THE DEVELOPMENT OF A CONCEPTUAL FRAMEWORK OF SOCIAL MEDIA LITERACY

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Abstract

Social media have become increasingly popular because of the combination of both technological developments and social change. However, there are manifest differences in the ways people use social media as well as in the level of their competence. Differences in the skills to master technology and in the use of social media may result in new types of digital inequality. In order to overcome these inequalities, an extensive body of initiatives must deal with enhancing people's level of social media literacy. Unfortunately, due to difficulties in adequately measuring media literacy, the effectiveness of these efforts has not yet been fully determined. Hence, the main objective of our research is measuring social media literacy. In order to do so we first need to be able to accurately define social media literacy and understand how it can be conceptualized. Based on an extensive literature review, this paper presents a conceptual framework for social media literacy and discusses its main building blocks. The proposed conceptual model posits that an accurate understanding of social media literacy requires more insight into people's access to social media applications, knowledge, skills, self-efficacy, attitudes and actual media use.

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1. Introduction

Today it is true to say that, in most Western countries and many other parts of the world, social media increase in importance and becomes more popular and even omnipresent (Kaplan & Haenlein, 2010). Various research projects have indicated a growth in social media use, and consequently, jump to the conclusion that people are now becoming increasingly engaged in online content creation and participation (Boyd, 2008; Courtois, Paulussen, Mechant, & De Marez, 2011; Madden & Zickuhr, 2011; Vickery & Wunsch-Vincent, 2007).

Social media can be defined as "*a group of Internet-based applications that build on the ideological and technological foundations of web 2.0., and that allow the creation and exchange of User Generated content." (Kaplan & Haenlein, 2010, p. 61).* This definition makes clear that many Internet applications are in fact social media, including blogs, social networking sites (e.g. Facebook), virtual social worlds (e.g. Second Life), collaborative Internet projects (e.g. Wikipedia), content communities (e.g. YouTube) and virtual game worlds (e.g. World of Warcraft) (Kaplan & Haenlein, 2010, p. 62).

Social media offer a lot of opportunities for users, for example they enable people to share collaborative knowledge (e.g. Wikipedia), to share their interests or hobbies (e.g. blogs), to share their own image (e.g. Flickr) and video creations (e.g. YouTube), to make new friends (e.g. Facebook) and to build communities (e.g. World of Warcraft). This way, achieving goals by using these applications can contribute to user empowerment or, in other words, it can enable *"people to control their own lives and to take advantage of opportunities"* (van der Maesen & Walker, 2002, p. 6). Notwithstanding, the failure to use or wrongly use of social media can lead to disempowerment, for example the violation of privacy. These opportunities but also threats of social media are recently becoming truly visible due to the proliferation of these media. Hence, there are many questions and ambiguities about the competences needed to (appropriately) use social media applications.

In this context notions of media literacy are relevant, since they focus on the competences people need to appropriately deal with media. In this paper we focus on *'social media literacy'* or the competences needed to deal with social media. Hence, being capable to handle these new media in a critical and conscious way is not an unnecessary luxury, but a necessity for all users of social media (Frau-Meigs, 2006). Users who are not able to appropriately use social media will therefore be excluded from a lot of possibilities and will be exposed to risks (Livingstone & Haddon, 2009). Moreover, one should bear in mind, as Ferro et al. [2010] argue, that media literacy is not only a factor of digital inequality, but also an inequality in itself, since the digital inequalities undeniably

lead to social inequalities or exclusion (S. Martin & Robinson, 2007). We need to be aware that despite the increasing use of social media, differences can also be noticed in the way people engage with these applications (Boyd, 2008; Jenkins, Purushotma, Weigel, Clinton, & Robinson, 2009; Madden & Zickuhr, 2011; Vickery & Wunsch-Vincent, 2007). Furthermore, although a majority of the population has access to computers, Internet and other new media technologies, there are still manifest inequalities in the frequency of use and the different ways in which people use these new media in their everyday life.

