



Research article

Physical self-concept, achievement motivation and attitudes towards Physical Education

Autoconcepto físico, motivación de logro y actitudes hacia la Educación Física

Autoconceito físico, motivação para a realização e atitudes face à Educação Física

Urrutia-Medina, Juan I.¹; Vera-Sagredo, Angélica²; Rodas-Kürten, Viviana³; Pavez-Adasme, Gustavo⁴; Palou-Sampol, Pere⁵; & Poblete-Valderrama, Felipe⁶.

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ABSTRACT

The purpose of this study was to analyze the influence of physical self-concept in relation to achievement motivation and attitudes of high school students in the subject of Physical Education and Health. In addition, we sought to explore the disparities in perceptions between men and women, as well as between those who participate in physical-sports activities. To carry out the research, a quantitative approach with a descriptive-correlational scope was used, using a questionnaire applied to a sample of 279 students from the Biobío region, Chile. This instrument evaluated various dimensions of physical self-concept, achievement motivation, and attitudes toward the subject. The main results indicate that constant physical activity is linked to a better evaluation in these dimensions. Men show a more positive body perception and greater willingness to actively participate, while women experience high levels of anxiety and perceived difficulty. Constant physical activity is associated with more favorable perceptions in various dimensions. These results highlight the importance of considering gender and level of physical activity when designing educational strategies in Physical Education and Health in secondary education.

Key words: Self esteem; Motivation; Student attitudes; Education; Physical education.

¹ Universidad Católica de la Santísima Concepción, Facultad de Educación, Chile.
<http://orcid.org/0000-0003-3042-9986>, jurrutia@magisteredu.ucsc.cl

² Universidad Católica de la Santísima Concepción, Facultad de Educación, Chile.
<https://orcid.org/0000-0003-1657-2241>, avera@ucsc.cl

³ Universidad Santo Tomás, Facultad de Salud, Chile.
<https://orcid.org/0009-0001-2449-0345>, clararodasku@santotomas.cl

⁴ Universidad Adventista de Chile, Unidad de Postgrados, Chile.
<https://orcid.org/0000-0003-4377-384X>, gustavopavez@unach.cl

⁵ Universidad de las Islas Baleares, Facultad de Educación, España.
<https://orcid.org/0000-0002-3362-4675>, pere.palou@uib.cat

⁶ Universidad Católica de la Santísima Concepción, Facultad de Educación, Chile.
<http://orcid.org/0000-0002-8960-3996>, felipepobletev@gmail.com

RESUMEN

El propósito de este estudio fue analizar la influencia del autoconcepto físico en relación con la motivación de logro y las actitudes de estudiantes de enseñanza media en la asignatura de Educación Física y Salud. Además, se buscó explorar las disparidades en las percepciones entre hombres y mujeres, así como entre aquellos que participan en actividades físico-deportivas. Para llevar a cabo la investigación, se empleó un enfoque cuantitativo con un alcance descriptivo-correlacional, utilizando un cuestionario aplicado a una muestra de 279 estudiantes de la región del Biobío, Chile. Este instrumento evaluó diversas dimensiones del autoconcepto físico, la motivación de logro y las actitudes hacia la asignatura. Los principales resultados indican que la actividad física constante se vincula con una mejor evaluación en estas dimensiones. Los hombres muestran una percepción corporal más positiva y mayor disposición para la participación activa, mientras que las mujeres experimentan niveles elevados de ansiedad y percepción de dificultad. La actividad física constante se asocia con percepciones más favorables en diversas dimensiones. Estos resultados resaltan la importancia de considerar género y nivel de actividad física al diseñar estrategias educativas en Educación Física y Salud en la enseñanza media.

Palabras clave: Respeto de sí mismo; Motivación; Actitud del estudiante; Educación; Educación física.

RESUMO

O objetivo deste estudo foi analisar a influência do autoconceito físico em relação à motivação e atitudes de realização de estudantes do ensino médio na disciplina de Educação Física e Saúde. Além disso, procuramos explorar as disparidades de percepções entre homens e mulheres, bem como entre aqueles que participam de atividades físico-esportivas. Para a realização da pesquisa foi utilizada uma abordagem quantitativa com escopo descriptivo-correlacional, por meio de um questionário aplicado a uma amostra de 279 estudantes da região Biobío, Chile. Este instrumento avaliou diversas dimensões do autoconceito físico, motivação para realização e atitudes em relação ao sujeito. Os principais resultados indicam que a atividade física constante está ligada a uma melhor avaliação nestas dimensões. Os homens demonstram uma percepção corporal mais positiva e maior disposição para participar ativamente, enquanto as mulheres apresentam altos níveis de ansiedade e dificuldade percebida. A atividade física constante está associada a percepções mais favoráveis em diversas dimensões. Estes resultados destacam a importância de considerar o gênero e o nível de atividade física na concepção de estratégias educativas em Educação Física e Saúde no ensino secundário.

Palavras chave: Respeito próprio; Motivação; Atitude do estudante; Educação; Educação física.

INTRODUCTION

The Ministry of Education (2015) highlights the essential importance of the subject of Physical Education and Health in the comprehensive training of students in the school system. This subject not only encourages fundamental attitudes such as responsibility, reflection, body care and interaction with peers, but also enhances various skills. According to Palomino-Devia et al. (2018), the learning process of students is not limited exclusively to cognitive aspects; in fact, it is strongly influenced by social, emotional and physical elements. In the stage of adolescence, these factors acquire a transcendental role for the development of self-esteem, motivation and attitude (Gaete, 2015).

One of the most relevant behavioral variables for personal well-being and physical development is Self-concept (García & Musitu, 2014). This is defined as the perception that an individual has of himself and is linked through personal and interpersonal experiences, attributing and influencing his behavior

in a situation or action (Álvaro, 2015; González-Pienda et al., 1997). In this way, the Self-concept is determined by five dimensions: academic, social, emotional, family and physical (García & Musitu, 2014).

The dimension that is related to active lifestyle habits, sports practice and a greater intention and motivation to be a physically active person is the Physical Self-concept (García & Musitu, 2014). This dimension corresponds to the perception that the person has about his condition and physical appearance (Roa, 2013). In this regard, various studies have confirmed that there are positive relationships between physical self-concept and physical activity or the intention to be physically active (Frutos de Miguel, 2018; García & Musitu, 2014; Grao-Cruces et al., 2017; Navarro-Paton et al., 2018; Palomino-Devia et al., 2018). On the other hand, it has been described that the female sex tends to obtain lower values in physical self-concept, mainly at the beginning of adolescence, compared to the male sex (Gaete & Cavazos, 2017; Herrera et al., 2017; Tapia, 2019; Vera et al., 2023).

