

# Linkage Between the Usage of Digital Technologies and Emotional Competence

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## ABSTRACT

Emotional competence (EC) is crucial for the 21<sup>st</sup> century society, where digital technologies permeate all spheres of life, requiring a rethinking of human relationships in both private and working life. The need for technological detoxification is increasingly being discussed; however, at the same time, the inevitability of intervention of digital technologies in everyday life is understood. There is still a gap of knowledge regarding the impact of the use of digital technologies on EC. Moreover, different scholars see both the harm of digital technologies the EC and their positive effect on the development of EC when digital technologies activate the system of human senses. The paper aims at closing this gap by examining the linkage between the use of digital technologies focusing on digital social networks and the EC. In doing this, quantitative data were collected from questionnaires distributed in Lithuania using simple random sampling (178 responses). The research showed that the usage of digital social networks could have both positive and negative effects on EC. Respondents who used digital social networks as a means of communication developed their interpersonal EC, but it was found that the use of certain social media was negatively related to both intrapersonal and interpersonal EC.

**Keywords:** Digital technologies, Digital social network, Emotional competence

## INTRODUCTION

The accelerating pace of life and the extreme pervasion of digital technologies in the human life encouraged the scholars to launch the debate regarding the impact of digital technologies on EC. According to Serano-Pushe (2015), digital technologies evoke emotions and impact on the identity of a person. Liberati (2019) emphasized the changing experience due to the penetration of digital technologies into the human life and consequently the changed perception of the individual about themselves and their environment. Moreover, the COVID-19 pandemic threatened the emotional-social development (Li, 2021; Long et al., 2022) when communication moved to the virtual space due to the stay-at-home requirement.

Nevertheless, the importance of EC in the workplace is considered one of the key factors in work performance (Lemisiou, 2018). Goleman (1998)

found that in some cases, high levels of EC had a greater impact on productivity in the workplace than good technical skills. Later Goleman et al. (2013) added that poorly developed EC had a negative impact on decision-making because a person was unable to accurately determine their emotional state, and this could lead to inappropriate decision-making. Machova et al. (2020) indicated that high EC contributed to better communication with colleagues, increased communication effectiveness and empathy, influenced better career prospects, and increased confidence in managing changes.

An analysis of the scientific literature examining how digital technologies affect the EC revealed different research streams in this emerging field. Scholars emphasize the impact of digital technologies on EC of different generations (Statnickė et al., 2019; Machova et al., 2020), study the links between the use of digital technologies and the moral climate, values of the organization (Blštáková et al. 2020; Girdauskiene et al., 2020), and analyze the impact of different digital social networks on EC (Masciantonio et al., 2021; Shankar and Tewari, 2021). Furthermore, there is still no consensus among scholars on the harms and benefits of using digital technologies in relation to the EC (Musik and Bogner, 2019; Thulin et al., 2019). Thus, this paper aims at revealing the linkage between the use of digital technology and EC. In doing this, the paper seeks the following goals: (a) determine the linkage between the time spent in digital social networks and EC, (b) reveal the linkage between the usage of different social digital networks and EC.

## **THEORETICAL INSIGHTS ON LINKAGE BETWEEN THE USAGE OF DIGITAL TECHNOLOGIES AND EMOTIONAL COMPETENCE**

Emotional competence refers to the skills developed on the basis of emotional intelligence (Goleman, 2006) that can be improved throughout life. Goleman (2006) noted that EC covered intrapersonal (self-awareness, self-management) and interpersonal competences (social awareness and relationship management). Denham et al. (2003) identified three components of EC: perception of emotions, ability to express them, and management of emotions. According to Zsolnai (2015), the ability to express one's emotions is the most important factor in person's social connections, because it is how a person expresses their emotions that is essential for building relationships. Meanwhile, the ability to perceive one's own and others' emotions also contribute to relationship building. Mayer and Salovey (1997) also agreed that when it came to EC, it was important to distinguish between the two main areas of EC: intrapersonal and interpersonal EC. They suggested that EC included the following types of abilities: recognition and expression of emotions, management of emotions, and use of emotions in activities and thinking. Brasseur et al. (2013), based on Mayer and Salovey's model of EC, defined EC as the ability of a person to identify, express, understand, regulate, and use their own and others' emotions. They emphasized that both intrapersonal and interpersonal EC could be expressed in the following five ways: identification of emotion, their expression, comprehension, regulation, and utilization (Brasseur et al., 2013).

