

COMPARING THE USE OF SNSs AMONG ADULTS AND EMERGING ADULTS

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Social Networks Sites (SNSs) are becoming more and more prominent in everyday life. Their portability and ease of use grant them a wide diffusion, both vertically (among all social classes) and horizontally (in number), throughout the population, especially in western countries. This is not just a trend; the way in which SNSs are being used can be considered part of a pervasive attitude in our daily lives where everything is becoming more social. With a specific focus on emerging adults, in this paper we will argue and demonstrate how they use SNSs in their transitions between activity systems, by comparing them with the use of SNSs in adults. There are age-based differences in the use of SNSs, and in the way in which subjects maintain and expand their social capital through the use of these sites.

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1 Introduction

Changes in the global market have also affected the social structure and educational contexts of society. Transitional phases in particular have become less defined and predictable, requiring residential changes and greater adaptability from young adults. But though types of transition may have changed, the personal need for social integration has not. People find new channels of communication in many types of technology (desktop computers, laptops, smartphones, etc.) that allow them to maintain their relational network by overcoming barriers of space and time.

This is the case of Social Network Sites (SNSs), whose users dramatically increase in number each year (Brenner & Smith, 2013). Thanks to their portability and user-friendly interface, SNSs have, over the last few years, become one of the most popular web artifacts in the current ICT panorama. Their intrinsic characteristics and facility of use mean that SNSs can be considered as an extension of an individual's ability to create and maintain relationships, particularly so in the case of those individuals who have to face important transitions between different contexts as they move from adolescence to adulthood.

This paper proposes a study on the use of Social Network Sites by three different samples of the population which we will define as early emerging adults (EEAs), late emerging adults (LEAs) and adults.

2 Emerging adults and transitions

Arnett defines Emerging Adulthood as the specific phase of development which takes place from approximately the end of high school until around the age of 30, with a focal point which occurs more or less between the ages of 18 and 25 in industrialized western countries (Arnett & Tanner, 2006; Arnett, 2000; Douglass, 2007). Allowing for differences in definition and opinion of emerging adulthood (Arnett *et al.*, 2010; Arnett & Tanner, 2006; Arnett, 2007; Bynner, 2005; Douglass, 2007), the characterizing element of this period is instability and the consequent search for stability, brought about by the multiple transitions which emerging adults find themselves having to face. Examples of these transitions can be found in the shifts between various activity systems (Engestrom, 1987; Tuomi-Grohn & Engestrom, 2003) such as from college to the world of work or university, and from university to the world of work. This is one effect of the today's western societies in which young adults have the opportunity to spend such a great amount of time on their education and vocational training in order to acquire knowledge, learn new skills, develop their aspirations and abilities and construct their futures (Arnett & Tanner, 2006).

From the activity theory point of view, an 'activity system' can be consi-

dered a representation of any human activity. It is finalized to an particular outcome and characterized by three main elements (subject, object and community) and by the three entities that mediate the relationships between them (rules, the division of labor and instruments). Among the mediating elements, and as purported by the Vygotskian view, an essential role in the relationship between subject and object is played by cultural artifacts. In Leont'ev's view (Leont'ev, 1974), these instruments are not simply tools for doing something, but cultural artifacts which should be thought of as prostheses which, in certain conditions, can enhance and strengthen human capabilities and skills. This means that, as with the Vygotskian zone of proximal development, humans can achieve a level of performance which otherwise would be impossible to reach. The goal of the transitional phases between different activity systems is to acquire suitable and sufficient knowledge and skills to fulfill the expectations of the new social-cultural environments which emerging adults must deal with.

3 Social Capital and the mediation of Social Network Sites

The transitions between the systems described above involve risks and stress for individual social capital. This appears to be further strained by distance due to the residential changes that often occur during emerging adulthood (Goldscheider, 2000).

Social capital can be defined as any kind of resource deriving from relationships between individuals (Coleman, 1988). More specifically, Bourdieu & Wacquant (1992) define social capital as the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition. Before the telematics era the social capital was formed by families, by friends and by colleagues. Nowadays a social network site's contacts can be a good example of a modern social capital because it has within itself several people than can lend a help or information in case of need.

