

# INFORMATIONAL ASPECTS OF DIGITAL LITERACY

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## Abstract

Through digital communication in a collaborative media environment, not only do individuals create new information practices that are the result of their digital footprints, but also a digital identity by which each individual inevitably creates an image of themselves, which they predictably project into their own reality. The aim of this paper is to examine how digital literacy level of an individual influences the information aspects of digital self-validation, with the aim of exploring the types of discourses that determine digital literacy of adolescents in the digital intelligence domain. To what extent does sharing information about oneself through digital profiles influence the creation of an image of one's body, how it affects young adults' digital intelligence are questions that determine the scope of the research problem. Young adults were selected for the research sample as they build self-awareness and self-affirmation within the social environment, and simultaneously undergo education in the field of media and information literacy within the digital environment. The survey was conducted using an online questionnaire containing original metrics of the influential factors of young adults' digital literacy. Based on the results, the information constructs Knowledge, Skills, Attitudes were designed to determine the informational aspects of digital literacy. In this sense, this paper provides an innovative approach to the study of digital literacy in the discourse of new media, an evaluation that can be carried out by complementary research relevant to determining the degree of digital intelligence.

Keywords: digital communication, digital self-awareness, digital intelligence, digital literacy, informational aspects.

## 1 INTRODUCTION

With the development of information and communication technologies in the 21<sup>st</sup> century, traditional media literacy is no longer sufficient for an individual to competently participate in the new digital ecology, especially young adults. The importance of digital literacy is justified not only by the amount of media exposure, but also by sharing and understanding information. Moreover, it plays an important role in the development of democracy, cultural participation and participatory citizenship. In this process, young people are exposed the most, since media messages not only serve as a means of socialization, but they have to actively use digital media as a means of communication, equally for work and private life. The contemporary concept of literacy includes visual, electronic and digital forms of expression and communication as it has expanded within its activities, and it is linked to technology and culture, therefore the ability to become and remain literate requires a long-term commitment [1].

Media literacy generally refers to “the ability to access the media, to understand and to critically evaluate different aspects of the media and media contents and to communicate in a variety of contexts” [2], thus emphasizing the critical approach to media in terms of quality and accuracy of content (for example, the ability to evaluate information and the intelligent use of search engines). In addition to the term media literacy, in literature, information and digital literacy are equally strongly associated with it. In order to understand the amount of information that surrounds him or her, a literate person today can independently find information, evaluate it and use it effectively and efficiently [3]. Digital literacy has many definitions, and for the purposes of this paper the following definition [4] was used: “being digital literate means having access to a wide range of practices and resources that you can use digital tools, and this is the ability to create and share meaning in different formats; it also means creating, collaborating and effectively communicating and understanding how and when digital technologies can best be used to support these practices” (Figure 1).



Figure 1. Digital literacy.

Since it is difficult to distinguish between where one type of literacy ends and where the other one begins, the umbrella term that applies to them recently is digital intelligence of an individual. The term is used for the purposes of this paper as a comprehensive set of technical, cognitive, metacognitive and socio-emotional competencies based on universal moral values that enable individuals to face the challenges and opportunities of digital life [5]. As such, it covers: digital identity, digital technology use, digital security, digital emotional intelligence, communication literacy, and the digital rights of individuals.

## 2 METHODOLOGY

The aim of this paper was to examine how the level of digital literacy of an individual affects the informational aspects of digital self-awareness, with the research aimed at exploring the types of discourse that determine digital literacy of adolescents in the domain of digital intelligence. To what extent does the sharing of information about oneself through digital profiles affect the creation of an image of one's own body, how does it affect the digital intelligence of young people, are the questions that determine the framework of the research problem. Young adults have been selected as the research sample as they build self-awareness and self-affirmation within the social environment, and simultaneously receive education in the field of media and information literacy within the digital environment. The survey was conducted using the Google Form online questionnaire in December 2019 and January 2020. Consequently, 116 respondents (N=116), 45 male and 71 female, aged 14–21, participated in the survey. The questionnaire consisted of metrics of influencing factors of young adults' digital literacy divided into categories of security and frequency of online communication, ways of sharing information about themselves, attitudes about the impact of social networks on their moods during the four weeks preceding the survey. Based on the answers of the respondents, information constructs *Knowledge, Skills and Attitudes* were designed by describing which it is possible to determine the information aspects of digital literacy.

