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# Social network user motivation: An analysis of rural women's profiles

Motivos de uso de las redes sociales virtuales: Análisis de perfiles de mujeres rurales

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#### Resumen

En el presente trabajo, se muestran los resultados de una investigación cuyo objetivo es conocer los motivos de uso de las redes sociales virtuales de las mujeres rurales y determinar perfiles en función de sus respuestas. Para ello, se realiza un estudio de encuesta, cuyo cuestionario se aplica a 478 mujeres de entornos rurales de Andalucía de 18 a 65 años. Los resultados muestran dos perfiles de mujeres en función de sus motivaciones de uso de las redes, encontrando que las que usan las redes con una mayor variedad de motivos, muestran mayores niveles en intensidad, habilidad y autonomía de uso, mientras que las que la usan exclusivamente por motivos relacionales presentan niveles inferiores en estas variables. Esto sugiere que los motivos de uso es una variable explicativa de la inclusión digital de las mujeres rurales en las redes sociales. Los resultados permiten repensar las propuestas educativas de alfabetización digital

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Redes sociales, mujer rural, inclusión digital, estudios de las mujeres, capital social, motivos de uso, alfabetización digital, aprendizaje permanente

#### **Abstract**

This paper reports some of the findings from a study that aimed to analyse the motives for using social networking sites and to establish profiles from their responses. To do this, we carried out a survey study based on a purposely designed questionnaire answered by 478 women from rural areas of Andalusia aged 18 to 65. From an analysis of the responses, we identified two profiles based on the use motives of social networking sites. The results indicate that women, who use social networks with a higher diversity of uses, also express higher level of intensity, ability and autonomy of use. In contrast, women who use only social networks with a relational purpose, also express lower level of intensity, ability and autonomy in the use of social networks. These findings suggest that use motives is a predictor variable of rural women's digital inclusion in the social networks. The findings allow us to rethink the educational proposals of digital literacy.

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#### **Keywords:**

Social networking sites, rural women, digital inclusion, women's studies, social capital, motives of use, digital literacy, lifelong learning

This study analyzes the social network user motivation of women in rural areas and outlines user profiles with the overall objective of rethinking educational proposals for digital literacy to promote active digital citizenship. International studies indicate that social networks have changed the presence and participation of women in online environments (Clipson, Wilson & DuFrene, 2010; Mazman & Usluel, 2011). Social

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networks are seen as an ideal context for learning (Dabbagh & Kitsantas, 2012) making it crucial to find out more about how and why people learn in these new settings. This could lead to a better exploitation of the educational potential of social networks and help build bridges between formal and informal training (Greenhow & Robelia, 2009).

Most of the research into digital literacy and new literacies for the exercise of active and participative digital citizenship (Area& Pessoa, 2012; Coiro, Knobel, Lankshear & Leu, 2008; Livingstone, Couvering Thuminn, 2008; Meyers, Erikson & Small, 2013) emphasize the importance of user motivation as a key variable in learning and training mediated by interactive digital technologies. Hence, the existence of a whole body of works (Arteaga, Cortijo & Javed, 2014; García, López de Ayala & Catalina, 2013; Gómez, Roses & Farias, Greenhow& Burton, 2011) focusing on user motivation in relation to the increase in social capital and its importance for the design of educational proposals, particularly in terms of social networks as learning networks (Sloep & Berlanga, 2011) or as part of personal learning environments (Attwell, 2007).

In turn, a large number of studies into ICT habits and use have focused on child and juvenile populations (Chen, Hsiao, Chern & Chen, 2014; Livingstone & Helsper, 2007; Staksrud, Ólafsson & Livingstone, 2013), while there have been few studies on adults (Godfrey & Johnson, 2009; Martinez-Pecino, Delerue & Silva, 2013; Pfeil, Arjan & Zaphiris, 2009), fewer on women (Castaño, 2009; Rubio & Escofet, 2013) and even fewer on women in rural areas (Falk & Kilpatrick, 2000; Rebollo & Vico, 2014). Some reports have drawn attention to the particular difficulties faced by rural communities (LaRose, Gregg, Strover, Straubhaar & 2007; Novo-Corti, Carpenter, Candamio & García-Alvarez, 2014) and the elderly (Braun, 2013; Dias, 2012) in access to and use of technologies, highlighting several factors which may contribute to their digital exclusion. Hence the importance of the digital education of the population, and in particular that part at greater risk of digital exclusion: women in rural areas and elderly women.

