



Participatory culture and knowledge sharing among educators and scholars in higher education

Ana Paiva & António Quintas-Mendes

To cite this article: Ana Paiva & António Quintas-Mendes (2024) Participatory culture and knowledge sharing among educators and scholars in higher education, Educational Media International, 61:1-2, 86-102, DOI: [10.1080/09523987.2024.2357954](https://doi.org/10.1080/09523987.2024.2357954)

To link to this article: <https://doi.org/10.1080/09523987.2024.2357954>



© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 24 May 2024.



Submit your article to this journal [↗](#)



Article views: 964



View related articles [↗](#)



View Crossmark data [↗](#)

Participatory culture and knowledge sharing among educators and scholars in higher education

Ana Paiva^a and António Quintas-Mendes^b

^aLaboratory of Distance Education and E-Learning, Universidade do Algarve, Faro, Portugal;

^bLaboratory of Distance Education and E-Learning, Universidade Aberta, Lisboa, Portugal

ABSTRACT

This study aims to explore how subjects identified as digital scholars use social media for sharing information and knowledge. A qualitative approach was used with in-depth semi-structured interviews to a purposive sample of 13 subjects. We adopted the Braun and Clarke Thematic Analysis approach and used NVivo QDA Software for the analysis of the data. The results point to 3 major themes: 1) Sharing 2) Interacting and Communicating and 3) Connecting and Networking. The participants in this study reveal a clear awareness of the importance of online presence and interaction with others in establishing shares, dialogues, relationships and bonds on the network. However, there is some heterogeneity among the participants, some being assumed as more active and participatory and others as less so, some clearly separating the work and non-work contexts and others for whom this distinction is less relevant. Motivations for sharing, such as altruism and generosity, are also related to possible gains in social capital. What is common to all participants is the need to find value in what is shared in networks, as well as the need for these actions to have some utility for themselves or for the collectives where information and knowledge are shared.

KEYWORDS

Participatory culture;
knowledge sharing; social
web; digital scholarship

1. Introduction

Several years have passed since the Internet evolved from a mere information repository into a dynamic global platform that promotes extensive social interaction and collaborative content creation. As Conole (Conole, 2013) aptly observed, this modern web realm encompasses at least two crucial dimensions: one dimension relates to user-generated content and the other dimension relates to peer review and critique. In what concerns user-generated content we can say that the web is no longer a passive

CONTACT Ana Paiva  amvpaivaster@gmail.com  Laboratory of Distance Education and E-Learning, Universidade do Algarve, Faro, Portugal

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

medium for consumption but an interactive stage for active participation, authorship, co-authorship, and content production. Bruns (2008) poignantly articulates this shift by coining the term “producers” to describe the emergence of a new breed of users who engage not in traditional content production but in “produsage” involving the collaborative and continuous enhancement of existing content with the aim of continual improvement. In what concerns peer review and critique, we can say that beyond user authorship, the digital landscape offers ample opportunities for openly commenting on and evaluating others’ work. This practice has become pervasive across various online domains, from social networks to scientific repositories. Here, authors can seamlessly engage in dialogues with readers, users, and fellow authors, exchanging critiques, assessments, revisions, and recommendations.

In the present work, we draw on a theoretical framework rooted in the contributions of various authors who focus on the culture of online participation. Notably, Jenkins (2006), Bruns (2008), Shirky (2010), Rheingold (2017), among others, advocate for a shift from passive roles to active involvement in content creation and the dissemination of ideas, information, and knowledge on the web. Bruns (2008) views the acts of social web users as part of an ongoing stream of content development and refinement, positioning them as both active consumers and producers of information and knowledge, participating in collaborative online communities as “producers.” This concept of “produsage” challenges the traditional notion of finished products attributed to specific and singular authors (Ong, 1982). Instead, it emphasizes the collaborative nature of continuously building and extending existing content in the pursuit of improvement (Bruns, 2008).

Rather than generating static “products,” content developed in this manner give rise to knowledge artifacts that are “inherently incomplete, always evolving, modular, networked, and never finished” (Bruns, 2008) (p. 22). The concept of a “participatory culture” (Jenkins, 2006) leads us to envision a social landscape shaped by citizens through their digital engagements on the web. This era of participatory and digital culture signifies a transition, in the realm of information and knowledge, from a culture of scarcity to one of abundance (Jenkins, 2006; Stewart, 2015). Unlike the tangible nature of earlier artifacts, digital content possesses the qualities of persistence, replicability, scalability, and searchability (Boyd, 2011). Hence, the notion of participation demands individual competencies and strategies that enable personal expression, alongside novel social and relational skills fostering diverse participatory actions within the networks. These processes and practices necessitate a fresh literacy in participation and collaboration (Rheingold, 2017). These techno-social knowledge and skills are acquired through reflective engagement with the services and tools of the social web. As cautioned by Rheingold (Rheingold, 2017), it is essential to acquire these skills in order to avoid reverting back to the “media environments of the broadcast era,” where a select group of cultural producers distributed their products to a passive audience.