In accordance with the objectives, hypotheses were constructed:

- H1: Digitally literate girls and boys alike compare their online appearance with the online appearance of others
- H2: In digitally literate young adults, sharing information about oneself in a digital environment creates an illusory sense of belonging to a community
- H3: Creating an online identity for digitally literate young adults does not affect their offline mood

### 3 RESULTS

#### 3.1 Knowledge

Respondents demonstrate coherence and integrity through digital and offline behaviours. The real name is used by 92.2% (N = 107) of respondents on social networks, 75% (N = 87) of respondents have a private profile on social networks, 34.5% (N = 40) of respondents have more than one profile on social networks and 77.6% of them (N = 90) believe that they are the same person both in virtual and real environment (Table 1).

Table 1. Features of respondents' social media profiles.

	<i>I have one social media profile</i>	<i>I have more than one social media profile</i>	<i>My social media profile is private</i>	<i>My social media profile is public</i>	<i>I consider myself to be the same person online and offline</i>	<i>I consider myself not to be the same person online and offline</i>
<i>I use my real name on my social media profile</i>	37	70	80	27	84	23
<i>I use a fake name on my social media profile</i>	3	6	7	2	6	3
<b>Total</b>	40	76	87	29	90	26

The average time that respondents spend daily on social networks is 3.5 hours, and they have an average of 400 followers on social networks. Eighteen-year-olds stand out as the age group, who spend the most time a day (more than 4 hours) on social networks and have the most followers (more than 400) and activities on social networks.

#### 3.2 Attitudes

The majority of respondents are very satisfied with their appearance and believe that the media has a negative impact on the creation of a picture of their own body (Table 2).

Table 2. The satisfaction with appearance.

	<i>I would love to look like a model</i>	<i>I am feeling happy with my weight</i>	<i>I would undergo a plastic surgery</i>	<i>I am feeling pressured to lose weight from the media</i>	<i>I believe that the media creates a negative impact on our body image</i>
<i>I completely disagree</i>	33	9	81	70	23
<i>I strongly disagree</i>	15	15	12	17	8
<i>I neither agree nor disagree</i>	36	31	15	13	19
<i>I strongly agree</i>	13	24	2	9	25
<i>I completely agree</i>	19	37	6	7	41

The results show that girls compare their appearance with the appearance of girls and women in the media, but they also compare it with the appearance of their friends, while in men there is no such correlation, which does not confirm the hypothesis (H1) that boys and girls alike compare their appearance with the appearance of others (Table 3 and Table 4).

Table 3. Social comparison of girls' appearance with the appearance of others.

			I compare my appearance with that of girls and women in the media	I compare my appearance with that of my friends
<b>Spearman's rho</b>	I compare my appearance with that of my friends	Correlation Coefficient	1.000	.659**
		Sig. (2-tailed)	.	.000
		N	68	68
	I compare my appearance with that of girls and women in the media	Correlation Coefficient	.659**	1.000
		Sig. (2-tailed)	.000	.
		N	68	68

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 4. Media pressure on ideal body weight in girls.

			I compare my appearance with that of girls and women in the media	I feel the pressure of the media that I have to lose weight
<b>Spearman's rho</b>	I compare my appearance with that of girls and women in the media	Correlation Coefficient	1.000	.418**
		Sig. (2-tailed)	.	.000
		N	68	68
	I feel the pressure of the media that I have to lose weight	Correlation Coefficient	.418**	1.000
		Sig. (2-tailed)	.000	.
		N	1.000	.418**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 3.3 Skills

According to the average number of followers (400) on social networks and the number of hours spent on social networks per day (3.5 hours), respondents show an elaborate digital social network. Hypothesis (H2) has been confirmed that building an online identity creates an illusory sense of belonging to the online community (Table 5 and Table 6).

Table 5. The feeling of social isolation by inactivity on social networks.

			I feel isolated when I do not check my social media profile for a while	Social networks (Instagram / Facebook) are a part of my daily activities
<b>Spearman's rho</b>	I feel isolated when I do not check my social media profile for a while	Correlation Coefficient	1.000	.500**
		Sig. (2-tailed)	.	.000
		N	116	116
	Social networks (Instagram / Facebook) are a part of my daily activities	Correlation Coefficient	.500**	1.000
		Sig. (2-tailed)	.000	.
		N	116	116

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 6. The sense of belonging to the community on social networks.

			I am proud to tell others that I have a social media profile	I feel that I belong to a community on social media
<b>Spearman's rho</b>	I am proud to tell others that I have a social media profile	Correlation Coefficient	1.000	.511**
		Sig. (2-tailed)	.	.000
		N	116	116
	I feel that I belong to a community on social media	Correlation Coefficient	.511**	1.000
		Sig. (2-tailed)	.000	.
		N	116	116

\*\* Correlation is significant at the 0.01 level (2-tailed).

