

The Self-Perceived Digital Competence of Social Educators in Spain: Influence of Demographic and Professional Variables

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Abstract— In 21st-century society, Information and Communication Technologies establish the ways of communication and socialization. The way we live, study, work, entertain ourselves, etc. have changed, and the patterns of social and economic development demand new skills from citizens. In Spain, the scientific and professional career called Social Education and their social educators, are responsible for promoting and facilitating the adaptation of people to society. Nowadays, these professionals must be aware that one of the fundamental competencies, along with others, is digital competence, and its development is a requirement to agree with contemporary society. This article presents the findings of a research that aims to be a pioneer in the field of study of Social Education in Spain and whose objective is to analyze the self-perceived digital competence of 452 working social educators and determine if demographic variables and professionals influence it. A quantitative, non-experimental, and descriptive method was used, with an ex-post-facto methodology, of a descriptive type in which no kind of treatment was applied to the object of study. The electronic survey technique was used to collect the information. For the analysis of the data, descriptive, inferential and regression tests were carried out. The main results obtained allow us to conclude that neither gender, nor age, nor the Autonomous Community influence the dimensions of management and attitude towards Information and Communication Technologies. On the contrary, professional variables do have an influence on the self-assessment of digital competence.

Keywords— information and communication technologies; digital competence; social education; social educators.

I. INTRODUCTION

In 1997, Castells [1] stated: "For the first time in history, the human mind is a direct productive force, not just an element of the production system" (p.62). I was thinking about a type of society in which the processing and transfer of information were to be the fundamental basis of productivity and power, being knowledge the basis of production processes. Nowadays, known as the Information and Knowledge Society (SIC), known by its complexity, and increasing expansion; In which knowledge and knowledge are the principles ruling and making the social structure as instruments of welfare and progress of nations.

The start of the Internet and its widespread adoption all over the world produced a deep social change. In the new interconnected world, Information and Communication Technologies (ICT) determine the ways of communicating and socializing [2]. The way of living, studying, working, entertaining, etc., have changed drastically [3]. We live in a world of profound changes [4] and of lightness [5] of

evanescent modernity, where everything is fast and outdated [6].

In the manhood of the 21st century, the guidelines of social and economic development demand new social and digital competences to citizens, to live in it and so that they can develop their professional activity in an effective way actively contributing to economic growth [7]. The quick scientific and technological advances, as well as economic and cultural globalization, drive the activity of today's society and cause a rapid gap in knowledge, in addition, they lead to continuous transformations in cultural, economic, and social structures, demanding from the citizens a constant change to adapt to the new circumstances.

In Spain, there is a scientific and professional area called Social Education whose workers, social educators, as educational agents, are responsible for promoting and facilitating the adaptation of people to society. Since ICTs influence personal relationships, participation as citizens, personal and professional development, and community and social development [8], at present, social educators should be aware that one of the fundamental competencies, along

with others, is digital. Therefore, training for the development of the digital competence must be a “must”, a non-avoidable requirement for any social educator who aims to be updated. First, because he or she needs the knowledge, procedures, and attitudes necessary to favor the socialization of the citizens of the Information and Knowledge Society, and, secondly, because digital competence is a right and a duty of a person who aims his or her work to be useful in society [9]. It is necessary not to forget that ICT offer great possibilities, but also strong challenges for freedom and equality

The issue of self-perceived digital competence has been researched, especially in the field of formal education in its different stages and levels, both in Spain [10]–[12], as in other countries [13]–[20]. However, the scientific field on digital competence in the field of Social Education has not been developed yet. Some research has been carried out with university students of the Degree in Social Education [21]; [22], but really none with social educators who are working, developing their career. Therefore, this article presents the results of a research that aims to be a pioneer in the area of study of the digital competence of Social Education professionals in Spain.

A. *The Profession of Social Educator*

Social Education is a science whose purpose is to help people and social groups to shape an optimal way of life, in addition it facilitates the processes of socialization and integration of one culture into another. It explores the essence of social phenomena and deals with the influence of education in the social context on the lives of people and social groups [23]. The General Council of Schools of Educators and Social Educators (CGCEES), public law corporation integrated by all the professional associations existing in Spain and joint representative of them in the national and international scope, defines Social Education. It is defined as “the right of citizenship which is the recognition of a pedagogical career, which generates educational contexts within a frame of formative actions, which are the professional competence of the social educator, enabling:

- The inclusion of the subject of education to the diversity of social networks, understood as the development of sociability and social development; and
- The cultural and social promotion, understood as an opening to new possibilities for the acquisition of cultural goods, that broaden educational, labor, leisure, and social participation perspectives” [24].

The social educator is a professional who carries out standardized or specialized socio-educational actions, prevention, and intervention, with individuals and groups in order to originate changes to improve and transform society [25]. Its educational practice corresponds to three categories or organizing criteria, in which it analyzes situations, designs, plans, carries out and evaluates socio-educational projects.

