Determination of problematic use of social networks by university students

(Determinación del uso problemático de las redes sociales por estudiantes universitarios)

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Abstract

The uses of Information and Communication Technologies (ICT) in general, and the Internet specifically, are present on a daily basis in many people's lives. It is a fact that we are a part of a digital society, and therefore new generations belong to the so-called "digital natives" group. In this context, new problems have emerged, related to the misuse or abuse of certain ICT tools, such as social networks. The main purpose of this study was to carry out an analysis of the uses of social networks by students from the Early Childhood Education Degree and the Primary Education Degree at the University of Cordoba (Spain). Data collection was performed using an adapted version of the Internet Addiction Test. The results obtained showed that students did not perceive their behavior as adverse regarding the use of the Internet and social networks. Also, we have to highlight that the women manifested more problematic uses of social networks than the men. In conclusion, we can state that teachers in training do not evidence a harmful use of social networks. Nevertheless, we consider that this conclusion should be taken cautiously and further research is needed about this aspect of ICT.

Keywords: student teacher; information and communication technologies; Internet; social Networks; addiction.

Resumen

Las Tecnologías de la Información y la Comunicación (TIC)en general, y el Internet en particular, están presenten diariamente en nuestras vidas. Es un hecho que vivimos en una sociedad digital, y por tanto, las nuevas generaciones pertenecen ya a lo que se ha denominado "nativos digitales", ya que es el mundo en el que se desenvuelven continuamente. Ello ha provocado que comience a hablarse de uso problemático o abuso de determinadas herramientas que ofrecen las TIC, como es el caso de las Redes Sociales. El presente estudio tiene como propósito general realizar un análisis del uso de las redes sociales en estudiantes universitarios del Grado de Magisterio de Educación Infantil y Primaria de la Universidad de Córdoba. Para la recogida de la información se empleó una versión adaptada del Internet Addiction Test. Los resultados han indicado que el alumnado no percibe tener una conducta nociva ni con Internet ni con las redes sociales en particular. Un dato a resaltar es que las chicas han manifestado un uso más problemático de las redes sociales que los chicos. En conclusión, podemos indicar que los maestros en formación no presentan un uso problemático de las redes sociales. No obstante, consideramos que hay que tomar se considera que se debería tomar esta conclusión con cautela y seguir analizando el uso que se hace de las TIC.

Palabras clave: estudiante para profesor; tecnologías de la información y de la comunicación; Internet; redes sociales; adicción.

As of today, making progress in society implies thinking about the development of Information and Communication Technologies (ICT). We live in a digital society, with that which is digital surrounding us, being present at many moments of our lives; this has resulted in conversations about addiction or problematic uses of certain tools offered by the ICT.

The Diagnostic and Statistical Manual of Mental Disorders (DSM-V) (APA, 2013) does not recognize being connected to the Internet for a large number of hours, conducting or engaging in different online activities, as an addiction, and only recognizes it when the use of the ICT is linked to gaming, and when the variable "money" comes into play. Nevertheless, it is significant to observe how the youth of today spend a great part of their lives connected to the Internet in general and to social networks in particular (Sánchez, Cantero-Téllez and Rodríguez-Martínez, 2016).

The study conducted by Marín, Sampedro and Muñoz (2015) has already highlighted this issue. Thus, it was deemed important to determine if university students were found to be involved in problematic uses of social networks, and if these uses were concerned with ICT in general or social networks in particular, and if it altered their academic, personal or even social and family life in some manner.

The present work reflects the research conducted with university students enrolled in the Early Childhood Education and Primary School Degrees at the University of Cordoba, and intends to clarify if these university students demonstrate problematic uses of social networks, given that, as stated by González and Muñoz (2016), these are some of the most representative tools of the Internet in general and Web 2.0 in particular.

ON THE NETWORKS AND THEIR PROBLEMATIC USES

The staggering development of the Internet, as well as all the tools that rely on it for their proper use, is today, without a doubt, unquestionable. Some people point to the fact that these tools, in general, are more democratic, open, collaborative, creative, participative, socializing and intuitive as compared to the ones from yesteryear (Blees and Rittberger, 2009; López and Llorente, 2010). Along with this, it has been found that children today are more digital (Díaz-Lázaro, Solano and Sánchez, 2017), not due to being born on a specific date, but because practically all their activities are linked to these resources, and because they have linked them to their life as something that is completely natural (Prensky, 2001). From all the tools that can be found on the Internet, social networks in general, and social software in particular, are the ones that have the greatest presence in the day-to-day lives of youth.