To fulfill their needs during the transitions between different activity systems, emerging adults increasingly use social network sites to maintain their previous social networks and to create new relationships (Ellison *et al.*, 2007). At the same time, social network sites also become a type of mediational tool to reduce the gap between the knowledge and skills one already possesses and those required by new contexts, acting as bridges which can be used to cross from one activity system to another in which different knowledge and skills are required (Wenger, 1998; 2000).

The genesis of these web based tools stems from a driving force which itself derives from context and socio-cultural environment. Cultural artifacts are, in fact, an answer to a specific demand from human beings who wish to

create and modify the surrounding world in order to carry out a specific activity (Leonardi & Kallinikos, 2012).

Throughout its socio-cultural evolution mankind has developed several ways of enhancing its means of communication, passing from handwritten letters to fax messages, then to email and the development of web artifacts such as SNSs. They complement natural human abilities, enabling the construction of a more efficient system in order to better maintain relationships and bonds. SNSs can be considered as functional organs which are functionally integrated ‘tools’ representing internal and external resources aimed at achieving an objective (Leont’ev, 1974). Today the use of SNSs is largely mastered by users through interaction and these web tools can no longer be considered external instruments, but natural extensions of the individual which are integrated with their personal resources. These tools, as described above, are used by emerging adults in many situations to achieve different goals such as improving self-esteem, managing romantic relationships or participating in groups (Barker, 2009; Fox & Warber, 2013; Wilson *et al.*, 2010). We argue that SNSs are also used by emerging adults in their transitions between different social contexts.

Despite this optimistic point of view, there’s some critical aspect that has to be taken into account. First of all, the functional organs perspective tells us that the tool has a potential to enhance human performances, but it is expressed only in connection to the specific human ability that needs this tool and to the use that is made. Dillenbourg and Evans (2011) speak about a socio-constructivist flavor to indicate that there isn’t a tool activity intrinsically socio-constructivist but that technological artifacts afford socio-constructivist approaches. However, we have also to consider “digital technologies”, particularly SNSs, “are too recent, and their effects on learners too multi-faceted and interrelated... to allow the research community to provide a quick and coherent knowledge base...” (Pedró, 2012, 87). The empirical studies conducted in different countries to investigate the students’ use of technologies suggest “that ‘digital native’ label may be too simplistic to explain the ways young people use technologies” (*Ibidem*, 85) and “more empirical research is certainly needed to improve our understanding of the nature and extent of technology uptake by students” (*Ibidem*, 87).

On the basis of previous theoretical foundations, this study aims to analyze the use of social network sites in managing social capital in early emerging adults (under 24), late emerging adults (between 24 and 30) and adults (over 30). In particular, we will ask whether the different phases of life will influence the use of the social network sites in the frequency and the motives of use, the quantity of online contacts and the factors considered when connecting or being connected with new people.

4 Materials and Methods

4.1 Study design, participants, and procedures

An online questionnaire, constructed using the Qualtrics Research Suite (<http://www.qualtrics.com>), was submitted and distributed on the most popular social network sites in Italy (Facebook, Google+, Myspace, etc.). The sample was therefore not completely casual, but intentionally included only social network site users. This choice of communication channel represents an initial selection which ensures a minimum of social network site expertise in the sample. The questionnaire was in Italian, but the survey was open to anyone who speaks Italian and therefore not only Italians. The only requisite to be able to complete the questionnaire was the use of at least one SNS. The questionnaire consisted of three main parts:

The first part regarding personal and social data. The second part in which participants were firstly asked to select the SNSs they use the most. This section focuses on the participants' interaction with SNSs and includes questions about their propensity in forming and strengthening bonds through conventional methods (offline), privacy perception, trust in internet tools and the SNS selected by the participant as the most used. The third part which concentrates on the participants' habits in the use of the selected SNS and on the management of contacts on that SNS.

The questionnaire lasts 3 month. After that period, the 95% of the questionnaires were completed and in the remaining 5% at least 90% of the questions had been completed.

