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**Being in the Social: A cross-cultural and cross generational study on identity
processes related to Facebook use**

Since its launch in February 2004, Facebook (FB) has become the most successful Social Networking Site (SNS) in the world, boasting 1.79 billion active users per month (FB users Worldwide, n.d.). It is therefore not surprising that studies concerning the motives for, and functions of, FB use in Social Sciences are rapidly proliferating (Nadkarni & Hofmann, 2012).

A common approach to exploring the motivational underpinnings of FB use is the Uses and Gratifications perspective, which starts from the assumption that users are not passive recipients of mediated communication, but their use of media is purposive and directed at seeking the gratification of specific desires or needs (Rubin, 1994). This perspective seeks to counterbalance the ‘media effects’ tradition, which often sees the user as a passive recipient of media influence rather than an active user. In general, motivations for using the internet have been classified along three key dimensions: content (related to the information and general content available), process (e.g. learning, surfing, browsing), and social (e.g. chatting, interacting with friends) gratifications (Stafford, Stafford, & Schkade, 2004).

Researchers have applied this approach to understanding FB use (e.g., Bumgarner, 2007; Papacharissi & Mendelson, 2011; Park, Kee, & Valenzuela, 2009; Raacke & Bonds-Raacke, 2008; Smock, Ellison, Lampe, & Wohn, 2011). In general, this research indicates that FB is used primarily as a way to keep in touch with friends or as a form of entertainment.

At the same time, a growing body of literature has started to highlight how Social Media in general – and FB in particular – are also important platforms for self-performance and self-construction (e.g. boyd, 2014; Papacharissi, 2011, 2013).

These processes are particularly interesting in Social Networks (SNS), or ‘anonymous’ online environments (Zhao, Grasmuck, & Martin, 2008): here, in contrast to anonymous sites, participants’ identity work is ‘anchored’ to their offline persona, thus limiting the extent to which the individuals are able to make explicit identity claims that are incongruent with their offline Self (Back et al., 2010). However, the construction of the ‘network’ (i.e. the connections a user has on a site) can in itself be seen as identity work (e.g., boyd & Ellison, 2007). Moreover, in their analysis of posts that a sample of 63 student FB users chose to leave public, Zhao and colleagues (2008) show how this work is mostly carried out implicitly, for example by sharing images and quotes, or associating oneself with particular cultural products, thus constructing indirectly a particular – and desirable - public image.

Due to the extensive work of self-discovery, presentation and management which characterizes users’ activities on FB, it would be plausible to expect that part of FB’s success can be explained by its association with identity-related processes. In this study, we therefore investigated for the first time the potential role of two identity processes - identity motives satisfaction and identity exploration – as identity-related predictors of FB use.

FB use and Identity Processes

Drawing on classical theories of identity construction and development (e.g. Breakwell, 1986; Marcia, 1980) to analyze FB use, we focused here on two different but related identity processes: identity motive satisfaction and identity exploration. Even if both have been previously identified as influential identity processes for social media use (Manago, Graham, Greenfield, & Salimkhan, 2008; Riva, 2012), the combined associations of both identity motive satisfaction and identity exploration together with FB use have never been empirically tested, to the best of our knowledge.

With the term *identity motive satisfaction*, we refer here to the processes by which individuals - through working on their identity - seek satisfaction of “various general

principles which seem to have motivational or need like properties [...] which have recently been named identity motives” (Vignoles & Manzi, 2014, p. 3061). Many authors agree in considering individuals’ identity work as aimed at satisfying identity motives (for a review see Vignoles, 2011). Due to its affordances – such as personalized profiles and timelines, the possibility to create and share content, as well as to interact with other individuals and associate with cultural products and brands which are consistent with one’s Self concept - FB can be seen as a useful tool to satisfy one’s identity motives. Here, we tested the proposal that people would engage in FB use to the extent that their FB profile helps them to reinforce and consolidate the satisfaction of identity motives. Note that previous studies have analyzed the association between FB use and individual differences in self-reported needs (e.g., Utz, Tanis, & Vermeulen, 2012). However, our focus here is on the motivational *satisfactions* that are perceived to come from FB use, rather than individual differences in need strength.