An extensive body of research projects and policy initiatives deal with enhancing people's level of (new) media literacy. So far, it is very difficult to determine the effectiveness of these projects, especially because new media use and the level of new media literacy were hardly measured. In today's constantly changing and converging media culture it is a challenging task for measuring (new) media use and media literacy, because the variety of questions and methods that are being used. In addition, there is almost no consensus about the concept of media literacy (Graham & Goodrum, 2007; Potter, 2004). In literature there exist many different definitions, perspectives and concepts that relate to media literacy, for example information literacy, computer literacy, Internet literacy, network literacy or digital literacy.

It is evident that research activities on both a conceptual and a methodological level are needed to support research projects and policy initiatives for enhancing people's (social) media literacy and consequently help to re-balance participation inequality. We need to overcome conceptual vagueness concerning social media literacy on the one hand and counter fight the lack of good practices for measuring social media use and media literacy on the other hand. In this paper we focus on the conceptualisation of social media literacy.

This paper starts with a conceptualization of media literacy in general, consisting of different definitions and approaches. We come up with a (critical) contribution about the dominant approaches of media literacy and which are applicable to social media literacy. After this general introduction of the concept, we present a working definition and a conceptual model of social media literacy and explain the underlying components and elements in that model. Finally, in the discussion we will summarize the advantages and disadvantages of our approach and conceptualization of social media literacy.

2. Media literacy and its applicability in the context of new media

The competences needed to deal with media are discussed in the scholarly literature through various concepts, being media literacy, information literacy, computer literacy, network literacy, Internet literacy and digital literacy (Bawden, 2001). The choice of a concept depends on the aspects on which the focus is (e.g. skills-oriented or critical thinking). In this respect, the concepts are embedded in different approaches, such as a critical approach (e.g. media literacy as the critical evaluation of media content), a cognitive approach (e.g. media literacy are the cognitive skills to attain and use knowledge about media), a structuration or action-oriented approach (e.g. computer literacy is the ability to turn on the computer) and a rather idealistic or normative approach (e.g. digital literacy as a personal fulfilment). We can identify several *'literacies applicable to new media'*, mostly originating in the pre-digital period, but presented as routes for understanding phenomena, such as the (r)evolution to social media, which have become more significant in a multifaceted social media landscape. Nevertheless we recognise the existence of multiple definitions and frameworks in describing the different literacy concepts. In this paper, we limit ourselves to the definitions that we use as starting points for our conceptualization of social media literacy.

Media literacy has been developed from the critical evaluation of mass media, and is a major educational and research activity. Media literacy as a critical evaluation should serve as a protection against the negative effects of the media messages (A. Martin & Grudziecki, 2006). A definition of media literacy that fits this critical approach is offered by Livingstone (2004): *"the ability to access, analyze, evaluate and create messages across a variety of contexts" (Livingstone, 2004, p. 18).* Livingstone identifies the critical thinking rather than the practical competences as the main element of media literacy, and emphasizes the critical evaluation and creation of media messages, rather than the technical skills to operate the media technology.

Information literacy developed since the late 1980s when academic library communities promoted information retrieval in libraries. With the increasing notion of the Internet as a seemingly infinite source of information, the concept of information literacy gained more urgency. A definition of information skills is proposed by Catts & Lau (2008, p. 8). They have elaborated a five-skill set people need in order to deal with information in the current information society. People must be able to:

1. Recognize their information needs;
2. locate and evaluate the quality of information;
3. store and retrieve information;
4. make effective and ethical use of information, and
5. apply the information to create and communicate knowledge.

These five skills refer to the fact that each element is supporting information literacy, but also that progression is possible up each step. As it were following a continuum of increasing skills from 'basic' through 'advanced'. Hence, it is a rather prescriptive and formulaic definition, which is based upon the assumption of a formally expressed information need. However, people do not always have an information need in advance; it is also possible that information just comes around, for example in the case of people that are watching You Tube movies.