A total number of 123 participants voluntarily filled in the online questionnaire. Among them, 32 (26%) were men and 91 (74%) were women. Their ages range from 19 to 64 ($M=33,85$).

4.2 Results

Starting from Arnett's studies (J. Arnett, 2012), emerging adulthood, was, in western countries, initially conceptualized as the time between the ages of 18 and 25. However, this period is increasing and we currently find the characteristic dynamics of emerging adulthood until around the age of 30. For this reason we divided participants into three age categories (tab. 1): those younger than 24 years old (Early Emerging Adults - EEAs), those between 24 and 30 years old (Late Emerging Adults - LEAs) and those older than 30 (Adults).

Table 1
DESCRIPTION OF THE PARTICIPANTS AND DIVISION BASED ON AGE CLUSTERS

			Age < 24	from 24 to 30	> 30	Total
Genre	Male	Count	4	11	17	32
		% on Genre:	12,5%	34,4%	53,1%	100,0%
		% on Age	14,3%	30,6%	28,8%	26,0%
		% on Total	3,3%	8,9%	13,8%	26,0%
	Female	Count	24	25	42	91
		% on Genre:	26,4%	27,5%	46,2%	100,0%
		% on Age	85,7%	69,4%	71,2%	74,0%
		% on Total	19,5%	20,3%	34,1%	74,0%
Total	Total	Count	28	36	59	123
		% on Genre:	22,8%	29,3%	48,0%	100,0%
		% on Age	100,0%	100,0%	100,0%	100,0%
		% on Total	22,8%	29,3%	48,0%	100,0%

An ANOVA one-way between subjects was conducted to compare the habits of SNS use and of the management of contacts by the three different age groups (tab. 2).

Table 2
ANOVA'S RESULTS ON DIFFERENCES OF THE SNSS'S USE ON THE BASE OF DIFFERENT CLUSTERS OF AGE

		df	F
SNS use to keep contacts with already known people (frequency)		2 120	5,82*
Social Network Use (frequency)		2 120	4,94*
Percentage of only-online contacts		2 120	19,16**
Characteristic taken into account to activate new contact (frequency)	Common Friends	2 115	7,85**
	Home City	2 115	10,03**
	Age	2 115	8,44**
	Photo	2 115	8,88**
	Former school	2 115	9,99**

* = p < .05 ** = p ≤ .01

The following graph (Fig. 1) shows the differences between EEAs, LEAs and Adults with regard to the means in the factors detected by the ANOVA.

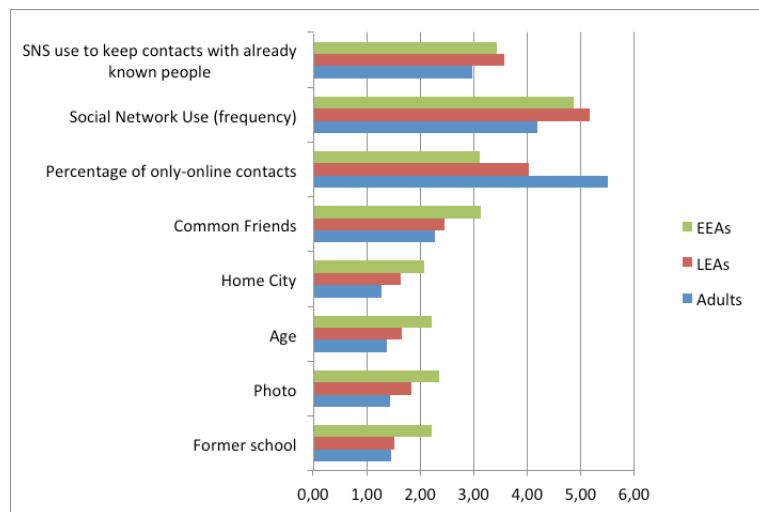


Fig. 1 - Means differences between the three clusters of age

Statistically speaking, there is a significant difference, based on age group, in the frequency with which participants use their preferred SNS to keep in contact with people that they already know [$F(2, 120) = 5.82, p = 0.00$]. Post hoc comparisons made using the Bonferroni test indicate that the mean score for LEAs ($M = 3.58, SD = 0.69$) is significantly different from that of Adults ($M = 2.97, SD = 1.07$).