Here, to measure individuals’ identity motive satisfaction through their FB profiles, we focused on four identity motives: self-esteem, efficacy, belonging and continuity. We focused on these four motives because previous research has already shown each of their involvement in FB use. According to Gonzales and Hancock (2011), FB use is a strategy for satisfying the motive for self-worth, since it brings to awareness essential aspects of the self-concept. Regarding the belonging motive, the frequency of FB use has been found to be positively correlated with the need to belong (Utz et al., 2012) and with feelings of general connection in life (Sheldon, Abad, & Hinsch, 2011), to reduce feelings of loneliness, to be positively associated with offline friendship (Lou, 2010) and to maintain long-distance relationships (Billedo, Kerkhof, & Finkenauer, 2015). Regarding the self-efficacy motive, Sun and Wu (2012) have shown that self-efficacy is likely to affect identity processes on FB and other studies have shown that self-efficacy has a role in explaining joining FB (Gangadharbatla, 2008). Finally, regarding the continuity motive, keeping in touch and

maintaining contact with close friends the individual does not see very often are among the most important motives for FB use (Hew, 2011; Joinson, 2008). Moreover, according to Lincoln and Robards (2016), FB is an important tool for a reflexive re-ordering of life narratives, helping people to perceive their identity as a continuous story-line.

In sum, we predicted that people would be motivated to use FB to the extent that their FB profiles helped them to satisfy identity motives. We therefore analyzed the process of identity motive satisfaction, operationalized as the extent to which FB profiles help individuals to see themselves in a positive light (*self-esteem*), to perceive they are close to others (*belonging*), to feel competent and capable of influencing their environments (*efficacy*), and also to perceive their life has a story (*continuity*). Previous studies have already shown that these four identity motives are highly and significantly correlated and that they are all associated with the same identity processes of assimilation/accommodation and evaluation of identity contents (e.g., Vignoles et al., 2006).

The second identity process we focused on is *identity exploration*, defined as seeking and processing information about possible self content (Flum & Kaplan, 2006). The process of identity exploration has been identified as crucial in identity formation for decades (e.g., Erikson, 1950, 1982). Indeed, since Marcia's influential contribution on the identity status paradigm (Marcia, 1966, 1980) there has been much empirical work on identity exploration (e.g., Grotevant & Cooper, 1981; Marcia & Archer, 1993). We considered that the 'disembodied' online environment that characterizes FB is a special place where individuals are allowed to explore new aspects of their identity. By adding or removing information on their profiles, connecting with friends of friends, or acquaintances, interacting with others, or joining groups or causes associated with particular cultural or commercial trends, individuals can expand or modify their identities and add new possibilities to their self-conceptions. Indeed, FB use, like other online experiences, has been theoretically linked with the process

of identity exploration by several authors (Davis, 2013; Riva, 2012). Moreover, Turkle (1997) has clearly identified the new media as the optimum place where individuals can explore new aspects of identity. Social network activities provide users with easier and faster opportunities to experiment with new identities and receive feedback and validation from others. Nevertheless, very few studies have empirically documented this assumption in relation to the individual's use of social networks (for a review, see Manago 2014). Hence, in this study, we also tested the hypothesis that FB use is predicted by the perception that FB offers affordances for identity exploration.

To summarize, processes of identity exploration and identity motives satisfaction both have been linked with social media use in past research. However, the majority of studies focus on one or the other mechanism. This study includes both processes with the aim of testing the relative strength of association of each mechanism with social media use.