This study aims to: a) identify the social network user motivations of women in rural areas; and b) determine and establish the profiles of these women's use of social networks. Our main hypothesis is that social network user motivation constitutes a significant variable in the digital inclusion of rural women; and those that use social networks with a wider range of user motivation will have higher levels of intensity, ability and autonomy of use.

#### **Background**

Internet use as a factor of digital inclusion has been studied from different approaches in the literature. It has been tackled from the perspective of user motivation (Lin& Lu, 2011; Seidman, 2013; Tosun, 2012; Vergés, 2012; Yang & Brown, 2013), types of use (Carpenter, Green & LaFlan, 2011; Cheung, Chiu & Lee, 2010, Zillien & Hargittai, 2009), intensity of use (Hargittati & Hsieh, 2010; Steinfield, Ellison & Lampe, 2008) and user skills (Hargittai, 2010; Hsieh, 2012).

Several studies have analyzed user motivation of ICTs in general (Vergés, Hache & Cruells, 2011; Vergés, 2012) and of social networks in particular (Hew & Cheung, 2012; Subrahmanyam, Reich, Waechter Espinoza, 2008; Lin & Lu, 2011; Steinfield, Ellison & Lampe, 2008). Amongst the latter, we also find studies focusing specifically on user motivation of Facebook (Arteaga, Cortijo & Javed, 2014; Dogruer, Menevis & Eyyam, 2011; Joinson, 2008; Nadkarni & Hofmann, 2011; Seidman, 2013; Smock, Ellison, Lampe & Wohn, 2011; Tosun, 2012; Yang & Brown, 2013). User motivation represents a key variable in this study because it is tackled in the study of learning and training mediated by interactive digital technologies (Coiro et al.,

2008; Livingstone, Couvering & Thuminn, 2008; Area & Pessoa, 2012).

These studies have found a variety of motives for which people use social networks. Drawing on the work of Papacharissi & Mendelson (2011), Smock et al. (2011) identified nine motivations for Facebook use: such as usual pastime, to have fun and relax, to share expressive information, to escape, for companionship, for career advancement, for social interaction and to meet new people. Other studies have also found very similar user motivations (Arteaga et al., 2014; Dogruer et al., 2011; Hew & Cheung, 2012; Yang & Brown, 2013), identifying at least three types: oriented towards social relations, information exchange and entertainment. In turn, Joinson (2008) also adds as the main motivation the reinforcement of one's own identity.

In short, the studies (Lin & Lu, 2011; Rebollo & Vico, 2014) have shown that the main motives for using social networks are social relations; in other words, keeping in touch with friends and family, having fun and relaxing. This means that networks create opportunities for obtaining resources and support from network contacts, thereby contributing to the increase in social capital (Ellison, Steinfield & Lampe, 2007; Valenzuela, Park & Kee, 2009). In a study students, with undergraduate Ellison, Steinfield & Lampe (2007) analyzed how, when life circumstances change, such as the move from secondary school to university, with communities, contacts and relations also changing, the initial social capital is preserved thanks to social networks. This capital is crucial for learning as it includes people who can be trusted to resolve problems or even learn of peer experiences which may serve as referents in the new situation. Sloep & Berlanga (2011) emphasize the importance of the role played by social networks as learning networks, particularly because of the social capital which derives from the trust between participants and peer support.