There is also a significant difference, based on age group, in the frequency of use of the preferred SNS in general [$F(2, 120) = 4.94, p = 0.01$]. The Bonferroni post hoc test indicates that the mean score for LEAs ($M = 5.17, SD = 1.108$) is notably different from that of Adults ($M = 4.20, SD = 1.76$).

Furthermore, we found a significant difference, based once again on age group, in the percentage of contacts with whom participants engage in conversation only on the net [$F(2, 120) = 61.13, p = 0.00$]. The Bonferroni post hoc test gives a mean score for Adults ($M = 5.51, SD = 2.72$) which is significantly different from that of EEAs ($M = 3.11, SD = 1.60$) and LEAs ($M = 4.03, SD = 2.25$).

Finally, there are significant statistical differences, based on age group, in the elements taken into account by the user when activating a new contact with someone they do not already know. These differences involve:

Friends in Common [$F(2, 115) = 7.85, p = 0.00$]. Post hoc comparisons using the Bonferroni test indicate that the mean score for EEAs ($M = 3.14, SD = 0.97$) is significantly different from that of LEAs ($M = 2.46, SD = 1.01$) and Adults ($M = 2.27, SD = 0.91$).

Home Town [$F(2, 115) = 10.03, p = 0.00$]. The Bonferroni post hoc test indicates that the mean score for EEAs ($M = 2.07, SD = 1.05$) is significantly different from that of Adults ($M = 1.27, SD = 0.56$).

Age [$F(2, 115) = 8.44, p = 0.00$]. The Bonferroni post hoc test gives a mean score for EEAs ($M = 2.21, SD = 1.61$) which is again significantly different from that of LEAs ($M = 1.66, SD = 0.97$) and Adults ($M = 1.38, SD = 0.68$).

Photos [$F(2, 115) = 8.88, p = 0.00$]. Post hoc comparisons using the Bonferroni test indicate that the mean score for EEAs ($M = 2.36, SD = 1.06$) is significantly different from that of Adults ($M = 1.44, SD = 0.79$).

Former School [$F(2, 115) = 9.99, p = 0.00$]. The Bonferroni post hoc test indicates that the mean score for EEAs ($M = 2.21, SD = 0.1$) is significantly different from that of LEAs ($M = 1.51, SD = 0.66$) and Adults ($M = 1.45, SD = 0.69$).

5 Discussion and Conclusion

As for behavior and attitudes in the use of SNSs, results show that there are differences based on the age of the participants. LEAs use SNSs more than Adults, especially to keep in touch with people they already know. Younger people (EEAs) have not yet expanded their social capital beyond their offline contacts and only a few of them have moved away from home to study elsewhere. This leads to them using offline methods for the majority of contacts. Adults, however have already expanded their social capital but in a different way from LEAs. It is more stable, more structured and overlaps with their offline social capital. For these reasons Adults do not use SNSs to keep in touch with people they already know as much as LEAs do.

These results are also in line with those found in literature (Ellison *et al.*, 2007) and show a tendency to first recreate one's personal offline (real) network in an online context such as a SNS, and then increase social capital with unknown people. This tendency, to increase the percentage of contacts with whom participants engage in conversation only on the net, is directly correlated with age: it is more predominant amongst LEAs than amongst EEAs, and is more predominant again amongst Adults than LEAs.

As for the elements taken into account by the user in the decision whether to activate a new, previously unknown, contact, we can see that EEAs have a tendency to try to recreate their offline social capital by first adding people with whom they share a common background. This tendency is supported by greater averages in the lower age group than those in the higher: EEAs show a significantly higher value than LEAs and the latter show a higher value than Adults. This argument is valid for the elements: *Friends in Common*, *Home Town*, *Age* and *Former School*. Studies on emerging adulthood (Subrahmanyam

et al., 2008) state that young adults initially maintain, strengthen and expand their offline social network through social networking sites. This mechanism is necessary for the definition of their personal identity, and SNSs, in their role of functional organs, seem to be a valuable and effective artifact for this purpose. Moreover, SNSs can also be seen as zones of proximal development (Griffin & Cole, 1984; Vygotsky, 1978) for emerging adults who use these virtual tools to overcome their mental and physical limits in the construction and maintenance of social networks. Previous research studies have come to similar conclusions by considering college students (Ellison *et al.*, 2007) and university students (Mazzoni & Iannone, 2014).