There is much similarity between the concepts of media literacy and information literacy. Both concepts highlight the importance of the media message, however, they differ from each other in the way the message is handled. While the term media literacy mainly focuses on how the message is constructed and interpreted, information literacy draws attention to the way it is accessed and evaluated (A. Martin & Grudziecki, 2006). Information literacy highlights the importance of the identification of the problem (what do you want to know?), the location where information can be found, the evaluation of the founded information and the use of this information in solving the problem (Livingstone, Van Couvering, & Thumim, 2005).

Computer or ICT literacy are more action-oriented than media and information literacy and has been identified as a need from the late 1980s with the increasing popularity of the personal computer (A. Martin & Grudziecki, 2006). As evidenced by the terms themselves, they refer to the actual use of a computer or in other words the operational or technical skills needed to use the computer for example turning on the computer, opening a folder and saving a file. In literature, computer literacy has been most commonly defined as *"the skills required to use a variety of computer applications packages –word processing, databases, spreadsheets, etc. – together with some general IT skills, such as copying disks and generating hard-copy printout" (Bawden, 2001, p. 226).* Computer and ICT literacy are terms that are often described narrowly and that only cover the basic skills to operate a

computer. While, such definitions are very focused and perfectly measurable, they quickly become obsolete due to the rapidly changing media environment (Ba, Tally, & Tsikalas, 2002).

The concept of *Internet literacy* fits in the series of action-oriented approaches and emphasizes the importance of action and interaction on the Internet. This concept is focused on the skills needed to deal with the Internet. Van Deursen (2010) operationalized internet skills by making a distinction between medium-related and content-related skills (see figure 1). The medium-related skills are the operational and formal skills to operate the technology, being the computer and the computer network – the Internet – such as menu structure and hyperlinks. The content-related skills are the information and strategic skills to deal with information on the Internet. Van Deursen (2010) illustrates the importance of going beyond a technologic viewpoint when defining Internet skills. Internet skills, according to van Deursen, should contain both the technical skills to operate the medium and more substantive skills to deal with the content of the medium.

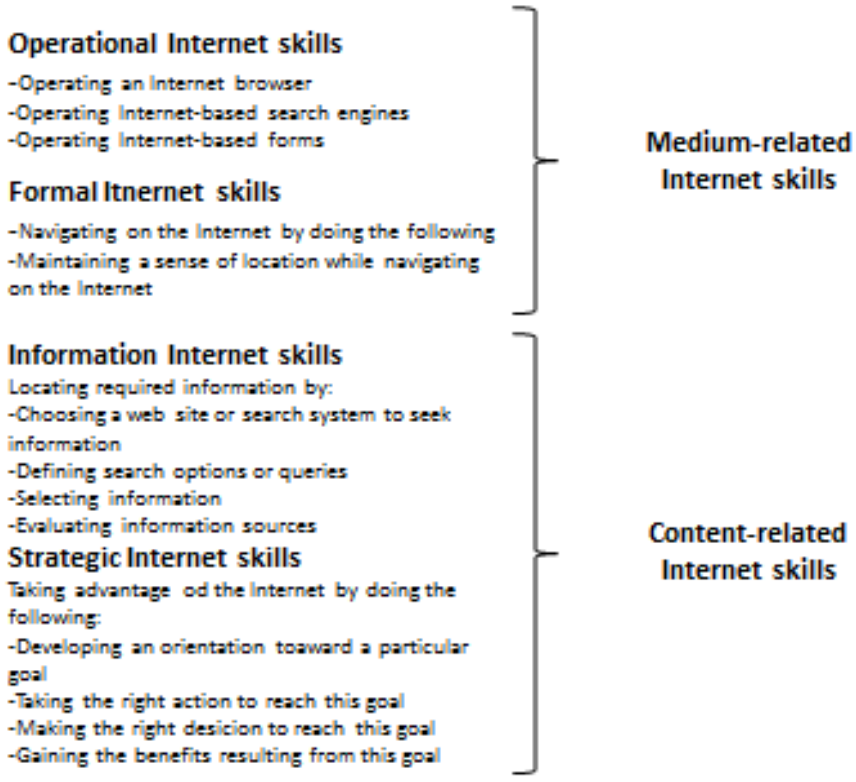

Figure1: Summary Internet skills of van Deursen (2010).

