Studygrammers: Learning influencers

Estudigramers: Influencers del aprendizaje

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Abstract
Today's learning ecologies stand out due to their variety, dynamism and mutability, demanding an observation that matches them. This paper focuses on emerging youth informal learning cultures, with the main objective of recognizing and characterizing a new figure in online social media: the studygrammer. Using questionnaires (N=256), discussion groups organized using Philips 66 (N=56) and Atlas.ti (thematic analysis), as well as participant observation, we analyzed: practices of academic use of social networks by Communication students outside the institutional environment, the opinion about the #Studygram community, and the analysis of profiles. The main results are centered on a proposed definition of the studygrammer: namely the student who works as a mentor and peer leader in Instagram's academic field. This profile not only shares notes (which stand out for their neatness and detailed aesthetics), but also conveys advice, support and experiences. In fact, studygrammers keep influencer genetics by prioritizing aesthetics and monetization in their publications. The conclusion is that the academic purpose adds exclusive characteristics to the community, where the visual code functions as a lingua franca between fields of study. In fact, studygrammers have followers from various academic backgrounds who seek "know-how" (management and planning of their own learning) as well as a fundamentally rational adherence.

Resumen
Las actuales ecologías de aprendizaje destacan por su variedad, dinamismo y mutabilidad, lo que requiere una observación análoga a las mismas. Este trabajo se centra en las culturas de aprendizaje informal juvenil emergentes, tomando como objetivo principal reconocer y caracterizar una nueva figura en medios sociales en línea: el estudigramer. Empleando cuestionarios (N=256), grupos de discusión organizados mediante Philips 66 (N=56) y Atlas.ti (análisis temático), y observación participante, se analizan: prácticas de uso académico en redes sociales por parte de estudiantes de Comunicación al margen del entorno institucional, la opinión sobre la comunidad #Studigram, y el análisis de perfiles. Los principales resultados se concentran en una propuesta de definición del estudigramer: véase aquel estudiante que ejerce la labor de mentor y líder entre pares del ámbito académico en Instagram. Este perfil no solo comparte apuntes (que sobresalen por su orden y detallada estética), sino que también transmite consejos, apoyo y experiencias. De hecho, el estudigramer mantiene la genética influencer al priorizar la estética y monetización en sus publicaciones. Se concluye que el fin académico añade características exclusivas a la comunidad, donde el código visual funciona como lengua franca entre ámbitos de estudio. En efecto, los estudigramers cuentan con seguidores.
de diversos grados académicos que buscan el «saber hacer» (gestión y planificación del aprendizaje), así como una adhesión fundamentalmente racional.

**Keywords / Palabras clave**
Studygrammer, Instagram, influencer, informal learning, social media, learning communities, communication students, transmedia literacy.

Estudigrammer, Instagram, influencer, aprendizaje informal, redes sociales, comunidades de aprendizaje, estudiantes de comunicación, alfabetización transmedia.

1. **Introduction**

After an extensive decade of usage and exploration of social networks fluctuating between panacea and apocalypse (Piscitelli, Adaime, & Binder, 2010), the maturity of their life cycle (IAB, 2018) invites a more pondered reading of their possible effects (Allcott & al., 2019). The scientific literature records both negative consequences, normally associated with intensive uses such as: personal discomfort and depression, digital addiction, distancing from healthy activities and physical personal relationships, increased consumption of biased information and political polarization (Mosquera & al., 2019); and positive consequences: obtaining information and entertainment, evading isolation, fostering relationships and social participation (Valkenburg & Peter, 2007). While the concerns are well-founded and legitimate, these authors suggest preventing the negative from obscuring the positive (Allcott & al., 2019).

The need of individuals to relate to the group as an anchor for a sense of belonging, and the creation of group and individual identity, which is also forged in relation to the group (Fisher, 1992), is characteristic of human beings. Social networks play a great role in this sense, since they have the power to exert influence from the dawn of their existence (Castells, 2001). In this way, relationship and influence are considered outstanding ingredients in the concept of community. These online platforms can connect people with common interests, although this is certainly not new. Fans have always gathered around their affinities, but, in this case, with the peculiarity provided by the Network to replace a physical space by a virtual one. This enables associations to stick to the subject that concerns them jointly and, once the common objective has been achieved (or not), the link is dissolved, since “there are no membership cards or membership fees, only common concerns” (Bajo, 2015: 114). An example of this are the various changes that took place in this century under the umbrella of technopolitics (Castells, 2009; Candon-Mena, 2013) led by the so-called “smart mobs” (Rheingold, 2004).