Social networks, according to Llamas and Pagador (2014, p.45), "have come to blur physical, geographical and social barriers". Their use allows us to be in contact with other Internet users, promoting a continuous exchange of information of diverse types and impact. This is why one of the elements that most characterizes social networks, and perhaps the reason why they have so many followers, is that their users can create a customized profile about themselves, which can be shared with other Internet users (Roig, Mengual and Rodríguez, 2013; Dans and Muñoz, 2016), besides creating new ways of communicating, relating and exchanging information, propitiating spaces of socialization, of sharing experiences and feelings (Osorio, Molero, Pérez and Mercader, 2014; García-Umaña and Tirado-Morueta, 2018; Rodríguez, Prats, Oberst and Carbonell, 2018).

On the other hand, other authors have pointed to the diverse benefits that are part of the use of social networks. Thus, we find how Chan and Lee (2013) indicate that participation in any network results in a decrease in blood pressure and conflicts, and in the promotion of collaboration, exchange, participation, cohesion, cooperation and generation of harmonious spaces. Others have also offered the opinion that they promote active commitment (Trujillo, Aznar and Cáceres, 2015; Lorenzo-Romero and Buendía-Navarro, 2016), help with maintaining friendships at the same time that they can help create new ones, and entertain, even being understood as the organizing element of the life of a business (Caldevilla, 2010).

Nevertheless, it is important to point out that others have pointed out elements that can contribute risks or have indicated negative aspects of social networks. Thus, Echeburúa (2012, p.438) reminds us about the possibility of "creating a fictitious identity, driven by an

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element of deception, self-deception or fantasy". Along this line, it can be observed how it can even distort reality, creating a parallel world that has little to do with day-to-day reality. Among other risks, we can point to cyberbullying, sexting, grooming, sharing of information that can create misunderstandings or facilitate a crime, violation of intimacy/privacy, anxiety, stress, etc.

Ultimately, social networks attract youth as well as adults, due to a human being's need to be in contact with others, with their wish to communicate – and this can be the element that can provoke excessive use of these networks. Based on the research by Labrador and Villadangos (2010), and Prado, Suarez, Rodríguez, Moreno, Serrato, and Rivera (2018), it could not be stated that the number of hours is what determines if the Internet user has an addiction, so further discussion on the problematic uses of the Internet in general, and of social networks in particular, is suggested. This is what leads us to ask if youth are abusively using these networks, and this is the reason why research studies similar to the present one have been conducted in diverse contexts, in order to determine the profile of problematic use. As the report from 2011 by Dahlstrom, De Boor, Grunwald and Vockley for EDUCAUSE (Higher Education Technology Association) states, 90% of young Americans participated in some social network, and in Spain, the study conducted by IAB (Interactive Advertising Bureau) in 2018, indicated that 85% of the youth had some type of social network (IAB Spain, 2018).

METHODOLOGY

In the present research study, a descriptive, inferential and correlational methodology was utilized, using a survey to gather the opinions of university students with respect to the uses they make of ICT. The adoption of a survey is particularly useful when the intention is to collect information about perceptions and opinions related to educational aspects, and for analyzing possible relationships between the study variables (Alaminos and Castejón, 2006).

The general purpose of the study was to conduct an analysis of the use of social networks by university students. This analysis was specified through the following objectives:

1. To describe the opinions of university students enrolled in a teaching degree, related to problematic uses or not of social networks.
2. To analyze the difference between the different items of the scale *problematic uses of social networks* (dependent variables) to the independent variables (gender, academic year, and age).
3. To verify the existing relationship between the different items of the scale.

Starting with these, the following hypotheses were stated:

a. Women have a greater problematic use of social networks compared to men.
b. The teachers in initial training (1st year students), with less training on Media Education (ICT), show a more addictive behavior or problematic uses of social networks compared to the students who have had more training (2nd year students).
c. The teachers in initial training who are younger, show more problematic uses of social networks compared to the older teachers.
d. The relationship of the items that comprise the scale utilized in the study is significant.