Cross-cultural aspects of FB use

We had the opportunity to collect data in two different countries: Italy and Chile. As of June 2016, Chileans seemed to be fond users of FB, with a 68.0% penetration rate compared to a 48.4% in Italy. Italy's penetration rate is nonetheless in line with the average penetration rate in other EU countries (48% as of June 2016), and higher than the overall European average (39.5%). Previous research (Becker et al., 2012; Owe et al., 2013) has highlighted some cultural differences between these two countries: Chileans on average appear to be more open to change (i.e. less conservative) in their values and to adopt a more decontextualized concept of personhood than Italians. This suggests that Italians may fall relatively closer to a collectivistic culture as compared to Chileans, according to Hofstede's (1984) traditional classification.

Bolton and colleagues (2013) emphasize that the intensity of social media use can be shaped by cultural context, such as where the cultural context is placed along the

individualism/collectivism continuum. But while cross-cultural studies on FB use have shown that there are significant differences in the ways FB is used across cultures (e.g., Vasalou, Joinson, & Courvoisier, 2010) the major motives for using social network sites seem to be similar among countries (e.g., Kim, Shon, & Choi, 2011). Indeed, one could argue – in line with soft versions of technological determinism (e.g., Smith & Marx, 1994) – that the affordances of the platform are conducive of a limited and fixed amount of activities and, as a consequence, entail particular processes, although the way in which these processes take place may be influenced by cultural/contextual factors. In other words, if FB is indeed a platform in which certain identity processes are made possible, this should be observable across different cultural contexts, although the behaviors associated with these processes on the platform may vary across countries. For example, Ardi and Maison (2014) explored differences among Indonesian and Polish FB users' practices of online self-disclosure, and they found differences in the type and amount of information disclosed. However, in both countries they found a positive correlation between positive self-disclosure and self-esteem. Thus, the relationship between the behavior and the particular psychological outcome here remains constant, although there are differences in how the behavior is performed across cultures.

We therefore did not expect to find differences across cultures in the association between identity processes and frequency of use. In other words, our goal in comparing two cultures was not to search for differences, but to test the generality of our key findings across two somewhat different cultural contexts.

FB use across generations

Existing studies of FB use have mainly focused on adolescents and young adults, whereas adults' use of FB has been analyzed much less frequently (Leung, 2013; McAndrew & Jeong, 2012). Literature suggests generational differences in the willingness, access and

ability to use social media (Loos, Haddon, & Mante-Meijer, 2012). Both Italy and Chile reflect this generational gap, in that there is a substantial difference in FB use between younger and older adults: while 86% of 18-29 year old Chileans and 89% of 18-29 year old Italians report they have a FB account, the percentage of adults above 30 with a FB account is 39% in Chile and 43% in Italy (Scherman, Arriagada, & Valenzuela, 2015; SocialMediAbility, 2016).

Besides differences in the uptake of FB across generations, boyd (2014) suggests that adults' and adolescents' experiences of (and on) FB differ significantly. For example, while younger people's main challenge maybe to be 'public' (i.e., to manage their public image), adults have to struggle with the idea of being 'networked' (manage diverse connections on social media). When it comes to identity processes, it is nonetheless plausible to expect differences also in the strength of the associations between identity processes and FB use across generations. While identity motives satisfaction appears to be a stable process across generations (e.g., Vignoles et al., 2006), identity exploration has been identified as a process that is particularly salient during adolescence. During adolescence, individuals are expected to define their main identity commitments after having explored different identity alternatives (Marcia, 1980). Indeed, Valkenburg, Schouten and Peter (2005) have found that adolescents' internet-based identity behaviors are mainly motivated by identity exploration. Following this line of reasoning, one could expect that identity exploration, rather than identity motives satisfaction would be more important for adolescents, while adults would be more concerned with satisfying their identity motives than exploring new identities. However, it is important to bear in mind the constraints of FB as a 'nonymous' environment, which restricts significantly the possibility for experimentation. In this light, one would expect no differences between adolescents and adults on this dimension. To test these hypotheses, we collected data in each country from two different samples: adolescents and adults.