The element “*Photo*” is a critical indicator of socialization, particularly when engaging in a new relationship with a person which is not based on professional interests. Hancock and Toma (Hancock & Catalina, 2009) noted that, “with the emergence of profile-based social networking sites like MySpace and Facebook online self-presentations are no longer limited to text-based descriptions. The profile photograph is now a central component of online self-presentation, and one that is critical for relational success”.

The tendency to start from offline social capital and people that have several characteristics in common seems to be a dominant behavioral feature of LEAs and even more so of EEAs, though considerably less so of Adults. This behavior seems to be in contrast with Granovetter’s findings (Granovetter, 1973) regarding weak ties: emerging adults, both early and late, seem to give a lot more importance to strong ties than to weak ties, while the strength of weak ties is still significant for adults.

6 Limitations and future research

A limitation of this study is that the three age groups used are continuous, but the study itself is not longitudinal. For this reason, even though the results are consistent within the study, it is not possible to draw evolutionary implications from this sample. The differences observed could be based on generational differences between the age groups, and future longitudinal studies are therefore needed in order to analyze these dynamics in greater depth. A further limitation of this study is the lack of a measure of the participants’ expertise with SNSs in the questionnaire. However, it is proper to consider all of them equally expert as the survey was submitted by a wide variety of SNS users. It is, therefore, legitimate to assume a similar level of expertise. Moreover, although the results of the Italian survey were consistent with previous literature, the sample should be expanded to other countries to enable us to obtain a more accurate description of the differences between EEAs, LEAs and Adults in different cultural contexts. A last limitation is the number of individuals (particularly male and

females) in the different subgroups, an aspect that we have tried to curtail by using a non-parametric test.

Despite these limitations, the results of the study are strong and consistent with previous research. Moreover, they shed new light on the phenomenon of emerging adulthood and SNSs as link-tools between system activities. The comprehension of how emerging adults manage their profile and online network will help to reduce the difficulties caused by the transitions between activity systems by using pre-made links between those activity systems, and will support emerging adults in safeguarding their online social image, informing them of the risks of recklessly expanding online social networks and SNS addictions.

REFERENCES

- Arnett, J. (2012), *New Horizons in Research on Emerging and Young Adulthood*. In A. Booth, S. L. Brown, N. S. Landale, W. D. Manning, & S. M. McHale (Eds.), (Vol. 2, pp. 231–244). Springer New York. Retrieved from http://dx.doi.org/10.1007/978-1-4614-1436-0_15
- Arnett, J. J. (2000), *Emerging adulthood: A theory of development from the late teens through the twenties*. American Psychologist, 55 (5), 469–480. doi:10.1037//0003-066X.55.5.469
- Arnett, J. J. (2007), *Emerging Adulthood: What Is It, and What Is It Good For?* Child Development Perspectives, 1 (2), 68–73. doi:10.1111/j.1750-8606.2007.00016.x
- Arnett, J. J., Kloep, M., Hendry, L. B., & Tanner, J. L. (2010), *Debating Emerging Adulthood: Stage Or Process?* Retrieved from <http://dx.doi.org/10.1093/acprof:oso/9780199757176.001.0001>
- Arnett, J. J., & Tanner, J. L. (2006), *Emerging adults in America: Coming of age in the 21st century*. (Jeffrey Jensen Arnett & J. L. Tanner, Eds.). Washington, DC, US: American Psychological Association. doi:10.1037/11381-000
- Barker, V. (2009), *Older adolescents' motivations for social network site use: the influence of gender, group identity, and collective self-esteem*. Cyberpsychology & Behavior : the Impact of the Internet, Multimedia and Virtual Reality on Behavior and Society, 12 (2), 209–13. doi:10.1089/cpb.2008.0228
- Bourdieu, P., & Wacquant, L. J. D. (1992), *An Invitation to Reflexive Sociology*. University of Chicago Press. Retrieved from <http://books.google.fi/books?id=rs4fEHa0ijAC>
- Brenner, J., & Smith, A. (2013), *72% of Online Adults are Social Networking Site Users*. Washington, DC: Pew Internet & American Life Project.
- Bynner, J. (2005), *Rethinking the Youth Phase of the Life-course: The Case for Emerging Adulthood?* Journal of Youth Studies, 8 (4), 367–384. doi:10.1080/13676260500431628
- Coleman, J. S. (1988), *Social capital in the creation of human capital*. American Journal of Sociology, S95–S120.