Regarding attitudes, Bobbio (2019) and Casis et al. (2017) point out that a student's attitudes directly influence their behavior towards the actions they perform. An attitude can be defined as thoughts and emotions that a person perceives and that will lead to a positive or negative response in a given context (Rodrigues, 1987). For Casis et al. (2017) attitudes are determined by emotions, the self-concept of the individual and his or her own particularities.

The influence of attitudes in the subject of Physical Education and Health affects the student's behavior in the participation or initiation of physical and sports activities, as well as the development and compliance of the curriculum (Moreno et al., 1996). Regarding the studies that have related attitudes to the subject of Physical Education, it has been concluded that those students with positive attitudes and interests in the subject are mainly male and students who practice some sport extracurricularly (Cárcamo-Oyarzun et al., 2017; Sánchez-Alcaraz et al., 2018). The research found that links physical self-concept and attitudes in the subject of Physical Education are scarce; one of these conclusions is that of Orive (2020), who states that there is a correlation between these two variables and, in addition, concludes that students with a higher assessment of physical self-concept are those with better attitudes towards the Physical Education class. For the development of an optimal attitude and behavior, the disposition, motivation and responsibility of the student in the teaching-learning process are necessary (Luis-de Cos et al., 2019). Motivation is understood as the psychological or physiological process that determines the beginning, maintenance or end of a behavior (Pila, 2012). In the school context, there is a consensus that motivated behavior is shaped by a complex interaction of factors linked to the individual, the environment and the task to be carried out (Ruiz et al., 2015). Within the specific framework of the Physical Education subject, we seek to understand the reasons underlying the desire of students to actively participate in classes throughout the different educational levels (Ruiz et al., 2015). The study by Fuentes & Lagos (2019) highlights that one of the main motivations for participation in physical education lies in the student's personal predisposition towards sport, whether as a means of recreation, personal improvement or for health considerations. In the field of motivation theories, three stand out especially in the educational sphere and in the field of Physical Education: the attribution theory, the self-determination theory and the achievement goal theory (Luis-de Cos et al., 2019). These theories provide a valuable conceptual framework to understand and analyze the factors that influence the motivated behavior of students in the context of physical education, thus enriching our comprehensive understanding of this phenomenon.

The achievement goal theory is related to the adaptation that an individual acquires and the determination and perception of his or her success or failure in a given environment (Solorzano, 2021). This perception of effort in the subject of Physical Education arises from the interaction of the student with his or her environment and how he or she directs his or her behavior towards the fulfillment of the goals in the subject. Among the variables that influence achievement motivation are the perception of competence, the effort applied, the difficulty and the amount of help obtained in carrying out each proposed task (Ruiz et al., 2015).

Specifically in the subject of Physical Education, the studies found (Luis-de Cos et al., 2019; Márquez-Barquero & Azofeifa-Mora, 2019) have generally been based on the relationship between achievement motivation and the individual's motor competence, since the results show that students with a higher level of motor competence were also those with the highest levels of motivation and commitment in class. Other important results (Cahuana, 2020) indicate that the younger the age or educational level, the higher the student's achievement motivation score. Research that has compared the relationship between achievement motivation and self-concept has mainly found that there is a significant correlation between these two variables, indicating that the higher the individual's self-concept, the greater the motivation in the academic field (Cahuana, 2020).

Herrera et al. (2017) and Luis-de Cos et al. (2019) highlight the direct connection between self-concept, attitudes and motivation, and students' academic performance. Several studies indicate positive relationships between these variables and motor competence, healthy lifestyle habits, and participation in physical activity (Luis-de Cos et al., 2019; Palomino-Devia et al., 2018; Sánchez-Alcaraz et al., 2018). Despite these observations, to date, no research has been documented that comprehensively explores the interrelationship of these three variables and their specific impact on Physical Education and Health classes. After what has been described, the following questions arise: 1) What is the physical self-concept, achievement motivation and attitudes of high school students?, 2) Are there differences in the physical self-concept, achievement motivation and attitudes that high school students present in the subject of physical education with respect to sex and their physical activity?, 3) Is there a relationship between physical self-concept and achievement motivation and attitudes in the subject of physical education and health in high school students?

METHODS

Using a quantitative methodological approach of a descriptive-correlational nature, the aim was to achieve the research objective which consisted of "analyzing the influence of physical self-concept regarding achievement motivation and the attitudes of Chilean secondary school students in the subject of Physical Education and Health."

Sample

A non-probabilistic convenience sampling was carried out with the participation of 279 students from the Biobío region, Chile (142 women, 50.9% and 137 men, 49.1%) who are enrolled in seventh grade through fourth year of high school. Ages ranged from 11 to 18 years ($M= 14.34$; $SD= 1.647$). The highest participation was in the first year of high school (20.4%), while the lowest participation was in the fourth year of high school (12.2%). Among those surveyed, 127 students (45.5%) stated that they practiced some sport or physical exercise on a regular basis, such as soccer, basketball, cycling, volleyball, dance, artistic and/or rhythmic gymnastics, among others.

Instruments

Three Likert-type instruments were applied to each student, through an online form. The questionnaires were administered by educational level, depending on the availability and schedule in the Physical Education and Health subject. The surveys used were:

The Physical Self-Concept Assessment Test (PSDQ-s), developed by Marsh et al. (1994) and adapted to the Chilean context by Espinoza et al. (2007) that assesses physical self-concept. It consists of 47 items with a rating on a Likert-type scale from 1 to 5 points (1 = "Totally disagree" to 5 = "Totally agree"). The questionnaire is categorized according to 11 variables: 1) Active life; 2) Appearance; 3) Obesity; 4) Coordination; 5) Endurance; 6) Flexibility; 7) Health; 8) Sport; 9) Strength; 10) Overall physique; 11). The items are arranged randomly and with positive and negative statements. The reliability indices of the questionnaire were obtained through internal consistency using Cronbach's α coefficient, obtaining reliability data of $\alpha = .95$.

