Excessive use of social networks: Psychosocial profile of Spanish adolescents

Uso excesivo de redes sociales: Perfil psicosocial de adolescentes españoles

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ABSTRACT

Understanding the factors that predict excessive use of social networks in adolescence can help prevent problems such as addictive behaviours, loneliness or cyberbullying. The main aim was to ascertain the psychological and social profile of adolescents whose use of SNSS is excessive. Participants comprised 1,102 adolescents aged between 11 and 18 from Girona (Spain). Those who made excessive use of social networks were grouped together. Their personality and social profiles were explored, the former using NEO FFI, NEO PI-R and Self-Concept AF5, and the latter through the use of Social Support Appraisals, self-attributed type of ICT use in the family and rules regarding ICT use at home. The prevalence of excessive use was 12.8%, being higher among girls. The personality profile was characterized by neuroticism, impulsivity and a lower family, academic and emotional self-concept. The social profile was defined by the perception of high ICT consumption in the mother and siblings, and a lack of rules. The protective factors were conscientiousness, the existence of rules, and being a boy; risk factors were the use of SNSS as a distraction and for fun, and the perception of high sibling consumption. Interventions based on gender and working on responsible ICT use within the family environment are proposed to prevent more serious psychological problems.

RESUMEN

Poder entender los factores que predicen un uso excesivo de redes sociales en la adolescencia puede ayudar a prevenir problemas como conductas adictivas, soledad o ciberacoso. El principal objetivo es explorar el perfil psicológico y social de adolescentes que realizan un uso excesivo de redes sociales. Participaron 1.102 adolescentes de 11 a 18 años de Girona (España). Se agruparon los que realizaban un uso excesivo y se exploró su perfil de personalidad (NEO FFI, NEO PI-R y autoconcepto AF5) y el social (apoyo social percibido, tipología autoatribuida de consumo de TIC en la familia y normas de uso de las TIC en el hogar). La prevalencia de uso excesivo fue del 12,8%, siendo mayor en chicas. El perfil de personalidad se caracterizaba por el neuroticismo, la impulsividad y menor autoconcepto familiar, académico y emocional. Percibir elevado consumo de TIC en la madre y hermanos y no disponer de normas de uso define su perfil social. Los factores protectores fueron: la responsabilidad, tener normas de uso y ser chico, y los de riesgo: el uso de redes sociales para distraerse y divertirse, y la elevada percepción de consumo de los hermanos. Se sugiere plantear intervenciones según el sexo y trabajar el uso responsable de las TIC con el entorno familiar, para prevenir problemáticas psicológicas más graves.

KEYWORDS | PALABRAS CLAVE

Excessive use, social networks, teenagers, personality, self-concept, social support, family consumption, rules of use.
Uso excesivo, redes sociales, adolescentes, personalidad, autoconcepto, apoyo social, consumo familiar, normas de uso.

1. Introduction

Children and adolescents' increased use of and constant presence on social networks has been highlighted by a number of global organizations and researchers (Livingstone, Haddon, Görzig, & Ólafsson, 2011; International Telecommunication Union, 2017). This continuous use of technology may lead to "excessive use", something recognized as a public health concern (World Health Organization, 2014) and it can be associated with serious psychological and interpersonal relationship problems as addiction (Ho, Lwing, & Lee, 2017), loneliness (Ndasauka & al., 2016) or cyberbullying (Casas, Del Rio, & Ortega-Ruiz, 2013). This study will use the term "excessive use" of social networks (Buckner, Castille, & Sheets, 2012), understanding this to be when the number of hours of use affects adolescents leading a normal daily life (Castellana, Sánchez-Carbonell, Graner, & Beranuy, 2007; Viñas, 2009), but not only in terms of the time invested in this use but also in the impact that it causes in personal and social areas of adolescent life (Smahel & al., 2012).

In southern European countries, excessive Internet use ranges from 3% to 24% (Olafsson, Livingstone, & Haddon, 2014), with similar percentages reported in the United States (Weinstein & Lejoyeux, 2010). In Spain, 21.3% of adolescents are at risk of developing addictive Internet behaviour due to abusive use of social networks (Fundación Mapfre, 2014). Some studies pointed out gender differences in social network excessive use (Müller & al., 2017): intensive use is related to girls whereas an addictive use is related to boys among intensive users (3.6% of girls vs. a 4.1% of boys). Nevertheless, results on gender differences are not consistent in the literature. In this sense, Salehan and Negabahn (2013) didn't find gender differences between the use of mobile social networking applications and mobile addiction; in opposite to previous research that suggests that women are more susceptible to develop addictive behaviour.