Method

Participants and procedure

Data were collected through self-report questionnaires in Italy and Chile. Adolescent participants were enrolled in various grades of high schools in Milan (Italy) and Santiago del Chile (Chile). The adolescents were contacted through their school teachers and, subject to parents' consent, invited to participate in the study. Adult participants were contacted in different locations in Milan and Santiago del Chile: through their children's schools, different workplaces, universities. All participants completed a set of scales measuring the variables of theoretical interest. Researchers administered the scales to adolescents during specially scheduled sessions at school, and to adult participants individually in their homes.

In total, 1961 participants participated in the study: 768 (256 Chilean and 512 Italians) adolescents and 999 (263 Chilean and 736 Italians) adults. Among the adolescents, 56 participants reported not to have a FB profile; among the adults, 636 (58.3%) participants reported not to have a FB profile. Analyses were conducted on a final sample of 1269 participants with FB profiles: 712 adolescents (243 Chilean) aged between 13 and 19 ($M = 16.4$, $SD = 2.03$) and 363 adults (160 Chilean) aged between 30 and 69 ($M = 45.5$, $SD = 6.4$). Among the adolescents, 48.0% were males, 58.8% reported writing at least once a week on their profile wall, and 51.1% reported changing their profile image at least once every month. Among the adults, 38.7% were males, 43.5 % reported writing less than one a month on their profile wall, and 87.2 % reported changing their profile image less than once a month.

Measures

Identity motives satisfaction. Four items measured participants experiences of how much their FB profile satisfied identity motives for self-esteem, efficacy, continuity and belonging (adapted from Vignoles et al., 2006): “My FB profile makes me see myself positively” (self-esteem); “My FB profile gives me a sense that I belong” (belonging); “My

FB profile makes me feel competent and capable in the things I do” (efficacy); “My FB profile makes me feel that my life has a story” (continuity). Responses ranged from 1 (*not at all*) to 8 (*extremely*).

Identity exploration. Two ad hoc items measured participants experiences of using their FB profile to explore new parts of the self: “My FB profile lets me test a different way of being myself than usual ones” and “My FB profile lets me explore new aspects of myself”. Responses ranged from 1 (*not at all*) to 8 (*extremely*).

FB use. Two items measured the frequency of wall posts and changes of profile image: “How often do you post on your FB wall?” and “How often do you change your FB profile image?” Responses ranged from 1 (*never*) to 6 (*every day*).

Results

Preliminary Analyses

In analyzing the statistical distribution of the variables for univariate normality, no issues emerged in regards to skewness and kurtosis (Gravetter & Wallnau, 2014). Table 1 summarizes sample means, skewness and kurtosis for considered variables.

Our second set of analyses were designed to clarify if identity motives satisfaction and identity exploration were two clearly separable dimensions among our respondents. Exploratory factor analysis makes it possible to analyze the clustering of items in a questionnaire in order to establish which structure best fits the data (Thompson, 2004). Using SPSS 24, an initial exploratory factor analysis using the maximum likelihood estimation method was performed for each group of participants (Italian adolescents, Chilean adolescents, Italian adults and Chilean adults) to generate a scree plot to determine the possible number of factors. The results of the scree plot suggested a two-factor solution for all groups. The two-factor solution was further confirmed by the BIC dimensionality test computed with the software Factor (version 10.5, Lorenzo-Seva and Ferrando, 2017). Based

on this finding, we generated a solution with two factors for each group, using the direct Oblimin rotation method. For all the groups, this accounted for a high proportion of variance: 70.4% of the variance for Italian adolescents, 71.6% for Chilean adolescents, 75.7% for Italian adults and 79.1% for Chilean adults. For each group, the final dimensions of this model were the same, with all the identity motive satisfaction items loading on one factor and the two identity exploration items loading on another factor. The factor loadings were estimated between .50 and .96, and none of the items cross-loaded above .30 on the other dimension.