The Achievement Motivation Test (AMPET), designed by Nishida (1988) and adapted to Spanish by Ruiz et al. (2015), assesses achievement motivation for learning in the context of Physical Education. This instrument consists of 32 items, rated according to a Likert-type scale from 1 to 5 points (1 = "Totally disagree" to 5 = "Totally agree"). In addition, it is categorized according to 4 variables: 1) Self-perceived competence; 2) Comparative competence; 3) Commitment to learning; 4) Anxiety or stress in the face of failure. Each item is arranged randomly and with positive and negative statements. The reliability indices of the questionnaire were obtained by internal consistency through Cronbach's α coefficient, obtaining reliability data of $\alpha = .82$.

The Physical Education Attitudes Questionnaire (CAEF), designed by Moreno & Rodríguez (2003) evaluates the attitudes of students in the subject of Physical Education. The instrument consists of 46 items, with a Likert-type rating from 1 to 4 points (1 = "Disagree" to 4 = "Totally agree"). This instrument is categorized according to 7 variables: 1) Assessment of the subject and the teacher; 2) Difficulty of Physical Education; 3) Usefulness of Physical Education; 4) Empathy with the teacher and the subject; 5) Agreement with the organization of the Physical Education subject; 6) Preference for Physical Education and sport; 7) Physical Education as a sport. Each item is in random order and with positive and negative statements. The reliability indices of the questionnaire were obtained through internal consistency using Cronbach's α coefficient, obtaining reliability data of $\alpha = .81$.

Analysis

To determine the profile of the students, descriptive analyses were performed. Likewise, to identify whether there were statistically significant differences between men and women and students who practiced sports, the Student t test was performed considering a significance value of $p < .05$. Subsequently, to determine the existence of relationships between physical self-concept, motivation and attitude towards Physical Education and Health class, the Pearson correlation test was performed. Before the indicated analyses, the assumptions of normality, homogeneity and homoscedasticity of the data were checked. The analyses carried out were done through the IBM SPSS Statistics 22 software. Regarding the ethical guidelines of the study, informed consents for parents and/or guardians and assents for the study participants were considered.

RESULTS

Table 1 shows the descriptive analyses of physical self-concept, achievement motivation and attitudes towards Physical Education. To do this, the average of the dimensions was considered with respect to the number of items in each one, namely (1) Active life (AL); (2) Appearance (AP); (3) Obesity (OB); (4) Coordination (COO); (5) Endurance (END); (6) Flexibility (FLE); (7) Health (HE); (8) Sport (SP); (9) Strength (ST); (10) Global physique (GP); and (11) Global esteem (GE); (12) Self-perceived competence (SPC); (13) Comparative competence (CC); (14) Commitment to learning (CL); and (15) Anxiety and overwhelm in the face of failure; (16) Evaluation of the subject and the Physical Education teacher (ESPET); (17) Difficulty of Physical Education (DPE); (18) Usefulness of Physical Education (UPE); (19) Empathy with the teacher and the subject (ETS); (20) Agreement with the organization of the subject (AOS); (21) Preference for Physical Education and sport (PPE); and (22) Physical Education as a sport (PES).

Table 1

Descriptive analysis of each dimension examined.

Instrument	Dimension	min	max	M	SD	Asymmetry	Kurtosis
PSDQ-s	AL	4	20	11.25	4.568	.207	-.903
	AP	4	20	12.28	3.661	-.268	-.272
	OB	4	20	14.34	3.710	-.414	-.487
	COO	6	25	18.13	3.897	-.393	-.060
	END	4	20	12.45	4.099	-.151	-.747
	FLE	4	20	12.86	4.012	-.081	-.812
	HE	9	25	21.07	3.612	-.897	.187
	SP	4	20	13.01	4.049	-.189	-.686
	ST	4	20	11.95	3.770	-.106	-.455
	GP	4	20	12.89	4.497	-.332	-.681
	GE	5	25	17.13	4.419	-.387	-.149

Instrument	Dimension	min	max	M	SD	Asymmetry	Kurtosis
AMPET	SPC	9	45	28.89	7.967	-.174	-.465
	CC	5	25	12.66	5.132	.354	-.679
	CL	9	45	33.18	6.752	-.695	.712
	AAF	9	45	25.45	9.770	.177	-.804
	AOS	5	20	13.34	3.092	.014	-.226
	PPE	4	15	7.68	2.383	.543	-.328
	PES	4	16	8.41	2.514	.243	-.376
CAEF	ESPET	11	44	31.65	6.252	-.330	-.170
	DPE	7	24	14.84	3.485	.275	-.702
	UPE	10	32	19.27	3.718	.789	.809
	ETS	6	24	13.99	4.381	.005	-.903
	AOS	5	20	13.34	3.092	.014	-.226
	PPE	4	15	7.68	2.383	.543	-.328
	PES	4	16	8.41	2.514	.243	-.376

PSDQ-s: Physical Self-Concept Assessment Test; AMPET: Achievement Motivation Test; CAEF: Physical Education Attitudes Questionnaire; min.: Minimum; max.: Maximum; M: Average; SD: Standard Deviation; AL: Active Life; AP: Appearance; OB: Obesity; COO: Coordination; END: Endurance; FLE = Flexibility; HE: Health; DEP: Sport; ST: Strength; GP: Global Physique; GE: Global Esteem; SPC: Self-Perceived Competence; CC: Comparative Competence; CL: Commitment to Learning; AAF: Anxiety and Overwhelm in the Face of Failure; ESPET: Assessment of the Physical Education Subject and Teacher; DPE: Difficulty of Physical Education; UPE: Usefulness of Physical Education; EPPE: Empathy with the Teacher and the Subject; AOS: Agreement with the Organization of the Subject; PPE: Preference for Physical Education and Sport; PES: Physical Education as Sport.

The results show that eight of the ten highest scores correspond to the instrument of physical self-concept, among which the HE dimension (M = 21.07; SD = 3.612) stands out as the best valued by the students; in this area, the subjects perceive that getting sick infrequently or recovering quickly is a condition of good health. At the same time, the OB dimension (M = 14.34; SD = 3.710) is among the four highest results; this considers that the students perceive themselves to be above their ideal weight regardless of their real state. What is relevant is to highlight the perception of the young people regarding their health, emphasizing that there is a positive assessment, independent of their physical perception. It is worth noting that other of the highest scores are the CL (M = 33.18; SD = 6.752), which refers to the seriousness with which the students take each class of the subject; COO (M = 18.13; SD = 3.897), focused on the perception of ability to perform coordinated and precise movements; and GE (M = 17.13; SD = 4.419), that is, the appreciation or positive feeling that each student has about himself.