The term *digital literacy* is considered as a combination of the above discussed approaches and terms. Hence, the term belongs to a more 'idealistic' approach in which an ideally idea of media literacy is proposed, for example media literacy as a personal fulfillment or individual moral fortitude. The concept of digital literacy, as it is now generally used, was firstly introduced by Gilster (1997) who defined it as *"the ability to understand and use information in multiple formats form a wide range of sources when it is presented via computers"* and *"…being able to understand a problem and develop a set of questions that will solve that information need" (cited in Bawden, 2001, p. 19).* Gilster (1997) provides a broad definition of digital literacy, which has as advantage that it is applicable to all kinds of digital media. The disadvantage is that it does not give a particular clear and coherent account of digital literacy itself, of the skills, knowledge and attitudes that underline it; it is rather a wide-ranging approach, which may lead to some confusion for anyone attempting to operationalize and to measure digital literacy.

In line with the above conceptualization of digital literacy, Martin & Grudziecki (2006) developed a framework of digital literacy in three stages (see figure 2): digital competences, digital usage and digital transformation. These competences are a combination of for example skills, concepts, approaches and attitudes, so it contains all the abilities people need in order to be able to use digital media. Therefore, these competences are seen as a criterion for using digital media for professional, private or other purposes.

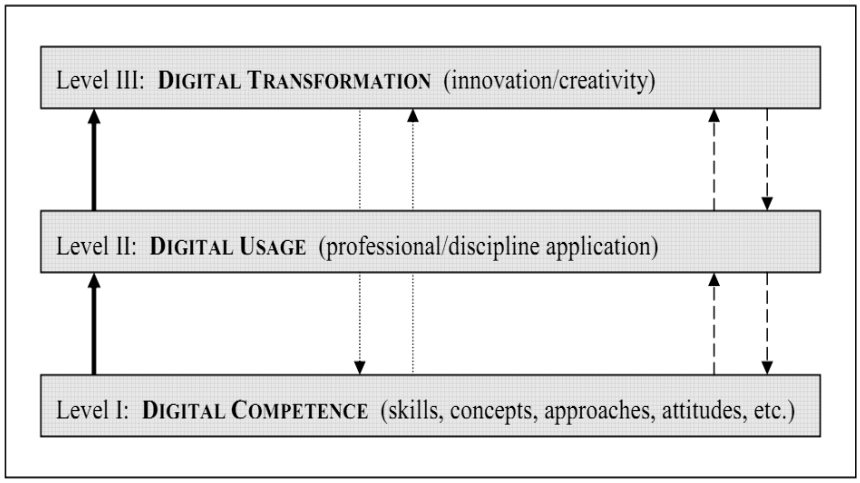

Figure 2: Stages of digital literacy by Martin & Grudziecki (2006).

This stage-model sheds light on digital literacy as a personal fulfillment. Media literacy cannot be seen as equal for everyone, but must be considered from the situation of the individual. Consequently, Martin & Grudziecki (2006) state that for evaluating media literacy we must set up a personal development profile based on this conceptual model. The highest level in the model is digital transformation, innovation or creativity and this can only takes place when digital competences and usage is established. This is the most comprehensive and complete definition of digital literacy found in literature. In addition, the definition is very general and can therefore be applied to different kinds of digital media. However, in this definition, as in the other definitions of digital literacy, no clear practical skills and knowledge are distinguished what makes it very difficult to operationalize and to measure.