The heavy presence of adolescents in social networks allows them to express and develop their personality and their characteristics. Moreover, the social nature of networks implies a wide range of interactions and relationships among adolescents and the others as peers, relatives, or strangers. For this reason, the present research is conducted on their psychological profile, as well as personality, social, and context factors, to determine the impact of excessive use of social networks on adolescents. While some studies show the importance of analyzing these aspects together (Marino & al., 2016), studies that explore them separately are more common.

Research linked certain personality traits to the social networks use, and the majority of them are based on Costa and McCrae's (1992) Big Five Theory. In this regard, it has been observed that high scores in neuroticism (Amichai-Hamburger & Vinitzky, 2010; Marino & al., 2016; Tang, Chen, Yang, Chung, & Lee, 2016) and low scores in extraversion (Ross, Orr, Sisic, Arseneault, & Simmering, 2009) are linked to problematic or addictive use. There is a negative correlation between the use of networks such as Facebook or Twitter and the facets of openness to experience and conscientiousness (Hughes, Rowe, Batey, & Lee, 2012; Schou & al., 2013), which act as protective factors. Some studies show that high scores in agreeability are linked to problematic use (Kuss, Van-Rooij, Shorter, Griffiths, & Van-de-Mheen, 2013), while others conclude that they are an indicator of a lower risk of developing addiction (Meerkerk, Van-den-Eijnden, Vermulst, & Garrestsen, 2009). Finally, our aim was also to analyze the relationship between impulsiveness and excessive use of social networks, since some studies note that this seems to be the strongest predictor of problematic use (Billieux, Gay, Rochat, & Van-der-Linden, 2010; Billieux, Van-der-Linden, & Rochat, 2008).

Adolescents seek acceptance or social validation through social networks, and this affects their well-being and self-esteem (Jackson, von Eye, Fitzgerald, Zhao, & Witt, 2010; Pérez, Rumoroso, & Brenes, 2009; Valkenburg, Peter, & Schouten, 2006). Low self-esteem is linked to the more frequent use of social networks (Aydin & Volkan, 2011), and symptoms of addiction (Bahrainian, Haji-Alizadeh, Raeisoon, Hashemi-Gorji, & Khazaee, 2014).

The Internet and social networks allow adolescents to connect with their friends, create and strengthen inter-personal relationships, support others and receive social support, and cultivate emotional ties (Best, Manktelow, & Taylor, 2014; Frison & Eggermont, 2015; Livingstone, 2008; Reich, Subrahmanyam, & Spinoza, 2012; Tang & al., 2016).

The family may provide an environment that protects against excessive use of technology as long as this social context is perceived to be a facilitator of social support (Echeburúa, 2012). Research shows that parents use a range of mediation strategies to regulate the use their children make of the Internet (Durager & Livingstone, 2012; Livingstone & Helsper, 2008), among them restrictions or rules of use (OfCom, 2016; Garmendia, Jiménez, Casado, & Mascheroni, 2016).

Another factor related to adolescents' use of technology is the real or perceived use of their parents (Hiniker,

Shoenebeck, & Kientz, 2016; Lauricella, Wartella, & Rideout, 2015; Livingstone, Haddon, Görzig, & Ólafsson, 2011). In those European countries where parents use the Internet on a daily basis, their children use it more frequently; the reverse is also true (Livingstone & al., 2011). These data would seem to indicate that the relationship between parental and children's use not only means that they spend more time using technology together, but also that there is an individualized increase in the time they spend separately on their devices (Lauricella & al., 2015). As Boyd points out (2014: 85): "A gap in perspective –about the adolescents' opportunities to gather with friends– exists because teens and parents have different ideas of what social life should look like".

The primary aim of this cross-sectional study is to determine the psychological and social profile of adolescents aged between 11 and 18 who make excessive use of social networks. It explicitly sets out to:

Describe the socio-demographic profile and prevalence of use among the group of adolescents identified as excessive users versus that of the normative group.

Explore which personality and social context variables constitute the profile of such consumers.

Assess which variables best predict excessive use of social networks in the age group researched.