On the contrary, the evaluations with the lowest scores correspond to the dimensions of PPE (M = 7.68; SD = 2.383), explained as the preference that students have towards the subject of Physical Education, and followed by the variable of UPE (M = 19.27; SD = 3.718), understood as the usefulness that they give to the subject. It should be noted that both results correspond to the questionnaire of Attitudes towards Physical Education and, in addition, six of its dimensions are among the lowest results of the survey in general. This is striking, as students perceive and value attitude in the subject to a lesser extent, highlighting the preference they have for it and the usefulness they find in it for the educational process.

When comparing the measured variables, statistically significant differences are observed with respect to the gender of the students (women and men) in the dimensions of Appearance (AP), Coordination (COO), Endurance (END), Health (HE), Sport (DE), Strength (ST), Global Physique (GP), Global Esteem (GE), Self-Perceived Competence (SPC), Comparative Competence (CC), Commitment to Learning (CL), Anxiety and Overwhelm in the Face of Failure (AAF), Difficulty of Physical Education (DPE), Usefulness of Physical Education (UPE), Empathy with the Teacher and the Subject (ETS), Agreement with the Organization of the Subject (AOS) and Preference for Physical Education and Sport (PPE) (Table 2).

Table 2

Differences in each dimension with respect to sex.

Instrument	Dimension	Male (N = 137)		Female (N = 142)		t	p
		M	SD	M	SD		
PSDQ-s	AL	11.69	4.575	10.82	4.536	-1.594	.112
	AP	12.93	3.453	11.65	3.757	-2.958	.003
	OB	14.23	3.822	14.44	3.609	.456	.648
	COO	18.84	3.663	17.44	4.004	-3.050	.003
	END	13.79	4.023	11.16	3.756	-5.639	.000
	FLE	12.75	3.807	12.96	4.211	.443	.658
	HE	21.96	2.793	20.21	4.084	-4.169	.000
	DE	14.12	3.995	11.94	3.815	-4.678	.000
	ST	13.08	3.589	10.87	3.629	-5.122	.000
	GP	14.09	4.008	11.73	4.65	-4.538	.000
AMPET	GE	18.26	4.171	16.04	4.394	-4.312	.000
	SPC	30.77	7.918	27.08	7.614	-3.959	.000
	CC	14.07	5.264	11.3	4.63	-4.660	.000
	CL	34.16	6.928	32.24	6.462	-2.396	.017
CAEF	AAF	22.09	8.741	28.7	9.638	5.994	.000
	ESPET	32.39	6.038	30.94	6.391	-1.957	.051
	DPE	14.23	3.314	15.44	3.554	2.939	.004
	UPE	19.82	3.905	18.73	3.458	-2.476	.014
	ETS	15.44	3.954	12.60	4.334	-5.711	.000
	AOS	14.01	3.005	12.69	3.046	-3.655	.000
	PPE	8.26	2.462	7.13	2.174	-4.038	.000
PES	8.68	2.532	8.15	2.478	-1.770	.078	

PSDQ-s: Physical Self-Concept Assessment Test; AMPET: Achievement Motivation Test; CAEF: Physical Education Attitudes Questionnaire; M: Mean; SD: Standard Deviation; t: Student t-test; p: Significance; AL: Active life; AP: Appearance; OB: Obesity; COO: Coordination; END: Endurance; FLE: Flexibility; HE: Health; DEP: Sport; ST: Strength; GP: Global physique; GE: Global esteem; SPC: self-perceived competence; CC: Comparative competence; CL: Commitment to learning; AAF: Anxiety and burden in the face of failure; ESPET: Assessment of the subject and the Physical Education teacher; DPE: Difficulty of Physical Education; UPE: Usefulness of Physical Education; ETS: Empathy with the teacher and the subject; AOS: Agreement with the organization of the subject; PPE: Preference for Physical Education and Sport; PES: Physical Education as a Sport.

When comparing the means of the variables analyzed, results with significant differences in favor of men are observed in most of the dimensions examined, specifically in 15 variables out of 22. These results take on greater importance when viewing that these dimensions acquire a positive value in each of the instruments respectively, for example, the GP dimension (Mm = 11.73, SD = 4.650; Mh = 14.09,

SD = 4.008, $t(279) = -4.538$, $p < .05$) shows that a greater number of men positively appreciate their body compared to women. Another example is the PPE (Mm = 7.13, SD = 2.174; Mh = 8.26, SD = 2.174, $t(279) = -4.038$, $p < .05$) section that mentions that men prefer to actively participate in the subject to a greater extent than women. At the same time, women perceive values with significant differences in the dimensions of AAF (Mm = 28.7, SD = 9.638; Mh = 22.09, SD = 8.741, $t(279) = 5.994$, $p < .05$) and DPE (Mm = 15.44, SD = 3.554; Mh = 14.23, SD = 3.314, $t(279) = 2.939$, $p < .05$). These values are relevant, since both dimensions acquire a negative meaning in the respective instruments. This means that women consider a higher score in the anxiety and stress that carrying out the different activities of the subject generates in them in relation to men and, also, in the perceived difficulty of Physical Education in comparison with other subjects. In students who report whether or not they practice any sport or physical exercise on a regular basis, statistically significant differences are observed in the dimensions of Active Life (AL), Appearance (AP), Coordination (COO), Endurance (END), Flexibility (FLE), Sport (DE), Strength (ST), Global Physique (GP), Global Esteem (GE), Self-Perceived Competence (SPC), Comparative Competence (CC), Commitment to Learning (CL), Anxiety and Overwhelm in the Face of Failure (AAF), Difficulty of Physical Education (DPE), Empathy with the Teacher and the Subject (ETS), Agreement with the Organization of the Subject (AOS) and Preference for Physical Education and Sport (PPE) (Table 3).

Table 3

Differences of each dimension regarding the sports practice variable.