The growth of participative culture on the Web (Jenkins, 2009) also reaches the didactic field. Thus, “transmedia literacy” (Scolari, 2016) implies a new relationship between subjects, ICT and educational institutions that doubly affects the youth population. On the one hand, this group is in full formative development, and on the other, it is openly exposed to media and technology. However, it is important to maintain a watchful function from the research community, the home and the school, given that a longer screen time “does not guarantee the development of a reflective attitude nor does it favor learning” (Caldeiro-Pedreira & Aguaded, 2017: 102). It is for this reason that adolescents are invited to demand “the ability to reflect in order to achieve audiovisual autonomy” and to “develop a critical view that allows them to survive in a digitalized world” (Caldeiro-Pedreira & Aguaded, 2017: 102).

1. **State of the art**

The greatest contribution of the Internet and ICTs to the field of education has been the promotion of teacher innovation. The logic and dynamics of digital technology itself have become natural allies of the new teaching model based on collaborative, autonomous and decentralized work. The
scientific framework related to the positive effects of the introduction of technology in learning processes covers all types of scenarios, skills and procedures. Experiences in the formal environment report advances in terms of methodologies such as flipped learning, which relies on the use of digital resources inside and outside the classroom (Serrano & Casanova, 2018), the usefulness of Personal Learning Environments (PLE) and gamification (Torres-Toukoumidis, Romero-Rodriguez & Pérez-Rodriguez, 2018), from which an increased acquisition of skills is identified (Callaghan & Bower, 2012; López-Pérez, Pérez-López, & Rodríguez-Ariza, 2011). The empirical verification of these experiences includes both formal and informal processes. Pereira, Fillol and Moura (2019) state that, despite the excessively institutionalized view of education, informal learning strategies contribute to the development of useful skills and competences from a school viewpoint. In fact, the skills acquired through the use of information technologies go beyond the cognitive realm to also cover the social and emotional realm (Tan & Pierce, 2011). Simply, the cross-sectional nature, ubiquity and versatility of virtual space makes it more "friendly" for young people, who also take advantage of it to learn without establishing differences.

The unlimited digital space does not respond to the stagnant logic of the pre-digital world, since "unlike other environments exclusively dedicated to learning (...) the opportunity for interactivity offered by social networks configures a completely hybrid space where it is not possible to distinguish when young people are sharing and when they are learning" (Arriaga, Marcellan-Baraze, & González-Vida, 2016: 213). The existential journey of social networks also enables us to observe an evolution in their uses. Although in the beginning, a predominance of entertainment was detected, there has been an increase in their use for professional purposes since 2015 (Fundación Telefónica, 2016). Recently, the Internet Oxford Institute has detected a decrease in their use to stay informed in favor of the consumption of news via traditional media (Marchal, 2019). Piscitelli, Adaime and Binder (2010) talk about the potential of social networks to influence education through the collective intelligence of groups of prosumers (content producers and consumers). The pedagogical and cultural possibilities of YouTube have also produced valuable scientific literature (Gilroy, 2010; Burgess & Green, 2018), discovering figures such as, for example, the booktuber: a young Internet user who recommends books in vlog format (Vizcaíno-Verdú, Contreras-Pulido, & Guzmán-Franco, 2019).

The veteran and versatile nature of Facebook can also be seen in the scientific production generated (Selwyn, 2009; Piscitelli & al., 2010; Sánchez, Cortijo, & Javed, 2014) and, by extension, in the rest of platforms such as WhatsApp and Twitter (Abdullah & Darshak, 2015; Túñez & Sixto, 2012), the contributions of this epigraph have significance beyond the national scale, since they include populations from different places, such as: Portugal, United Kingdom, United States, Australia, Turkey, Israel, Singapore and Indonesia. The social network focus of this research, Instagram, is the most recent (2010), and continues to expand increasing in users, rating and notoriety (IAB, 2018). In addition, it has been the object of several studies, which report the positive reception of students to the inclusion of Instagram as part of the learning methodology. Some of the results observed highlight the improvement in the presentation of papers through a flipped classroom model (Supiandi, Sari, & Subarkah, 2019), or the improvement of expression skills in the acquisition of a second language (Barbosa & al..., 2017; Jalaludin, Abas, & Yunus, 2019).