2. Digital scholarship

The ongoing digital transformations holds extensive implications for the academic sphere, significantly affecting the roles of educators, students, and researchers. Academic experts, such as Weller (Weller, 2011) and Veletsianos and Kimmons (Veletsianos & Kimmons, 2012), emphasize the all-encompassing impact of social media within higher education. This impact goes beyond merely altering student interactions; it also fundamentally transforms the structure, delivery, enactment, and experience of scholarship. For example, Weller (2011) fittingly describes the traditional “lecture” as a “pedagogy of scarcity,” based on a one-to-many model meant to maximize the utilization of a limited resource – the expert. Conversely, Veletsianos (2016) points out that the conventional image of an isolated scholar laboring in a dimly lit office markedly differs from the connected scholarly activities taking place online. Within academic professionals’ lives, these digital networks challenge core assumptions that form the foundation of scholarly work – assumptions about teaching, research, knowledge creation, and dissemination. Consequently, academia faces new demands for socio-technical skills, which scholars are expected to address (Jhangiani & Biswas-Diener, 2017; Kluzer & Pujol, 2018). Traditionally, academia valued teaching and research above all else; however, modern scholarship now calls for academics to assume additional roles. These new responsibilities involve scholars engaging and communicating with broader audiences via social media and integrating open science networks that incorporate practices like open-access publishing, sharing open data sources, and actively participating in Open Education. This interaction can manifest in various ways – such as creating and distributing open educational resources (OER) or adopting open educational practices (OEP). Consequently, new and diverse designations have been adopted such as “Digital Scholar” (Weller, 2011), “Networked Participatory Scholar” (Veletsianos, 2016; Veletsianos & Kimmons, 2012), or “Open Educational Scholar” (Jhangiani, 2017; Nascimbeni, 2020). Nevertheless, this transition is not without its difficulties and contradictions. Due in part to the heightened level of public visibility, individuals may struggle to navigate the divide between their professional and personal identities. Veletsianos (2016) insightfully observes that many professionals might feel apprehensive about how their social media engagements will be interpreted by students, colleagues, administrators, potential employers, or policy makers.

3. Scholars and networks

The inquiries surrounding these issues have given rise to a substantial body of research, spanning a diverse array of perspectives. One category of studies revolves around the characterization of the networks that academics engage with, encompassing their capabilities and the depth of their involvement within

them (Dron & Anderson, 2014; Hailu & Wu, 2021; Nentwich & König, 2014). Hailu & Wu (2021) have classified the shared spaces among academics into three categories: 1) Social Network Sites (SNS), such as Twitter, Facebook, Instagram, Quora, and others, defined as web-based platforms enabling individuals to construct public or semi-public profiles and connect with others (Nentwich & König, 2014); 2) Institutional Repositories, where researchers deposit their work; and 3) Academic Social Networks (ASNs) like Mendeley, Zotero, ResearchGate (RG), or Academia.edu. ASNs, unlike institutional repositories, possess a dynamic nature and are tailored to bring the advantages of social networking sites to a distinctly academic audience. Conversely, we must acknowledge that research specifically designed to comprehend sharing behaviors in the context of digital scholarship can be categorized into two types. The first type, correlational in nature, seeks to elucidate sharing behaviors through specific theoretical constructs. For instance, Ma & Yuen (2011) dissected sharing behaviors, exploring constructs like “perceived online attachment” and “perceived online relationship commitment,” revealing significant correlations between these constructs and sharing behaviors among university students. These behaviors stem from the desire for belonging and the need to forge and sustain social connections. In a subsequent study, Ma & Chan (2014) introduced the pivotal dimension of “altruism” as a fundamental binding force within communities primarily characterized by “weak ties.” Chedid et al. (2020), working with a Portuguese sample of 176 scholars and employing a conceptual model grounded in the Theory of Reasoned Action (Fishbein et al., 1975), discovered that intrinsic motivation and networking positively influence attitudes toward knowledge sharing, with “trust” emerging as the most potent variable affecting knowledge-sharing intentions. The second type of study adopts a more qualitative and ethnographic approach (Grand et al., 2016; Stewart, 2015; Veletsianos, 2016), shifting the focus from Scholarly Networks to the Scholars within these Networks. These qualitative approaches delve into the lived experiences of scholars as they share and collaborate within networks, transcending the confines of academia. As Veletsianos (Veletsianos, 2016) points out “shifting our focus from scholarly networks to scholars in networks allows us to acknowledge that scholars will engage, exist, and function within networks in a myriad of ways, and will perform both scholarly and non-scholarly activities in them” (p. 107). In this context, Stewart (2015) scrutinized the practices and perspectives of networked scholars hailing from diverse locales and institutional positions. The study revealed a rich tapestry of practices and modes of engagement within these networks. Participation in networks vastly broadens the traditional scope of academic life by nurturing cross-disciplinary ties, fostering public connections, and rewarding collaboration and curation between individuals, transcending rigid roles or institutional affiliations. However, Veletsianos (2016) aptly observes that this expansion of academic boundaries is not without dilemmas and tensions. Scholars often grapple with the tension between their personal and

academic lives, experiencing situations of context collapsing (Quintas-Mendes & Paiva, 2023) navigating fragmented identities within disjointed networks, all within a broader academic context that has yet to fully and formally acknowledge the work conducted within these networks.