Their professional competences are structured in five types of skills: communicative, relational, analysis and synthesis, reflexive critic, and for the selection and management of knowledge and information [24]. The

professional profile of these professionals is broad, since they can work in very diverse contexts, a fact that characterizes this profession due to its heterogeneity. Taking into account different researches [26], we can conclude that the profession of social educator is polyvalent and is mainly assigned to work related to projects and services aimed at: childhood and youth; care for people with disabilities; primary care social services; social services for the elderly; community invigoration; community insertion; labor insertion; prison services; gender violence; etc.

B. *The digital competence of the social educator*

“Among other things, digital competence consists of managing and keeping abreast of different digital devices and their software in order to use the Internet and digital technology in an educational and critical approach” [39].

Last years, Social Education has faced challenges that technological issues have originated in societies, both globally and locally, and nearly everything has yet to be done, because technology has not yet been adapted to its professional practice. It is necessary that this work environment evolves and integrates ICT in its development. Must reflect deeply on the educational use of them, on their adaptation to different professional fields, on the impacts they cause, on new didactics and the effects that new virtual educational environments have on educational relationships. But you should also reflect on the possible risks and dangers that technology originates. [27].

ICTs are present in all sectors, from large multinationals to small and medium enterprises, governments, administrations, universities, educational centers, social organizations, professionals, and individuals [28], and the social educator as a professional of the socio-educational field cannot be apart. You can find in them a technical potential for continuing education, as well as new paths and alternatives for socio-educational action, education, and citizen participation. And it is obvious that if these professionals want to use them in their professional development, they must be digitally competent, to have “success in a complex and interconnected world that faces a rapid change of technological, cultural, economic, informative and demographic type” [29].

Competence implies knowledge, procedures, attitudes, and values to improve problem solving in a specific context. Digital competence refers to a conceptualized reality under a heterogeneity of terms. Some authors use digital literacy [30], while others prefer digital literacy [31]. However, both terms are often used as synonyms because, to a greater or lesser extent, they overlap [32],

This competence encompasses the safe and critical use of Information Society Technologies (IST) for work, leisure and communication; and from the point of view of a social educator, it can be understood as the set of knowledge, procedures, skills, values and attitudes on the ICTs that one should have to be able to: technologically literate his or her students, collaborate to end the digital divide, contribute with citizens not to be left out of the Information and Knowledge Society (e-Exclusion), work for the sake of e-inclusion and make possible the empowerment of people and social groups [22] by means of Technologies for Empowerment and Participation (TEP) [33].

The professional documents were set to articulate the culture and identity of the figure of the social educator in Spain. The collection of a catalog of function and competency of the profession based on the description of the skills that this professional has are for their development [24]. The importance of digital competence is not enough. Only, within the "Competencies related to communication skills", is the "knowledge and management of information and communication technologies, to increase the possibilities of coding and expand the knowledge and information necessary in the professional practice, enriching the forms of expression and communication."

After a systematic review of the literature on the digital competence of Social Education professionals, it has not been possible to identify by no means any research in this regard. With the intention of opening study line, this article presents the results of a work on the self-perceived digital competence of Spanish social educators, as well as the influence of demographic and professional variables in it

II. MATERIAL AND METHOD

A quantitative, non-experimental, and descriptive method was used, with an ex post-facto methodology, of a descriptive type in which no type of treatment was applied to the object of study.

A. Objective and research questions

Analyze the self-perceived digital competency of active Social Education professionals and determine if demographic and professional variables influence it.

The research questions to be answered are:

- Do social educators think that they have sufficient knowledge about ICT to carry out their work and develop their professional skills?
- What ICT do they have to handle in their professional tasks?
- Do they show a positive attitude towards ICT as tools that contribute to their good professional development?
- Are there differences in self-perceived digital competence based on demographic and professional variables?

B. Sample

We worked with a sample of Social Education professionals who, freely and voluntarily, wanted to participate in the research, being well informed of the objectives of the study. The type of sampling used was non-probabilistic and intentional, obtained through the network technique, using Twitter to request the participation of social educators in the research. This social network, in addition to allowing us access to this professional group, exercised a snowball effect making it possible to reach the largest number of participants, as in Table 1.

TABLE I
SAMPLE DISTRIBUTION: DEMOGRAPHIC VARIABLES

Gender	f	%
Male	154	36.5
Female	268	63.5
Age	f	%

18-28 years	95	22.5
29-39 years	169	40
40-51 years	121	28.7
52-62 years	32	7.6

The sample was made by a total of 452 social educators who worked in Spain. The corresponding homogeneity contrast showed that the distribution was not homogeneous at the different levels (p-value = 0.000). In relation to the most representative demographic variables of the participants (table I), 163 are men (36.1%) and 289 women (63.9%), with ages between 18 and 62 years, belonging to 18 different Autonomous Communities (territorial administrative Spanish entities).