However, the scope of this line of research has the following limitations: a) most existing references deal with the educational use of Instagram in a limited field known as SMILLA (social networks as an instrument of language learning); b) references are mostly concentrated in Asia; and c) studies are published extensively in the infamous "predator journals", which is why they are not referenced in this text. In contrast, there is not much scientific activity in the West. Moreover, most papers focus on docent view on this social platform, which justifies the relevance of undertaking a study focused on the academic activity of students, regardless of the institution.
3. Material and Methods

3.1. Objectives and approach

This research addresses how Communication students use social networks outside the institutionalized educational environment, although directly linked to their higher education, with the aim of identifying new components and emerging learning processes. Within the heterogeneous digital ecosystem, attention is focused on a new actor: the studygrammer. A student who leads the #Studygram community of Instagram. The main purpose of the text is, therefore, to define and characterize his figure, while understanding the relationship and opinion of students in the Communication area about this phenomenon.

The analytical approach is comparative in relation to other networks or "influencers" of other fields, other degrees and other training stages. In this way, "Instagram use by Communication students" and "role played by the studygrammer" are established as dependent variables; and the independent variables are: "types of social network: Instagram or other", "purpose of learning: formal or informal", "field of knowledge: communication or other" and "education stage: university or earlier."

3.2. Methodological design

The present design offers a triangulation of three techniques: questionnaires, participant observation and Phillips 66 processed with Atlas.ti. The data on the academic uses in social networks and, in particular, from the #Studygram community, were obtained from 256 students from all the courses of the different degrees in Communication of a Spanish public university, both in person and online. The main collection instrument was an online questionnaire.

The innovative nature of the phenomenon initially posed a stumbling block to the development of sufficiently representative categories of variables. A pilot questionnaire was conducted that collected open-ended answers to those questions with less certainty about the possible options. The replication of responses to the pilot questionnaire facilitated the development of representative categories, which gave rise to manifest variables for analyzing behavior through closed options (many of them with a "multi-response" option).

During the participant observation, an appropriate technique to become acquainted with groups or communities outside the researcher (Gaitán & Piñuel, 1999), 15 random profiles (Spanish, English and Portuguese speaking) were followed for two weeks under the label #Studygram. This qualitative evaluation on the images and the associated "post" (the 10 top posts of each "hashtag" eliminating duplicates and posts not related to the object of study) allowed to characterize the figure of the studygrammer.

The methodological design was completed with the execution of a Phillips 66, a conversational technique that is useful to organize the participation of large groups in limited times (Peñafiel, Torres, & Izquierdo, 2016). According to the protocol of the technique (Gaitán & Piñuel, 1999), 10 discussion groups were organized with a total of 56 participating subjects, all of them students of the double degree in Journalism and Audiovisual Communication. The design of the groups did not determine homogeneity or heterogeneity variables, precisely because the first type (age, studies) adequately served the design of previously established independent variables. In addition, variables irrelevant to the ultimate purpose of the study were recognized, such as gender (which was randomly distributed and naturally annulled by the spontaneous group formation). Each group had a secretary who collected the main findings of the "group discourse" (Ibáñez, 2003) in writing. Alphanumeric coding was used to maintain the confidentiality and anonymity of the participants (Cohen, Manion, & Morrison, 2007), and a spokesperson exposed the data in a meeting where each group had two rounds of intervention. The exploitation of the documents generated by the groups was carried out with the Atlas.ti program, following the method of "thematic analysis", which allows to identify, organize and provide patterns or themes for the understanding of the phenomenon (Braun & Clarke, 2006). The strategy of open, axial and selective coding (Strauss & Corbin, 1990) was also used to
create and organize the codes through networks or flow diagrams that graphically represented the possible systems of relationships between categories and/or codes. That is to say, linking participants’ concepts and opinions. In order to increase validity, another Philips 66 was carried out, whose data were not processed, although it did enable the verification of the hermeneutic unit of analysis in which a previously formed group (a classroom of peers) was constituted, which did not produce group biases in the discourse produced. An external auditor's review of the codebook was also requested (Creswell, 2012). The data collected in this phase of the study responded to the objective of knowing the relationship and the opinion of Communication students on the studygrammer phenomenon.