Respondents' responses of their mood in the last four weeks prior to the survey found no correlation between the time spent in online activities or the number of followers on social networks, confirming the hypothesis (H3) that creating a self-image and personality of online digitally literate individuals does not affect their mood offline (Table 7 and Table 8).

Table 7. The correlation of the number of friends on social networks on the respondents' mood.

			The number of friends on social media sites	During the last 4 weeks how often were you feeling nervous
<b>Spearman's rho</b>	The number of friends on social media sites?	Correlation Coefficient	1.000	-.171
		Sig. (2-tailed)	.	.066
		N	116	116
	During the last 4 weeks how often were you feeling nervous	Correlation Coefficient	-.171	1.000
		Sig. (2-tailed)	.066	.
		N	116	116

Table 8. The influence of time spent in a day on the respondents' mood.

			How much time did you spend on social media daily during the last 4 weeks	How often did you feel tired during the last 4 weeks?
<b>Spearman's rho</b>	How much time did you spend on social media daily during the last 4 weeks	Correlation Coefficient	1.000	.083
		Sig. (2-tailed)	.	.375
		N	116	116
	How often did you feel tired during the last 4 weeks?	Correlation Coefficient	.083	1.000
		Sig. (2-tailed)	.375	.
		N	116	116

## 4 CONCLUSIONS

Digital literacy curricula are increasingly showing results for young people in the use of digital technologies and their understanding of security in the virtual world, as demonstrated by the research conducted. Respondents showed an understanding of the risks of their personal Internet profiles as well as the risk of cyber threats that they can avoid by using the privacy settings of their profiles on social networks. Already in the sixties it has been theorized [6] that individuals should be able to manage or control private-public boundaries by selectively revealing their identity, while it has been confirmed there is a significant association between demographic characteristics and the level of education in providing false data [7]. Our research shows that young respondents who undergo media and information literacy education are aware of the shortcomings of false profiles and build a real

virtual identity. They are also familiar with social network security settings and choose private profiles with security restrictions over public ones.

Modern technology that creates digital communication places like the Internet which become platforms where participants do not get clear roles as message recipients or senders in the communication model, but the emphasis is on mutual interaction of participants. Unlike the traditional physical environment, the virtual environment provides an endless array of contexts for interaction. Active participation through content creation is the foundation of Web 2.0, especially the context of social networks. By creating online profiles and identities, individuals build a social network and connect to groups whom they share similar characteristics with. In this way, they develop a collective sense of belonging to the online community. In this way, they develop a collective sense of belonging to the online community. Collective identity is considered [8] to be a process that consists of three parts, according to its framework, co-creation of meaning, interactive activation of relationships, and investment in emotional are crucial components of the process of building a collective identity. Our research showed that respondents felt belonging to the online community and confirmed that when testing the boundary of online identity, virtual contexts, such as offline contexts, are transactional in quality, since many online activities are based on the assumption of active participation. This dynamic relationship evolves over time as individuals move from one context to another, bringing new skills and experiences with them into current interactions, with the potential to change them, and it is a process that constantly evolves and reflects the online and offline communication experience [9].

Such communication, develops the digital self-awareness of the user and it is inevitable that the digital context affects the real person. Examining young people's digital self-awareness in the context of satisfaction with their appearance by the influence of media messages and social comparison, the social comparison theory [10] suggests that individuals process social information and evaluate themselves by making comparisons with others. Our research has confirmed that girls are more inclined to compare themselves with the appearance of women in the media and with the appearance of their female friends on social networks. This builds on a series of studies that confirm that women are more likely to compare their physical appearance [11,12] than men.

Modern digital media provide interactivity, multimodality and non-linearity, thus requiring new forms of work and communication for individuals. The aim of this paper was to examine how the level of digital literacy of an individual affects the informational aspects of digital self-awareness of young people. Research has shown that digital literacy, which enhances digital intelligence, is constantly needed to enable young people to act independently and safely in the new media landscape. In this way, the development of various aspects of literacy and digital intelligence is encouraged [13]. Research has shown that education must include the effects that technology can have on young people's value system (e.g. body images, media pressure) and how the personal use of digital media can have negative consequences in terms of their online security. In order for young people to show coherence and integrity through online and offline behaviour, it is important that they build confidence and personalization in the digital environment. With the development of digital intelligence, they think about how their emotions can be affected by the digital experience, and how to manage their moods and impulses in line with active self-regulation. In addition, they are able to remain aware of their own level of digital competence and are actively working on managing and updating their skill sets. By developing self-awareness, they become attentive and critical of the information they encounter online, demonstrating resolution in their assessment of the reliability and credibility of online information. Although childhood and adolescence are popular developmental periods for studying social comparison, as a recommendation for future research, this phenomenon should be explored in different media contexts as it occurs over the life span.

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