The research we present here primarily aligns with this qualitative research paradigm, aiming to explore the practices and experiences of individuals in the context of this information-rich environment and the redefinition of roles traditionally ascribed to educators and researchers.

4. Research methodology

4.1. Research questions

Questions relevant to this investigation are: What participatory culture means for scholars? What is the importance that teachers and researchers attribute to sharing? How are scholars using online networks to engage in the creation, dissemination and sharing information and knowledge? What kind of materials do they share online? What kind of audiences do they have in mind when they share materials? What motivates them to share? What do they feel when sharing? How do they communicate and interact with peers and audiences with whom they share materials?

4.2. Participants and procedure

Data collection employed purposive sampling, a suitable approach for qualitative studies (Breckenridge & Derek, 2009; Webster, 2016). Thematic Analysis encourages purposeful sampling, where participants are selected based on their relevance to the research question and the specific goals of the study. Purposive sampling enables researchers to select participants who are most relevant to the research question and can provide valuable insights. By intentionally targeting individuals who have specific characteristics, experiences, or expertise related to the research topic, researchers can gather in-depth information that directly addresses their research objectives. The selection of participants was nonrandom, focusing on individuals actively involved in digital scholarship-related activities. These participants included teachers and researchers engaged in digital participation practices within social networks, groups, and communities. They were chosen for their active public profiles in social media or academic repositories and their work in areas highly relevant to the study, such as technology integration in education, online teaching, cyberculture research, and open educational resources production, among others. In essence, we sought out individuals who could be considered networked scholars, as defined by Veletsianos (2016) – scholars who employ participatory

technologies and online social networks to enhance and disseminate their scholarship.

Rather than aiming for a representative or statistically significant sample, the emphasis is on capturing a range of perspectives and experiences that can shed light on the research topic. We believe that the sample size of 13 participants in this qualitative study is aligned with the guidelines and principles of Thematic Analysis as proposed by Clarke and Braun (2013a) and Braun and Clarke (2021). The question of the size of the sample in qualitative studies, namely in Thematic Analysis Studies as well as in other research paradigms like Grounded Theory (Webster, 2016), have been treated more through the construct of “data saturation” than as size sample generated by statistical procedures envisaging a representative sample of subjects. Data saturation refers to a point in which “thematic exhaustion”, is attained, or, in other words, a point where no significant new codes or new themes emerge. Although the data saturation criterion has been criticized by Braun & Clarke (2021) for still showing some traces of positivism within qualitative research, as a precaution we have taken into account more conservative studies such as those of Guest, Bunce and Johnson (2006). These authors note that when working with a relatively homogenous population, data saturation typically occurs around 12 interviews, where no significant new codes or themes emerge. Consequently, in the present study we included thirteen teachers and researchers, comprising eight Portuguese and five Brazilian individuals, with seven males and six females.

Data collection involved semi-structured interviews guided by open-ended questions related to the research questions (Peel, 2020). The interviews aimed to elicit reflective insights into the participants’ practices, ideas, beliefs, attitudes, and perceptions regarding their involvement in networks and knowledge-sharing activities. These interviews were conducted in a conversational and empathetic manner, emphasizing active listening (Holstein & Gubrium, 2004) to encourage interviewees to lead the discussion about their experiences and practices. All interviews were conducted via videoconference, with an average duration of approximately 1 hour and 59 minutes per interview, totaling 23 hours and 48 minutes of recorded audio. Prior to the interviews, participants received information about the research objectives and an informed consent protocol. After transcription, the interviews were sent to each participant for validation, and all transcripts were anonymized.

4.3. Data analysis

All transcripts underwent analysis using Computer-Aided Qualitative Data Analysis software, specifically NVivo software, version 11. For our data analysis methodology, we adopted Thematic Analysis, as described by Braun & Clarke (2006, 2012), and Braun, Clarke & Rance (2014). Thematic Analysis is a systematic approach that aims to identify, organize, and provide insights into patterns of

meaning (themes) within a dataset. It focuses on uncovering shared or collective meanings and experiences. It's important to note that Thematic Analysis (TA) is distinct from Grounded Theory, as TA produces conceptual interpretations of data without attempting to formulate a theory. Thematic Analysis is particularly valuable for studying individuals' perspectives, practices, and the underlying reasons behind their thoughts, feelings, actions, and decision-making processes (Clarke & Braun, 2013b).