Regarding the professional variables (table II), the most common academic degree is the Diploma of Social Education (81.3%), although there are professionals who in their starting training have fulfilled other degrees such as: Pedagogy, Psychology, Fine Arts, Social Work, Criminology, Philology, Biology, Mathematics, among others. The professional areas in which they work are diverse, highlighting some as: Social services, socio-educational actions with children and youth, social vulnerability to minors, socio-educational actions with adults, training and information for employment, education for health and additions, education for leisure and free time, animation and socio-cultural management, attention to disability, socio-educational intervention and mediation for social integration, socio-educational intervention in the regulated and adult sphere, and emerging and cross-cutting areas. Most have a professional experience between 1 and 10 years.

TABLE II
SAMPLE DISTRIBUTION: PROFESSIONAL VARIABLES

Autonomous Community in which one works	f	%
Cataluña	76	18.0
Asturias	3	0.7
Castilla la Mancha	7	1.7
Cantabria	9	2.1
Comunidad Valenciana	22	5.2
La Rioja	1	0.2
Ceuta	1	0.2
Navarra	8	1.9
Aragón	3	0.7
Canarias	11	2.6
Andalucía	88	20.9
Galicia	15	3.6
Murcia	19	4.5
Extremadura	19	4.5
Castilla y León	53	12.6
Madrid	45	10.7
País Vasco	22	5.2
Islas Baleares	20	4.7
Academic qualification	f	%
Grade Social Education	343	81.3
FP ASC	11	2.6
Degree in Pedagogy	16	3.8
Degree in Psychology	19	4.5
Degree Fine Arts	1	0.2
Grade Magisterium	11	2.6
Degree in Sociology	1	0.2

Degree in Psychopedagogy	4	0.9
Degree Social Work	8	1.9
Degree in Criminology	1	0.2
Degree in Philology	1	0.2
FP Administrative	1	0.2
Degree in Geography and History	1	0.2
Degree in Biology	1	0.2
High school	1	0.2
Degree Business Administration	1	0.2
Degree in Mathematics	1	0.2
Professional field	f	%
Social Services	140	33.2
Socio-educational actions with children and young people	97	23.0
Social unprotection of underage	39	9.2
Socio-educational actions with the elderly	25	5.9
Training and information for employment	17	4.0
Education for health and prevention of addictions	22	5.2
Education for leisure and free time	10	2.4
Animation and sociocultural management	7	1.7
Attention to disability	20	4.7
Socio-educational intervention and mediation for social integration	10	2.4
Socio-educational intervention in the regulated and adult spheres	4	0.9
Emerging and transversal fields.	10	2.4
Other	21	5.0
Professional experience	f	%
1-10 years (junior A)	242	57.3
11-20 years (junior B)	125	29.6
21-30 years (senior A)	31	7.3
31-40 years (senior B)	8	1.9

C. Data collection

To collect the information, the electronic survey technique was used, by means of a direct response questionnaire, adapted from the instrument called CODIEU, used to measure the digital competence of university students, whose psychometric characteristics can be consulted [34]. The questionnaire includes 54 items, distributed in three dimensions (knowledge, management, and attitude) and structured in four blocks: identification, knowledge, management, and attitude (table III). To answer, we chose a (yes / no) scale in the knowledge dimension and a Likert type scale of 1-5 in the management and attitude dimensions. The initial instrument was improved through the application of a pilot test and validated by the method of judges, specialists in the subject of study. It is proved its high reliability and internal consistency through the Cronbach α statistic ($\alpha = 0.89$).

TABLE III
QUESTIONNAIRE STRUCTURE

Dimensions	Definition	Items
Identification data (ID)	Variables that allow the sample to be identified by means of demographic and professional characteristics (gender, age, working "Autonomous Community," academic qualifications, years of experience and professional field).	1-7 (7 items)
Knowledge (KN)	Knowledge of ICT-related concepts and technological devices.	8-27 (20 items)

Usage (US)	ICT usage in their professional performance.	28-45 (18 items)
Attitude (AT)	Value and attitude towards ICT according to the need and importance for the Social Education professional.	46-54 (9 items)

D. Data Analysis

The statistical organization, treatment and analysis of the data was carried out with the statistical program Statistical Package for the Social Sciences (SPSS v.24). For the study of the dimensions of knowledge, management and attitude, descriptive analysis was carried out and for the identification variables (demographic and professional), inferential.

In addition, they were completed with the Lambda regression test, to ratify the differences found. Regarding the inferential analysis, once the parametric assumptions of normality (Kolmogorov-Smirnov and Shapiro-Wilk test) and homoscedasticity (Levine's test) were verified, it was decided to use parametric tests, of hypothesis contrast (T of Student, for two samples and ANOVA > 2 samples), to check if there were differences depending on the demographic and professional variables. In addition, they were completed with the Lambda regression test, to verify the existing differences.

III. RESULTS AND DISCUSSION

Next, we present the main results obtained structured according to the analysis.