From the outline above, it seems that there are several approaches possible, all with their own strengths and weaknesses. The main purpose of this part is not to select or propose one concept definition for the conceptual framework development, but rather to compare the different concepts and to recognize the essential characteristics and elements of each concept of literacy. This should help us to choose an appropriate approach or approaches to conceptualize social media literacy.

3. Social media literacy

Because social media are Internet-based applications, the other conceptualizations of literacy are only applicable to social media in a limited way. While the concepts media and Internet literacy mainly focus on analyzing and evaluating information online, social media competences, as indicated by Jenkins et al. (2009) and Kaplan & Haenlein (2010), must deal with the production, creation, communication, collaboration and transaction of media content. Therefore, using social media requires more action or active engagement of the user. The specific competences needed to deal with social media, however, are rarely or never actually operationalized.

Hence, in conceptualizing '*social media literacy*' we face a number of challenges. As mentioned above, dealing with social media demands more action and interaction from the user compared to the competences needed to deal with other media such as television. Therefore, our focus will mainly be on an action-oriented or skill-based approach in order to conceptualize social media literacy. However, although we will mainly focus on action-oriented media competences, we cannot neglect the critical-analysis competences in order to conceptualize social media literacy. The latter are competences that have been arisen with the emergence of mass media and cannot be disconnected from new media competences. Due to the media convergence some applications from

other ‘older’ media, such as television watching, can also be used in social media, for example streaming television programs on YouTube (Jenkins, 2006). Therefore, the challenge is to combine the both approaches, the critical and the action-oriented approach.

These approaches can only be combined when we not only pay attention to the medium-related competences in dealing with the social media applications itself, but also to the content-related competences in dealing with the content on these applications. In addition, we follow Livingstone (2004) and Martin and Grudziecki (2006) who assume that media literacy is more than the competences needed to deal with media, but that also access and use must be considered as prominent components of media literacy. The concepts of ‘media literacy’ and ‘media competences’ are often used as interchangeable terms, but from now on *‘social media literacy’* is used as an umbrella concept for the components access, medium- and content-related competences and use.

Above all, the conceptual framework must be applicable to a wide range of social media applications, as they all have their own specific characteristics. Hence, the conceptualization must be broad enough to contain all the above challenges and, at the same time, ensure that the conceptualization is concrete enough to stay measurable.

3.1. Definition of Social Media Literacy

In order to define social media literacy, we start from the above outlined conceptualizations. We started with the definition of Livingstone (2004) in order to include the aspect of critical thinking about media content. For a more action-oriented notion of media literacy we follow the operationalization of van Deursen (2010), who has attention for both medium-related and content-related Internet skills. For a more comprehensive and wide interpretation of media competences we refer to the definition of Martin & Grudziecki (2006). They highlight not only the importance of critical thinking, but also the self-creation and communication what are typical social media competences.

Considering these points, we developed the following definition of social media literacy: *“Social media literacy are the competences of individuals to (appropriately) use social media applications and to critical analyze, evaluate, share and create social media content.”*

In this regard, social media literacy implies a broadening, and also a reinforcement of the elements by which all (media) literacies in general are defined. It does not attach itself to the rather

operational or instrumental skills, but also to a critical analyze and evaluation of numerous media texts, transaction and creation of media content.

The first part of the definition illustrates the medium-related competences needed to use social media tools. For using these tools people first need to have access to the Internet and some 'basic' technical knowledge and skills to operate the Internet for example the abilities to open web sites by entering the URL. Considering the hypermedia nature of the Internet, not all technical skills are necessarily simple or basic, for example the complex nature of navigating through different websites.