Our analysis followed the six phases proposed by Braun and Clarke (2006). 1) Familiarization with the data: this initial phase involved deep immersion in the data. Researchers either repeatedly listened to interviews or thoroughly read and reread transcripts. During this process, extensive notes and memos were created within NVivo. Both researchers collaborated on these notes, developing preliminary ideas for initial codes. 2) Generating initial codes: in this second phase, both researchers independently created codes. We employed open coding, which allowed us to develop meaningful "nodes" without imposing pre-existing codes onto the data. This inductive approach aimed to create concise descriptive or interpretive labels for information relevant to our research questions. 3) Generating themes: codes with similar content were aggregated in the third phase, leading to the formulation of initial themes. These themes represented the most prevalent patterns emerging from the data concerning our research questions. At this stage, we shifted from interpreting individual data items to interpreting the collective meaning and significance across the entire dataset. 4) Reviewing themes: stage four involved reviewing, modifying, and expanding upon the themes. We combined themes when overlaps occurred and created new themes as necessary. Previous themes were transformed into sub-themes, ensuring each theme and sub-theme remained coherent and distinct. 5) Defining and naming themes: in phase five, we refined and defined the themes and sub-themes, aiming for both distinctiveness and clear, organic relationships between them. Multiple rounds of coding were conducted to categorize codes into themes and further refine them before the final stage. 6) Producing the report: the final phase involved selecting the most representative examples of themes and sub-themes and generating the final analysis in relation to our research questions. We ensured that the themes formed a cohesive narrative consistent with both the data and existing literature. It's essential to note that this entire process is dynamic and recursive, with stages interacting with each other. They are not strictly linear phases but operate in a recursive manner, with ongoing interactions between data, coding, interpretation, and writing processes. While there is a debate in the field of qualitative analysis regarding whether it is more bottom-up or top-down, it's clear that the questions posed during interviews initially shape the data. However, the themes generated are not directly derived from interviewees' questions and responses. Researchers play an active role in interpreting and constructing themes, emphasizing that data alone do not speak, and themes are constructed and developed by the researchers themselves (Braun et al., 2022) (p. 431).

5. Results

5.1. Theme A: sharing

This theme encompasses statements people have about what and why they share online, either in a casual, informal way or in a more structured, academic format. Additionally, this theme includes assessments about the value of the shared content (see Table 1).

Table 1. Theme A: sharing.

Theme	Sub-theme	Sub-theme description
Sharing. Subjects describe what they share on the Web, be it every day, informal information, or academic topics.	What is shared	Subjects signal what they share and when they share it.
	Why is it shared	Subjects explain the reasons why they share on the Web.
	Value of what is shared	Subjects give a positive or negative evaluation to what they share or what is shared on the Web.

5.1.1. What is shared

Codes referring to the kind of participation and sharing on the Web were assigned in this sub-theme:

Look, this issue of sharing has been part of our lives more and more frequently, isn't it? because you see, when I'm on Facebook and I see something interesting in the professional area, I share it with friends, isn't it? and in the personal area, sometimes something of more personal interest, things, subjects, outside the professional field, I also share it with the students, right? (S10-Vanda)

(...) if you analyze my Facebook page, I don't know, in one week you will find everything mixed, for example, I shared today a conference on networks that some friends are organizing, last week I published an article with a student, I shared it, but this weekend I shared my wanderings around the city, so in one week we do the 3 things, that's it. (S3-Cesária)

Some subjects express an orientation towards sharing more directly focused on academic work:

My shares relate to the work I have in hand (...) I try to disseminate information that may inspire those who are working in an area close to my interests, trying to follow closely the reactions that such dissemination provides. I share articles, opinions and original others' information that I value and that may be useful to those who read me. (S5 -Damásio)

5.1.2. Why is it shared

Codes referring to the reasons why subjects share on the Web were agglutinated in this sub-theme. In some statements, a diversified set of motivations is listed focused mainly on academic topics:

I participate, first of all, in the extended exercise of my function as a teacher, understood as a civic contribution so that the social environment in which I am inscribed becomes intellectually, aesthetically and emotionally richer, for the benefit of the collective and of each of the parties. I also participate in order to subject my ideas to scrutiny so that I can revise and improve them. I participate, finally, to expose myself to accidental discoveries, which I value highly, in the context of a phenomenon I have been studying closely and which is at the root of many of humanity's greatest scientific discoveries: serendipity, or "the art of finding what one does not seek" (S5 – Damásio)

The sharing of knowledge of a more informal nature also emerges as a valued practice, with some subjects understanding that the sharing of non-academic knowledge is also important and formative. In this sense, we find the answer of Cesária, who associates the sharing of information with the dissemination of cultural events in the city:

For example, yesterday I saw 2 art exhibitions, I shared and I have already triggered my students, see this, go there! it is a way of encouraging a cultural life beyond having a beer with the husband at the weekend. How are you going to educate if you don't use the cultural repertoire? are you going to be a teacher of school content only? I discuss this exhaustively in my research group so it is fundamental to go to the cinema, it is fundamental to go to the museum, it is fundamental to walk in the garden... you can take this into the classroom and discuss it with your students, for me it is fundamental, I do a lot of this work with my students. (S3 Cesária)

5.1.3. *Value of what is shared*

In this sub-theme were included all codes in which subjects give a positive or negative valuation to what they share on the Web and to what is shared on the Web including dimensions such as the intrinsic value of what is shared and the value added to what is shared.