A. Descriptive Analysis

Regarding the knowledge dimension (KN), self-evaluations are very high, highlighting that professionals know most of the concepts presented (table IV). The least known are mashup (13.7%), b-learning (28.7%), m-learning (30.8%) and Massive Open Online Course (MOOC) (34.6%).

TABLE IV
DESCRIPTIVE STATISTICS ON ICT KNOWLEDGE

Knowledge (KN)	f	%	σ	Asymmetry	Kurtosis
Web 2.0.	333	78.9	.408	-1.422	.023
Wikipedia	418	78.9	.097	-10.161	101.725
Blogosphere	295	78.9	.459	-.871	-1.247
Podcast	288	78.9	.466	-.787	-1.388
Social Signs	204	78.9	.500	.067	-2.005
Mashup	58	78.9	.345	2.114	2.479
WebQuest	208	78.9	.501	.029	-2.009
Tablet	418	78.9	.097	-10.161	101.725
Smartphone	421	78.9	.049	-20.543	422.000
eBook	421	78.9	.049	-20.543	422.000
Interactive Digital Whiteboard	412	78.9	.152	-6.285	37.683
Videoconference	420	78.9	.069	-14.474	208.481
Information search engine	420	78.9	.069	-14.474	208.481
Learning object	360	78.9	.354	-2.002	2.017
e-learning	359	78.9	.357	-1.975	1.911
m-learning	130	78.9	.462	.834	-1.310
b-learning	121	78.9	.453	.947	-1.109
MOOC	146	78.9	.476	.650	-1.585
Network	418	78.9	.097	-10.161	101.725
Cloud Storage	398	78.9	.232	-3.840	12.809

Regarding the management dimension (US), the average results are very low regarding to the use of ICT devices (table V). Social educators only recognize using the computer ($\bar{x}=4.5$, $S_x=0.84$) and the smartphone ($\bar{x}=3.61$, $S_x=1.52$) in their professional development. Regarding ICT tools, they self-assess with the highest scores in the use of documentation search tools ($\bar{x}=4.44$, $S_x=0.86$), communication (WhatsApp, email, videoconference, chat, forums, etc.) ($\bar{x}=4.30$, $S_x=1.07$) and administration and management ($\bar{x}=4.13$, $S_x=1.13$). With slightly lower scores, the use of social networks such as Facebook, Twitter, LinkedIn, Instagram, YouTube, etc., stands out ($\bar{x}=3.73$, $S_x=1.47$) and the lowest score is awarded in the use of tools for training (e-learning platforms, Moodle, etc.) ($\bar{x}=2.97$, $S_x=1.52$). Only 24.25% of these professionals have ever enrolled in a MOOC and only 17.8% of those enrolled have completed it.

The results in both dimensions (KN and US) are different from those found in other research, such as that carried out by [21] with apprentice social educators.

TABLE V
DESCRIPTIVE STATISTICS ON ICT USAGE

Usage (US)	\bar{x}	σ	Asymmetry	Kurtosis
Computers	4.502	.8406	-1.888	3.612
Tablets	2.322	1.5336	.678	-1.096
Smartphone	3.616	1.5271	-.646	-1.083
eBooks	1.969	1.3807	1.122	-.180
Interactive Digital Whiteboard	1.590	1.0477	1.690	1.800
Digital camera	3.377	1.4581	-.383	-1.200
Digital video camera	2.495	1.5393	.480	-1.285
Communication tools	4.303	1.0757	-1.524	1.459
Search/documentation tools	4.448	.8669	-1.619	2.214
Tracking tools	3.367	1.4425	-.351	-1.212
Administration/management tools	4.130	1.1345	-1.160	.364
Training tools	2.972	1.5208	-.001	-1.471
Time organization tools	3.062	1.5025	-.012	-1.422
Collaborative work tools	3.133	1.4691	-.150	-1.351
Cloud storage tools	3.197	1.5509	-.208	-1.455
Social networks tools	3.735	1.4704	-.809	-.809

Considering the attitude dimension (AT), they express a very unanimous opinion on the issues raised, with very homogeneous distributions (table VI). The same can be found in other works such as that of [35], which participants were practicing social educators. The standard deviations are, in many cases, less than 1, which indicates that they agree with the valuation of the variables. In general, they consider ICT very useful for training ($\bar{x}=4.52$, $S_x=0.76$), although they do not believe they are sufficiently trained to

use these technologies ($\bar{x}=3.46$, $S_x=1.10$). They also consider them necessary and useful for their profession ($\bar{x}=4.28$, $S_x=0.92$), they think that they save time and work ($\bar{x}=4.25$, $S_x=0.92$), they consider them as professional development tools ($\bar{x}=4.10$, $S_x=1.00$) and feel competent to use them in their work activities ($\bar{x}=4.33$, $S_x=0.86$), although they think that they should improve their initial and continuous ICT training ($\bar{x}=4.46$, $S_x=0.78$).