Instrument	Dimension	Practice sports				t	p
		Yes		No			
		M	SD	M	SD		
PSDQ-s	AL	13.83	4.067	9.10	3.790	10.036	.000
	AP	12.81	3.739	11.83	3.545	2.248	.025
	OB	14.34	3.526	14.34	3.869	.007	.995
	COO	19.51	3.561	16.97	3.797	5.734	.000
	END	13.92	4.011	11.22	3.765	5.785	.000
	FLE	14.09	3.753	11.83	3.941	4.886	.000
	HE	21.31	3.474	20.88	3.723	.995	.321
	DE	14.87	3.667	11.45	3.688	7.734	.000
	ST	13.24	3.637	10.88	3.547	5.458	.000
	GP	13.69	4.487	12.21	4.407	2.775	.006
AMPET	GE	18.39	4.215	16.07	4.320	4.519	.000
	SPC	32.19	7.835	26.14	6.990	6.814	.000
	CC	14.78	5.172	10.89	4.386	6.801	.000
	CL	35.31	6.394	31.40	6.542	5.028	.000
	AAF	22.89	9.624	27.59	9.397	-4.117	.000

Instrument	Dimension	Practice sports				t	p
		Yes		No			
		M	SD	M	SD		
CAEF	ESPET	32.43	6.128	31.00	6.299	1.916	.056
	DPE	14.20	3.254	15.38	3.590	-2.864	.005
	UPE	19.28	3.576	19.26	3.844	.028	.978
	ETS	14.94	4.142	13.20	4.432	3.350	.001
	AOS	13.91	3.086	12.86	3.025	2.865	.004
	PPE	8.49	2.475	7.01	2.084	5.404	.000
	PES	8.50	2.309	8.33	2.679	.578	.564

PSDQ-s: Physical Self-Concept Assessment Test; AMPET: Achievement Motivation Test; CAEF: Physical Education Attitudes Questionnaire; M: Mean; SD: Standard Deviation; t: Student t-test; p: Significance; AL: Active life; AP: Appearance; OB: Obesity; COO: Coordination; END: Endurance; FLE: Flexibility; HE: Health; DEP: Sport; ST: Strength; GP: Global physique; GE: Global esteem; SPC: self-perceived competence; CC: Comparative competence; CL: Commitment to learning; AAF: Anxiety and burden in the face of failure; ESPET: Assessment of the subject and the Physical Education teacher; DPE: Difficulty of Physical Education; UPE: Usefulness of Physical Education; EPPE: Empathy with the Physical Education teacher; AOS: Agreement with the organization of the subject; PPE: Preference for Physical Education and Sport; PES: Physical Education as a Sport.

When observing the results of the variables analyzed, it is shown that there are results with significant differences in the participants who declare to do physical exercise or sport constantly in 17 variables out of 22. As with the sex variable, what is described is important due to the positive assessment given to these significant values. Among the highlighted dimensions is the GE (Msi = 18.39, SD = 4.215; Mno = 16.07, SD = 4.320, $t(279) = 4.519$, $p < .05$), that is, physically active students perceive themselves as more satisfied with themselves compared to young people who declare not to do any sport or exercise constantly. Another dimension to highlight is the CL (Msi = 35.31, SD = 6.394; Mno = 31.40, SD = 6.542, $t(279) = 5.028$, $p < .05$), which states that physically active students take Physical Education classes with greater seriousness and commitment than students who claim to be sedentary. On the contrary, students who declare not to practice sport or exercise on a constant basis perceive values with significant differences in the dimensions with a negative meaning of the instruments analyzed, specifically in AAF (Msi = 22.89, SD = 9.624; Mno = 27.59, SD = 9.397, $t(279) = -4.117$, $p < .05$) and DPE (Msi = 14.201, SD = 3.254; Mno = 15.38, SD = 3.590, $t(279) = -2.864$, $p < .05$). This means that young people who do not practice sport constantly express a greater fear of failure and of inadequately performing some specific activity of the subject, in addition to considering it more difficult compared to other disciplines compared to students with a declared active life. In order to observe possible relationships between the dimensions of physical self-concept and achievement motivation (Table 4); physical self-concept and attitude towards Physical Education (Table 5); and achievement motivation together with attitude towards Physical Education (Table 6), bivariate correlations were used, through the Pearson correlation coefficient, to obtain an estimate of the factor scores.

Table 4

Correlations between dimensions of physical self-concept and achievement motivation.

	SPC	CC	CL	AAF
Active life	.542**	.523**	.436**	-.196**
Appearance	.527**	.471**	.304**	-.439**
Obesity	.241**	.154*	.109	-.275**
Coordination	.660**	.487**	.568**	-.400**
Resistance	.677**	.568**	.522**	-.429**
Flexibility	.441**	.343**	.329**	-.207**
Health	.226**	.075	.273**	-.300**
Sports	.815**	.710**	.568**	-.483**
Strength	.620**	.593**	.468**	-.410**
Global Physique	.594**	.448**	.467**	-.498**
Global esteem	.667**	.530**	.523**	-.583**

SPC: self-perceived competence; CC: comparative competence; CL: commitment to learning; AAF: anxiety and burden in the face of failure; **: The correlation is significant at the 0.01 level; *: The correlation is significant at the 0.05 level.

When observing the dimensions of physical self-concept in relation to achievement motivation, it is noted that there is a positive and statistically significant relationship between most of the dimensions of physical self-concept and the dimensions of achievement motivation, specifically in Perceived Competence, Comparative Competence and Commitment to learning. In a minority, the variables of Obesity and Commitment to learning; and Health with Perceived Competence do not express a significant correlation, but are positive in the same way. At the same time, it is evident that there are negative and significant correlations between all the dimensions of physical self-concept and the variable of anxiety and burden in the face of failure. This means that participants who show high levels of physical self-concept demonstrate high levels in dimensions such as perceived competence, comparative competence and commitment to learning, in turn, these students obtain low scores in anxiety and burden in the face of failure perceived in the Physical Education class.

Table 5

Correlations between dimensions of physical self-concept and attitude towards Physical Education.

	ESPET	DPE	UPE	ETS	AOS	PPE	PES
Active life	.112	-.194**	.003	.201**	.164**	.391**	.139*
Appearance	.238**	-.121*	.067	.218**	.223**	.200**	.042
Obesity	.105	.055	-.207**	-.020	-.046	-.066	-.162**
Coordination	.326**	-.206**	-.072	.307**	.310**	.286**	.009
Resistance	.215**	-.225**	-.053	.276**	.240**	.363**	.066
Flexibility	.060	-.166**	-.173**	.026	.166**	.100	-.019
Health	.139*	-.059	-.101	.081	.037	.136*	-.084
Sports	.235**	-.246**	-.044	.371**	.284**	.436**	.059
Strength	.209**	-.202**	-.016	.363**	.213**	.446**	.103
Global Physique	.330**	-.186**	-.040	.249**	.117	.290**	-.005
Global esteem	.323**	-.196**	-.004	.308**	.285**	.356**	-.006

ESPET: Assessment of the subject and the Physical Education teacher; DPE: Difficulty of Physical Education; UPE: Usefulness of Physical Education; EP: Empathy with the teacher and the subject; AOS: Agreement with the organization of the subject; PPE: Preference for Physical Education and Sport; PES: Physical Education as Sport. **: The correlation is significant at the 0.01 level; *: The correlation is significant at the 0.05 level.