Description of the sample

The participants of this study were teachers in initial training at the University of Cordoba, enrolled in the Early Childhood and Primary Education degrees, who were taking two courses related to ICT, taught during the first and second years of the degrees. Thus, the sample selection was probabilistic and incidental due to accessibility (Mateo, 2012).

The total population was composed of 715 subjects, from which a sample of 23.1% was obtained, with a confidence error interval of 5.3%, which was distributed in the following manner:

Of the sample, 78.8% were women, and based on the contributions by Gialamas, Nikiolopoulu and Koutromanos (2013), we can attest to the non-existence of gender bias in the selection of the sample, as the social and legal sciences tend to have a high membership of women.

As for age, it was observed that most of the population were 19 years old (44.7%), with a lesser number of participants being 24 years of age or older (10.6%).

Related to academic year (1st or 2nd), it was observed that 32.9% were in their 1st year, and 67.1% were in their 2nd year, of which 46.8% corresponded to the Early Childhood Education Degree, and 53.2% were enrolled in the Primary Education Degree.

As to the question of the students having created a profile in any social network, the answer was a significant 1.7% who said that they had not created a profile, and 95.2% who verified having social network profiles. Of the ones who answered affirmatively, most had a profile in Facebook (51.5%), with Twitter (30.3%) being the second option (see Table 1). These data are similar to those obtained in previous studies (Rial, Gómez, Braña and Varela, 2014; Marín, Sampedro and Muñoz, 2015; Ruíz De Miguel, 2016).

Table 1. Profiles in social networks

	Frecuency.	%
Facebook	119	51.5
LinkedIn	3	1.3
Skype	15	6.5
Tuenti	10	4.3
Twitter	70	30.3
Other	8	3.5

Instrument

For gathering the information, the instrument created by Kimberly Young was utilized, as it referred to Internet addiction (Watters, Keefer, Kloosterman, Summerfeldt and Parker, 2013) and had already been used and adapted to the sphere of social networks by Marin, Sampedro and Muñoz (2015). In this case, the items that referred to the socio-demographic variables were reduced to 5 items, related to: gender, age, academic year, degree, possession of a profile in some social network, and if the answer to the last question was affirmative, indicating which or which ones.

In order to determine if the instrument had the level of reliability that had been obtained in other, previous studies, Cronbach's Alpha was utilized, with the resulting value being .975. It should be noted that in our case, it was higher than the reliability level found by Marin, Sampedro and Muñoz (2015) (.878) as well as that found by Dias, Cadime, García, García-Castillo and García (2018) (.90). Taking into account the item by item discrimination, this oscillated between .975 and .973, which indicates that the instrument had stability and reliability.

The poll utilized was composed of 19 items, and the response scale used was a Likert-type with 5 response options, where 1=rarely, 2=once in a while, 3=frequently, 4=very frequently, and 5=always.

Data Analysis

Initially, a descriptive study was conducted of the variables that comprised the questionnaire. For this, the means and standard deviations were calculated.

In the second place, an inferential study was conducted through the use of analysis of variance to verify the existence of a relationship between the independent variables of the questionnaire and the independent variables (gender, academic year, degree and age). For this, a student's t-test and ANOVAs were utilized. The first was used when the comparison was between two samples (gender, academic year, degree), and the second was used when the comparison was between three samples or more (age). In every case, the effect size of the difference in means was calculated with Cohen's *d* (Cohen, 1977), which allows us to see the

significance of the scores of each group, respectively. Nevertheless, according to Fritz, Morris and Richler (2012), its interpretation depends on the area of research, with these authors considering that in education, scores around .25 are considered significant.

Lastly, a correlational study was performed to verify the relationship or lack thereof between the different items of the questionnaire. For this, bivariate correlations were utilized.

RESULTS

Descriptive study

Looking at the results obtained (see Table 2), it was verified that the teachers in training did not consider themselves to have a negative relationship with the Internet or with social networks, and they also did not believe that their uses could harm their academic or family life or relationship with their peers.