4. Analysis and results

4.1. Use of social media in informal learning

To contextualize the topic of learning in a peer community, one begins with the question: "habitually, what notes do you use to study?", where the answer “Those I take in class complemented with those of a colleague” obtained 70.07%.

![Figure 1. Academic use of networks.](image)

Regarding the usefulness of the educational use of social networks (Figure 1), only WhatsApp and YouTube have a significant utility (represented by lighter tones in Figure 1), where Facebook is indicated as the least useful, followed by Instagram and Twitter.

In relation to specific features, WhatsApp stands out for "solving short and practical doubts." It is the only platform that has been indicated as very useful for: "sharing notes", "sharing general information about the degree and/or the university", "obtaining diagrams and summaries", "receiving encouragement" and "reviewing in company" (although the last three in less intensity). YouTube is considered the most appropriate for "complete explanations of complex subjects", its usefulness was most recognized in previous stages of training. In this sense, the data relating to the authorship of the videos that are consumed as academic support stands out: in secondary education 50% of the videos were made by professional teachers, in higher education this figure dropped to 30%. "The possibility of stopping and repeating the explanation" (sample testimony) and "we did not know how to make our own websites, blogs or profiles" (sample testimony) are the arguments offered. Likewise, it is relevant for this study to emphasize that the option "none" was the option most frequently mentioned with respect to receiving "study and planning advice."

In order to completely understand the assessment of the educational use of social networks, it is essential to underline that the adjective most commonly used is "collaborative" (indicated 70.6% of the time), followed by “fast” (63.25%), while adjectives such as "clear" and "organized" obtained low scores: 3.3% and 9.6% respectively. The assessment "reproduces errors" had a significant incidence...
of 35%. Another element detected as a barrier when associating social networks and study was identified as a danger of distraction. Despite the balance expressed, a door remained open for the manifest opinion: "these are still used sparingly, but they could be used more and better", which obtained 58.3% support.

4.2. The figure of the studygrammer

4.2.1. Analysis of profiles and activities of the studygrammer

Instagram has over 3.5 million #Studygram publications. During the month of February, 2019 it accumulated 9.1 million interactions (Instagram, 2019), these figures invite an empirical observation of the phenomenon.

The term #Studygram (also #Studigram, #Estudygram or #Estudigram) comes from the English root “Study” and the suffix “-gram” in reference to Instagram, where the "hashtag" or tag (#) indicates a particular community on the Web. The word "studygrammer" designates the person who publishes in the community, and although in its Spanish version it resembles English terms in line with other similar terms such as "youtuber", "booktuber" or "studytuber", it uses the suffix "-er", which in English forms nouns that indicate profession or occupation, equivalent to Spanish "-or" or "-ero."

In general, studygrammers post their notes, share experiences of their student life, offer advice on planning and studying, and sometimes resolve questions. It is a profile that dominates Instagram's communication codes, as their publications show meticulous care for all visual aspects: colors, calligraphy, framing and lighting. The order of both the content shown and the environment (table and/or desk) take center stage. In fact, this question is related to additional data obtained from the questionnaires, where 95% of the subjects "consider that having well-ordered notes that are pleasing to the eye can be a motivation to devote more time to studying." Therefore, the use of these codes and visual elements of organization can produce a personal and community effect. The motivational factor does not only arise from inspiration it is also expressed explicitly. The phrases of self-improvement and the exchange of good wishes are present in the analyzed publications, where two message recipients are observed: themselves and the community.

Analyzing the economic aspect, we observe two relevant elements: the presence of brands and online stores. The most important companies are those of markers, such as Stabilo Boss. Studygrammers also monetize their online community by selling their diagrams, agendas and planners through online portals and/or with their personal brand. The most outstanding example is that of the British Communication student "Emma Studies", who has more than 450,000 followers and an online store.

