Education	-4.856	0.193

Results obtained from the comparison between the independent variable "gender"

and the other value categories are presented in Tables 9 and 10.

Table 9

Descriptive statistics for each category of values gender wise

Value Categories	Male	Female
Bodily	30.79	31.99
Intellectual	29.31	29.88

Table 9 (Continue)

Value Categories	Male	Female
Affective	42.38	42.08
Aesthetic	27.36	29.54
Individual	37.67	37.32
Moral	40.01	41.07
Social	32.51	33.71
Ecological	39.47	41.13
Instrumental	21.24	21.75
Religious	19.12	23.73

Table 10
ANOVA test results from a comparison between the variable gender and the ten categories of values

Value Categories	Source of Variance	Sum of Squares	GI	Quadratic Mean	F	Sig.
Bodily	Int. gr Intr. gr.	96.316 21113.772	1 317	96.316 66.605	1.446	.230
Intellectual	Int. gr Intr. gr.	21.994 32065.893	1 317	21.994 101.154	.217	.641
Affective	Int. gr Intr. gr.	5.771 22015.746	1 317	5.771 69.450	.083	.773
Aesthetic	Int. gr Intr. gr.	318.991 45495.385	1 317	318.991 143.519	2.223	.137
Individual	Int. gr Intr. gr.	8.489 37221.380	1 317	8.489 117.418	.072	.788
Moral	Int. gr Intr. gr.	74.451 31014.985	1 317	74.451 97.839	.761	.384
Social	Int. gr Intr. gr.	96.075 38240.301	1 317	96.075 120.632	.796	.373
Ecological	Int. gr Intr. gr.	183.876 39155.666	1 317	183.876 123.519	1.489	.223
Instrumental	Int. gr Intr. gr.	17.512 67874.927	1 317	17.512 214.116	.082	.775
Religious	Int. gr Intr. gr.	1418.857 155314.115	1 317	1418.857 489.950	2.896	.090

Note: Inter group: Int. gr.
Intra group: Intr. gr.

There are no significant differences in the means between males and females (Table 10). However, the lowest means correspond to the male group categorized in religious values (M = 19.08), whereas the highest mean corresponds to affective values (M = 42.38), also found in the male group.

On the other hand, when we examine the means obtained in each level of the variable "gender," as expected, the female group highlights the importance of moral, ecological, bodily, social, aesthetic, intellectual, and religious values. Moreover, the values present in the lives of men and women are linked to family, professional and social contexts.

Table 11 shows the ANOVA results for comparing the variable "graduation cohort" and the ten categories of values examined in this study.

Table 11

ANOVA test results from a comparison between the variable graduation cohort and the ten categories of values

Source of Variance	Sum of Squares	GI	Quadratic Mean	F	Sig.
Int. gr Intr. gr.	1429.037 19781.051	9 309	158.782 64.016	2.480	.010*
Int. gr Intr. gr.	1799.924 30287.964	9 309	199.992 98.019	2.040	.035*
Int. gr Intr. gr.	1174.582 20846.936	9 309	130.509 67.466	1.934	.047*
Int. gr Intr. gr.	6255.822 39558.554	9 309	695.091 128.021	5.430	.000*
Int. gr Intr. gr.	1803.552 35426.316	9 309	200.395 114.648	1.748	.078
Int. gr Intr. gr.	1437.374 29652.061	9 309	159.708 95.961	1.664	.097
Int. gr Intr. gr.	896.402 37439.974	9 309	99.600 121.165	.822	.596
Int. gr Intr. gr.	2508.696 36830.846	9 309	278.744 119.194	2.339	.015*
Int. gr Intr. gr.	3906.160 63986.279	9 309	434.018 207.075	2.096	.030*
Int. gr Intr. gr.	12414.671 144318.301	9 309	1379.408 467.050	2.953	.002*
	Variance Int. gr Intr. gr. Int. gr	Variance Squares Int. gr 1429.037 Intr. gr. 19781.051 Int. gr 1799.924 Intr. gr. 30287.964 Int. gr 1174.582 Intr. gr. 20846.936 Int. gr 6255.822 Intr. gr. 39558.554 Int. gr 1803.552 Intr. gr. 35426.316 Int. gr 1437.374 Intr. gr. 29652.061 Int. gr 37439.974 Int. gr 36830.846 Int. gr 3906.160 Intr. gr. 63986.279 Int. gr 12414.671	Variance Squares Int. gr 1429.037 9 Intr. gr. 19781.051 309 Int. gr 1799.924 9 Int. gr. 30287.964 309 Int. gr 1174.582 9 Intr. gr. 20846.936 309 Int. gr 6255.822 9 Int. gr. 39558.554 309 Int. gr 1803.552 9 Int. gr. 35426.316 309 Int. gr. 29652.061 309 Int. gr. 29652.061 309 Int. gr. 37439.974 309 Int. gr. 36830.846 309 Int. gr. 36830.846 309 Int. gr. 63986.279 309 Int. gr. 63986.279 309 Int. gr. 12414.671 9	Variance Squares GI Mean Int. gr 1429.037 9 158.782 Intr. gr. 19781.051 309 64.016 Int. gr 1799.924 9 199.992 Intr. gr. 30287.964 309 98.019 Int. gr 1174.582 9 130.509 Intr. gr. 20846.936 309 67.466 Int. gr 6255.822 9 695.091 Intr. gr. 39558.554 309 128.021 Int. gr 1803.552 9 200.395 Intr. gr. 35426.316 309 114.648 Int. gr 1437.374 9 159.708 Intr. gr. 29652.061 309 95.961 Int. gr 396.402 9 99.600 Intr. gr. 37439.974 309 121.165 Int. gr 2508.696 9 278.744 Intr. gr. 36830.846 309 119.194 Int. gr 63986.279 3	Variance Squares GI Mean F Int. gr 1429.037 9 158.782 2.480 Int. gr 19781.051 309 64.016 2.480 Int. gr 1799.924 9 199.992 2.040 Int. gr 30287.964 309 98.019 2.040 Int. gr 1174.582 9 130.509 1.934 Int. gr 20846.936 309 67.466 1.934 Int. gr 6255.822 9 695.091 5.430 Int. gr 1803.552 9 200.395 1.748 Int. gr 1803.552 9 200.395 1.748 Int. gr 35426.316 309 114.648 1.748 Int. gr 29652.061 309 95.961 1.664 Int. gr 37439.974 309 121.165 .822 Int. gr 2508.696 9 278.744 2.339 Int. gr 36830.846 309 119.194

Note: *The difference in averages is significant at the 0.05 level.