Table 2. Descriptive statistics

	Media	Standar Desviation (SD)
1: How frequently do you think you are connected to the Internet?	2.67	1.751
2: How frequently do you neglect the house chores to spend more time on the Internet?	1.92	1.674
3: How frequently do you prefer to spend time connected to the Internet?	1.45	1.520
4: How frequently do you create new relationships with other social network users?	1.86	1.755
5: How frequently do the other people in your life complain about the amount of time you spend on social networks?	1.99	1.863
6: How frequently are your grades or university work affected due to the time you spend connected to social networks?	1.68	1.872
7: Do you check your email before another academic activity you have to do?	2.59	1.951
8: How frequently is your performance in your studies affected by the time you spend on social networks?	1.71	1.815
9: How frequently do you become defensive or reserved when someone asks you about what you do in the social networks?	1.69	1.723
10: How often do you block ideas/thoughts of your everyday life that worry you with thoughts/ideas about what is happening in your social network life?	1.63	1.813
11: Do you think that life without social networks would be boring?	2.22	1.840
12: How frequently do you become angry when someone interrupts you when you are connected to the social networks?	1.64	1.734
13: How frequently do you spend the night or part of it connected to the social networks?	2.10	2.035
14: How frequently do you feel disconnected when you are not connected to the social networks?	2.04	1.863
15: How often do you disconnect from the social networks and think “a few more minutes”?	2.17	1.831
16: How often do you try to reduce the time you spend connected to the social networks and you are not able to?	1.99	1.991
17: When someone asks you about how much time you spend in social networks, do you hide the real amount of connection time?	1.57	1.816
18: How often do you spend more time connected to the social networks instead of going out with friends and acquaintances?	1.51	1.688
19: How often do you feel depressed, angry or in a bad mood if you are not connected to the social networks, and does this feeling disappear when you connect?	1.53	1.693

Inferential study

A student’s t-test was performed in order to answer the hypotheses (a. women exhibit greater problematic uses of social networks compared to men; b. the teachers in initial training with less training on Media Education have a more addictive behavior or problematic uses towards social networks compared to the older students).

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From the results, with the intention of providing a response to hypothesis (a), the values resulting from the student's t-tests, as well as the values obtained from Cohen's *d*, indicate the existence of significant differences related to the participant's gender, with respect to items related to the uses they make of social networks. Except for item 1, in which the value of Cohen's *d* was lower than .25 (d=.11), the results pointed to men having higher means than the women with respect to uses of social networks (see Table 3), which was similar to the data found by Diaz et al. (2018). The men's presence in social networks was higher.

Table 3. Comparison of difference of means according to gender

	Gender	N	Media	SD	
1	Men	49	2.82	2.506	T=.673 ; Cohen's d=.11; p=.000
	Women	182	2.63	1.491	
2	Men	49	2.59	2.557	T=3.219; Cohen's d=.42; p=.000
	Women	182	1.74	1.294	
3	Men	49	2.24	2.634	T=4.276; Cohen's d=.69; p=.000
	Women	182	1.24	.937	
4	Men	49	2.59	2.508	T=3.375; Cohen's d=.54; p=.000
	Women	182	1.66	1.435	
5	Men	49	2.69	2.778	T=3.027; Cohen's d=.46; p=.000
	Women	182	1.80	1.481	
6	Men	49	2.76	3.072	T=4.736; Cohen's d=.77; p=.000
	Women	182	1.39	1.247	
7	Men	49	3.57	2.821	T=4.087; Cohen's d=.66; p=.000
	Women	182	2.33	1.549	
8	Men	49	2.47	2.800	T=3.374; Cohen's d=.64; p=.000
	Women	182	1.51	1.382	
9	Men	49	2.53	2.631	T=3.955; Cohen's d=.57; p=.000
	Women	182	1.47	1.303	
10	Men	49	2.57	2.930	T=4.235; Cohen's d=.68; p=.000
	Women	182	1.38	1.263	
11	Men	49	2.69	2.748	T=2.076; Cohen's d=.34; p=.000
	Women	182	2.09	1.444	
12	Men	49	2.39	2.783	T=3.480; Cohen's d=.56; p= .000
	Women	182	1.44	1.254	
13	Men	49	3.02	3.146	T=3.663; Cohen's d=.77; p=.000
	Women	182	1.85	1.532	
14	Men	49	2.69	2.755	T=2.891; Cohen's d=.46; p=.000
	Women	182	1.87	1.404	
15	Men	49	2.78	2.576	T=2.627; Cohen's d=.43; p=.000
	Women	182	2.01	1.541	
16	Men	49	2.84	2.896	T=3.425; Cohen's d=.56; p=.000
	Women	182	1.76	1.603	
17	Men	49	2.20	2.646	T=2.787; Cohen's d=.45; p=.000
	Women	182	1.40	1.482	
18	Men	49	2.29	2.661	T=3.719; Cohen's d=.61; p=.000
	Women	182	1.30	1.240	
19	Men	49	2.10	2.640	T=2.688; Cohen's d=.43; p=.000
	Women	182	1.38	1.298	