2. Material and methods
2.1. Participants

The multi-stage cluster sampling technique was used to choose a random sample (n=1,218) from a total population of 5,365 secondary, baccalaureate, and professional training students in the Alt Empordà region (Girona, Spain). The final sample was comprised of 1,102 students (90.5% participation) from 6 educational centres, most of which are state-run (91.6%). 48.1% of participants were boys whose ages ranged from 11 to 18 (M=14.42; SD=1.78). At the time of the research, the students were attending the 4th year of secondary education (n=793) (equivalent to year 10 in the UK education system); the 1st and 2nd years of the university entry level course or baccalaureate (n=278) (equivalent to a two-year 'A' level course); or professional training cycles (n=31).

2.2. Instruments

• Scales to determine excessive social networks use:

– A Self-attributed scale of social networks use (Facebook, Twitter, WhatsApp, Instagram, Snapchat) (Casas & al., 2007). A single-item scale which asks subjects what kind of social networks consumer they consider themselves to be based on 5 possible answers (1=I never or hardly ever use it; 2=I'm a low consumer; 3=I'm an average consumer; 4=I'm a fairly high consumer; 5=I'm a very high consumer).

– The media and technology usage and attitudes scale (MTUA) (Rosen, Whaling, Carrier, Cheever, & Rokkum, 2013). 60 items are grouped into 15 sub-scales assessing the frequency of use and attitudes towards ICT (1=Never and 10=Continually). The sub-scale "social networks Activities" (α= .89) was used for those who indicated they had a Facebook profile (Instagram was added as it is currently one of the networks most used by adolescents).

• Scales to determine personality:

– NEO Five Factor Inventory (Costa & Mc Rae, 1992, 2004): a reduced version of NEO PI-R, allowing the assessment of five personality traits and consisting of 60 items (0=Totally disagree and 4=Totally agree). Cronbach alphas for each scale are: neuroticism, .64; extraversion, .61; openness to experience, .62; agreeableness, .53; and conscientiousness, .69. The impulsiveness facet items of the NEO PI-R (Costa & Mc Rae, 2008) were added, showing an internal consistency of .74.

– AF5 self-concept by García and Musitu (1999). The Catalan-adapted version was applied (Malo & al., 2014), consisting of 30 items contemplating the five self-concept dimensions suggested by the original authors

> Setting rules, restrictions, or technical mediation strategies (such as parental filters) is linked to lower online risk. However, this can lead to children becoming less free to explore, learn and develop resilience; thus taking less advantage of digital opportunities and abilities.

(0=Never and 10=Always). The psychometric properties of this scale are excellent and similar to those of the original scale: internal consistency ranges vary between .75 (social) and .91 (academic).

• Scales to determine social context:

– Social Support Appraisals (SSA) (Vaux & al., 1986). This study used 14 of the 23 original items, seven referring to the family and seven to friendships (0=Not at all and 10=Very clearly). The internal consistency of the friends' dimension of SSA is .91, and that of family .92.

– Self-attributed scale for family ICT use. A single-item scale adapted from Casas et al. (2007), in which subjects classified the kind of consumer their parents and siblings were.

– Rules on ICT use at home (adapted version of Hiniker & al., 2017). A dichotomous question (Yes/No) was created to determine whether there were any set rules at home regarding the use of ICT (mobile, computer, tablet, etc.).

– Items from the scale perceptions regarding social networks use (a scale created ad hoc). 19 items were designed to explore how and what adolescents feel when using social networks. The question was as follows: Below you will find a group of phrases regarding things you may feel when using social networks such as Facebook, Twitter or WhatsApp. Please indicate how far you agree with each of them. When I use social networks… The scale ranged from 0 (I completely disagree) to 10 (I completely agree). The Cronbach Alpha for this study was .92.

2.3. Procedure

Permission was requested from the Government of Catalonia's Department of Education and the respective school boards and parents associations, who were also informed of the research aims. All head teachers and students were guaranteed data confidentiality and anonymity. The questionnaire was divided into two parts to make it less tiring for participants and administered in two one-hour sessions during the 2016-2017 academic year. Two researchers were present to answer questions or doubts.