With justified exceptions, I avoid sharing what has already been shared. I give preference to what, being useful and relevant, runs the risk of going unnoticed. (S5 Damásio)

Clara, who assumes herself to be more of a consumer than a sharer of information, seems to judge some people who share a lot but with little quality:

yes without a doubt, I'm more of a consumer than a disseminator, I have that perception...now I also avoid posting rubbish, because there are also a lot of people who post pure rubbish [...laughs...]. (S6 Clara)

Cláudio, on the other hand, points out that in general he only adds value to materials that are directly related to his teaching context and that in other types of sharing he adds little value:

in general I add little value to what I collect and then share. I'm talking about things like facebook (...) I add little value because, for example, if I see something I like, an object, when I say object it may be a text or a film or anything, in general I don't make a big comment, I put a title and see if people are interested, I dismiss them from my opinion about it. But when I say that I add little value, it's in those areas, generically, in those

questions, but then there is the whole pedagogical field in which I work, and there I have to exchange texts, exchange things that have already been worked on, etc. And I think that I add value as a teacher, don't I? Commenting, trying to get people to do more, to use, to reuse, to share, to amend... (S7 Claudio)

5.2. Theme B: interacting and communicating

All codes referring to the phenomena of dialogue and interaction in the Web were included in this sub-theme (see Table 2).

Table 2. Theme B: interacting and communicating.

Theme	Sub-theme	Sub-theme description
Interacting and Communicating. Subjects refer to processes of communication when sharing.	Interaction and Dialogue	Subjects refer to strategies and modes of dialogue, interaction and collaboration with other subjects on the Web.
	Reciprocity	The subjects refer to processes of reciprocity where giving and receiving are implied and eventually to expectations of gain or no gain from sharing.

5.2.1. Interaction and dialogue

The importance of genuine interaction and exchange of information and knowledge is often emphasized, with a focus on receiving feedback rather than simply posting passively. As Carlos points out:

if [people] are posting on the web it's not just venting, because they need to vent, no, it's not just that, they need to post because they need to get feedback, they need to feel that the other side hears them, that the other side gives them some response, gives them some support, reinforces their theory, gets into a discussion... For example, with a colleague of mine I love to discuss things about politics, he's a bit extreme but I also like to push him a lot, but there you go... when someone publishes something they're always expecting some kind of feedback, so don't come to me with things that are just publishing for publishing's sake, no, a person publishes because they're always expecting some critic. After all, we are social beings, aren't we? (S8 Carlos)

Also in the sense of the need for interaction and not only to mark a passive presence on the network, Gabriel points out:

In general people have a compulsion to post, they have no interest in interacting, so you're still in the logic of television right? all you want is to transmit things, you found an image, go there and post, you found whatever, go there and post, you found a video go there and post, and you do not even bother to go back there later to see what people commented and make replicas. (S1 Gabriel)

This theme of dialogue and interaction introduces us precisely to the topic of reciprocity which we will deal with in the next section.

5.2.2. *Reciprocity*

This sub-theme included all categories in which subjects referred to reciprocity processes involving giving and receiving, expectations of gain or no gain from sharing, as well as situations of balance or imbalance with the obligation to reciprocate or not, or simply giving thanks.

we are in a (...) world which is more and more shared, more global isn't it?, and, therefore, in that sense, the interaction in these contexts goes through precisely that, through receiving and giving isn't it? (...) so that things grow, so that knowledge evolves (...) we have to give our contribution, and searching the contribution from others, but there is, let's say, some obligation isn't it? to give back, isn't?, and so I think it is very much about this, about this feeling of sharing". (S6 Clara)

I don't think I share more than I receive, no, I think I receive a lot, I think I am very benefited by the generosity of my colleagues, my friends, the communities I participate in, I see a very large sharing perspective, and I am very happy to see this (...) in general, I have perceived a perspective of growth. This perspective of sharing is quite big. And I'm very happy about that." (S2 Milton)

Among the participants we find profiles that point to a greater sharing activity, in contrast with others who assume themselves as more consumers than generators of these sharings.

In general, I share much more than I receive, I already realize this, since the time of my master's degree because I did my master's degree with Professor X and he has a maxim that "you are what you share", so we had a discussion list, we always learned to share everything. (S3 Cesária)

The perspective of those who are more active in sharing apparently points to a gesture of pure altruism and generosity:

I see sharing as generosity but many people perceive sharing as exhibitionism, even this appears in the speech of some colleagues or in the literature in some way, so I think that the person who is connected, shares, right?, I think she is much more generous, once she shares, she triggers, invites, I really like it when people remember that I am interested in a theme they call me there and show me. . .(S3 Cesária)

On the other hand, Clara who sees herself more as a consumer rather than a disseminator, despite having previously expressed a sense of obligation and debt to those who share, when comment on how she sees the processes of giving and receiving in online interactions, says:

Then there are those who are very diffusers. . . but I assume that those who do it, do it because they have pleasure in doing it and because they have that disponibility, so let's say that I don't exactly feel indebted, don't I? (S6 Clara)

5.3. Theme C: connecting and networking

This theme includes statements concerning individuals, groups or communities with whom subjects share information and knowledge as well as how subjects situate themselves in relation to the phenomenon of abundance of content and how they manage the information flow (see Table 3).