The second part presents the advanced content-related competences, which are the main abilities people should learn to apply in a social media environment. The analysis and evaluation of media content illustrates the critical interpretation of everything that is on a social media website, including text-messages, visuals and sounds. Sharing social media content includes the communication or interaction with other people online (=sharing text-messages) and the transaction of other electronic material (e.g. photos, movies, music, etc.). Creating social media content contains the production of that content or everything what is self-generated or created by the user (User Generated Content).

In addition, people must also be able to operate the specific social media applications on the Internet. This is where attitudes and self-efficacy comes in, if a person hates a certain social media application (attitudes), he or she will not or reluctantly use this application and consequently does not develop the competences to use it (appropriately).

3.2. Conceptual Model Social Media Literacy

What the factors of social media literacy are and how these various components of social media competences are linked is further discussed in the conceptual model below (figure 3). The hierarchy of the model clarifies that the higher steps cannot exist without the lower ones.

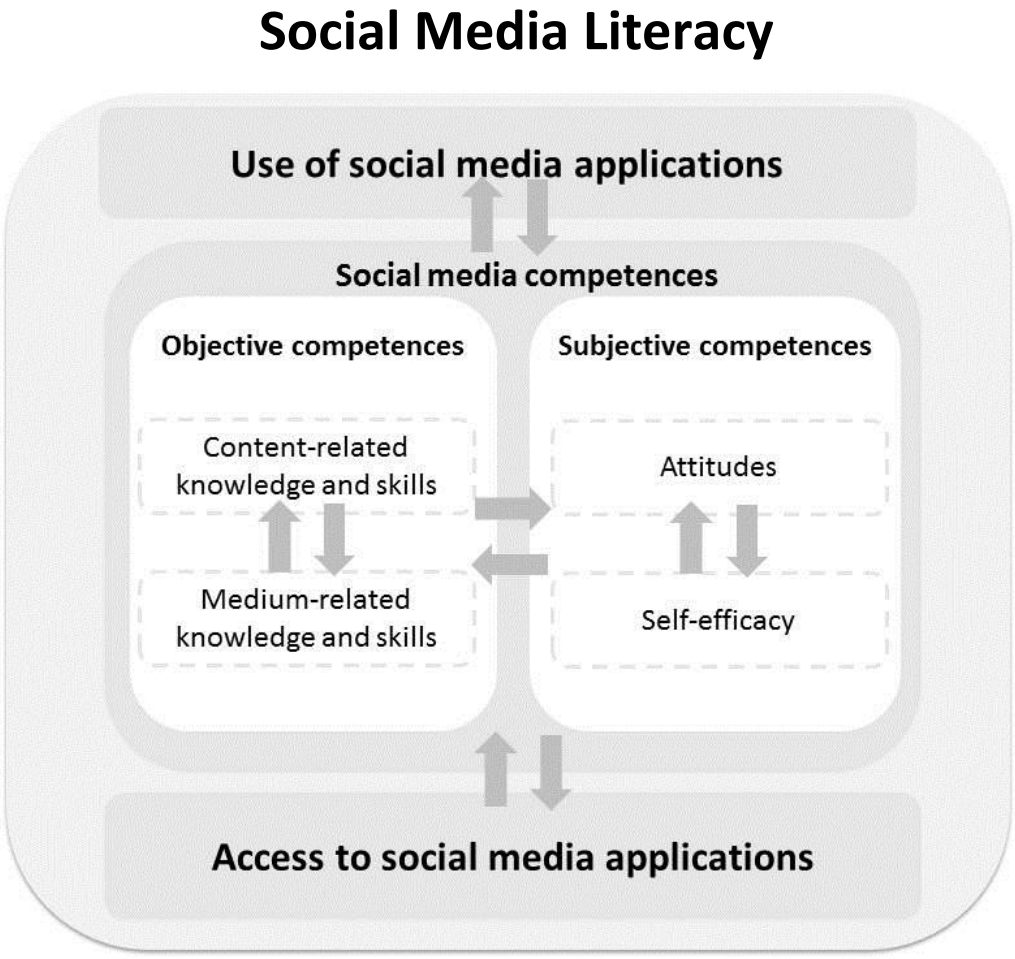

Figure 3: Conceptual model of social media literacy

Based on a literature review we can distinguish three dimensions of social media literacy, being social media access, social media competences and social media use:

Dimension 1: Access to social media applications

At the foundation of the model we place access to social media as an important prerequisite for the development of social media competences. In this case, access is the possession of a technology through which people can go on the Internet, such as a computer with Internet connection or a smartphone. In addition, it is not only important to have a device that can connect to the Internet, also the connection in itself should be accomplished and must be sufficient to open social media applications. Without this access the development of social media competences is precluded.

Dimension 2: Social media competences

The second level illustrates social media competences, which encompass the abilities needed to deal with social media applications. However, the terms media competences, media literacy and media skills are often used as synonyms (A. Martin & Grudziecki, 2006), while in our conceptualization we use them as separate terms. Social media competences refer to being able to perform a certain social media activity. Therefore, skills are treated in our conceptual model as a component of competences and refer to the more practical aspects of these competences (van Deursen, 2010; van Deursen & van Dijk, 2010). Media competences, in turn, are considered as a component of media literacy. In moving from media competences to media literacy, we take into account access to social media applications and the actual social media use.

Social media competences are divided in objective and subjective competences, according to the way they can be measured. Skills and knowledge can be objectively verified, while attitudes and self-efficacy should be measured by asking the person themselves (subjective). The objective competences are in turn subdivided in 'basic' or medium-related knowledge and skills and rather 'advanced' or content-related knowledge and skills. Knowledge in the medium-related competences is the descriptive and practical knowledge with a low degree of self-conscious awareness, content-related competences contain the knowledge about social media applications, the understanding of media context and content and knowledge about knowledge (meta-knowledge). Moreover, skills are the tools to translate this knowledge into (social) media behaviour. The specific skills needed to deal with social media, however, are rarely or never actually operationalized, therefore we base ourselves on the operationalization of Internet skills by van Deursen (2010). We make a distinction between medium-related and content-related skills. The medium-related skills are the skills needed to operate and to deal with the formal characteristics of different kinds of social media. The content-related skills are the skills to deal with the content on social media applications, which are divided in

information, creation and communication skills. These are the skills to critically analyze and evaluate information, to create unique content and draw the needed attention to that content and the sharing and/or communicating of content while taking into account the receiver of the sender.

The 'basic' or medium-related knowledge and skills are at the bottom of the objective competences, because they are a pre-requisite for the development of the advanced content-related competences. For example before you can write something on a social networking site (SNS) or forum, you need to create an account. Without the practical knowledge and skills to operate the social media applications, people will not be able to analyze, evaluate, share and create social media messages. Also the advanced content-related knowledge and skills can, in turn, influence the medium-related knowledge and skills: dealing with the content, for example content creation, can provide more insights into how a particular social media application works and on this way tighten the medium-related knowledge and skills.

The development of these objective competences does not happen without the subjective competences of the individuals themselves. Someone who hates (attitude) a particular media application and therefore refuses to use it, will be reluctant towards learning the knowledge and skills to deal with that social medium. In addition, a person who is in advance underrating his or her own knowledge or skills to use a particular social media application (self-efficacy), will be less inclined to learn these objective competences. Consequently, attitudes and self-efficacy are very closely linked to the development of knowledge and skills. Moreover, between the subjective competences there also exists a reciprocal relationship: if a person believe in his or her (objective) competences to use a particular medium, he or she will be quite positive towards that social media application and vice versa. In sum, both the objective and subjective media competences determine the actual media use.

Dimension 3: Social Media Use

At the highest level of the model is social media use, which is the result of the development of media competences. Users draw upon relevant competences to use social media in private or professional life situations. Social media use is the successful conversion of both, objective and subjective media competences in actual social media behaviour. This behaviour indicates not only which and how social media applications are used, but also how often, and where.