Inter group: Int. gr. Intra group: Intr. gr.

In the analysis of the variable "graduation cohort" and the value categories, statistically significant differences in the

bodily, intellectual, affective, aesthetic, ecological, instrumental, and religious values were observed. Besides, for the variable

"graduation cohort," the appreciation of bodily values shows significant differences. For example, bodily values appear less important for the Math and IT Education Program (M=28.16) than the Physical Education and the Early Childhood teacher

education program. Their means are 34.26 and 34.77, respectively (Figure 1). Table 12 shows the set of post-hoc contrasts for the category bodily values across different pedagogy programs.

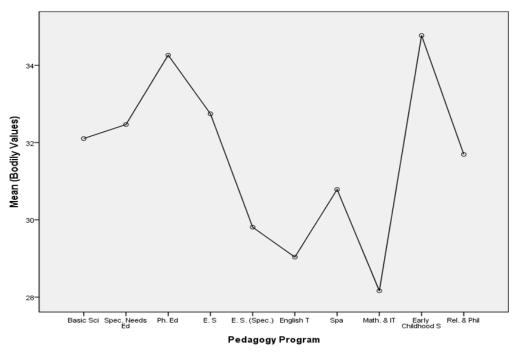


Figure 1. Histograms with mean values for the bodily values pedagogy program wise

Note:

Basic Sci.: Pedagogy in Science

Spec. Needs Ed.: Pedagogy in Differential Education

Ph. Ed.: Pedagogy in Physical Education E. S: Pedagogy in Elementary Education

E. S. (Spec.): Pedagogy in Elementary Education with major

English T.: Pedagogy in English Spa: Pedagogy in Language

Math. & IT: Pedagogy in Mathematics and Computer Science Early Childhood S.: Pedagogy in Early Childhood Education

Rel. & Phil.: Pedagogy in Religion and Philosophy

Post-hoc contrasts for the category bodily values (Tests: Shefffë and Tukey)

	Basic Sci.	Basic Spec. Sci. Needs.	Ph. Ed.	E. S	E. S. (Spec.)		English T. Spa.	Math. & IT	Math. & Early Childhood IT S.	Rel. & Phil.
Basic Sci.	-	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Spec. Needs		1	P > 0.05	P > 0.05	P > 0.05	P>0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Ph. Ed.			1	P>0.05	P>0.05	P>0.05	P > 0.05	P < 0.05	P > 0.05	P > 0.05
E. S				1	P>0.05	P>0.05	P > 0.05	P>0.05	P > 0.05	P > 0.05
E. S. (Spec.)					1	P>0.05	P > 0.05	P>0.05	P > 0.05	P > 0.05
English T.						1	P > 0.05	P>0.05	P > 0.05	P > 0.05
Spa.							П	P>0.05	P > 0.05	P > 0.05
Math. & IT								1	P<0.05	P > 0.05
Early Childhood									1	P > 0.05
Rel. & Phil.										1

Secondly, there are important differences in the category, which refers to intellectual values; that category comprises aspects related to abstraction, analyzing, supporting an argument, knowledge, research, reasoning, and others. On examining the results, significant differences between the "graduation cohort" of the Math and IT Education Program (M = 25.48) and the Early Childhood School Program were found (Figure 2). Finally, the Religion and Philosophy Teaching Program, with a mean of 34.85, is considerably far from the rest of the graduation cohorts. Table 13 shows the set of post-hoc tests that revealed binomial differences.

Thirdly, we can observe the affective values, which include *gladness*, *love*, *friendship*, *kissing*, and a *good mood*. The average in this category is the highest for all graduation cohorts, with a mean of 42.17. On the other hand, the English Teaching Program has a mean of 38.38, which happens to be the lowest (Figure 3). Finally, Table 14 shows the post hoc results in which there is no statistically significant difference between the groups.

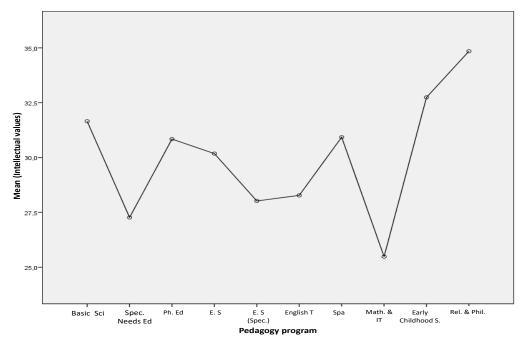


Figure 2. Histograms with mean values for the intellectual values pedagogy program wise

Table 13
Post-hoc contrasts for the category intellectual values (Tests: Shefffé and Tukey)

							-			
	Basic Sci.	Spec. Needs.	Ph. Ed.	E. S	E. S. (Spec.)	English T.	Spa.	Math. & IT	EChilhood	Rel. & Phil.
Basic Sci.	1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Spec. Needs		1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Ph. Ed.			1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P < 0.05	P > 0.05	P > 0.05
E. S				1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
E. S. (Spec.)					1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
English T.						1	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Spa.							1	P > 0.05	P > 0.05	P > 0.05
Math. & IT								1	P < 0.05	P > 0.05
E. Childhood									1	P > 0.05
Rel. & Phil.										1

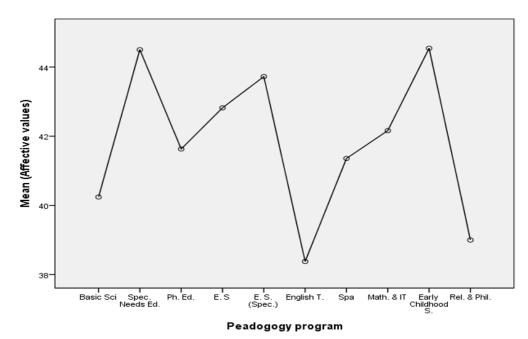


Figure 3. Histograms with mean values for the affective values pedagogy program wise