In order to verify hypothesis (b), the scores from the student's t-tests and Cohen's *d* were likewise verified. In both cases, values were obtained that showed the existence of significant differences related to the use of social networks with respect to the academic year of the students (1st or 2nd year). More specifically, the significant differences were found in more than half of the items of the scale (item 4 and items 10 to 19), where it was observed that 1st year students had significantly higher means compared to 2nd year students (see Table 4). On the rest of the items, Cohen's *d* results indicated values lower than .25, which indicates that the effect size was small, and the existence of significant differences could not be confirmed.

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Table 4. Comparison of difference of means according to academic year

	Academic year	N	Media	SD	
1	1st Year	76	2.80	2.185	T=.826; d de Cohen=.06; p=.10
	2nd Year	155	2.60	1.497	
2	1st Year	76	2.08	2.183	T=.997; d de Cohen=-.35; p=.20
	2nd Year	155	1.85	1.359	
3	1st Year	76	1.74	2.181	T=2.021; d de Cohen=.13; p=.00
	2nd Year	155	1.31	1.036	
4	1st Year	76	2.14	2.302	T=1.752; d de Cohen=.23; p=.002
	2nd Year	155	1.72	1.399	
5	1st Year	76	2.21	2.288	T=1.254; d de Cohen=.18; p=.031
	2nd Year	155	1.88	1.611	
6	1st Year	76	1.86	2.319	T=.998; d de Cohen=.14; p=.023
	2nd Year	155	1.59	1.610	
7	1st Year	76	2.93	2.259	T=1.871; d de Cohen=.27; p=.097
	2nd Year	155	2.43	1.765	
8	1st Year	76	1.96	2.463	T=1.473; d de Cohen=.18; p=.000
	2nd Year	155	1.59	1.385	
9	1st Year	76	1.93	2.306	T=1.496; d de Cohen=.21; p=.007
	2nd Year	155	1.57	1.343	
10	1st Year	76	2.05	2.454	T=2.497; d de Cohen=.37; p=.000
	2nd Year	155	1.43	1.358	
11	1st Year	76	2.41	2.316	T=1.101; d de Cohen=.26; p=.004
	2nd Year	155	2.13	1.502	
12	1st Year	76	1.99	2.447	T=2.142; d de Cohen=.38; p=.000
	2nd Year	155	1.47	1.218	
13	1st Year	76	2.51	2.517	T=2.100; d de Cohen=.36; p=.003
	2nd Year	155	1.90	1.725	
14	1st Year	76	2.42	2.379	T=2.250; d de Cohen=.43; p=.001
	2nd Year	155	1.86	1.412	
15	1st Year	76	2.59	2.504	T=2.432; d de Cohen=.34; p=.000
	2nd Year	155	1.97	1.350	
16	1st Year	76	2.42	2.704	T=2.319; d de Cohen=.34; p=.000
	2nd Year	155	1.78	1.491	
17	1st Year	76	1.99	2.452	T=2.461; d de Cohen= .35; p=.000
	2nd Year	155	1.37	1.368	
18	1st Year	76	1.99	2.485	T=3.054; d de Cohen=.43; p=.000
	2nd Year	155	1.28	1.042	
19	1st Year	76	1.92	2.459	T=2.469; d de Cohen=.32; p=.000
	2nd Year	155	1.34	1.107	

Related to the polled student's degrees, the results provided by the comparisons of means conducted (student's t-tests) and the values from Cohen's *d* tests indicated that students from the Primary Education Degree, who had a greater digital training (as they had two courses related to ICT), showed significant differences on some items compared to students enrolled in the Early Childhood Education Degree. These items were: if they were connected for longer than was expected (item 1); how often they created new relationships with other social networks users (item 4); and the item related to becoming defensive or reserved when someone asked them about what they did in the social networks (item 9) (see Table 5).