TABLE VI
DESCRIPTIVE STATISTICS ON ATTITUDE TOWARDS ICT

Attitude (AT)	\bar{x}	σ	Asymmetry	Kurtosis
Addressees can use ICT	3.675	1.2219	-.576	-.636
ICT are necessary and useful for their profession.	4.287	.9277	-1.317	1.275
ICT save professional effort and work.	4.258	.9258	-1.221	1.118
ICT are useful for training.	4.521	.7664	-1.615	2.164
Users have the adequate training to use ICT in their profession.	3.467	1.1039	-.267	-.661
ICT are a cold and distant communication media.	2.668	1.0915	.159	-.471
ICT are professional development tools.	4.109	1.0000	-1.008	.545
Social Educator is competent to use ICT in their profession.	4.334	.8607	-1.195	.963
Improve initial and continuous training of SE in ICT.	4.464	.7813	-1.443	1.812

Asymmetry and kurtosis are distribution measures that allow us to identify how the values are grouped according to their graphic representation and if the data are distributed regularly around the average. Considering the results obtained, we can affirm that the positive asymmetries are since most of them are above the value of the arithmetic mean, and those that are negative (all the items minus one) to which the greatest amount of data are added to the values which are lower than the average.

B. Inferential Analysis of Demographic Variables

If we focus on the gender variable (table VII), there are significant differences in the knowledge dimension (KN) ($t=4.97$, $p<.05$), but they are not observed in the other two dimensions evaluated: usage (US) ($t=1.68$, $p>.05$) and attitude (AT) ($t=0.88$, $p>.05$), with a very small effect size ($d=0.2$, $d=0.08$ respectively), which corresponds to 2% and 1% of the variance explained. As in other research carried out with professionals in internships and training education, it is confirmed that gender is more powerful mainly in the knowledge dimension and less in usage and attitude dimensions ([36] and [37]).

TABLE VII
DESCRIPTIVE STATISTICS AND T-TEST RESULTS FOR THE GENDER VARIABLE

Gender	Male		Female		Kolmogorov-Smirnov			t-Test		d (Cohen)
	N	\bar{x} (SD)	N	\bar{x} (SD)	Z	gl	Sig	t	Sig.	
KN	154	.78 (.13)	268	.71 (.14)	9.30		.000	4.97	.000	0.5
US	154	3.34 (.76)	268	3.21(.84)	2.54		.000	1.68	.094	0.2
AT	154	4.00 (.60)	268	3.95(0.55)	8.25		.000	0.88	.377	0.08

Note. N = sample number. \bar{x} (SD) = mean (standard deviation). t = Student's t. Sig = significance level (0.05).

In relation to the age variable (table VIII), no significant differences were found, neither in the knowledge (KN) (F=1.71, p>.05), nor in the management (US) (F=0.09, p>.05), nor in attitude (AT) (F=1.05, p>.05), with a very

small effect size (d= 0.0, d=0.0, d=0.1 respectively), which corresponds in all three cases to the 1% of the variance explained. Unlike in other studies in which it concludes the influence of age in favor of the younger [38].

TABLE VIII
DESCRIPTIVE STATISTICS AND ANOVA TEST RESULTS FOR THE AGE VARIABLE

Age	18-28 years		29-39 years		40-51 years		52-62 years		ANOVA		d (Cohen)
	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	F	Sig.	
KN	95	.72 (.14)	169	.75 (.13)	121	.75 (.15)	32	.70 (1.43)	1.71	0.16	0.0
US	95	3.27 (.86)	169	3.25 (.75)	121	3.25 (.85)	32	3.33 (.89)	0.09	0.96	0.0
AT	95	3.90 (.61)	169	3.96 (.54)	121	4.04 (.54)	32	3.97 (.63)	1.05	0.36	0.1

Note. N = sample number. \bar{x} (SD) = mean (standard deviation). Sig = significance level (0.05).

Finally, in the variable Autonomous Community (CC. AA) (table IX), no significant differences were found in any

of the three dimensions (KN, F=1.51, p>.05, US, F=0.98, p>.05; AT, F=0.52, p>.05), in contrast to other studies [22].