Table 14

Post-hoc contrasts for the category affective values (Tests: Shefffé and Tukey)

	Basic Sci.	Spec. Needs.	Ph. Ed.	E. S	E. S. (Spec.)	English T.	Spa.	Math. & IT	E.Chilhood	Rel. & Phil.
Basic Sci.	1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Spec. Needs		1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Ph. Ed.			1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P < 0.05	P > 0.05	P > 0.05
E. S				1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
E. S. (Spec.)					1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
English T.						1	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Spa.							1	P > 0.05	P > 0.05	P > 0.05
Math. & IT								1	P < 0.05	P > 0.05
E. Childhood									1	P > 0.05
Rel. & Phil.										1

The fourth category is aesthetic values related to *arts*, *beauty*, *dancing*, *music*, and others. Several statistically significant differences (Table 15) were found between the graduation cohorts of the Math and IT Education Program (M = 23.81), the Early Childhood Education Program (M = 34.74), the Language and Communication Teacher Education Program (M = 34.89), and the Elementary School Teacher Education

Program (specialization), which has a mean of 32.91 (Figure 4). The Physical Education graduation cohort values this category less than those from the Elementary School Teacher Education Program (specialization), the English Teaching Program, the Language and Communication Teacher Education Program, and the Early Childhood education program.

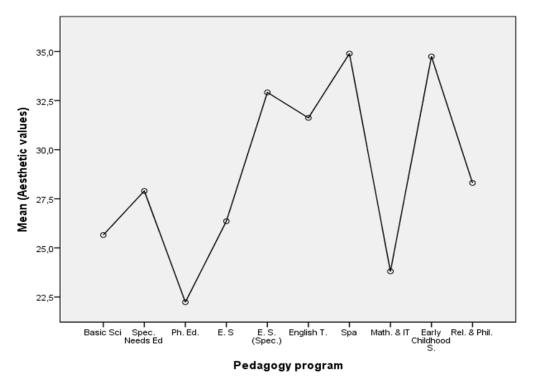


Figure 4. Histograms with mean values for the aesthetic values pedagogy program wise

Table 15
Post-hoc contrasts for the category aesthetic values (Tests: Shefffé and Tukey)

	Basic Sci.	Spec. Needs.	Ph. Ed.	E. S	E. S. (Spec.)	English T.	Spa.	Math. & IT	E.Chilhood	Rel. & Phil.
Basic Sci.	1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Spec. Needs		1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Ph. Ed.			1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P < 0.05	P > 0.05	P > 0.05

Table 15 (Continue)

	Basic Sci.	Spec. Needs.	Ph. Ed.	E. S	E. S. (Spec.)	English T.	Spa.	Math. & IT	E.Chilhood	Rel. & Phil.
E. S				1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
E. S. (Spec.)					1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
English T.						1	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Spa.							1	P > 0.05	P > 0.05	P > 0.05
Math. & IT								1	P < 0.05	P > 0.05
E. Childhood									1	P > 0.05
Rel. & Phil.										1

The fifth category is ecological values, which refer to *agriculture, animals, forest, countryside, nature, green areas*, and others. The results drawn from this analysis show that students in the Math and IT Education Program (M = 34.74) value this category less than those in the Elementary School Teacher and the Early Childhood Education

Program (Figure 5). In addition, statistically significant differences were found between students from the Math and IT Education Program, Elementary School Teacher Education Program (specialization), and Early Childhood Education Program (Table 16).

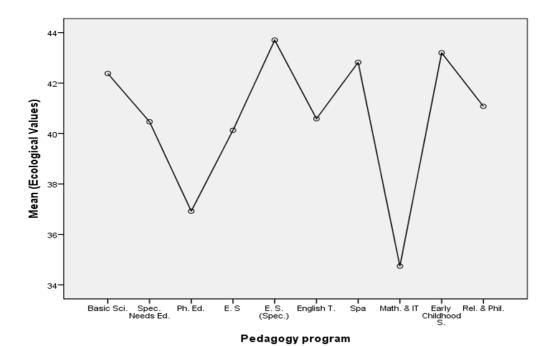


Figure 5. Histograms with mean values for the ecological values pedagogy program wise

Table 16

Post-hoc contrasts for the category ecological values (Tests: Shefffé and Tukey)

		,	0 ,	O	,	333				
	Basic Sci.	Spec. Needs.	Ph. Ed.	E. S	E. S. (Spec.)	English T.	Spa.	Math. & IT	E.Chilhood	Rel. & Phil.
Basic Sci.	1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Spec. Needs		1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Ph. Ed.			1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P < 0.05	P > 0.05	P > 0.05
E. S				1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
E. S. (Spec.)					1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
English T.						1	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Spa.							1	P > 0.05	P > 0.05	P > 0.05
Math. & IT								1	P < 0.05	P > 0.05
E. Childhood									1	P > 0.05
Rel. & Phil.										1

Regarding the category of instrumental values, which is related to aspects such as *materials, applying, cars, saving, tools,* and *machinery*, no post-hoc differences were found in an analysis conducted by

the teaching program (Table 17). Figure 6 shows the mean values of the different pedagogy programs for the instrumental value category.

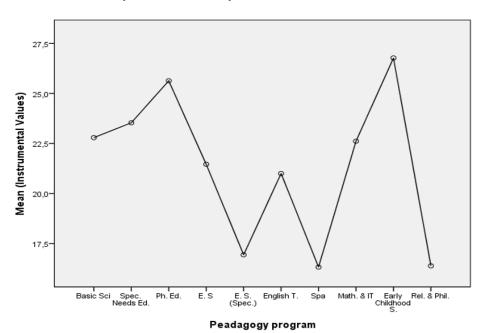


Figure 6. Histograms with mean values for the instrumental values pedagogy program wise

Table 17

Post-hoc contrasts for the category instrumental values (Tests: Shefffé and Tukey)

	Basic Sci.	Spec. Needs.	Ph. Ed.	E. S	E. S. (Spec.)	English T.	Spa.	Math. & IT	E.Chilhood	Rel. & Phil.
Basic Sci.	1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Spec. Needs		1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Ph. Ed.			1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P < 0.05	P > 0.05	P > 0.05
E. S				1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
E. S. (Spec.)					1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
English T.						1	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Spa.							1	P > 0.05	P > 0.05	P > 0.05
Math. & IT								1	P < 0.05	P > 0.05
E. Childhood									1	P > 0.05
Rel. & Phil.										1

Finally, in the category of religious values, in general, no large differences were observed. However, the mean obtained by the English Teaching Program does not even reach 10, which generates differences between the Elementary School Teacher (M = 28.79) and the Early Childhood Education

Program (M = 30.94). It is the category with the largest dispersion in the data set, with a Standard Deviation of 22.20. Table 18 shows the post hoc results for this category of values, whereas Figure 7 illustrates the mean values for various pedagogic programs.