Table 5. Comparison of difference of means according to degree

	Degree	N	Media	SD	
1	Early Child.Edu. Deg.	108	2.59	1.388	T=-.616; Cohen's d=-.08; p=.031
	Prim. Edu. Deg.	123	2.73	2.021	
2	Early Child.Edu. Deg.	108	1.66	1.104	T=-2.354; Cohen's d=-.30; p=.002
	Prim. Edu. Deg.	12	2.15	2.025	

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	Degree	N	Media	SD	
		3			
3	Early Child.Edu. Deg.	108	1.19	.848	T=-2.530; Cohen's d=-.29; p=.000
	Prim. Edu. Deg.	123	1.67	1.901	
4	Early Child.Edu. Deg.	108	1.62	1.412	T=-1.975; Cohen's d=-.26; p=.062
	Prim. Edu. Deg.	123	2.07	1.991	
5	Early Child.Edu. Deg.	108	1.73	1.082	T=-2.086; Cohen's d -.27; p=.000
	Prim. Edu. Deg.	123	2.22	2.324	
6	Early Child.Edu. Deg.	108	1.28	.884	T -3.272; Cohen's d=-.47; p=.000
	Prim. Edu. Deg.	123	2.03	2.378	
7	Early Child.Edu. Deg.	108	2.01	1.350	T=-4.562; Cohen's d=-.62; p=.000
	Prim. Edu. Deg.	123	3.11	2.239	
8	Early Child.Edu. Deg.	108	1.43	1.178	T=-.2.331; Cohen's d=-.30; p=.000
	Prim. Edu. Deg.	123	1.96	2.204	
9	Early Child.Edu. Deg.	108	1.52	1.264	T=-1.485; Cohen's d=-.20; p=.006
	Prim. Edu. Deg.	123	1.85	2.037	
10	Early Child.Edu. Deg.	108	1.18	.830	T=-3.869; Cohen's d=-.50; p=.000
	Prim. Edu. Deg.	123	2.03	2.290	
11	Early Child.Edu. Deg.	108	2.00	1.192	T=-1.808; Cohen's d=-.25; p=.000
	Prim. Edu. Deg.	123	2.41	2.203	
12	Early Child.Edu. Deg.	108	1.34	.898	T=-2.594; Cohen's d=-.34; p=.000
	Prim. Edu. Deg.	123	1.90	2.193	
13	Early Child.Edu. Deg.	108	1.82	1.471	T=-1.998; Cohen's d=-.26; p=.000
	Prim. Edu. Deg.	123	2.34	2.405	
14	Early Child.Edu. Deg.	108	1.76	1.143	T=-2.350; Cohen's d=-.30; p=.000
	Prim. Edu. Deg.	123	2.29	2.202	
15	Early Child.Edu. Deg.	108	2.07	1.337	T=-.793; Cohen's d=-.11; p=.004
	Prim. Edu. Deg.	123	2.26	2.176	
16	Early Child.Edu. Deg.	108	1.72	1.471	T=-1.992; Cohen's d=-.26; p=.000
	Prim. Edu. Deg.	123	2.23	2.336	
17	Early Child.Edu. Deg.	108	1.36	1.203	T=-1.715; Cohen's d=-.34; p=.001
	Prim. Edu. Deg.	123	1.76	2.208	
18	Early Child.Edu. Deg.	108	1.18	.830	T=-3.011; Cohen's d=-.38; p=.000
	Prim. Edu. Deg.	123	1.80	2.141	

	Degree	N	Media	SD	
19	Early Child.Edu. Deg.	108	1.20	.829	T=-2.945; Cohen's d=-.32; p=.000
	Prim. Edu. Deg.	123	1.82	2.150	

In order to answer hypothesis c (the teachers in initial training who are younger exhibit more problematic uses of social networks compared to the older teachers), the variable "age" was re-categorized, taking into account the following age intervals in years: 19-20; 21-22; 23-24; 25 and older, and an ANOVA was performed to verify if there were significant differences in the different items of the scale with respect to the age of the participants. The results obtained showed no significant differences with respect to the age in any of the items evaluated; so this hypothesis is rejected.