Testing the association between identity processes and FB use

Based on the EFA results, we computed single indicators for identity motives satisfaction and identity exploration by averaging the items loading on each factor. We also computed a single indicator for FB use, which was the mean score of frequency of image changes and frequency of wall posts (the correlation between these two variables ranged between .338 and .523 in the four groups).¹

Using these indicators, we tested in the total sample the effects of the identity processes (motives satisfaction and exploration) on FB use through linear regression analysis. Identity motives satisfaction and identity exploration were considered as independent variables and FB use as dependent variable. In this model, we also controlled for the effect of country (Italy = 0, Chile = 1) and generation (adolescents = 0, adults = 1). We performed bootstrapping analyses (see Preacher & Hayes, 2004) to verify that 95% bias corrected and accelerated confidence intervals for these effects did not include 0. The regression analysis indicated a significant effect of identity motives satisfaction on FB use, whereas the effect of identity exploration was not significant: identity motives satisfaction $\beta = 0.243$, 95% bootstrap CI : [0.119, 0.311]; identity exploration $\beta = 0.046$, 95% bootstrap CI : [-0.013, 0.075]. We also found a significant effect of generation ($\beta = -0.321$, 95 % bootstrap CI : [-

0.897, -0.311]) indicating that adolescents show higher levels of FB use. The effect of country was not significant ($\beta = -0.013$, 95 % bootstrap CI : [-0.151, 0.092]). Adjusted R^2 for this model is .243.

We then tested if the relationships between identity motive satisfaction, identity exploration and FB use were different across generations and countries. In other words, we wanted to test if country and/or generations significantly moderated the relationship between our independent variables and outcome. We started analyzing the relationship between identity motives satisfaction and FB use. We firstly performed a multiple moderation analysis using MODEL 2 of Hayes' SPSS macro PROCESS (Hayes, 2013). This model tests if the relationship between an independent variable (X) affects a dependent variable (Y) and if the effect of X on Y is moderated by two or more variables M . Results showed that there was no significant moderation of the relationship between identity motives satisfaction and FB use by Country ($\beta = -0.026$, 95 % bootstrap CI : [-0.099, 0.047]), or generation ($\beta = 0.055$, 95 % bootstrap CI : [-0.030, 0.140]). We also compared the model with only direct effect of identity motives satisfaction country and gender with the model with the two interaction terms: $\Delta R^2 .001$, $\Delta F (2, 1069) = .937$, $p = .392$.

Next, we tested if the relationship between identity motives satisfaction and FB use could vary for the combined effect of country and generation. In other words, we analyzed if one of our four groups of participants varied compared to the others because they belonged to a particular generation in a particular country. We thus performed a moderated moderation analysis using Model 3 of Hayes' SPSS macro PROCESS (Hayes, 2013). This moderated moderation model tests if an independent variable (X) affects a dependent variable (Y) and if the effect of X on Y is moderated by a variable M (in our case country), and if the moderation effect of M is further moderated by a variable W (in our case generation)—that is, the 3-way interaction of country*generation*identity motives satisfaction. Results showed that there

was no significant country*generation*identity motives satisfaction moderation effect ($\beta = -0.047$, 95 % bootstrap CI : [-0.220, 0.126]). We compared the model with only direct effect of identity motives satisfaction country and gender and the country and gender interaction terms with the model with the double interaction term: $\Delta R^2 .000$, $\Delta F (1, 1069) = .285$, $p = .593$.

The same procedure was used to analyze moderation effects on the relationship between identity exploration and FB use. Results showed that there was no significant moderation of country ($\beta = -0.022$, 95 % bootstrap CI : [-0.095, 0.050]) or generation ($\beta = 0.010$, 95 % bootstrap CI : [-0.084, 0.106]). $\Delta R^2 .000$, $\Delta F (2, 1069) = .199$, $p = .819$. Also, the moderated moderation of country*generation*identity exploration ($\beta = -0.040$, 95 % bootstrap CI : [-0.231, 0.149]) was not significant $\Delta R^2 .000$, $\Delta F (2, 1069) = .178$, $p = .673$.