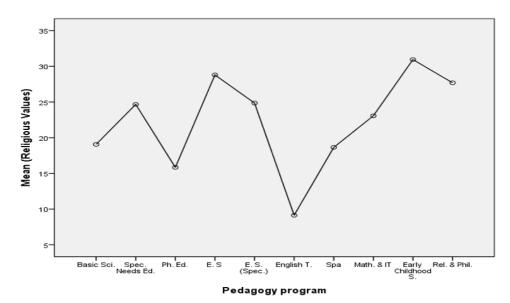


Figure 7. Histograms with mean values for the religious values pedagogy program wise

Table 18

Post-hoc contrasts for the category religious values (Tests: Shefffé and Tukey)

	Basic Sci.	Spec. Needs.	Ph. Ed.	E. S	E. S. (Spec.)	English T.	Spa.	Math. & IT	E.Chilhood	Rel. & Phil.
Basic Sci.	1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Spec. Needs		1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Ph. Ed.			1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P < 0.05	P > 0.05	P > 0.05
E. S				1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
E. S. (Spec.)					1	P > 0.05	P > 0.05	P > 0.05	P > 0.05	P > 0.05
English T.						1	P > 0.05	P > 0.05	P > 0.05	P > 0.05
Spa.							1	P > 0.05	P > 0.05	P > 0.05
Math. & IT								1	P < 0.05	P > 0.05
E. Childhood									1	P > 0.05
Rel. & Phil.										1

DISCUSSIONS AND CONCLUSION

The study's results allowed us to determine a clear preference for affective, moral, and ecological values among the participants. The high appreciation of affective values is in line with the earlier studies carried out by Benedicto (2017), Cívico-Ariza et al. (2021), and González-Gijón (2020). These values constitute a fundamental component in people's psychological well-being (Dirzyte et al., 2022) and the development of socioemotional skills (Di Fabio & Kenny, 2019; Extremera et al., 2020). The importance of moral values coincides with studies by Bond and Chi (1997) and Fernández-Vega and Cárcamo-Vásquez (2017). Furthermore, the research studies express the importance of morally worthy actions in the personal and social sphere (Garay et al., 2018). The high interest in ecological values corresponds with the research by González-Gijón (2020) and Van der Werff et al. (2014).

These studies reflect on the importance of fostering attitudes and behaviors that contribute to caring for the environment. The importance assigned to individual values is similar to the research carried out by Benninga (2006) and Gamage (2021), which qualifies the importance of these values in learning processes (Berkowitz & Bier, 2005; Gonzalez-Gijón & Díaz, 2017). The social values reveal the importance given to social interactions, which coincide with the earlier research studies of Collier (2013), Ortega and Blanco (2017), and Véliz et al. (2017). Underlining social values signifies the need for students in pedagogical training to acquire tools for understanding social reality, which is part of their pedagogical processes in the context of inclusive citizenship (Gómez, & González, 2017; Halstead & Taylor, 2000). As for bodily values, these can be associated with the importance that young people attach to taking care of their physical

and mental health (Nava & Ureña, 2017). It is close to Gervilla's (2000) integral model of the human being. Values linked to the development of intellectual knowledge and the appreciation of aesthetics were found to be at a lower level. The low score for intellectual values reveals little interest in intellectual work, coinciding with the study by González-Gijón et al. (2020), in the understanding that this is part of their daily task. The concern is not minor, as intellectual values are fundamental in acquiring new cognitive categories that guide relationships with others and the environment (Krumrei-Mancuso, 2017; Şahin, 2019).

In addition, our study markedly differs in the importance given to processes such as analysis and abstraction from that of González-Gijón and Soriano (2017), who describe the importance of attending classes as an intellectual indicator. The low appreciation of aesthetic values reveals that student teachers have little interest in art, literature, and beauty. It is in line with the findings of studies by González-Gijón et al. (2020). On the other hand, it differs from the study by González-Gijón and Soriano (2017), in which the importance of activities related to aesthetics, associated with personal care, and activities linked to music, art, and cinema, is noted. The religious values were found to be at the lowest level and are consistent with other studies (Cívico-Ariza et al., 2020; Elzo, 2006; Gervilla, 2002) in which religious values are not well rated or show no difference between the responses of students from denominational and nondenominational establishments. In contrast, the studies carried out by Black (2017) and Hill and Den Dulk (2013) were not coherent with the present study. The instrumental values are the least pleasant for students, and their low scores reveal that young people are not very materialistic, coinciding with the study by Murga (2008).

In terms of gender, this study showed no significant differences in the means between males and females, in line with the study of Marušić-Jablanović (2018), which indicates that the value priorities of male and female students are quite similar. Furthermore, the highest mean corresponds to affective values discovered in the male group, similar to that reported by Marušić-Jablanović (2018) and Vicentela et al. (2015). The results of this study are not similar to those achieved in gender differences conducted by Schwartz and Rubel (2005), which point out that women value security, benevolence, and universalism more than men. It opens the discussion on the importance of the cultural context in transmitting values. Quijano et al. (2016) and Sánchez et al. (2011) show that women prefer aesthetic, moral, and religious values, while men show greater interest in instrumental values. Furthermore, no significant differences between women and men in aesthetic values were found in this study, which is not in line with the results obtained by Angelucci et al. (2009).