Between the three levels there also exist reciprocal relationships. Once initial and physical access is accomplished, acquiring media competences conducts users to transform significantly and

continually the conditions of access and use and vice versa (Livingstone, 2003). It is assumed that media literacy is the reciprocal relationship between media use and the growing and changing media competences of the user (Livingstone, 2003). The idea behind this is that media competences are shaping and being shaped by someone's experience with media technology and content, both physically and symbolically. Physically in the sense of how often it is used and symbolically as the importance that is attached to it. If a particular media technology or content is used a lot and/or it is interpreted as for example important or functional, the competences of the user needed to deal with it will enhance.

4. Discussion

The main goal of this paper was to develop a conceptual framework of social media literacy. The latter entails both a definition and a conceptual model of social media literacy. We conceptualize social media literacy in a well-elaborated way that goes beyond 'basic' operational competences. Besides the more objective competences (e.g. skills and knowledge), we also focus on subjective competences (e.g. attitudes and self-efficacy) as equally important for measuring people's level of media literacy (Brandtweiner, Donat, & Kerschbaum, 2010; S. P. Martin, Robinson, J.P., 2007; Tondeur, Sinnaeve, Van Houtte, & Van Braak, 2010; Verdegem & Verhoest, 2009). Hence, we consider social media literacy as broader than only the skills in order to deal with social media applications, also the knowledge to perform these skills, a positive attitude towards the social media use and confidence in the own skills (self-efficacy) are relevant for dealing with social media applications.

In addition, we consider media competences, in line with scholars such as Livingstone (2004) and van Deursen (2010), not merely in terms of operational or medium-related knowledge and skills e.g. operating the Internet, but also in terms of content-related knowledge and skills e.g. a critical evaluation of content. Hence, the advantage of the proposed conceptualization is that both approaches on media literacy, being the critical and the action-oriented approach, are integrated in one comprehensive model of social media literacy.

Another advantage of the proposed conceptualization is the attention for access, in this case access to the Internet. Because this access is a necessary prerequisite for the development of social media competences, the same goes for social media literacy. Also the attention for media use, in a reciprocal relation with media competences, is important for the development of social media literacy. This is so because the actual use of social media applications determines the competences

people can develop and these developed media competences, in turn, can change people's actual media use. For example if people are experimenting (using) social networking sites, they will develop a few competences for dealing with social networking sites and this, in turn, enhance their use of these applications.

Moreover, the conceptual framework of social media literacy applies equally well to all kinds of social media applications, which is useful for measuring the level of social media literacy in a multifaceted social media landscape. The consequence of this social media independent framework is that it is not possible to immediately convert into a measurement instrument. Hence, the model contains elements that should be addressed and elaborated in more detail when further research, both quantitative and qualitative, on media literacy and the underlying elements is set up. This further conceptualization will be different for different research methods as well as for different social media applications and will therefore serve as input for the next stage of the research.

In addition, we recognize that there are also other factors, both individual (e.g. income) and social (e.g. peers network), that play a role in the development of social media literacy. These other factors will be discussed in the operationalization of social media literacy, which is the subject of future research.

5. Conclusion

This paper proposes a conceptual framework of social media literacy that is developed upon and can be linked to the definitions, approaches and concepts that can be found in the scholarly literature about media literacy. The model proposes the conceptualization of the underlying elements of social media literacy, however, a more detailed description is needed in order to apply in concrete measurements and particular research methods has not been elaborated yet. Rather, the objective of this paper is developing a wider conceptual framework of social media literacy which is on the one hand applicable to the whole range of social media applications and can on the other hand be adapted to different research methods (both quantitative and qualitative). In the presented conceptual framework, we shed light on all the different elements that should be considered when developing social media literacy, namely access to social media applications, social media competences (knowledge, skills, attitudes and self-efficacy) and the actual use of social media applications.

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