Table 3. Theme C: connecting and networking.

Theme	Sub-theme	Sub-theme description
Connecting and Networking. Subjects refer to individuals, groups, communities or audiences with whom they share information.	Information Flow	Subjects refer to how they view the permanent flow of information.
	Following People	Subjects refer to “following people” as a strategy to follow the flow of information and create networks.
	Creating Networks	Subjects refer to how they engage themselves into networks and the reasons for doing so.

5.3.1. Information flow

As we mentioned in the theoretical part of this work, one of the characteristics of the digital era in which we currently live is the phenomenon of information abundance. All the subjects interviewed are obviously aware of this problem and deal with it in diversified ways. Gil describes how he thinks people situate themselves in the face of this permanent flow of information and draws attention to the importance of using “filters”:

I think that this thing that people think that the flow makes them lose a lot of information, because deep down they feel that they are looking at a river and that the water is always passing by, isn't it? When they take their eyes off the river, a lot of water has already gone by and they haven't seen it... people have a bit of a sense of loss, don't they? But it's, it's... because maybe they don't have the good filters that guarantee that... OK, I wasn't looking when it went by, but there's a dam up ahead that catches what's important and I, when I have time I'll go there and see if there's any stone left in the middle of the thing, haa... and so, I think it's very much that way, isn't it? So, I treat the flow as a real flow, I respond to what I have to respond to as quickly as possible so as not to let it accumulate, but I'm not very structured in that approach, am I? (S4 Gil)

5.3.2. Following people

Categories in which subjects refer to “following people” as a strategy to follow the flow of information were included in this sub-theme. Claudio, for example, highlights the importance of identifying and following relevant people in specific areas of his interest as a strategy to follow the flow of information he considers relevant:

I look in terms of connections, I look at the professional and research level, etc., I look to identify who are the important people in the network in certain subjects that interest me (...) I look to be aware of what those people produce. So somehow

being connected to their networks, their blogs, their material, right? With regard to other types of things, for example, at the level of social and political intervention, I try to stay connected to people who I think have intelligent, informed, independent comments (...) I really look for informed, independent people who can bring me new information, things that I wouldn't normally find in a newspaper or on the television news". (S7-Cláudio)

5.3.3. *Creating networks*

This sub-theme includes all categories that refer to strategies for widening the network of contacts and increasing social capital, particularly when subjects mention that a given contact gave rise to a given project, and/or common work. In contrast to the previous sub-theme (following people to follow the flow of information) in this sub-theme are situated explicit strategies to establish contacts and build networks and obtain some benefit in terms of social capital, be it anticipated or not.

exactly, this flow of information, this flow of contacts, isn't it? just yesterday I was commenting (...) that this project that I submitted to Brazil I didn't know, I mean, it all started from a doctoral qualification jury where I was where I didn't know anyone, neither the candidate nor the people who were on the jury and it all started, it all started from the network, right? and from the interest precisely in the issue of social networks because her thesis is also in this area, right? (...) well, these are things that are of common interest, right? (...) so without the network, let's say, there wouldn't have been this approach, there wouldn't have been this joint project (...). (S6-Clara)

Clara explicitly states motivations of a personal/relational nature for her engagement in social networks:

I think the main motivation is the human relationship isn't it, (...) in fact... it's a completely new situation in terms of the proximity that you can maintain with people, everyday almost isn't it. So I think that

this is a factor that attracts me. (...) so we can do many more things, exchange many more experiences, know much more about others, so I think that's the motivation, it has to do with the relationship and how this enriches us in its diversity. (S6-Clara)

However, in addition to personal/relational motivations, Clara also mentions professional motivations, namely with regard to the increase in her visibility and recognition of her work by others.

(...) then in professional terms I think it is also a fabulous thing (...) nowadays this allows all this interaction to take place much more easily (...) you develop work with people who are on the other side

of the world... , (...) from the point of view of my professional activity, it is important to publicise what I

write, what I do, it is good when someone finds interest in what we do, isn't it? (...) it is important to be in networks, it is also important in terms of recognition by others, for them to know what we do. (S6 Clara)

In addition to the motivations linked to altruism and generosity evoked earlier by Cesária we can see that in the same person other motivations coexist. Motivations very centred on the profession and also on the need for visibility, with a view to expanding the network of intellectual partners and using this amplifying effect in the dissemination of her work, emerge as Cesária's main motives for participating in the networks:

my main motivation is to expand the networks (...). The visibility of what you do is fundamental for you to have and enlarge networks. For example, I receive many private emails from people who thank me for the things I share, from Brazil, you know it's continental, isn't it?, and not everything circulates in the same way in all states, so people say "Hey professor, it's good that you shared those articles"... people like it and often invite me to panels, juries or to speak or participate in events, people invite me, because they read the things I share. So, fundamentally, my greatest motivation is to give visibility to what we do, even because I think that what we do is important and the more we share and give visibility to our things and the things of our friends or intellectual partners, the more powerful network we form. (S3 Cesária)