Concerning the pedagogy program, significant differences were observed among the careers in the categories of values related to bodily, intellectual, affective, aesthetic, ecological, instrumental, and

religious values, which align with the study by Cámara (2010). In terms of a topic of concern is the great indifference to religious values. The students in the Early Childhood Education career showed above-average preferences in all value categories with the other professional careers. In previous research, Early Childhood Education is related to values such as democracy, discipline, care, and security, as described by Emilson and Johansson (2013) and Puroila et al. (2012). Communicating values at different educational levels is the prelude to organizing democratic life (Thornberg, 2008). At the same time, the low score for instrumental values contrasts with the findings of Karabati et al. (2010). Finally, the high score given by the participants in different careers in the moral and social values category is worth mentioning. In these categories of values, the professional careers of Basic Education Pedagogy, Language Pedagogy, Physical education pedagogy, and Early Childhood education stand out. Hence this study reflects high consistency with others that address the same subject, as mentioned in Lüdecke-Plümer (2007) and Lucena et al. (2011). They point out that vocational training centers should create educational policies for teaching values manifested in the social, individual, and affective moral categories to form reflective citizens.

At the level of faculties, significant differences were observed in aesthetic, individual, and moral values, which coincides with the study by Beltrán et al. (2005), who points out the importance of

aesthetic values. On the other hand, the marked preference for individual values coincides with the study by Zubieta et al. (2008), in which individuals express the need to determine their actions. Furthermore, the development of early practices in the different professional training processes is a space of encounter with others, which plays a role in triggering values, and consequently, the development of moral values becomes more visible and important (Navarro et al., 2012). Finally, the low score obtained for intellectual values is worrying. These intellectual values related to the acquisition of knowledge by future teachers to the development of children and young people in the construction of society are a challenge to be strengthened. It is also the responsibility of the different faculties to allocate efforts, procedures, and resources to discuss what values are being transmitted to future generations of education professionals and whether these are focused on implementing an education that will allow the creation of a fairer and better society.

Finally, as concluding remarks, the present study's first objective was achieved by identifying the values of preservice teachers in pedagogical programs at a regional university in Chile. The students of the three faculties of the University's pedagogical program surveyed for this study present axiological preferences expressed in corporal, intellectual, affective, social, moral, instrumental, and religious values. In addition, the participants' low interest in art and beauty is striking.

The second objective to determine the axiological hierarchy was also accomplished. The axiological analysis shows the following hierarchy of values: in the first place, affective values stand out, followed by moral values. Individual, social, and corporal values are presented in a second block, followed by intellectual values. Finally, instrumental and religious values are present far from the previous preference options. The axiological hierarchy of the participating pedagogy students shows that they significantly value aspects that have to do with emotional intelligence, decisionmaking, the development of their identity, and human relations. Finally, indifference is shown concerning the religious theme.

Regarding the third objective to determine whether there are significant differences in the hierarchy according to the gender variable, the analysis of preferences does not show significant differences in the means between these two groups. However, the female group stands out in moral, ecological, corporal, social, aesthetic, intellectual, and religious values. The male group, on the other hand, places affective values at the top of their axiological scale and religious values in the last place.

The final objective was to determine if there are significant differences in the three faculties' hierarchy of values in the prospective preservice teachers. In this case, significant differences in the hierarchy of values among participants according to the faculty in which they study are concentrated in three categories. The other categories of the survey do not present significant

differences. The categories that present relevant differences are aesthetic, individual, and moral values. It is important to mention that students belonging to the Faculty of Education Sciences reach the highest preferences in relation to the Faculty of Religious and Philosophical Sciences and the Faculty of Basic Sciences.

Finally, identifying and analyzing the values of students studying pedagogy at this Chilean university provides a starting point for reflecting on the importance of value education in the pedagogy curriculum. This study has made it possible to organize the knowledge and preferences about the values held by students in the Teacher Training Program for preservice teachers at a university in Chile. It provides us with important information that can be used by the management and teaching staff of the faculties examined to learn about the psychological profile of the students at this university. The students from the three faculties of the University's teaching program who were surveyed for this study present axiological intentions and preferences, among which non-material aspects stand out from more quantifiable ones.

It is important to emphasize that the profile of the average student in the preservice teacher-trainee training programs of a University in Chile, with the corresponding nuances of each graduation cohort/faculty, must present an interest in developing emotional intelligence, decision-making and, above all, caring for the environment. In addition, this choice is complemented

by aspects that refer to the identity of the individual, their bodily dimension, and their coexistence with other human beings. On the other hand, reference is made to intellectual knowledge and appreciation of aesthetics. Finally, both religious and instrumental values are the least appreciated by students.

IMPLICATION AND LIMITATION

The findings of the current research have a positive contribution as it provides us with information for decision-making and consistent implementation to the betterment of pedagogical training in accordance with today's society's problems and educational needs. Furthermore, this study explored the values of preservice teachers, which provides relevant knowledge regarding the challenges of the present and the future to be achieved. Consequently, it allows for realistically establishing a formative itinerary that addresses the major problems to which the education of the 21st century must urgently respond. Furthermore, the information obtained will help the pedagogical programs' authorities plan future changes in the curricula and the graduate profile.

Being a quantitative method study, a semi-structured interview of students could have strengthened the present research. Another limitation of the research is considering just a university to measure the perception of values. In the future, studies can be carried out to compare the value system between second and final-year university students to measure the impact of

university education on them and thereby take pedagogical decisions accordingly.

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REFERENCES

Álvarez, J., Rodríguez, C., Herrera, L., & Lorenzo, O. (2012). Valoración de alumnos universitarios sobre la deontología profesional: Un estudio realizado en la Licenciatura de Pedagogía de la Universidad de Granada (España) [University students' assessment of professional ethics: A study conducted in the Pedagogy Degree at the University of Granada (Spain)]. *Interdisciplinaria*, 29(1), 23-42.

Angelucci, L., Da Silva, J., Juárez, J., Serrano, A., Lezama, J., & Moreno, A. (2009). Valores y factores sociodemográficos en estudiantes universitarios: Un estudio comparativo [Values and sociodemographic factors in university students: A comparative study]. *Acta Colombiana de Psicología*, 12(1), 151-162.