4.2.2. Studygrammers in Communication undergraduate programs: Perception and assessment

The most relevant data obtained both from the questionnaires and the discussion groups on the relationship (follow-up and opinion) of Communication Degree students with the studygrammer are the following: the students stated that they knew fewer studygrammers from their own degree program (4.4%) than from other fields (12.1%), among which they mentioned Medicine, Biology, Architecture, Fashion Design, Philosophy, Law, History, Engineering, Teaching, Physics and Mathematics. For 87.9%, the criteria for choosing to follow a studygrammer should be based on content, while for 12.1% on personality. However, to follow a generic influencer the personality does gain importance, increasing the degree of agreement to 58%.

Considering the reasons to follow them, the most frequently mentioned is: "to complete notes" with 56.3%. Other reasons for deciding to be part of a studygrammer's community are: "for doubts" and "for advice" (both mentioned 37.6% of the time), followed by "for help to get organized" with 31.1%.
These questions are reflected in the description that the reporting subjects make of their “ideal studygrammer” (Figure 2).

The variable "explains in his/her own way, with a language appropriate to our age" also stands out from this representation. Based on the economic question, 19.7% think that “having the activity of the studygrammers for educational purposes, they should not get any benefit. 48.7% think it is appropriate for them to "monetize their online community by selling their schemes and other content", and for 31.6% to do so “through collaborations with brands.” The fact that the economic variable comes into play in the #Studygram community does not seem to generate strong disagreement. A fact that may be explained by the opinion expressed regarding the reasons students consider that lead a person to become a studygrammer: “for helping” (50%), “for money” (43.8%) and “because they consider that they are good students” (37.5%). On the other hand, although 68% think it is a useful figure, 75% say they would not like to be a studygrammer. The reasons for this refusal are shown in Figure 3.
5. Discussion of results

The manifestations of the performance of informal peer learning reflect a certain “sense of community”, with spatial limits that extend when social networks come into play, where they orbit around content sharing.

Initially, the educational usefulness of social networks perceived by students seems limited, because along with positive aspects, other negative factors continue to be identified. From the perspective of the learner, this opinion agrees with the one obtained from the teacher's point of view (Waycott & al., 2019) which, as previously commented, places its effects in both poles (Allcott & al., 2019). On the one hand, motivational benefits and community building are described; on the other, there is concern about the risk of students feeling exposed or having poor digital behavior (Waycott & al., 2019); only the value of WhatsApp, which functions as a virtual extension of what is usual in face to face interaction: sharing notes, doubts and encouragement with classmates, is highlighted.

During high school, YouTube is considered to play an outstanding role, not as a tool used among peers, but as a space for technical training (foreseeably also for personal development). Moreover, the professional teaching staff seems to favor, during the previous training stages, the delegation of regulated content in spaces outside the classroom, where the digital ecosystem helps as an extension of the lesson at home. This notion of "physical extension" (teaching staff, content), which is planned in the stories by incorporating the digital variable, highlights the importance of ubiquity as a characteristic of the virtual world and the specific contribution of cybertechnology to learning.

Within the framework of learning ecologies in the digital age and contextualized within the rise of collaborative culture among young people (Scolari, 2018), we observe the existence of the studygrammer as a student using Instagram for academic purposes for himself and a community. As Arriaga, Marcellán-Baraze and González-Vida (2016: 211) state, “the act of sharing what is produced also contains, in itself, an act of learning, both for those who get a response to what they show, and for those who observe what is produced by others.”

Along with academic content in this community, motivational aspects aimed at two audiences are very present. Both self-motivation statements and community support slogans are frequent, with members also expressing inspiration for the care of visual details. The aesthetics and the order of notes, diagrams and the work table are the protagonists of the communication code. The element of stimulus detected in the activity of the studygrammer makes it possible to establish a connection with the figure of the booktuber (prescriber of literature in vlog format), since "in the same line, it facilitates ratification and meditation on the factor of affinity between peers as an eminent motivational driver for reading in everyday and informal environments" (Vizcaíno-Verdú & al., 2019).

Another remarkable part of the activity in the #Studygram community is the advice offered on the organization of the study task, especially valued by your community, which recognizes such deficiency. They also consider them useful for current training needs, seeking the incorporation of mechanisms that allow them to resolve similar situations in the future.