6. Discussion and conclusions

The participants in this study reveal a clear awareness of the importance of online presence and interaction with others in establishing shares, dialogues, relationships and bonds on the network. In addition to this general and obvious observation, given that the participants were chosen precisely because they are active participants in networks, it can also be said that there are some contradictions or hesitations similar to those noted in the literature by other authors (Grand et al., 2016; Stewart, 2015; Veletsianos, 2016). Although being fully embedded in the networks and engaged in sharing processes a few participants express some hesitation or discomfort at times: *"I share what I do but I do so with coyness, for the risk of being confused with the narcissism that characterises social media"* (S5 Damásio); *"I see sharing as generosity, but many people perceive sharing as exhibitionism"* (S3 Cesária).

Also, it should be noted that despite a general positive attitude of the participants in this study towards participation and sharing in networks, we can identify distinct heterogeneous and even asymmetric postures among them. Some of the participants assume themselves as active, altruistic, "generous" and multifaceted, assuming dialogue and sharing without much differentiation between the professional and personal contexts. In contrast, other participants seem to be more selective, clearly differentiating between "what is work" and "what is personal", assuming that they invest more in sharings that are related to work contexts. The

most active participants are also those who emphasise more the importance of a really interactive dialogue and the need they have for feedback regarding their exchanges. However, other subjects assume that they feel good in a relatively asymmetric positioning in relation to the exchanges where they assume that they give less than they receive without feeling major emotional or cognitive imbalances in relation to this asymmetric positioning. This fact is interesting because the literature on reciprocity (Pelaprat & Brown, 2012) points to a sense of debt and obligation that does not seem to be determinant in the subjects we analysed. In reality, reciprocity often works when there is an expectation of gain in terms of image, recognition or perceived gains in terms of insertion in networks that subjects perceive as being able to bring them benefits. There are undoubtedly subjects who evoke generosity and altruism to justify their acts of sharing. Altruism has been described in the literature as a form of unconditional kindness without the expectation of a return by providing help and achieving a sense of satisfaction with one's own action and helping others regardless of whether something is received in return (Ma & Chan, 2014). However, the same subjects who mention generosity and altruism as the basis for their sharing also mention expectations of various benefits, such as the need for recognition of their work, the increase in their visibility or their inclusion in networks that may bring them benefits in their future work. It can be said however, as a final comment, that what is common to all participants is the need to find value in what is shared in networks as well as the need for these shares to have some utility for themselves or for the collectives where information and knowledge are shared.

In conclusion, we believe that this study captures some of the most characteristic aspects of the processes of networked sharing by digital scholars, as well as some of its more particular vicissitudes and nuances, and that it may contribute to a greater reflexivity regarding these processes in the context of contemporary networked society and the so-called participatory culture. In what concerns the limitations of the present work we could point that it is solely based in a purposive sample and that the research could be deepened with a shift towards theoretical sampling as the proponents of grounded theory suggest (Stern, 2007) with additional and follow up interviews and observations that could explore participants particular experiences or concepts in order to collect data related to conceptual categories and their properties and develop more foundational theoretical knowledge about sharing processes.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

Research supported by national funds through FCT – Fundação para a Ciência e a Tecnologia, I.P., under the project UIDB/04372/2020 UIDP/04372/2020 – LE@D Laboratório de Educação a Distância e e-learning.

References

- Boyd, D. (2011). Social network sites as networked publics: Affordances, dynamics, and implications. In Z. Papacharissi (Ed.), *A networked self* (pp. 39–58). Routledge.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper (Ed.), *APA handbook of research methods in psychology, vol. 2, research designs* (pp. 57–71). APA Books.
- Braun, V., & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, 13(2), 201–216. <https://doi.org/10.1080/2159676X.2019.1704846>
- Braun, V., Clarke, V., & Hayfield, N. (2022). 'A starting point for your journey, not a map': Nikki Hayfield in conversation with Virginia Braun and Victoria Clarke about thematic analysis. *Qualitative Research in Psychology*, 19(2), 424–445. <https://doi.org/10.1080/14780887.2019.1670765>
- Braun, V., Clarke, V., & Rance, N. (2014). How to use thematic analysis with interview data. In A. Vossler & N. Moller (Eds.), *The counselling & psychotherapy research handbook* (pp. 183–197). Sage.
- Breckenridge, J., & Derek, J. (2009). Demystifying theoretical sampling in grounded theory research. *Grounded Theory Review*, 8(2), 113–126. <http://groundedtheoryreview.com/2009/06/30/847/>
- Bruns, A. (2008). *Blogs, wikipedia, second life, and beyond: from production to produsage*. Peter Lang.
- Chedid, M., Caldeira, A., Alvelos, H., & Teixeira, L. (2020). Knowledge-sharing and collaborative behaviour: An empirical study on a Portuguese higher education institution. *Journal of Information Science*, 46(5), 630–647. <https://doi.org/10.1177/0165551519860464>
- Clarke, V., & Braun, V. (2013a). *Successful qualitative research*. SAGE Publications. Thousand Oaks.
- Clarke, V., & Braun, V. (2013b). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, 26(2), 120–123. <https://www.bps.org.uk/psychologist/methods-teaching-thematic-analysis>
- Conole, G. (2013). *Designing for learning in an open world*. Springer.
- Dron, J., & Anderson, T. (2014). *Teaching crowds - learning and social media*. AU Press.
- Fishbein, M., & Ajzen, I.: Belief, A. (1975). *Intention, and behavior: an introduction to theory and research*. Addison-Wesley.
- Grand, A., Holliman, R., Collins, T., Adams, A. (2016). “We muddle our way through”: Shared and distributed expertise in digital engagement with research. *Journal of Science Communication*, 15(4), 1–16. <https://doi.org/10.22323/2.15040205>
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82. <https://doi.org/10.1177/1525822X05279903>