Benedicto, J. (2017). *Informe Juventud en España* 2016 [Youth in Spain 2016 report]. Instituto de la Juventud.

Beltrán, G. F. J., Torres, F. I. A., Beltrán, T. A. A., & García, D. F. J. (2005). Un estudio comparativo sobre valores éticos en estudiantes universitarios [A comparative study on ethical values in university students]. http://www.redalyc.org/articulo.oa?id=29210213

Berkowitz, M. W., & Bier, M. C. (2005). What works in character education: A research-driven guide for education. Character Education Partnership.

- Benninga, J. S., Berkowitz, M. W., Kuehn, P., & Smith, K. (2006). Character and academics: What good schools do. *Phi Delta Kappan*, 87(6), 448-452. https://doi.org/10.1177/003172170608700610
- Black, P. (2017). Christian beliefs and values in science and religious education: An essay to assist the work of teachers of both subjects. *International Studies in Catholic Education*, 9(2), 206-222. https://doi.org/10.1080/194225 39.2017.1360612
- Bond, M. H., & Chi, V. M.-Y. (1997). Values and moral behavior in Mainland China. *Psychologia*, 40(4), 254-264.
- Cano-Escoriaza, J., Hernández, S. O., & Pascual, A. C. (2019). Work values of Spanish university students: A follow-up study. *Vocations and Learning*, 12(3), 425-439. https://doi.org/10.1007/s12186-019-09221-4
- Cámara, E. Á. M. (2010). Valores en futuros profesores de Secundaria [Values in future secondary teachers]. *REIFOP*, *13*(3), 113-121.
- Casado, A., & Sánchez-Gey, J. (1999). Valores y educación: Una investigación sobre "perfiles valorativos" [Values and education: An investigation of "value profiles"]. *Tendencias Pedagógicas*, 4, 141-155.
- Casares, P. (1995). Test de valores. Un instrumento para la evaluación [Values test. An instrument for the evaluation]. Revista Española de Pedagogía, 202, 513-537.
- Casares, P., & Collado, P. (1998). Evaluación de valores del cuerpo educando [Evaluation of the values of the learners]. *Revista de Ciencia de la Educación*, 174, 237-258.
- Chapa, A. P., & Martínez, C.T.J. (2015). Valores universitarios en los jóvenes estudiantes de la Facultad de Ciencias Políticas y Administración Pública [University values in young students of the School of Political Science and Public Administration]. Revista Iberoamericana Para

- la Investigación y el Desarrollo Educativo, 6(11), 773 786.
- Cívico-Ariza, A., Colomo-Magaña, E., & González-García, E. (2020). Religious values and young people: Analysis of the perception of students from secular and religious schools (Salesian Pedagogical Model). *Religions*, 11(8), 415. http://dx.doi.org/10.3390/rel11080415
- Cívico-Ariza, A., Colomo-Magaña, E., & González-García, E. (2021). Análisis de los valores de adolescentes en centros educativos salesianos del sur de España [Analysis of the values of adolescents in Salesian educational centers in southern Spain]. *Alteridad*, 16(2), 236-248. https://doi.org/10.17163/alt.v16n2.2021.06
- Clement, N. D. (2007). Perspectives from research and practice in values education. In T. J. Lovat & R. Toomey (Eds.), *Values education and quality teaching: The double helix effect*. David Barlow Publishing.
- Collier, K. G. (2013). The social purposes of education: Personal and social values in education. Routledge.
- Dirzyte, A., & Patapas, A. (2022). Associations between emotional intelligence and subjective wellbeing in the Lithuanian youth sample. *Current Psychology*. https://doi.org/10.1007/s12144-021-02598-3
- Di Fabio, A., & Kenny, M. E. (2019). Resources for enhancing employee and organizational well-being beyond personality traits: The promise of Emotional Intelligence and Positive Relational Management. *Personality and Individual Differences*, 151, 109278. https://doi.org/10.1016/j.paid.2019.02.022
- Elzo, J. (2006). *Los jóvenes y la felicidad* [Young people and happiness]. PPC
- Emilson, A., & Johansson, E. (2013). Participation and gender in circle-time situations in preschool. *International Journal of Early Years Education*,

- 21(1), 56-69. https://doi.org/10.1080/09669760 .2013.771323
- Extremera, N., Sánchez-Álvarez, N., & Rey, L. (2020). Pathways between ability emotional intelligence and subjective well-being: Bridging links through cognitive emotion regulation strategies. *Sustainability*, 12(5), 2111. https://doi.org/10.3390/su12052111
- Fernández-Vega, J., & Cárcamo-Vásquez, H. (2017). Citizenship notion held by students of pedagogy. Revista Electrónica Educare, 21(2), 1-28. https://doi.org/10.15359/ree.21-2.4
- Gamage, K. A., Dehideniya, D. M. S. C. P. K., & Ekanayake, S. Y. (2021). The role of personal values in learning approaches and student achievements. *Behavioral Sciences*, 11(7), 102. https://doi.org/10.3390/bs11070102
- Garay, M. N., Ortiz, G. M., & Ramírez P. G. (2018). Guía didáctica del profesorado para la transmisión transversal de valores de bien común [Teacher's didactic guide for the transversal transmission of values for the common good]. In Rosabel Roig-Vila (Ed.) *Redes de Investigación en Docencia Universitaria* (pp. 453-458). Universidad de Alicante.
- García, J. (2008). Formar ciudadanos Europeos [Training European citizens]. Academia Europea de Ciencias y Artes.
- Garza, T., & Patiño, S. (2000). *Educar en valores* [Educating in values]. Editorial Trillas.
- Gervilla, E. (2000). Un modelo axiológico de educación integral [An axiological model of integral education]. Revista Española de Pedagogía, 215, 39-58.
- Gervilla, E. (2002). Educadores del futuro, valores de hoy [Educators of the future, values of today]. Revista de Educación de la Universidad de Granada, 15, 7-25.
- Gervilla, E. (2010). *Educar en la postmodernidad* [Educating in postmodernity]. Dykinson.