In their study on user profiles, Pfeil et al. (2009) found a social capital age-gap: while adolescents have wider networks of friends (mostly of the same age), the social network of older people is smaller although it tends to include people of a wider range of ages. They also found that adolescents use a wider range of media and more self-references when describing themselves than older people. The generation gap in the use of digital technologies has been widely covered in previous research (DiMaggio et al., 2004; Freese, Rivas & Hargittai, 2006) with it being more likely to encounter non-users or functional users amongst older people (Brandtzæga, Heim & Karahasanovic, 2011).

Studies into digital inclusion have also documented the relation between motivation and skill and autonomy of ICT usage (Hargittai; 2010; Hargittai & Walejko, 2008; Livingstone & Helsper, 2010), with most studies having focused on self-perceived digital skills (van Dijk, 2006). In a study with adolescents, Hargittai (2010) demonstrated that digital skill is positively associated to types of use, finding that people who use Internet more diversely are those who perceive themselves to have a high level of skills, while those who consider themselves to be less skilful are also those who use Internet less diversely. The findings of Livingstone & Helsper (2010) suggest that differences in digital skills are associated to different uses of the Web: those people who think they have a high level of skills also use Internet more diversely. Hargittai & Hinnant (2008) showed that people with higher educational levels and with rich resource backgrounds use the Web for a wider range of activities, with skill being a mediating factor in the types of activities people perform on the Internet.

Research has also demonstrated that the diversified use of networks is associated to greater usage autonomy and intensity (Hargittai & Hinnant, 2008. Some studies (Hargittai & Walejko, 2008; Correa, 2010) have found that the relation of gender with the

activities of creation and dissemination of online contents are mediated by skill, with findings suggesting that even when access and functional usage of technologies has been reached, there is still a participation gap between those who perform activities of creation and dissemination of contents on the Internet. These studies also underline the importance of socioeconomic status and, particularly, the level of studies of the parents, as an important predictor of how people incorporate the Web into their daily lives. Higher levels of parental education are associated to higher levels of Web usage skill if one is a white male. Livingstone & Helsper (2007) also found that autonomy of use is associated to Internet connection time.

Intensity of use also seems to be a variable associated to diversified forms of network usage (Ellison et al., 2007; Stenfield et al., 2008; Valenzuela, Park & Kee, 2009). In the study on the participation of university students in social networks, Hargittai (2008) demonstrated that the user contexts and experience with the medium are associated to diverse uses, finding that students accessing Internet at the home of a relative or friend are likely to use the networks more autonomously. Correa (2010) argued that greater experience on the net and more diversified types of use imply development of more advanced skills. Hargittai (2010) also showed that spending more time online leads to a more diversified use of networks. Studies that have analyzed intensity of use of social networks in relation to varied forms of use and, in particular, to advanced uses have also found significant differences between men and women (Hargittati & Hsieh, 2010; Imhof, Vollmeyer & Beierlein, 2007; Jackson, Ervin, Gardner & Schmitt, 2001).

#### **Objectives**

Given the importance that user motivation has for online inclusion and learning, we propose investigating the motivations that women in rural settings express in the use of

social networks and establish their user profiles on the basis of these uses. As we have already mentioned, most of the research into social network user motivation has been conducted with children and adolescents, with little attention paid to adults and even less to those in rural areas, despite being a prime objective for digital inclusion in Andalusia. The driving force behind this study is the fact that the digital gender gap in terms of access has been reduced in the Web 2.0 and particularly in the use of social networks. The initial hypothesis for our study is that user motivation is a predictor variable of digital inclusion, with the following considered as inclusion indicators: intensity, skill and autonomy of use in the social networks.

The specific objectives of our study are as follows:

- 1) Outline social network user motivation for women in rural areas of Andalusia.
- 2) Determine women's profiles depending on their network user motivation.
- 3) Characterize these profiles according to skill, autonomy and intensity of use.

#### Method

#### **Participants**

The study involved 478 women aged 18 to 65 from rural areas of Andalusia. They were selected using a non-probabilistic quota sampling on the basis of age, using a procedure of proportional allocation, with educational level contemplated complementary variable. Together geographical location, these two variables have been shown to strong predictors of the digital gap in previous studies which is why we considered them in the selection strategy of our sample of adult women from rural areas.