The results show that there are positive and significant correlations between most dimensions of physical self-concept and attitudes towards Physical Education, with the exception of the dimensions of Obesity, Health, Flexibility, Usefulness of Physical Education and Physical Education as a sport, where in these dimensions no significant correlations are seen with the other related variables. In the case of negative relationships, the dimension of difficulty of Physical Education is significantly correlated with most dimensions of physical self-concept, except for obesity and health. It is noteworthy that there are 46 statistically significant relationships out of the 77 correlations made between both instruments.

Table 6

Correlations between the dimensions of achievement motivation and attitude towards Physical Education.

	ESPET	DPE	UPE	ETS	AOS	PPE	PES
SPC	.329**	-.256**	-.126*	.402**	.312**	.409**	.058
CC	.165**	-.268**	-.018	.354**	.268**	.384**	.158**
CL	.454**	-.152*	-.108	.415**	.334**	.422**	-.035
AAF	-.198**	.058	.158**	-.196**	-.141*	-.219**	.075

SPC: self-perceived competence; CC: comparative competence; CL: commitment to learning; AAF: anxiety and burden in the face of failure; ESPET: evaluation of the subject and the physical education teacher; DPE: difficulty of physical education; UPE: usefulness of physical education; ETS: empathy with the teacher and the subject; AOS: agreement with the organization of the subject; PPE: preference for physical education and sport; PES: physical education as a sport. **: the correlation is significant at the 0.01 level; *: the correlation is significant at the 0.05 level.

According to the results, there is a statistically significant relationship between most of the dimensions of achievement motivation and attitudes towards Physical Education. The four variables of achievement motivation are found in a positive and significant way together with the dimensions of assessment of the Physical Education subject, empathy with the Physical Education teacher, agreement with the subject and preference for Physical Education. In the case of negative relationships, there are the dimensions of difficulty of Physical Education. It is highlighted that the variables of utility of Physical Education and Physical Education as a sport acquire intermittent relationships between the dimensions of achievement motivation.

DISCUSSION

In relation to the research objective that sought to "analyze the influence of physical self-concept regarding achievement motivation and attitudes of Chilean high school students in the subject of Physical Education and Health", it is observed that, when evaluating the perception of students in these dimensions, the results reveal intermediate and low scores according to each evaluation instrument. In this context, it is highlighted that physical self-concept emerges as the most valued element among the variables studied.

The discrepancies in the results are evident when considering each research and variable analyzed. Regarding physical self-concept, Gaete & Cavazos (2017) show that respondents tend towards negative concepts, such as feeling weak, overweight, unattractive, among others. Contrary to this, Frutos de Miguel (2018) points out that students express a high degree of positive physical self-concept. Regarding achievement motivation and attitudes towards Physical Education, various studies, such as those by Cárcamo-Oyazun et al. (2017) and Luis-de Cos et al. (2019), reveal high perceptions in each

variable analyzed. This variability in the results is predictable, since factors such as the sociocultural and economic context, the type of establishment, the influence of the teacher, individual tastes and interests, and family dynamics are data that are not always considered in all research, which could contribute to greater consistency in the conclusions.

Secondly, when considering the differences established between each of the dimensions studied and the sex of the students, it is important to conclude that men value physical self-concept, achievement motivation, and attitudes towards the subject significantly more than the women surveyed. The above reflects what has already been stated by different authors, who describe this significant differentiation in the male sex (Cárcamo-Oyarzun et al., 2017; Frutos de Miguel, 2018; Márquez-Barquero & Azofoifa-Mora, 2019; Sánchez-Alcaraz et al., 2018; Tapia, 2019).

Thirdly, in relation to the physical activity of students, it is clear from the results that those who claim to constantly do sports or exercise have a higher assessment of physical self-concept, motivation to achieve and attitudes towards the different activities of the Physical Education class. What has been described corroborates what has been found in other research where they affirm that exercise and an active life have positive effects on the different variables described above (Fernández et al., 2017; Jodra et al., 2019; Luis-de Cos et al., 2019).

From what has just been mentioned, it is interesting to plan activities and classes in which women are considered in their own tastes, motivations and corporality, leaving aside exercises or sports that exclude gender and achieving real inclusion in Physical Education classes. Along the same lines, it is expected that each planned activity is directed towards the entire school group, regardless of their physical or sports ability, to achieve optimal learning and evident motor development from the person with the least physical ability to the one who is in better condition.

Finally, according to the relationship between the variables already mentioned, it is observed that there are positive and significant relationships between physical self-concept regarding achievement motivation and attitudes towards Physical Education in high school students, as in the studies that analyzed the relationship between these variables (Cabello et al., 2018; Cahuana, 2020; Navarro et al., 2016; Orive, 2020; Usán et al., 2018). The above means that students who perceive themselves as physically and motorically fit will have greater motivation and better attitudes towards classes and activities in Physical Education and Health.

In general, it is evident that physical self-concept was the most valued variable, although with discrepancies in the results between negative and positive perceptions. A significant gender differentiation was highlighted, with men valuing these dimensions more positively than women. Constant physical activity was associated with a better assessment. The importance of inclusive activities was emphasized and the positive relationship between physical self-concept, achievement motivation and attitudes in high school students was underlined.

The general limitations of this study include the possible influence of biases or limitations inherent to the quantitative descriptive-correlational methodological design used, which could affect the generalization of the results. In addition, the variability in the perceptions of the participants and the differences in the interpretation of the measurement scales could introduce some subjectivity in the responses. The lack of consideration of external factors not addressed in the research, such as the

sociocultural context, family environment, and specific characteristics of the teaching staff and the educational center, constitutes an important limitation that could have influenced the results. Likewise, the exclusion of certain qualitative or contextual aspects could limit the comprehensive understanding of the dimensions studied.