- Hailu, M., & Wu, J. (2021). The use of academic social networking sites in scholarly communication: Scoping review. *Science Direct*, 5(2), 277–298. <https://doi.org/10.2478/dim-2020-0050>
- Holstein, J. A., & Gubrium, J. F. (2004). The active interview. In D. Silverman (Ed.), *Qualitative research: Theory, method and practice* (Vol. 2, pp. 140–161). Sage Publications.
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. MIT Press.
- Jhangiani, R. S. (2017). Open as default: the future of education and scholarship. In R. S. Jhangiani & R. Biswas-Diener (Eds.), *Open: The philosophy and practices that are revolutionizing education and science* (pp. 267–279). Ubiquity Press.
- Jhangiani, R. S., & Biswas-Diener, R. (Eds.). (2017). *Open: The philosophy and practices that are revolutionizing education and science*. Ubiquity Press.
- Kluzer, S., & Pujol, P. L. (2018). *DigComp into action - Get inspired, make it happen*. Publications Office of the European Union.
- Ma, W. W. K., & Chan, A. (2014). Knowledge sharing and social media: Altruism, perceived online attachment motivation, and perceived online relationship commitment. *Computers in Human Behavior*, 39, 51–58. <https://doi.org/10.1016/j.chb.2014.06.015>
- Ma, W. W. K., & Yuen, A. (2011). Understanding online knowledge sharing: An interpersonal relationship perspective. *Computers & Education*, 56(1), 210–219. <https://doi.org/10.1016/j.compedu.2010.08.004>
- Nascimbeni, F. (2020). Empowering university educators for contemporary open and networked teaching. In D. Burgos (Ed.), *Radical solutions and open science. lecture notes in educational technology*. Springer. https://doi.org/10.1007/978-981-15-4276-3_8
- Nentwich, M., & König, R. (2014). Academia goes facebook? the potential of social network sites in the scholarly realm. In S. Bartling & S. Friesike (Eds.), *Opening science. the evolving guide on how the internet is changing research, collaboration and scholarly*. Springer Cham Heidelberg. <https://doi.org/10.1007/978-3-319-00026-8>
- Ong, W. (1982). *Orality and literacy: The technologizing of the word*. Methuen.
- Peel, K. L. (2020). A beginner's guide to applied educational research using thematic analysis. *Practical Assessment, Research & Evaluation*, 25(2), 1–15. <https://doi.org/10.7275/ryr5-k983>
- Pelapat, E., & Brown, B. (2012). Reciprocity: Understanding online social relations. *First Monday*, 17(10). <https://doi.org/10.5210/fm.v17i10.3324>
- Quintas-Mendes, A., & Paiva, A. (2023). Digital presence and online identity among digital scholars: A thematic analysis. *Social Sciences*, 12(7), 379. <https://doi.org/10.3390/socsci12070379>
- Rheingold, H. (2017). *Net smart: How to thrive online*. The MIT Press.
- Shirky, C. (2010). *Cognitive surplus: Creativity and generosity in a connected age*. Penguin Press.
- Stern, P. N. (2007). On solid ground: essential properties for growing grounded theory. In A. Bryant & K. Charmaz (Eds.), *The sage handbook of grounded theory* (pp. 114–126). Sage.
- Stewart, B. E. (2015). In abundance: Networked participatory practices as scholarship. *International Review of Research in Open & Distributed Learning*, 16(3), 318–340. <https://doi.org/10.19173/irrodl.v16i3.2158>
- Veletsianos, G. (2016). *Social media in academia: Networked scholars*. Routledge.
- Veletsianos, G., & Kimmons, R. (2012). Networked participatory scholarship: emergent techno-cultural pressures toward open and digital scholarship in online networks. *Computers & Education*, 58(2), 766–774. <https://doi.org/10.1016/j.compedu.2011.10.001>
- Webster, M. D. (2016). Examining philosophy of technology using grounded theory methods. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 17(2). <https://doi.org/10.17169/fqs-17.2.2481>
- Weller, M. (2011). *The digital scholar: How technology is changing academic practice*. Bloomsbury Academic.