We adopted the following inclusion criteria: a) subjects should live and carry out their usual activity in a rural area considered to be municipalities with a population under 30,000 and a density under 100 inhabitants per square kilometer (Law 45/2007 of 13

December for the sustainable development of the rural environment), b) have a minimum experience of one year in the use of social networks and, c) represent different profiles of women according to age, educational level, family situation, etc.

Table 1 summarizes the main characteristics of the sample.

TABLE 1: Data of the women in the study sample

Variables	Categories	Frequencies	Percentage
Age	≤ 25 years	117	24.7%
_	26 to 39 years	153	32.3%
	40 to 54 years	152	32.1%
	> 55 years	51	10.1%
Educational level	No studies	60	12.7%
	Primary	170	34,8%
	Secondary (PO)	56	11.8%
	University	188	39.7%
Occupational situation	Paid employment	224	48.8%
•	Unemployed	100	21.8%
	Student	58	12.6%
	Housewife	54	11.8%
	Retired/pensioner	23	5.0%
Marital status	Single	204	42.7%
	Married	229	47.9%
	Divorced/Separated	32	6.7%
	Widow	13	2.7%
Children	Yes	205	44.1%
	No	260	55.9%
Nationality	Spanish	463	96.9%
•	Other	10	2.1%
Social networks used	Facebook and Tuenti	206	43.7%
	Only Facebook	196	41.6%
	Only Tuenti	45	9.6%
	Other networks	24	5.1%

Most (96.9%) of the women in the sample were Spanish; 34.8% had completed primary education, while 39.7% had a university degree. Of the sample, 12.7% did not complete primary education, and only 11.8% completed secondary education. Roughly half of the sample had remunerated employment (48.8%), while 21.80% were unemployed, and there were also students (21.6%) and housewives (11.8%). As for their social networks, 43.7% used both Facebook and Tuenti while 41.6% only used Facebook.

#### **Instruments**

We gave the women a questionnaire about their use of social networks. It included the following sections:

- Sociodemographic characteristics and level of studies: participants were asked about their age, educational level, family situation and their current employment situation.
- Intensity of use in which four items measured their frequency of use of the networks Facebook, Tuenti, Twitter and LinkedIn with a response range between 0 (never) and 3 (daily). To measure the intensity of use variable we drew on previous studies (Ellison et al., 2007; Steinfield et al., 2008; Valenzuela et al., 2009) in which frequency of use was taken as the main indicator.
- User motivation, which included 14 nominal response items in which the

participants could mark all the options with which they identified. To ensure content validity, we drew up a control list of the use motives appearing in previous studies (Arteaga et al., 2014; Hew & Cheung, 2012; Kwon, D'Angelo & McLeod, 2013; Yang & Brown, 2013), completing it with other motives taken from studies into adult use of ICTs (Lin, Tang & Kuo, 2012; Braun, 2013).

- User skill, an ad hoc scale drawing on previous studies (Hargittai, Livingstone & Helsper, 2010) consisting of 8 Likert-type response items (from 0 –not at all, to 4 -totally). This scale presented a high reliability coefficient for Cronbach's alpha of 0.863, and optimum construct validity indexes, presenting a saturation of the items in the main component of 0.644 and a standard deviation of 0.089.
- Autonomy of use, an ad hoc scale drawing on previous studies (Correa, 2010; Hargittai & Walejko, 2008), consisting of 4 Likert-type response items on a 5 point scale (from 0 –not at all, to 4 –totally). Applying a factorial analysis of main components, the scale showed optimum construct validity, with all items presenting high saturation rates in the main component with a mean of 0.691 and a standard deviation of 0.040, indicating unidimensionality. It also obtained an acceptable reliability coefficient with a Cronbach's alpha of 0.776.

#### **Procedure**

For the field work we were assisted by the Equality Agents of the Women's Information Points (PIM) in each municipality. They were trained how to administer the questionnaire<sup>1</sup>.