This study offers significant opportunities for future research and practical applications in the field of Physical Education and Health. It is suggested that further research address in more detail contextual factors, such as the sociocultural and economic environment, for a more complete understanding of the variables studied. Furthermore, exploring specific pedagogical strategies to address the identified gender differences and designing more inclusive and motivating educational programs can contribute to improving the experience of students in these classes. The implementation of interventions aimed at strengthening physical self-concept and promoting a positive self-image also represents a valuable direction for future research, with the aim of enriching the quality of teaching in the field of Physical Education and Health.

CONCLUSION

The conclusions of the study offer valuable recommendations to improve the educational experience in Physical Education. First, it emphasizes the importance of addressing physical self-concept from the early stages, especially during adolescence, with the purpose of fostering positive attitudes and motivation towards the subject's activities. Second, it proposes promoting an active lifestyle, constant exercise and healthy nutritional habits to improve health-related perceptions and the perception of obesity. In addition, it is suggested to design activities that highlight the importance of Physical Education and promote physical activity outside the school environment. Finally, it highlights the need to address gender differences through inclusive methodologies that consider the individual interests and abilities of women, avoiding unnecessary comparisons with the male sex. Understanding how to positively strengthen physical self-concept is essential to cultivate a more enriching and stimulating educational environment in the field of Physical Education and Health in Chilean secondary education.

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REFERENCES

- Álvaro González, J. I. (2015). *Análisis del autoconcepto en relación con factores educativos, familiares, físicos y psicosociales en adolescentes de la provincia de Granada* [Tesis doctoral, Universidad de Granada]. <http://hdl.handle.net/10481/40109>
- Bobbio, R. de J. (2019). *Actitudes de los estudiantes frente al aprendizaje de la química* [Tesis de grado, Universidad de Piura]. <https://hdl.handle.net/11042/4227>

- Cabello, A., Moyano, M., & Tabernero, C. (2018). Procesos psicosociales en Educación Física: Actitudes, estrategias y clima motivacional percibido. *Retos*, 34, 19-24. <https://doi.org/10.47197/retos.v0i34.57668>
- Cahuana Cuti, M. E. (2020). *Motivación académica y autoconcepto académico en universitarios del Programa Nacional de Becas y Crédito Educativo de la Universidad Peruana Unión, Juliaca – 2018* [Tesis de grado, Universidad Peruana Unión, Lima]. <https://repositorio.upeu.edu.pe/handle/20.500.12840/3123>
- Cárcamo-Oyarzun, J., Wydra, G., Hernandez-Mosqueira, C., & Martinez-Salazar, C. (2017). Actitudes hacia la educación física: Grados de importancia y conformidad según escolares de Chile y Alemania. Una mirada intercultural. *Retos*, 32, 158-162. <https://doi.org/10.47197/retos.v0i32.52824>
- Casis, M., Rico, N., & Castro, E. (2017). Motivación, autoconfianza y ansiedad como descriptores de la actitud hacia las matemáticas de los futuros profesores de educación básica de Chile. *PNA*, 11(3), 181-203. <http://hdl.handle.net/10481/45499>
- Espinoza, L., Galvez, J., Mac Millan, N., Luhrs, O., & Rodriguez, F. (2007). Efecto de una estrategia de intervención educativa en la formación de hábitos de vida activa y saludable de los estudiantes de la PUCV. *Revista Motricidad Humana*, 6, 4-9.
- Fernández, M. Á., González, M., Toja, M. B., & Carreiro da Costa, F. (2017). Valoración de la escuela y la Educación Física y su relación con la práctica de actividad física de los escolares. *Retos*, 31, 312-315. <https://doi.org/10.47197/retos.v0i31.53508>
- Frutos de Miguel, J. (2018). El Autoconcepto Físico como herramienta de Inclusión Social en el área de Educación Física. *Journal of Sport and Health Research*, 10(1), 25-42. https://www.researchgate.net/publication/331453303_El_Autoconcepto_Fisico_como_herramienta_de_Inclusion_Social_en_el_area_de_Educacion_Fisica
- Fuentes Vilubrón, G., & Lagos Hernández, R. (2019). Motivaciones hacia la práctica de actividad física-deportiva en estudiantes de La Araucanía. *Revista Ciencias de la Actividad Física UCM*, 20(2), 1-13. <https://doi.org/10.29035/rcaf.20.2.3>
- Gaete, V. (2015). Desarrollo psicosocial del adolescente. *Revista Chilena de Pediatría*, 86(6), 436-443. <http://dx.doi.org/10.1016/j.rchipe.2015.07.005>
- Gaete, M. L., & Cavazos, J. (2017). Autoconcepto físico y académico en niños de contextos marginados en México. *Revista Electrónica de Investigación Educativa*, 19(2), 114-124. <https://doi.org/10.24320/redie.2017.19.2.604>
- García, F., & Musitu, G. (2014). *AF5. Autoconcepto Forma 5*. TEA Ediciones.
- González-Pianda, J. A., Núñez Pérez, J. C., González, S., & García, M. S. (1997). Autoconcepto, autoestima y aprendizaje escolar. *Psicothema*, 9(2), 271-289. <https://www.psycothema.com/pdf/97.pdf>
- Grao-Cruces, A., Fernández-Martínez, A., & Nuviala, A. (2017). Asociación entre condición física y autoconcepto físico en estudiantes españoles de 12-16 años. *Revista Latinoamericana de Psicología*, 49(2), 128-136. <https://doi.org/10.1016/j.rlp.2016.09.002>
- Herrera Torres, L., Al-Lal Mohand, M., & Mohamed Mohand, L. (2017). Rendimiento escolar y autoconcepto en educación primaria. Relación y análisis por género. *International Journal of*