Correlational study

Lastly, and to verify if hypothesis d could be accepted (the relationships of the items that comprise the scale utilized in the study are significant), a bivariate correlation analysis was performed between the items that comprised the scale, with a level of significance of p=.001 set for this. The outcome data obtained pointed to the fact that all the items were correlated between themselves in a statistically significant manner, with a value of p=.000.

DISCUSSION AND CONCLUSIONS

It is indisputable that the increasing incursion of the Internet in general, and of social networks in particular, is a reality. As previously pointed out, they are the new way of communicating for adolescents and youth (Dans and Muñoz, 2016). This situation led us to ponder about the problematic or addictive uses of these networks by adolescents and youth of the digital society of the 21st century. Educated in a technological world, social software or in other words social networks, have become a catalyzing element of their impulses, emotions, feelings, beliefs, as creators of friendships and feuds, which affect their daily lives, which in this case is linked to the education sphere (Marín, Vázquez and Cabero, 2012; Cabero and Marín, 2013; Chang and Lee, 2013; Gómez, Ruíz and Sánchez, 2015; Marín, Sampedro and González, 2015; Sánchez-Rodríguez, Ruíz-Palmero and Sánchez-Rivas, 2015).

In the case of youth, already in 2009, the report written by the Pfizer foundation, pointed out that 98% of them, aged between 11 and 20 years, were users of an online social network (96%). This result was similar to that from the present study with students aged from 18 to 25 years, and from the data from Marín, Sampedro and González (2015) and Ruíz de Miguel (2016). Thus, it can be deduced that these social networks are an Internet resource that they have interiorized into their lives.

The teachers in training who participated in this study, just as in the study by Line (2015), usually connect with mainly Facebook and Twitter.

Taking into account the first objective (describe the opinions of university students enrolled in a teaching degree, related to their problematic or non-problematic uses of social networks), it can be stated that the students believe that they do not exhibit harmful behaviors with the Internet in general or with social networks in particular. These results are in contrast to those of Marín, Sampedro and González (2015) and Pontes, Caplan and Griffiths (2016) but in line with those from Carbonell and Oberst (2012).

In general, as verified in this inferential study, the 1st and 2nd year students employed and connected to social networks equally, and the academic year was not a variable that determined the amount of time they were connected, or that affected the relationships with family, friends and academics, as well as possible changes in their character (objective 2). Likewise, analyzing if the university degree studied determined problematic uses of social networks (objective 2), we found that the divergence between the teachers revolved around connection time. Social network connection time was found to be less than the time they

spent connected to the Internet in general, and they did not create new relationships with other social network users. These results were contrary to those of Kircaburun (2018), and it was also found that they did not become defensive or reserved when someone asked them about their activities in the social networks, which contrasted with the results of Alkeinaya and Norwawi (2014).

Focusing on the hypotheses, it was verified that hypothesis a (women exhibit greater problematic uses of social networks compared to men) was not accepted, so the alternative hypothesis must be accepted - women do not exhibit problematic uses of social networks – which is in agreement with the results reached by Colmenares et al. (2017) and Días et al. (2018). However, it was found that on average, men had a greater presence in social networks than women.

As for hypothesis b (the teachers in training with less ICT training exhibited an addictive behavior or problematic uses of social networks compared to the older teachers), the alternate hypothesis should be accepted, given that there were no differences regarding the digital training of the participants. However, the results were in agreement with Flores (2018), in that the students should possess a digital competence that helps them and that favors their learning.

As for hypothesis (c), which referred to the younger teachers in initial training exhibiting problematic uses of social networks compared to the older teachers, it should be rejected, as no significant differences were found in this respect.

Lastly, hypothesis d is accepted, as a significant relationship between the different items of the survey concerned with problematic uses of social networks was found.

In conclusion, it is indicated that the teachers in training in this institution did not exhibit problematic uses of social networks. Nevertheless, any generalization of this conclusion should be accepted with caution, and the broadening of the sample is argued, in order to be able to generalize the data further.

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