TABLE IX
DESCRIPTIVE STATISTICS AND ANOVA TEST RESULTS FOR THE CCAA VARIABLE

CCAA	Cataluña		Asturias		Castilla La Mancha		Cantabria		Valenciana		La Rioja		ANOVA	
	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	F	Sig.
KN	76	0.76 (.142)	3	0.75 (.086)	7	0.75 (.159)	9	0.70 (.101)	22	0.77 (.138)	1	0.80 (-)	1.51	.08
US	76	3.24 (.841)	3	3.83 (.750)	7	3.37 (.710)	9	3.05 (.983)	22	3.36 (.805)	1	3.75 (-)	0.98	.46
AT	76	4.02 (.523)	3	4.03 (.449)	7	3.90 (.568)	9	4.14 (.461)	22	4.01 (.617)	1	3.88 (-)	0.52	.94
CCAA	Ceuta		Navarra		Aragón		Canarias		Andalucía		Galicia		ANOVA	
	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	F	Sig.
KN	1	0.70 (-)	8	0.65 (.097)	3	0.80 (.050)	11	0.65 (.230)	88	0.75 (.156)	15	0.82 (.084)	1.51	.08
US	1	2.25 (-)	8	3.16 (.898)	3	3.10 (.260)	11	3.25 (.776)	88	3.31 (.799)	15	3.49 (.602)	0.98	.46
AT	1	4.22 (-)	8	4.12 (.430)	3	3.77 (.587)	11	4.10 (.593)	88	3.99 (.622)	15	4.00 (.446)	0.52	.94
CCAA	Murcia		Extremadura		Castilla y León		Madrid		País Vasco		Islas Baleares		ANOVA	
	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	F	Sig.
KN	19	0.75 (.139)	19	0.73 (.158)	53	0.70 (.152)	45	0.76 (.147)	22	0.69 (.122)	20	0.69 (.124)	1.51	.08
US	19	3.12 (.722)	19	3.31 (.867)	53	3.30 (.837)	45	3.41 (.787)	22	2.89 (.908)	20	2.91 (.929)	0.98	.46
AT	19	3.91 (.592)	19	4.05 (.705)	53	3.91 (.620)	45	3.99 (.481)	22	3.76 (.561)	20	3.81 (.688)	0.52	.94

C. Inferential Analysis of Professional Variable

Regarding the academic qualification (table X), there are significant differences in the management dimension (US) (F=1.69, p <.05) and attitude (AT) (F=1.65, p<.05). The differences show a medium size effect, according to the interpretation of Cohen (1988) (d=0.4, d=0.5, d=0.4, respectively), which corresponds to 4% and 5% of then

variance explained. These differences in management are in favor of those professionals who studied the Diploma or Degree in Social Education compared to those who studied Teaching. In the attitude, those who studied Module of FP are shown more positively, presenting a more negative attitude those who come from the Degree in Psychology.

TABLE X
DESCRIPTIVE STATISTICS AND ANOVA TEST RESULTS FOR THE ACADEMIC QUALIFICATION VARIABLE

	ES		FP		PE		PS		MG		OT		ANOVA		d Cohen
	SE		VT		PE		PS		TE		OT		F	Sig.	
	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)			
KN	343	0.74 (.14)	11	0.75 (.14)	16	0.68 (.16)	19	0.70 (.15)	11	0.65 (.15)	22	0.73 (.14)	1.23	.23	0.4
US	343	3.30 (.81)	11	3.26 (.54)	16	3.01 (.77)	19	3.00 (.96)	11	2.78 (.59)	22	3.44 (.81)	1.69	.04	0.5
AT	343	3.98 (.55)	11	4.20 (.53)	16	3.94 (.37)	19	3.75 (.87)	11	3.87 (.70)	22	3.81 (.57)	1.65	.05	0.4

Note: SE- Degree in Social Education. VT- Coming from VT. PE- Degree in Pedagogy. PS- Degree in Psychology. TE- Degree in Teaching. OT- Other degrees.

Note: N = sample number. (SD) = mean (standard deviation). Sig. = level of significance (0.05).

In relation to professional experience (table XI), there are no significant differences in knowledge (KN) ($F=0.24$, $p>.05$), nor in management (US) ($F=0.24$, $p>.05$) nor in attitude (AT) ($F=1.00$, $p>.05$); with a very small effect size ($d=0.0$, $d=0.0$, $d=0.1$ respectively), which corresponds in the

three cases to 1% of the variance explained. Considering the professional field (table XII), there are significant differences that affect their value in two of the three dimensions of digital competence studied.

TABLE XI
DESCRIPTIVE STATISTICS AND ANOVA TEST RESULTS FOR THE PROFESSIONAL EXPERIENCE VARIABLE

	0-10 years		11-20 years		21-30 years		31-40 years		ANOVA		d Cohen
	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)	F	Sig.	
KN	242	0.73 (.14)	125	0.74 (.15)	31	0.73 (.15)	8	0.70 (.15)	0.24	.86	0.0
US	242	3.24 (.82)	125	3.29 (.79)	31	3.25 (.88)	8	3.43 (.85)	0.24	.86	0.0
AT	242	3.94 (.59)	125	4.03 (.52)	31	3.99 (.49)	8	3.77 (.94)	1.00	.39	0.0

Note. N = sample number. \bar{x} (SD) = mean (standard deviation). Sig = significance level (0.05).