The presence of products in some profiles indicates agreed collaborations with commercial brands, mainly in the stationery sector; in other cases, the monetization of the community takes place through the sale of its contents in virtual stores. In short, studygrammers reproduce, probably intuitively and in a self-taught manner, the only two business models that social networks have developed to date to obtain income: advertising and the sale of digital services and goods (Muñoz, 2018).

The initial skepticism of students regarding the relevance of the educational use of social networks and their subsequent positive assessment of the #Studygram community may seem paradoxical, but it has an explanation. Studygrammers neutralize —with their characteristic aesthetics and order— the aspects that were identified as factors of social networks that do not contribute to learning: “not clear”, “not organized.” Similarly, their advice mitigated the shortcomings reported, since it is noted that to receive “advice on studying and planning” the most common option was "no social network." Therefore, this untapped potential manifested in the subjects, became tangible through the personal leadership component. In fact, studygrammers carry out those same functions that, from the beginning, were recognized in the use of WhatsApp (exchanging notes, doubts,
encouragement). Now, studygrammers do it in open, where the messaging network selected is the intracommunity. The fundamental stigma in the combination of social networks and studies is marked by the recognition of the threat of distraction that these can pose when working (although it is also assumed that this is a factor of self-control).

The fact that it is a contemporary community appears to add value to the groups, since the subjects valued the fact that studygrammers used familiar words (appropriate to their age group) in explanations. The analysis of booktubers also reflects the generational alignment, positively reporting the prosumer role of young people around training, from which "new youth exercises in social networks find new tactics of literary development in environments that are beyond academic control, but which, likewise, are positive" (Vizcaíno-Verdú & al., 2019). In general, the whole "conversation" of the study moves within a specific framework that adequately focuses the phenomenon of study and enables one to understand its dimension as expressed in the following word cloud developed with the interventions in Philips 66 (Figure 4).

![Figure 4. Word Cloud representing the semantic field of the studygrammer phenomenon.](image)

To finalize the characterization of the studygrammer, the general influencer phenomenon is analyzed in relation to the particular influencer for studying. The data on the "content" is seven times greater than the data related to "personality." As a follow-up motivation, a more conscious decision is made to adhere to a learning community rather than a recreational one. This finding is in line with the results of Vizcaíno-Verdú and others (2019: 104) on the booktuber, when they state that, "unlike other studies on the identity and autobiographical fame of the youtuber (...) booktubing has created a synergy of collaboration, recommendation and participation among equals in which physical or psychic aspects are not as important as preferences and reflections.”

From the economic perspective, the differences between general influencers vs. influencers for studying are not so conclusive. On the other hand, half the subjects expressed their agreement with the monetization of the community of followers, when the answer for the reasons why someone becomes a studygrammer was very much “for helping” rather than “for benefit.”

The contribution of the present study limits their contributions to present-day culture and moments, since there are many factors that influence the life cycle of Web trends and, therefore, many cases of exhaustion of practices and actors by the socio-digital dynamics themselves.
6. Conclusions

The #Studygram phenomenon represents the new transmedia competences that Ferrés and Piscitelli (2012) describe as: 1) learning by doing what you like; 2) learning by simulation; 3) learning by perfecting one's own or others' work; 4) learning by teaching, where the young person transmits and receives knowledge. The first skill is led by the studygrammer, the second by the follower, and the third and fourth by the whole community. This places studygrammers and their activity within the growing group of informal digital practices that contribute to the young people's learning (Scolari, 2018), exemplifying the so-called visual culture learning communities (Freedman & al., 2013).

As a result of this research, a definition of studygrammer is proposed: "A student who exercises, through Instagram, a peer-to-peer mentoring role in the academic field, not only sharing notes and outlines, but also transmitting advice, encouragement and experiences." Likewise, the following characterization proposal is proposed as a result: "The studygrammer incorporates the influencer nature: mastery of the aesthetics and monetization of online activity, where the academic purpose adds its own characteristics." Among their followers the rational motives have more weight than the emotional ones for community adhesion, that is to say, what to follow becomes more important than who to follow. The visual code functions as a lingua franca between fields of knowledge. In fact, a studygrammer can be followed by students from other degrees because "how it's done" is also relevant. The learning mechanisms that underlie the studygrammer's activity and their virtual community are considered a practice and a positive contribution to the formative needs of today's society.

References