2.4. Data analysis

To meet the general aim, two groups of social network use were created: one for excessive use and a normative group. To this end, participants who had answered "5" (I'm a very high consumer) in the social networks consumption self-concept questionnaire, and those who had answered "10" (Continually) in three or more of the items of the MTUA "social network activity" sub-scale, were grouped. A value of "0" was given to the normative group and "1" to that of excessive use. For the first specific aim, the prevalence of participants who formed part of this group was calculated in comparison to the normative group; chi-squared tests were used to compare the results by gender and age. For the second, the t-test was used to analyze both the psychological and social profiles of the group with excessive use, and chi-squared tests were also used to analyze the social profile. For the final aim, a forward stepwise binary logistic regression was carried out to ascertain the variables that are predictors of excessive use. The dependent variable was the categorical variable of the "use group", where "0" was given to the normative group and "1" to the group making excessive use of social networks. The covariables were the personality dimensions (NEOFFI, NEOPIR, and AF5 self-concept), social variables (social support, perceived use by father, mother and siblings, the presence or not of rules, and the group of variables from the ad hoc scale on perceptions regarding use of social networks), and gender.

All analyses were carried out using the SPSS, version 23.0 statistical package. The minimum level of statistical significance required in all tests was $p<.05$.

3. Analysis and results

a) Socio-demographic profile and prevalence of excessive social networks use group and normative group. The prevalence of boys (n=34) and girls (n=78) who form part of the group making excessive use of social networks is 12.8%; the percentage of girls (69.4%) is significantly higher ($\chi^2=16.743$; $p<.001$) than that of boys. No differences were observed regarding age.

b) Personality profile of excessive social networks use group and normative group. Those participants classified in the group with excessive use show significantly higher scores than the normative group concerning neuroticism and impulsiveness, while this difference was observed in the scores for agreeableness and conscientiousness for the normative group. Those adolescents with excessive use show significantly lower scores in the family, academic and emotional self-concept than the other users (Table 1).

Table 1. Average scores in the five personality dimensions of the NEO-FFI, impulsiveness facet of the NEO PI-R, and AF5 self-concept scale, according to social network use group		
Variables	**Excessive use group**	**Normative use group**
Neuroticism	X 1.95 S .81	X 1.74 S .74 p=.004
Extraversion	X 2.29 S .86	X 2.22 S .71
Openness to experience	X 2.05 S .74	X 2.10 S .75
Agreeableness	X 2.02 S .76	X 2.28 S .68 p<.001
Conscientiousness	X 1.86 S .70	X 2.19 S .70 p<.001
Impulsiveness	X 2.07 S .72	X 1.75 S 1.07 p=.002
AF5 – Family Self-Concept	X 7.59 S 2.23	X 8.13 S 1.74 p=0.14
AF5 – Academic Self-Concept	X 6.12 S 2.01	X 6.85 S 1.86 p<.001
AF5 – Social Self-Concept	X 7.35 S 1.67	X 7.28 S 1.62
AF5 – Emotional Self-Concept	X 4.72 S 1.99	X 5.40 S 1.98 p=.001
AF5 – Physical Self-Concept	X 6.40 S 2.21	X 6.70 S 1.84

c) The social profile of excessive social networks use group and normative group. There are no significant differences in the perception of social support from friends and family among groups; however, significant differences were noted in the perception of ICT consumption by parents and siblings: those adolescents who make excessive use of social networks attribute a higher consumption to their mothers and siblings than those in the normative group (Table 2).

59.5% of participants said there were no rules regulating ICT use at home. The groups show significant statistical differences ($\chi 2(4)$ =8.390; p=.004): 72.1% of the excessive use group stated there were no rules (57.6% in the normative group), and 42.2% of the normative group said there were (27.9% of the excessive use group).

d) Variables predicting excessive and normative use of social networks. The model correctly classified 86.3% of participants. The Nagelkerke R2 indicates that the model explains 27.2% of the variability. The protective factors against excessive social networks use are the dimension of conscientiousness (OR=.512; IC 95%= .355-.739), family self-concept (OR=.841; IC 95%= .742 -.953), the existence of rules regulating ICT use at home (OR=.508; IC 95% =.301-.857) and being a boy (OR=.387; IC 95%=.234-.641); while the risk factors are related to the use of social networks as a distraction after schoolwork (OR=1.157; IC 95%=1.043-1.283), for fun (OR=1.475; IC 95%=1.258-1.729), and the perception of sibling ICT use (OR=1.229; IC 95%=1.036-1.458) (Table 3).