- Gómez, L. G., & González, M. J. A. (2017). La formación del profesorado en educación intercultural: Un repaso sobre su formación inicial y permanente [Teacher training within intercultural education: An overview of their initial and permanent training]. Revista de Educación Inclusiva, 7(2), 127-142.
- González-Gijón, G., Martínez-Heredia, N., Amaro-Agudo, A., & Soriano-Díaz, A. (2020). Estudio de los valores en el alumnado que cursa el grado de maestro en educación primaria en las universidades públicas de Andalucía [Study of values in students studying for a degree in primary education at public universities in Andalucia]. Formación Universitaria, 13(2), 83-92. http://dx.doi.org/10.4067/S0718-50062020000200083
- Gonzalez-Gijón, G., & Díaz, A. S. (2017). A study of the individual values of Puerto Rican youth. *Revista de Paz y Conflictos, 10*(1), 231-257.
- González-Gijón, G., Gervilla, C. E., Martínez, H. N., & Díaz, A. S. (2021). Análisis y validación de un test para medir valores (TVA_ADAPTADO) [Analysis and validation of a test to measure values (TVA_ADAPTED)]. *Pedagogía Social. Revista Interuniversitaria, 38,* 119-136. https://doi.org/10.7179/PSRI 2021.38.08
- Halstead, J. M., & Taylor, M. J. (2000). Learning and teaching about values: A review of recent research. *Cambridge Journal of Education*, 30(2), 169-202. https://doi.org/10.1080/713657146
- Hill, J. P., & Den Dulk, K. R. (2013). Religion, volunteering, and educational setting: The effect of youth schooling type on civic engagement. *Journal for the Scientific Study of Religion*, 52(1), 179-197. https://doi.org/10.1111/jssr.12011
- Ibáñez, R. M. (1993). Los valores un desafío permanente [Values a permanent challenge]. Cincel SA Spain.
- Karabati, S., & Cemalcilar, Z. (2010). Values, materialism, and well-being: A study with

- Turkish university students. *Journal of Economic Psychology*, 31(4), 624-633. https://doi.org/10.1016/j.joep.2010.04.007
- Karataş, K., & Oral, B. (2015). Teachers' perceptions on culturally responsiveness in education. *Journal of Ethnic and Cultural Studies*, 2(2), 47-57. https://doi.org/10.29333/ejecs/39
- Krumrei-Mancuso, E. J. (2017). Intellectual humility and prosocial values: Direct and mediated effects. *The Journal of Positive Psychology,* 12(1), 13-28. https://doi.org/10.1080/1743976 0.2016.1167938
- Legendre, M. (2007). L'évaluation des competences professionnelles [Assessment of professional competencies]. In L. Bélair, D. Laveault, & C. Lebel (Eds.), Les competences professionnelles en enseignement et leur évaluation (pp. 169-179). Presses de l'Universitéd' Ottawa.
- Lind, G. (2007). La moral puede enseñarse [Morality can be taught]. In *Manual teórico-práctico de la formación moral y democrática*. Trillas.
- Lüdecke-Plümer, S. (2007). La enseñanza de valores y principios morales en los centros de Formación Profesional [The teaching of values and moral principles in vocational training centers]. Revista Europea de Formación Profesional, 41, 115-128.
- Lucena, M., Álvarez, J., & Rodríguez, C. (2011). Estudio de los valores para la empleabilidad en formación profesional [Study of values for employability in vocational training]. Revista Journal for Educators, Teachers and Trainers, 2, 21-27. https://digibug.ugr.es/handle/10481/22287
- Magaña, Q., Quiles, L., & Benítez, C. (2016) Elección y preferencia de valores en estudiantes universitarios mexicanos [Value choice and preference in Mexican university students]. *Profesorado-Revista de Curriculum y Formación de Profesorado*, 20(2), 18-38. https://doi.org/10.30827/profesorado.v20i2.10406

- Marušić-Jablanović, M. (2018). Value priorities of future preschool and class teachers in Serbia in terms of the Schwartz refined value theory. *Psihologija*, *51*(2), 143-161. http://ipir.ipisr. org.rs/bitstream/handle/123456789/289/286. pdf?sequence=1&isAllowed=y
- Martínez, M., & Esteban, F. (2005). Una propuesta de formación ciudadana para el EEES [A proposal for citizenship education for the EHEA]. *Revista Española de Pedagogía*, 63(230), 63-84.
- Martínez, M., & Hoyos, G. (2006). *La formación en valores en sociedades democráticas*. [Values education in democratic societies]. Ediciones Octaedro.
- Martínez, M., Buxarrais, M. A R., & Esteban, F. (2002) La universidad como espacio de aprendizaje ético [The university as a space for ethical learning]. *Revista Iberoamericana de Educación*, 29, 17-42. http://sitios.itesm.mx/va/dide2/enc_innov/doctos/Launiversidad_aprendizajeetico.pdf
- Moreno, A. (2008). De la educación socioemocional a la educación en valores [From social-emotional education to values education]. Ministerio de Educación y Ciencia.
- Murga, M. Á., (2008) Percepciones, valores y actitudes ante el desarrollo sostenible [Perceptions, values and attitudes towards sustainable development]. Revista Española de Pedagogía, 54(240), 327-24, https://reunir.unir.net/handle/123456789/3913
- Nava, J. M., y Ureña, J. H. (2017). Dominios y valoraciones sobre la felicidad en adolescentes de Guadalajara México [Domains and ratings of happiness among adolescents in Guadalajara Mexico]. Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud, 15(1), 443-454. https://doi.org/10.11600/169271 5x.1512807032016
- Navarro, G., Boero, P., Jiménez, G., Tapia, L., Hollander, R., Escobar, A., Baeza, M., & Espina, Á. (2012). Valores y actitudes socialmente