TABLE XII
DESCRIPTIVE STATISTICS AND RESULTS OF THE ANOVA TEST FOR THE PROFESSIONAL FIELD VARIABLE

	KN		US		AT	
	N	\bar{x} (SD)	N	\bar{x} (SD)	N	\bar{x} (SD)
SS	140	0.71 (.14)	140	3.13 (.82)	140	3.98 (.57)
ASIJ SAIY	97	0.75 (.13)	97	3.11 (.81)	97	3.90 (.60)
DS SUM	39	0.73 (.15)	39	3.27 (.83)	39	3.82 (.65)
ASM SAE	25	0.75 (.17)	25	3.26 (.82)	25	4.04 (.50)
FIE TIE	17	0.76 (.11)	17	3.75 (.66)	17	4.04 (.40)
ESA EHA	22	0.68 (.16)	22	3.19 (.81)	22	3.97 (.49)
EOTL ELFT	10	0.76 (.11)	10	3.80 (.62)	10	4.14 (.66)
AGS ASM	7	0.78 (.10)	7	3.40 (.54)	7	4.39 (.42)
AD	20	0.83 (.14)	20	3.60 (.83)	20	4.04 (.63)
ISMIS SIMSI	10	0.76 (.15)	10	3.23 (.62)	10	3.94 (.48)
ISA SIRAS	4	0.71 (.10)	4	3.26 (.93)	4	4.19 (.50)
AET ETF	10	0.76 (.12)	10	3.78 (.75)	10	4.07 (.49)
O	21	0.77 (.16)	21	3.57 (.77)	21	4.02 (.51)
	KN		US		AT	
ANOVA	F	1.78	2.40	0.90		
	Sig.	.049	.005	.53		
d Cohen		0.2	0.4	0.1		

Note. N = sample number. \bar{x} (SD) = mean (standard deviation). Sig = significance level (0.05).

Note: SS: Social Services. SAIY: Socio-educational actions with infancy and youth. SUM: Social unprotection of minors. SAE: Socio-educational actions with the elderly. TIE: Training and information for employment. EHA: Education for health and addictions. ELFT: Education for leisure and free time. ASM: Animation and socio-cultural management. AD: Attention to disability. SIMSI: Socio-educational intervention and mediation for social integration. SIRAS: Socio-educational intervention in the regulated and adult spheres. ETF: Emerging and transversal fields. O: Other.

The knowledge dimension (KN) ($F=1.78$, $p<.05$) and the usage dimension (US) ($F=2.40$, $p<.05$) are significantly influenced by the working field. With a small effect size in knowledge (KN) and attitude (AT) ($d=0.2$; $d=0.1$ respectively), and medium in usage (US) ($d=0.4$), which corresponds to 2% and 1% of the variance explained in the first case and 4% in the second case. The professionals who

acknowledge having more knowledge about ICT are those who develop their work in the area of Attention to Disability and those who acknowledge not knowing a greater number of concepts are those who work in the area of Education for Health and Addictions. Those who carry out their professional work in Education for leisure and free time are those who say they handle ICT better than those who work

in the field of socio-educational actions with children and young people. There are no significant differences in attitudes towards ICT.

D. Regression Analysis Demographic and Professional Variables

In order to corroborate the significant differences found, the Lambda regression test was applied to those variables whose data could be used, obtaining the following results: The gender variable has its greatest predictive power over the usage dimension (US) (table XIV). With the knowledge (KN) and attitude (AT) dimensions it loses its predictive relevance (tables XIII and XV). In the discriminant represented by the digital usage, the equation shows a sufficient canonical correlation, with an optimal goodness of adjustment (Wilks's Lambda=.050, p=.046).

TABLE XIII
FIXING WITH WILKS' LAMBDA STATISTICS (GENDER-KNOWLEDGE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
GE	1.93	.020	.275
KN	1.93		

TABLE XIV
FIXING WITH WILKS' LAMBDA STATISTIC (GENDER-USAGE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
GE	1.93	.050	.046
US	0.82		

TABLE XV
FIXING WITH WILKS' LAMBDA STATISTIC (GENDER-ATTITUDE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
GE	1.41	.026	.107
AT	0.78		

The age variable shows its greater predictive power in the dimensions of management (US) (Wilks' Lambda =.082, p=.000) and attitude (AT) (Wilks' Lambda=.043, p=.002) (tables XVII and XVIII). In the knowledge dimension it loses its predictive relevance (table XVI). The equations show a sufficient canonical correlation, with an optimum goodness of fit.

TABLE XVI
FIXING WITH WILKS' LAMBDA STATISTIC (AGE-KNOWLEDGE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
AG	1.09	.013	.257
KN	0.33		

TABLE XVII
FIXING WITH WILKS' LAMBDA STATISTIC (AGE-USAGE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
Edad	3.65	.082	.000
AG			
US	1.40		

TABLE XVIII
FIXING WITH WILKS' LAMBDA STATISTIC (AGE-ATTITUDE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
AG	3.28	.043	.002
AT	1.81		

With respect to the Autonomous Community variable (CCAA), as can be observed in tables XIX, XX and XXI, it

shows predictive power over the three dimensions (KN, Wilks' Lambda=.055, p=.009; US, Wilks' Lambda=.118, p=.000; AT, Wilks' Lambda=.085, p=.001). All predictor variables acquire a significant degree of relationship to the equation.