4. Discussion and conclusions

The primary aim of this paper was to describe the psychosocial profile of a sample of Spanish adolescents aged between 11 and 18 who make excessive use of social networks. The data used to construct this profile were based on results deriving from the Five Factor Model, self-concept, the contextual variables of social support from friends and family, and the perception of the family's ICT consumption. Specifically, we found a greater prevalence of girls than boys in the excessive use group (Müller & al., 2017); and, while age does not seem to be a discriminating element, it was observed that it is at 13 (21.4%) and 16 (18.8%), the periods

Table 2. Average scores in perceived social support and perceived ICT use of parents and siblings according to social network consumption group		
Variables	**Excessive use group**	**Normative use group**
SSA – Family	X 8.09 S 2.10	X 8.38 S 1.67
SSA – Friends	X 8.09 S 1.72	X 7.87 S 1.68
ICT consumption – Mother	X 3.13 S 1.09	X 2.76 S .95 p<.001
ICT consumption - Father	X 2.68 S .98	X 2.53 S .98
ICT consumption - Siblings	X 3.48 S 1.57	X 2.90 S 1.54 p<.001

where there is most intense use of these technologies (Caldevilla, 2010). The prevalence of excessive use in this study (12.8%) was moderate, and in the intermediate band of values detected in previous studies (Olafsson & al., 2014; Weinstein & Lejoyeux, 2010).

Secondly, the results of this study support data from previous research identifying differentiated personality

Table 3. Binary logistical regression of personality factors, social context variables and gender in excessive social networks use									
Steps	**Variables**	**B**	**E.T**	**Wald**	**gl**	**p**	**OR**	**IC 95%**	
Step 7(g)	Responsibility	-.67	.19	12.81	1	<.001	.51	.36	.74
	Family self-concept	-.17	.06	7.34	1	.007	.84	.74	.95
	Rules (Yes/No)	-.68	.27	6.44	1	.011	.51	.30	.86
	Gender	-.95	.26	13.63	1	<.001	.39	.23	.64
	I use social networks after school work for distraction	.15	.05	7.62	1	.006	1.16	1.04	1.28
	I have fun on social networks	.39	.08	22.92	1	<.001	1.48	1.26	1.73
	Sibling ICT consumption	.21	.09	5.61	1	.018	1.23	1.04	1.58
	Constant	-3315	.89	13976	1	<.001	.04		

a. Variable(s) introduced in step 1: I use social networks after school work for distraction; b. Variable(s) introduced in step 2: I have fun; c. Variable(s) introduced in step 3: NEOFFI Conscientiousness; d. Variable(s) introduced in step 4: Gender; e. Variable(s) introduced in step 5: AF5Family; f. Variable(s) introduced in step 6: Rules (Yes/No); g. Variable(s) introduced in step 7: Sibling ICT consumption.

characteristics between the group making excessive use of social networks and the normative group, the former presenting the traits of neuroticism and impulsiveness, which confirmed their link to addictive and problematic behaviors. Some adolescents with high scores in neuroticism use Facebook as much to regulate their mood (Marino & al., 2016; Tang & al., 2016) as to experience the feeling of belonging to a group and satisfy their need to feel confident (Amichai-Hamburger & Vinitzky, 2010). Furthermore, the tendency to act hastily in response to intense emotional situations, such as social networks use, is an indicator of problematic use (Billieux & al., 2010; Billieux & al., 2008). The normative use group was characterized by higher agreeableness and conscientiousness, both factors being related to a lower risk of developing addictive behaviors (Meerkerk & al., 2009; Schou & al., 2013). However, these results should be interpreted with caution due to the low rates of internal consistency observed in some of the scales.

Self-esteem was another construct that presents differences between groups: the excessive use group showed a lower self-assessment of how they were perceived by their family, the academic world –by teachers, classmates and themselves– and the level of understanding of their own emotions and how these were shown to others (García & Musitu, 1999). Maintaining good levels of self-esteem and self-concept, above all in some of these dimensions, acts as a protective factor against ICT addictions (Echeburúa, 2012). An example is to be found in Pérez et al. (2009), who observed that those adolescents who make a varied and intense use of their free-time, and a low use of entertainment media and new media such as the Internet, show a more positive academic self-assessment than those whose free-time is less rich and diverse and who make greater use of entertainment and new media.