<sup>1</sup> This survey is more extensive than that included in this article. It covers other areas of how women use social networks and forms part of the publicly funded Excellence Research Project, entitled "Calidad Relacional, Inmersión Digital y Bienestar Social desde una Perspectiva de Género. Una Aplicación de las Redes Sociales Online en la Mujer Rural Andaluza" [Relational Quality, Digital Immersion and Social Wellbeing from a Gender Perspective. Women in Online Social Networks in Rural Andalusia], which is currently underway.

The questionnaire was completed in the presence of the interviewer with verbal interaction to ensure the items understood and filled in correctly by the participants regardless of their level of studies. The survey, which took roughly half an hour, was conducted in the municipal offices where classes in digital technology are given. Data was collected during the months of March, April and May 2012. The women were duly informed of the voluntary and anonymous nature of their participation in the study and its objectives and agreed to take part without any remuneration.

The data were processed with the SPSS statistical package (version 18 for Windows). From the 14 nominal variables about user motivation included in the sample we have created four nominal variables about social network user motivation (relational, identity, entertainment and information) resulting from their conceptual grouping, to operate with this in the multivariate correlational analyses. We took into account different contributions for the conceptual grouping of the 14 variables of motives (Arteaga et al., 2014; Dogruer et al., 2011; Hew & Cheung, 2012; Joinson, 2008; Yang & Brown, 2013). We grouped the following relation type motives as variables: keep up with friends, get in touch quickly and easily, share experiences, get back in touch with people, make friends. We then grouped the following variables for motives related to identity: form part of groups, feel included, make oneself known. Finally, in the group of motivations to do with entertainment and obtaining information we included variables: find out about my profession, find out about other people, know more about my surroundings, see photos and videos, entertainment, what is in fashion.

For the variables of skill and autonomy, once we had verified the unidimensionality of the scales using factorial analysis, we created a variable for each one with the overall score from the sum of all the items, with the overall score for skill on an ordinal scale of 0 to 32

points and the overall score for the autonomy variable on an ordinal scale of 0 to 16.

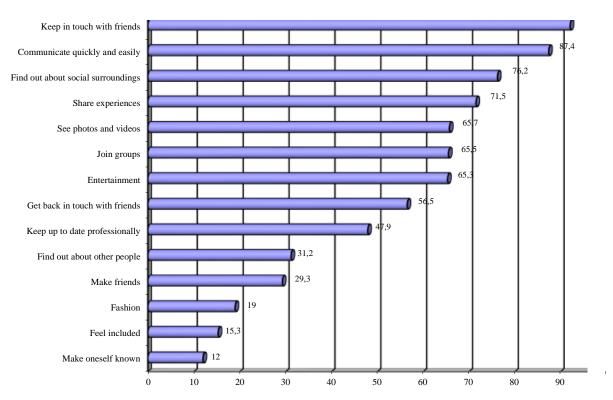
For the statistical processing of the data, we applied an exploratory analysis of the study variables to establish the distribution characteristics. After that, we conducted a bivariate analysis using contingency tables to observe the relation between the variables and the chi-squared test to study the incidence of the variables age and educational level. Finally, we also performed a K-means cluster analysis (Q-Cluster) to establish profiles and a discriminate analysis to characterize the profiles according to skill, autonomy and intensity of use.

# **Analysis and results**

Our first objective was to establish the motivations behind rural women's use of

social networks. The data indicate that 75% of the participants stated 5 to 10 motives for using them, while only 14.6% indicated less than 5 and 10.4% indicated more than 10 different motives. These data suggest that women use social networks for a variety of motivations and interests and therefore perform a wide range of activities.

The results show that the most frequent user motivations are: keep in touch with friends and family, communicate quickly and find about their easily, out social surroundings, share experiences and information, see interesting photos and videos, join groups with common interests and entertainment. Graph 1 shows the distribution of data for the user motivation variable.