Discussion

Given the extensive identity-related work which takes place on Social Media, identity processes were identified as potential correlates of engagement with FB, extending previous research into Uses and Gratification Theory (Rubin, 1994). We tested the hypotheses that identity motives satisfaction and identity exploration could explain individual differences in FB use among adolescent and adult participants from two nations. Findings indicate that FB use seems to be reliably associated with identity motives satisfaction and that this association did not vary significantly across countries and generations.

These results suggest that the traditional Uses and Gratification approach could be expanded by including identity related needs. Research on social media use (e.g., Dunne, Lawlor & Rowley, 2010; Park et al., 2009; Whiting & Williams, 2013) suggests that key factors underlying social media use include information seeking, interacting with others, and entertainment, as well as presenting and managing identity (i.e. membership, self-presentation), but it does not explain which particular identity processes these gratifications

are fulfilling. By including identity motives satisfaction, research could add more depth to our understanding of the role that (old and new) media play in an individual's psychological life. Moreover, understanding in what ways different platforms serve specific identity motives could help with improving their design and optimizing users' experience, as well as better understanding each platform's appeal.

Contrary to what has been theoretically proposed (Miura & Yamashita, 2007) and qualitatively assessed (Manago et al., 2008), FB seems not to be used because it is a tool to explore new parts of the self. Interestingly the same pattern of findings was found for adolescents and adults. We surmise that, unlike anonymous online environments or SNS less related to everyday life, FB provides less room for exploration. Indeed, FB profiles have been described as a mirror of offline identity (Back et al., 2010). But, as Turkle (1995) stated, "we come to see ourselves differently as we catch sight of our images in the mirror of the machine" (p. 9): FB profiles may help adolescents to reinforce and consolidate the satisfaction of identity motives and, in this sense, the FB profile becomes an integral part of the identity construction process. Indeed, participants in our study seemed to use FB because their FB profile helped them to satisfy their basic identity motives of self-esteem, efficacy, continuity and belonging. Interestingly, this process was similar for adolescents and adults. These results are in line with other findings indicating that there seem not to be significant generational differences in identity processes related to FB use. For example, Barker (2012) found that regardless of age, participants reporting high collective self-esteem and group identity were more likely to use social networking sites for peer communication and social identity gratifications, whereas those reporting negative collective self-esteem were more likely to use social networking sites for social compensation.

As expected, we did not find significant differences in the association between identity processes and FB use across Italian and Chilean participants. It is possible that

individuals who do not find their identity needs met on a certain platform, may simply not use it, thus leading to differing penetration rates or reduced frequency of use of certain platforms in favor of other platforms which better suit their needs. Moreover, research has shown that people across different cultural contexts strategically use different platforms. In a series of studies, Qiu, Lin and Leung (2013) showed how Singaporean users were able to switch from a more individualistic (FB) to a more collectivistic (Renren) style of interaction depending on the SNS they were using: although the two SNSs have similar functionalities (Study 1), participants displayed different behaviors online (in terms of ingroup sharing), which was consistent with the pattern of behavior observed in other users (Study 2). In other words, when using FB people are entering a shared - and predefined - cultural world, to which they tend to adapt. Indeed, this is in line with the qualitative analysis proposed by Sawyer and Chen (2012) in a series of interviews of international students in the US, which highlighted the important role social media play in intercultural communication and adaptation (see also Croucher, 2011).

The correlational nature of our data does not allow us to clarify the direction of the paths between the identity processes and FB use. Longitudinal and/or experimental research will be needed in future to clarify to what extent the observed relationships are due to identity motive satisfactions increasing FB use or vice versa. Nevertheless, our current findings give a better understanding of the identity processes related with FB. For the first time, identity motives satisfaction and identity exploration have been empirically tested together in relation to FB use. Our model was tested in two generations and in two countries, providing some measure of external validity. Further research should build on these findings to understand more fully the psychosocial functioning associated with FB use.

Notes

¹We computed the same data analyses with the two indicators of FB use individually. Results replicated the pattern of results obtained using a single indicator for FB use.

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