Regarding the contextual variables, no differences were found between the groups in perceived social support from either friends or family. Previous research does, however, show that giving and receiving social support online may be a motivation to make more intensive use of social networks (Tang & al., 2016). Nonetheless, the role played by the perception of the family's ICT consumption appeared as a differentiating factor in the formation of one type of social networks consumer or other (Hiniker & al., 2016). Our results support the idea that those adolescents who form part of the group of excessive users perceived that their mothers and siblings also made intensive use of such technologies, functioning as models of consumption (Livingstone & al., 2011). As previous studies have noted, this aspect seems not only to affect how the family uses ICT, but also individualized use by children (Lauricella & al., 2015). In the current context, in which multiple devices are frequently used by all members of the family, including the youngest (Holloway, Green, & Livingstone, 2013), parents and relatives play an essential role in the vicarious learning of responsible ICT use. Our study revealed that half of the sample said there are no rules governing ICT use at home, confirming that education should not merely be limited to rule-regulated use (OfCom, 2016; Garmendia & al., 2016). This percentage was even higher (72.1%) in the group that made excessive use. Durager

and Livingstone (2012) suggest that one of the most effective strategies for regulating responsible use, increasing opportunities and preventing risks, is active mediation, talking actively or sharing online activities with children. Contrarily, setting rules, restrictions, or technical mediation strategies (such as parental filters) is linked to lower on-line risk. However, this can lead to children becoming less free to explore, learn and develop resilience; thus taking less advantage of digital opportunities and abilities.

The present study is not exempt from limitations. The sample, while representative of a region and age range, does not permit extrapolation to other population groups. The data have been compiled through self-assessment surveys, which do not guarantee reliability or validity, as some subjects may have responded based on social desirability. Since this is a cross-sectional study, we cannot determine causative relationships. Future longitudinal cohort research would provide a sounder profile of excessive social network use, as well as protective and risk variables. Taking into account the percentage of explained variance, further variables that have not been dealt with in this study should be examined, such as social context and personality, as these may be related to the studied profile.

Despite these limitations, our study allows us to support previous findings because we found: a) gender differences between excessive and normative user, but not according to age, b) similar prevalence of Spanish adolescents' excessive use than European and American countries, c) impulsiveness and neuroticism as a main personality variables related to excessive use, and d) although we didn't find differences in perceived social support between groups of consumers, the group of excessive users perceived significantly more ICT family consume (mother and siblings). Furthermore, our data showed that the excessive use of social networks was negatively predicted by gender, responsibility, to have rules at home, and family self-concept; and was positively predicted by the perception of siblings ICT use, the use of social networks to have fun and to use them after school for distraction. According to these predictive variables we observed two adolescents' profiles: (a) Being a girl, using social networks as a distraction and for fun, and perceiving a high ICT use by siblings, as a risk profile; (b) Being a boy, with a high score in conscientiousness, high academic self-concept and having ICT-use rules at home as a protective one. It should be noted that the percentage of variance explained by the regression model is rather low and, consequently, it can be considered that there are other variables not included in this study that can predict excessive use.

These discoveries lead us to a number of conclusions: 1) Being part of the group of excessive users implies greater time using social networks and it may lead to a potential risk, affecting adolescents' everyday life; in this regard, recent studies point out that the intensive use of social networks in adolescence is related to Internet addiction and psychosocial distress. (Müller & al., 2017) 2) The profile of this group of users is comprised of the combination of personality traits and the closest social context in which they learn to use ICT, revealing the need for further studies that explore both variables, on the one hand, and on the other hand, the need to create: a) specific youth interventions to regulate the traits of personality directly associated with excessive use –as impulsivity– with training programs in full conscientiousness (Mindfulness) (Franco, de la Fuente, & Salvador, 2011), and b) to develop social policies to promote a more responsible use in family context. (Gómez, Harris, Barreiro, Isorna, & Rial, 2017). Finally, 3) As we have seen in previous studies (Müller & al., 2017) due to being a girl is a factor of risk for excessive use, the gender variable should be taken into account when developing specific intervention proposals to prevent problematic ICT behaviours.

> The role played by the perception of the family's ICT consumption appeared as a differentiating factor in the formation of one type of social networks consumer or other. Our results support the idea that those adolescents who form part of the group of excessive users perceived that their mothers and siblings also made intensive use of such technologies, functioning as models of consumption.

Overall, the results of this study can be a first step for the construction of new measures of excessive use of social networks to assess the facets of the personality of adolescents, as well as to more deeply analyze the context of family use in which children and teenagers are socialized. Following the ecological model of Bronfenbrenner (Bronfenbrenner & Evans, 2000) we could explore other contexts of socialization such as school life or leisure and free time (see chapter 3 of Boyd, 2014), and even explore what social values are involved in the excessive ICT use (for example, hedonism, security, or individualism). All these new variables would allow us to have a wider view of the complexity of this psychosocial reality.

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