- Developmental and Educational Psychology. Revista INFAD de Psicología*, 3(1), 315-326. <https://doi.org/10.17060/ijodaep.2017.n1.v3.1000>
- Jodra, P., Maté-Muñoz, J., & Domínguez, R. (2019). Percepción de salud, autoestima y autoconcepto físico en personas mayores en función de su actividad física. *Revista de Psicología del Deporte*, 28(2), 127-134. <https://ddd.uab.cat/record/211107>
- Luis-de Cos, G., Arribas-Galarraga, S., Luis-de Cos, I., & Arruza, J. A. (2019). Competencia motriz, compromiso y ansiedad de las chicas en Educación Física. *Retos*, 36, 231-238. <https://doi.org/10.47197/retos.v36i36.64243>
- Márquez-Barquero, M., & Azofeifa-Mora, C. (2019). El compromiso y entrega en el aprendizaje, la competencia motriz percibida y la ansiedad ante el error y situaciones de estrés: Factores de motivación de logro durante las clases de educación física en adolescentes. *MHSalud: Revista en Ciencias del Movimiento Humano y Salud*, 16(1), 40-53. <https://doi.org/10.15359/mhs.16-1.3>
- Marsh, H. W., Richards, G. E., Johnson, S., Roche, L., & Tremayne, P. (1994). Physical Self-Description Questionnaire: Psychometric Properties and a Multitrait-Multimethod Analysis of Relations to Existing Instruments. *Journal of Sport and Exercise Psychology*, 16(3), 270-305. <https://doi.org/10.1123/jsep.16.3.270>
- Ministerio de Educación. (2015). *Bases Curriculares. 7º básico a 2º medio*. https://www.curriculumnacional.cl/614/articles-37136_bases.pdf
- Moreno, J. A., Rodríguez, P. L., & Gutiérrez, M. (1996). Actitudes hacia la Educación Física: Elaboración de un instrumento de medida. En *Actas del III Congreso Nacional de Educación Física de Facultades de Educación y XIC de Escuelas Universitarias de Magisterio* (pp. 507-516). Universidad de Alcalá. https://www.researchgate.net/profile/juan-murcia-9/publication/237356878_actitudes_hacia_la_educacion_fisica_elaboracion_de_un_instrumento_de_medida/links/0deec5293a245c0199000000/actitudes-hacia-la-educacion-fisica-elaboracion-de-un-instrumento-de-medida.pdf
- Moreno, J., & Rodríguez, P. (2003). Intereses y actitudes hacia la educación física. *Revista española de Educación Física*, 11(2), 1-20. <https://www.researchgate.net/profile/Juan-Murcia-9/publication/268184173>
- Navarro, R., Barreal, P., & Basanta, S. (2016). Relación entre el autoconcepto físico y el disfrute en las clases de educación física en escolares de educación primaria. *Journal of Sport and Health Research*, 8(2), 151-162. <http://hdl.handle.net/10347/16093>
- Navarro-Paton, R., Rego, B., & García, M. (2018). Incidencia de los juegos cooperativos en el autoconcepto físico de escolares de educación primaria. *Retos*, 34, 14-18. <https://doi.org/10.47197/retos.v0i34.58803>
- Nishida, T. (1988). Reliability and factor structure of the achievement motivation in physical education test. *Journal of Sport and Exercise*, 11, 418-430. <https://doi.org/10.1123/jsep.10.4.418>
- Orive Pernia, J. (2020). *Relación entre el autoconcepto físico y las actitudes hacia la Educación Física en alumnos de cuarto curso de Educación Primaria* [Tesis de grado, Universidad del País Vasco]. <https://addi.ehu.es/handle/10810/43070>

- Palomino-Devia, C., Reyes-Oyola, F. A., & Sánchez-Oliver, A. J. (2018). Niveles de actividad física, calidad de vida relacionada con la salud, autoconcepto físico e índice de masa corporal: Un estudio en escolares colombianos. *Biomédica*, 38(2), 224-231. <https://doi.org/10.7705/biomedica.v38i0.3964>
- Pila, J. (2012). *La motivación como estrategia de aprendizaje en el desarrollo de las competencias comunicativas de los estudiantes del I-II nivel de inglés del Convenio Héroes del Cenepa-ESPE de la ciudad de Quito en el año 2012. Diseño de una Guía de Estrategias Motivacionales para el docente* [Tesis de grado, Universidad de Guayaquil]. <https://repositorio.ug.edu.ec/server/api/core/bitstreams/2fc8820e-eebd-4cbd-9e34-e04ab5ca7df8/content>
- Roa García, A. (2013). La educación emocional, el autoconcepto, la autoestima y su importancia en la infancia. *Edetania. Estudios y Propuestas Socioeducativas*, (44), 241-257. <https://revistas.ucv.es/edetania/index.php/Edetania/article/view/210/178>
- Rodrigues, A. (1987). *Psicología Social* (2da ed.). Trillas.
- Ruiz, L., Moreno, J., Ramón-Otero, I., & Alias-García, A. (2015). Motivación de logro para aprendizaje. *Revista Española de Pedagogía*, 260, 157-175. <https://reunir.unir.net/bitstream/handle/123456789/4395/Motivacion%20de%20Logro%20para%20Aprender%20en%20Educacion%20Fisica.pdf?sequence=1&isAllowed=y>
- Sánchez-Alcaraz, B. J., Bejerano-Urrea, A., Valero-Valenzuela, A., Gómez-Mármol, A., & Courel-Ibáñez, J. (2018). Deportividad, disfrute y actitudes hacia la Educación Física de los estudiantes de Educación Secundaria. *Ágora para la Educación Física y el Deporte*, 20(2-3), 319-340. <https://doi.org/10.24197/aefd.2-3.2018.319-340>
- Solorzano Prado, K. C. (2021). *Motivación de logro en alumnos de 4to y 5to de secundaria de la I.E. 5011 Darío Arrus, Cuestas, Callao 2020* [Tesis de grado, Universidad Autónoma de Ica, Perú]. <https://renati.sunedu.gob.pe/handle/sunedu/3070011>
- Tapia, A. (2019). Diferencias en los niveles de actividad física, grado de adherencia a la dieta mediterránea y autoconcepto físico en adolescentes en función del sexo. *Retos*, 36, 185-192. <https://doi.org/10.47197/retos.v36i36.67130>
- Usán, P., Salavera, C. S., Murillo, V., & Merino, A. (2018). Relación conductual de la motivación y el autoconcepto físico en el consumo de drogas de adolescentes deportistas. *Retos*, 33, 40-45. <https://doi.org/10.47197/retos.v0i33.53306>
- Vera Sagredo, A., Urrutia Medina, J., Poblete-Valderrama, F. (2023). Rol del autoconcepto físico, motivación de logro y actitudes hacia la Educación Física en función del sexo. *Retos*, 48, 461-469. <https://doi.org/10.47197/retos.v48.96398>

Address for correspondence

Felipe Poblete-Valderrama

Doctor en Educación.

Universidad Católica de la Santísima Concepción
Concepción, Chile.

ORCID: <https://orcid.org/0000-0002-8960-3996>

Contact: felipepobletev@gmail.com

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