Graph 1: Percentage of women who state different user motivations

The results also show that in general terms the user motivations of the women did not vary depending on age or educational level. However, we did find differences according to age in the profile of women who used networks to join groups with common interests and find out about other people, with women under 40 the ones who used networks most for this purpose. Likewise, communicating quickly and easily and keeping up to date professionally were more common motivations in women under 55.

while this motivation was less frequent in the older group. In contrast, the results show that it is more common for women over 55 to use the social networks to feel themselves socially

included. Table 2 shows the results of the contingency coefficient and chi-squared for these variables.

TABLE 2. Contingency table of user motivations according to age

		≤ 25 years (n = 117)	26 to 39 (n = 153)	40 to 54 (n = 152)	≥ 55 years (n = 51)	Significance
12. Join groups with common interests	Yes	106 (90.6%)	103 (67.3%)	78 (51.3%)	23 (45.1%)	X(2) = 55.796
	No	11(9.4%)	50(32.7%)	74 (48.7%)	28 (54.9%)	- p = .000 C. C. = .325
10. Communicate quickly and easily	Yes	114 (97.4%)	139 (90.8%)	123 (80.9%)	38 (74.5%)	X(2) = 26.060
	No	3 (2.6%)	14 (9.2%)	29 (19.1%)	13 (25.5%)	- p = .000 C. C. = ,229
5. Find out about other people's lives	Yes	57 (48.7%%)	44 (28.8%)	30 (19.7%)	16 (31.4%)	X(2) = 26.511
	No	60 (51.3%)	109 (71.2%)	122 (80.3%)	35 (68.6%)	- p = .000 C.C. = .230
9. Feel socially included	Yes	16 (13.7%)	15 (9.8%)	23 (15.1%)	19 (37.3%)	X(2) = 22.610
	No	101 (86.3%)	138 (90.2%)	129 (84.9%)	32 (62.7%)	- p = .000 C.C. = .214
11. Keep up to date professionally	Yes	65 (55.6%)	82 (53.66%)	68 (44.7%)	11(21.6%)	X(2) = 19.516
	No	51 (44.4%)	71 (46.4%)	84 (55.3%)	40 (78.4%)	- p = .000 C. C. = .199

We also found differences in some user motivations depending on the level of studies. Specifically, making new friends and feeling socially included were less frequent motivations in the group of women with university studies than they were in the rest. Table 3 shows the contingency coefficients and chi-squared for these variables.

TABLE 3: Contingency table of user motivations according to educational level

		Incomplete primary studies (n = 60)	Primary (n = 170)	Secondary (n = 56)	University (n = 188)	Significance
2. Make new	Yes	29 (48.3%)	57 (33.5%)	19 (33.9%)	34 (18.1%)	X(2) = 23.943
friends	No	31 (51.7%)	113 (66.5%)	37 (66.1%)	154 (81.9%)	- p = .000 C. C. = .219
9. Feel socially	Yes	17 (28.3%)	30 (17.6%)	10 (17.9%)	16 (8.5%)	X(2) = 15.470
included	No	43 (71.7%)	140 (82.4%)	46 (82.1%)	172 (91.5%)	- p = .000 C.C. = .178

In short, the results show that a very high percentage of the women interviewed used social networks not just to keep in touch and communicate (97.5%), but also to be

informed (90%) and for fun and entertainment (86%), while it was less frequent for them to use networks to develop and present their digital identity (76.4%).

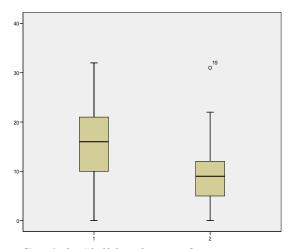
We performed a cluster analysis to identify profiles of women from their user motivations, finding two well differentiated groups. While the women in group 1 express a wide range of user motivations, those in group 2 use the networks with a purely relational motivation. The Anova test shows that the differences found are significant in the variables involved. Table 4 shows the sample results split into two clusters.