TABLE XIX
FIXING WITH WILKS' LAMBDA STATISTIC (CCAA-KNOWLEDGE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
CCAA	2.10	.055	.009
KN	1.99		

TABLE XX
FIXING WITH WILKS' LAMBDA STATISTIC (CCAA-USAGE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
CCAA	5.65	.118	.000
US	3.90		

TABLE XXI
FIXING WITH WILKS' LAMBDA STATISTIC (CCAA-ATTITUDE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
CCAA	3.45	.085	.001
AT	3.22		

The academic qualification" variable shows further results on the three analyzed dimensions: knowledge (KN) (Wilks' Lambda=.048, p=.000), usage (US) (Wilks' Lambda=.047, p=.000) and attitude (AT) (Wilks' Lambda=.041, p=.001) (tables XXII, XXIII and XXIV). The equations show a sufficient canonical correlation, with optimum goodness of fit in all cases.

TABLE XXII
FIXING WITH WILKS' LAMBDA STATISTIC (ACADEMIC QUALIFICATION-KNOWLEDGE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
AQ	3.46	.048	.000
KN	1.41		

TABLE XXIII
FIXING WITH WILKS' LAMBDA STATISTIC (ACADEMIC QUALIFICATION-USAGE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
AQ	4.29	.047	.000
US	1.41		

TABLE XXIV
FIXING WITH WILKS' LAMBDA STATISTIC (ACADEMIC QUALIFICATION-ATTITUDE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
AQ	3.22	.041	.001
AT	1.00		

The professional experience variable shows further results over the usage dimension (US) (Wilks' Lambda=.058, p=.004) (table XXVI). The equation shows sufficient canonical correlation, with optimum goodness-of-fit. The dimensions knowledge (KN) (Wilks' Lambda=.016, p=.30) and attitude (AT) (Wilks' Lambda=.028, p=.259) (tables XXV and XXVII) do not show predictive power.

TABLE XXV
FIXING WITH WILKS' LAMBDA STATISTIC (PROFESSIONAL EXPERIENCE-KNOWLEDGE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
PE	0.57	.016	.301
KN	0.87		

TABLE XXVI
FIXING WITH WILKS' LAMBDA STATISTIC (PROFESSIONAL EXPERIENCE-USAGE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
PE	2.52	.058	.004
US	2.01		

TABLE XXVII
FIXING WITH WILKS' LAMBDA STATISTIC (PROFESSIONAL EXPERIENCE-ATTITUDE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
PE	0.98	.028	.259
AT	0.85		

Finally, the professional field variable indicates capacity on the three dimensions analyzed: knowledge (KN) (Wilks' Lambda=.036, p=.011), usage (US) (Wilks' Lambda=.10, p=.000) and attitude (AT) (Wilks' Lambda=.065, p=.001) (tables XXVIII, XXIX and XXX). The equations show a sufficient canonical correlation, with optimum goodness of fit in all cases.

TABLE XXVIII
FIXING WITH WILKS' LAMBDA STATISTIC (PROFESSIONAL FIELD-KNOWLEDGE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
PF	1.26	.036	.011
KN	2.23		

TABLE XXIX
FIXING WITH WILKS' LAMBDA STATISTIC (PROFESSIONAL FIELD-USAGE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
PF	4.96	.102	.000
US	3.03		

TABLE XXX
FIXING WITH WILKS' LAMBDA STATISTIC (PROFESSIONAL FIELD-ATTITUDE)

Total structure matrix	T approx.	Wilks' Lambda	Sig
PF	2.30	.065	.001
AT	2.79		

IV. CONCLUSION

This article analyzes the self-perceived digital competence of Social Education professionals in Spain, as well as it shows whether demographic and professional variables influence it. In self-perceived digital competence, self-assessments are very high in the knowledge dimension, very low in the skills dimension in relation to the usage of ICT devices and medium in relation to the use of tools. The attitude towards ICT is quite positive according to their necessity and importance for professional development.

As for the influence of demographic variables on self-perceived digital competence, in general neither gender, age, nor the "Autonomous Community" influences the dimensions of usage and attitude. Only significant differences were found in knowledge, in favor of the male gender. Male social educators claim to have more ICT knowledge than female social educators.

With regards to age, although this sample shows more predictive power in the dimensions of handling and attitude losing its relevance in that of knowledge, no significant differences were found. Finally, the "Autonomous

Community" is the most powerful over the three dimensions, but no significant differences were found in this respect.

With respect to professional variables, results were found supporting the idea of the influence of some professional factors when assessing digital competence. Both academic qualifications, experience and professional field show predictive power over the three studied dimensions. However, the first has a significant influence, especially on the handling and attitude towards technology. Years of experience do not determine the valuation of digital competence by social educators. And the professional field influences knowledge and usage.

As the main constraint of this research, it should be noted that due to the limited nature of the sample, the results should not be generalized. However, such results are representative and may be useful for the professional community because the contribution of the self-assessment of the digital competence of active social educators may encourage reflection on their professional training and development. Given the lack of research on the subject, in the field of Social Education, studies are suggested in Spain and other countries to help developing the field of study of the digital competence of social educators.

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