- Dillenbourg, P., & Evans, M. (2011), *Interactive tabletops in education*. International Journal of Computer-Supported Collaborative Learning, 6(4), 491–514.
- Douglass, C. B. (2007), *From Duty to Desire: Emerging Adulthood in Europe and Its Consequences*. Child Development Perspectives, 1 (2), 101–108. doi:10.1111/j.1750-8606.2007.00023.x
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007), *The benefits of Facebook “friends:” Social capital and college students’ use of online social network sites*. Journal of Computer Mediated Communication, 12 (4), 1143–1168.
- Engestrom, Y. (1987), *Learning by Expanding: An Activity-theoretical Approach to Developmental Research*. Orienta-Konsultit Oy. Retrieved from <http://books.google.fi/books?id=lxGXQAAACAAJ>
- Fox, J., & Warber, K. M. (2013), *Romantic Relationship Development in the Age of Facebook: An Exploratory Study of Emerging Adults’ Perceptions, Motives, and Behaviors*. Cyberpsychology, Behavior, and Social Networking, 16 (1), 3–7.
- Goldscheider, F. (2000), *Why study young adult living arrangements? A view of the second demographic transition* (Vol. 6).
- Granovetter, M. S. (1973), *The strength of weak ties*. American Journal of Sociology, 1360–1380.
- Griffin, P., & Cole, M. (1984), *Current activity for the future: The Zo-ped*. New Directions for Child and Adolescent Development, 1984 (23), 45–64. doi:10.1002/cd.23219842306
- Jeffrey T. Hancock, & Catalina L. Toma. (2009), *Putting Your Best Face Forward: The Accuracy of Online Dating Photographs*. J Commun, 59 (2), 367–386. doi:10.1111/j.1460-2466.2009.01420.x
- Leonardi, P. M., & Kallinikos, J. (2012), *Materiality and organizing: Social interaction in a technological world*. Oxford University Press.
- Leont’ev, A. N. (1974), *The problem of activity in psychology*. Journal of Russian and East European Psychology, 13 (2), 4–33.
- Mazzoni, E., & Iannone, M. (2014), *From high school to university: Impact of social networking sites on social capital in the transitions of emerging adults*. British Journal of Educational Technology, 45(2), 303–315.
- Pedró, F. (2012), *Connected minds*. OECD.
- Subrahmanyam, K., Reich, S. M., Waechter, N., & Espinoza, G. (2008), *Online and offline social networks: Use of social networking sites by emerging adults*. Journal of Applied Developmental Psychology, 29 (6), 420–433.
- Tuomi-Grohn, T., & Engestrom, Y. (2003), *Between school and work: New perspectives on transfer and boundary-crossing*.
- Vygotsky, L. S. (1978), *Mind in Society: The Development of Higher Psychological Processes*. (M. Cole, Ed.). Harvard University Press. Retrieved from http://books.google.fi/books?id=RxjjUefze_oC
- Wenger, E. (1998), *Communities of practice: Learning, meaning, and identity*. Cambridge university press.
- Wenger, E. (2000), *Communities of practice and social learning systems*. Organization,

7 (2), 225–246.

Wilson, K., Fornasier, S., & White, K. M. (2010). *Psychological predictors of young adults' use of social networking sites*. Cyberpsychology, Behavior, and Social Networking, 13 (2), 173–177.