TABLE 4: Results split into two clusters and exploratory ANOVA

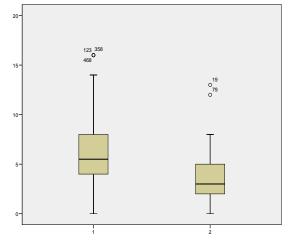
	Final cluster centers		ANOVA					
			Cluste	r	Error	•		
	1 2	Root mean	Gl	Root mean	Gl	F	Sig.	
Relational Motive (keep								
in touch and	1	1	.822	1	.023	476	35.958	.000
communication)								
Identity Motive	1	0	31.018	1	.116	476	267.145	.000
Entertainment Motive	1	0	19.467	1	.080	476	242.949	.000
Information Motive (be up to date)	1	0	15.241	1	.059	476	259.661	.000

The results of an exploratory bivariate analysis into skill and autonomy of use in each of the groups of women depending on motivation, showed that those who used networks more heterogeneously had higher

levels of skill and autonomy of use than those who used them for purely relational motives. Graphs 2 and 3 show the bivariate analysis between the two groups of women.



Graph 2: Skill level according to user motivation profiles



Graph 3: Autonomy level according to user motivation profiles

We performed a discriminate analysis to establish the incidence of these variables in the characterization and exploration of these two groups. We took the clusters formed from user motivation as criteria variables, and skill, autonomy and intensity of use as predictor variables. Although the discriminate equation showed a low canonical correlation of 0.0275 it presented an adequate goodness of fit (Wilks' Lambda = .924; p = .000), demonstrating that skill in the use of social networks is the most determinant variable.

The resulting discriminate equation is simplified in the following formula: y = .142 Skill -2.093. The equation excludes other predictor variables because of the multicollinearity between them, with the skill assuming the representative function of the set, so that the analysis of the total matrix structure may provide key information to establish the role of the other predictor variables.

The total matrix structure shows the weight of each variable in the differentiation of women's profiles in the use of social networks. It shows that user skill is the variable which plays the main role in the differentiation of women's profiles in terms of user motivation, followed by autonomy, with intensity of use being the variable which least explains the difference in women's profiles according to user motivation. Table 5 shows the total matrix structure of the discriminate function.

TABLE 5. Total matrix structure of the discriminate function

Total matrix structure	Function 1		
Total matrix structure			
Skill in the use of networks	1.000		
Autonomy in the use of networks (a)	.549		
Intensity of Facebook use (a)	.378		

After applying Student's t=test for the means comparison, we observed that there were statistically significant differences between the profiles of women in terms of skill and autonomy of use ( $t_{skill} = 6.940$ ; p = .000;  $t_{autonomy} = 4.863$ ; p = .000) but not in terms of intensity ( $t_{intensidad} = 1.764$ ; p = .082).

We did not observe significant differences in women's profiles as a function of educational level (Chi squared = 1.082; p = .782), although we did as a function of age (Chi squared = 13.029; p = .005), finding that there were proportionally more women from 40 to 54 who used the networks solely for relational purposes.

#### **Discussion and conclusions**

The general aim of our study was to analyze the user motivations of women in rural areas and categorize them in different profiles to explore the relation between user motivation and skill, autonomy and intensity of use. The overall aim was to document patterns in forms of network use to help redesign educational proposals.

As for the first study objective, the results indicated in general that women had a wide range of motives for using the social networks. with relational motives. information and entertainment being the most frequent. This coincides with previous studies (Arteaga et al., 2014; Dogruer et al., 2011; Hew & Cheung, 2012; Yang & Brown, 2013) which had identified these three types of motives. However, these results only partially concur with other studies (Lin & Lu, 2011; Dias, 2012; Rebollo & Vico, 2014) which found that the most frequent user motivations were relating socially and entertainment. In this study, we found that user motivation linked to an informative role also played an important role in the use that women in rural areas made of the social networks taking advantage of their social capital. Our findings showed that women who used the networks to join groups with common interests were under 40. In line with Joinson (2008) network use is related to reinforcing identity in activities which involve participation in groups with common interests. As such, we know that network use is linked to education and identity reinforcement, which represents a

very important element to be taken into account in the technological designs of networks and in the educational proposals of which they form part.