- responsables en universitarios chilenos [Socially responsible values and attitudes in Chilean university students]. *Calidad en la Educación*, *36*, 123-147. http://dx.doi.org/10.4067/S0718-45652012000100004
- Ortega, D., & Blanco, P. (2017). Los valores sociales y cívicos en la Educación Primaria española: concepciones del profesorado en formación [Social and civic values in the spanish primary education: student-teachers' conceptions]. ENSAYOS. Revista De La Facultad De Educación De Albacete, 32(1), 145-160. https://revista.uclm.es/index.php/ensayos/article/view/1328
- Ortega, P., & Mínguez, R. (2001). Los valores en la educación [Values in education]. Ariel.
- Poorchangizi, B., Borhani, F., Abbaszadeh, A., Mirzaee, M., & Farokhzadian, J. (2019). The importance of professional values from nursing students' perspective. *BMC nursing*, *18*(1), 1-7. https://doi.org/10.1186/s12912-019-0351-1
- Puroila, A.-M., Estola, E., & Syrja"la", L. (2012). Does Santa exist? Children's everyday narratives as dynamic meeting places in a day care centre context. *Early Child Development and Care*, 182(2), 191-206. https://doi.org/10.1080/03004 430.2010.549942
- Robson, J. V. K. (2019). Participatory pedagogy for values education in early childhood education. European Early Childhood Education Research Journal, 27(3), 420-431. https://doi.org/10.108 0/1350293X.2019.1600811
- Quintana, J. (2005). *La educación en valores y otras* cuestiones pedagógicas [Education in values and other pedagogical questions]. PPU.
- Quijano, D., Lorenzo, O., & Alegre, C. (2016). Elección y preferencia de valores en estudiantes universitarios mexicanos [Choice and preference of values in Mexican university students]. Revista De Currículum Y Formación Del Profesorado, 20(2), 18-38. https://doi. org/10.30827/profesorado.v20i2.10406

- Ríos, J. M., & Ruiz, J. (2011). Competencias, TIC e innovación. Nuevos escenarios para nuevos retos [Competencies, ICT and innovation. New scenarios for new challenges]. MAD.
- Rodríguez, C., Herrera, L., Lorenzo, O., & Álvarez, J. (2008). El valor de la familia en estudiantes universitarios de España: Análisis y clasificación [The value of family in university students in Spain: Analysis and classification]. *Enseñanza e Investigación en Psicología*, 13(2), 215-230. https://www.redalyc.org/articulo.oa?id=29213202
- Sagiv, L., Roccas, S., Cieciuch, J., & Schwartz, S. H. (2017). Personal values in human life. *Nature Human Behaviour*, *1*(9), 630-639. https://doi.org/10.1038/s41562-017-0185-3.
- Şahin, Ü. (2019). Values and Values Education As Perceived By Primary School Teacher Candidates. *International Journal of Progressive Education*, 15(3), 74-90. https:// doi.org/10.29329/ijpe.2019.193.6
- Sánchez, M. F., Suárez, M., Manzano, N., Oliveros, L., Lozano, S., Fernández, B., & Malik, B. (2011). Estereotipos de género y valores sobre el trabajo entre los estudiantes españoles [Gender stereotypes and work values of Spanish students]. Revista de educación, 355, 331-354.
- Santhi, S. (2016). Need of value education Today is the hour. *International Journal of Advanced Research in Education & Technology*, 3(4), 28-29.
- Schwartz, S. (2012). An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture*, 2(1), 11. https://doi.org/10.9707/2307-0919.1116
- Schwartz, S. H., & Rubel, T. (2005). Sex differences in value priorities: Cross-cultural and multimethod studies. *Journal of Personality and Social Psychology*, 89(6), 1010-1028. https://doi.org/10.1037/0022-3514.89.6.1010

- Thornberg, R. (2008). The lack of professional knowledge in values education, teaching and teacher education. *Teaching and Teacher Education*, 24(7), 1791-1798. https://doi.org/10.1016/j.tate.2008.04.004
- Touriñán, J. M. (2008). Educación en valores, sociedad civil y desarrollo cívico [Values education, civil society and civic development]. Netbiblo.
- United Nations Educational, Scientific and Cultural Organization. (1996). La Educación encierra un tesoro, informe a la UNESCO de la Comisión Internacional sobre la Educación para el Siglo XXI [Education holds a treasure, Report to UNESCO of the International Commission on Education for the Twenty-first Century]. https://unesdoc.unesco.org/ark:/48223/pf0000109590_spa
- United Nations Educational, Scientific and Cultural Organization. (2009). World Conference on Higher Education: The new dynamics of higher education and research for societal change and development. https://unesdoc.unesco.org/ark:/48223/pf0000183277
- United Nations Educational, Scientific and Cultural Organization. (2016). Incheon Declaration: Education 2030: Towards inclusive and equitable quality education and lifelong learning for all. https://unesdoc.unesco.org/ark:/48223/pf0000233137
- The UNESCO International Institute for Higher Education in Latin America and the Caribbean. (2020). Hacia el acceso universal a la educación superior: Tendencias internacionales [Towards universal access to higher education: International trends]. https://www.iesalc.unesco.org/2020/11/17/el-iesalc-lanza-el-informe-hacia-el-acceso-universal-a-la-educacion-superior-tendencias-internacionales/

- Van der Werff, E., Steg, L., & Keizer, K. (2014). Follow the signal: When past pro-environmental actions signal who you are. *Journal of Environmental Psychology*, 40, 273-282. https://doi.org/10.1016/j.jenvp.2014.07.004
- Vicentela, L. A., Narváez, C. G., & Velásquez, M. (2015). Valores éticos y formación curricular en odontología [Ethical values and curricular training in dentistry]. *Acta bioethica*, 21(1), 53-59. http://dx.doi.org/10.4067/S1726-569X2015000100007
- Véliz, A., Dörner, A., Gonzáles, E., & Ripoll, M. (2017). Perfil de valores de estudiantes de carreras de salud del sur de Chile [Values profile of students in health careers in southern Chile]. Horizonte Médico (Lima), 17(2), 48-54. https:// doi.org/10.24265/horizmed.2017.v17n2.08
- Zepke, N. (2013). Lifelong education for subjective well-being: How do engagement and active citizenship contribute? *International Journal of Lifelong Education*, 32(5), 639-651. https://doi.org/10.1080/02601370.2012.753125
- Zubieta, E., Delfino, G., & Fernández, O. (2008). Dominancia social, valores y posicionamiento ideológico en jóvenes universitarios [Social dominance, values and ideological positioning in young university students]. *Psicodebate*, 8, 151-170.