The second objective of our study was to find out whether there were differential patterns in network user motivations amongst rural women and, if there were, characterize them according to intensity, skill and autonomy of use. We found two significantly different profiles of women: those who use social networks for a wide range of motives and demonstrate greater levels of skills, autonomy and intensity of network use; and those women who use social networks exclusively for relational motives and express lower levels of skill, autonomy and intensity of use. These results concur with those obtained in previous studies (Hargittai, 2010; Livingstone & Helsper, 2007; Smok et al. 2008) which underlined the importance of a diversified use of the Internet for digital inclusion.

Our study also emphasizes the important role of user skill in the differentiation of profiles. Previous studies into skill and autonomy of use (Hargittai & Walejko, 2008; Hargittai, 2010; Correa, 2010) also confirmed the mediating role of skill in the development of a wide range of online activities, even confirming this mediating role to explain the creative activities of women on the Internet. This provides us with interesting keys for the design of educational proposals and learning networks incorporating for example strategies such as digital circles of support (Godfrey& Johnson, 2009) because these women have greater user skills and experience in creative online activities.

These results indicate that experience and intensity in the use of social networks is associated to the appearance of new motivations. In other words, the initial motivation of keeping in touch with friends and family diversifies into a variety of forms of use which increase in parallel with their

user experience, offering them a rich range of activities and practices. Findings from other previous studies also pointed in this direction (Livingstone & Helsper, 2007; Steinfieldet al., 2008). This has interesting applications for the design of learning networks in relation to the proposals of Sloap & Berlanga (2011). These authors considered that learning networks should stem from combined creation and be the fruit of an interactive and participative process, prioritizing approaches based on the user when creating specific learning networks. Thus, the design of learning networks should be based on specific user motivations, on the participants' profiles and taking into account the technologies which are available in their local setting.

The results showed significant differences in the women's profiles depending on age. We found that there were more women from 40 to 54 in the group which used the networks solely for relational purposes and who showed a lower level of skill, autonomy and intensity of use. Other previous studies have pointed to elderly people as a group in danger of digital exclusion (Brandtzæga, Heim & Karahasanovic, 2011; Braun, 2013; Dias, 2012). In our study, we found that the women in rural communities aged 40 to 54 also formed part of this group. This generation gap has already been documented in relation to inclusion (DiMaggio, digital Hargittai, Celeste & Shafer, 2004; Hargittai 2002; van Dijk, 2005), although it has not been approached specifically in relation to the use of social networks where most studies have focused on students with similar ages (Arteaga et al., 2014; Dogruer et al., 2011; Smok et al., 2011; Steinfield et al., 2008; Ellison et al., 2007). Our results on rural women's use of online social networks point in the same direction as these studies. They do not show differences in profiles according to educational level.

In short, the results suggest that women in rural communities should be encouraged to broaden their uses of social networks, and educational proposals designed for different

profiles should be based on user motivations. Designing educational strategies which are sensitive to these profiles would be a way of increasing not just their social capital but also literacy digital their and inclusion. Encouraging a more active and diverse online participation of women in rural areas means making pedagogical proposals to create circles of support where they would come into contact with other women with greater levels of skill and autonomy of use. The findings could play a part in the educational reappraisal of the best way to build bridges between formal and informal learning to improve the digital literacy of women in rural areas.

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## **NOTES**

This survey is more extensive than that included in this article. It covers other areas of how women use social networks and forms part of the publicly funded Excellence Research Project, entitled "Calidad Relacional, Immersión Digital y Bienestar Social desde una Perspectiva de Género. Una Aplicación de las Redes Sociales Online en la Mujer Rural Andaluza" [Relational Quality, Digital Immersion and Social Wellbeing from a Gender Perspective. Women in Online Social Networks in Rural Andalusia], which is currently underway.

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