Nevertheless, EC may also be impaired due to certain factors. Digital technology is one of the key factors whose impact on EC is under discussion among scholars (Liberati, 2019; Wei et al., 2019). The concept of digital technology is very broad, and this is reflected in the 4-layer classification of digital technologies by Berger et al. (2018). According to the authors, digital technologies can be understood as (1) device, (2) network, (3) content, and (4) service (Berger et al., 2018). The devices include computers, telephones, or other physical devices, and the operating system required to perform their function. The network enables the sharing of information flows between entities and allows people to connect and interact with each other on a particular subject online. The content of digital technologies explains how the data is used and processed. The last layer - service - defines the purpose of digital technology and its application functionality. The taxonomy of digital technologies of Berger et al. (2018) places greater emphasis on the technical aspects of digital technologies.

However, we are interested in using digital technologies to reveal our identities and build social connections and communities in pursuit of our addictive aspirations; as a result, our further research will focus on digital social networks. Social networks are increasingly integrating into people's daily lives and becoming a way of life (Wei et al., 2019). Twitter, Facebook, Instagram, LinkedIn etc. are becoming integral parts of both work and personal life for many people. Burke et al. (2011) distinguished three main modes of communication: active communication, passive use, and the publication of information that was not directly to something. Active communication means keeping in touch with other people, having simultaneous conversations, posting online, and commenting on other people's uploaded material – photos, videos, various links. According to Pociūtė and Krancaitė (2012), active communication in digital social networks strengthens social connections.

Passive communication in digital social network defines a person's interest in information uploaded by others, tracking photos, and reading comments without giving feedback. A study of Burke et al. (2011) showed that individuals who behaved passively in digital networks, even if they engaged in active communication activities, did so with a narrow scope of friends.

Posting information that is not directly addressed to someone includes posting general information, such as status updates, photos and links, and archiving photos in albums that are publicly available (Burke et al., 2011). The publication of this information usually involves much less open and intimate information compared to active communication activities. According to Pociūtė and Krancaitė (2012), this activity does not strengthen social ties, but Burke et al. (2011) disagree and argue that this can also have a positive effect on building and maintaining relationships. According to them, the provision of general information can provide content for the conversation and reveal similarities between users.

Thus, based on the ideas expressed below and Liberati's (2019) insights that digital technologies not only enable people to show the emotions in a different way, but they also change the meanings related to the emotions, we

**Table 1.** Linkage between the time spent in digital social networks and EC.

	Interpersonal EC	Intrapersonal EC	EC
Total time spent in digital social networks	0.233**	0.006	0.129
Time spent in digital social networks for personal purposes	0.153*	-0.117	0.014
Time spent in digital social networks for business purposes	0.186*	0.079	0.147

\*\*\* p<0.01. \*\*p<0.05. \*p<0.1.

can presume that the transformation of EC is affected by both the time spent in digital social network, and the kind of social digital network used.

## Materials and Methods

A quantitative research method using a questionnaire was applied for this study. In doing this, the quantitative data were collected through social media adhering to the principle of voluntary participation. The survey was conducted in the first and second quarter of 2021. In total, 216 respondents took part in the survey; however, only 178 duly completed questionnaires are analyzed to summarize the results of the survey.

The questionnaire consists of three parts. In the first part, demographic data of respondents such as age, gender and education were identified. The second part of the questionnaire on the usage of social digital networks was based on Cheung et al. (2011) and Burke et al. (2011). The questions of the first subsection identified the ways of communicating on digital social networks - active communication (chatting), passive tracking and sharing of information. The questions of the second subsection allowed determining the frequency of usage of the four most popular digital networks in Lithuania (Snapchat, LinkedIn, Facebook, and Instagram) for personal and work purposes. The final part of the questionnaire was designed to measure the respondents' EC. For this purpose, the Profile of Emotional Competence (PEC) (Brasseur, 2013) was used, the Lithuanian version of which has been validated by Skarbalienė et al. (2019). The questionnaire encompassed 50 statements rated on a 5-point Likert scale and was designed to measure the intrapersonal and interpersonal EC in the five main areas of EC: emotion identification, expression, comprehension, regulation, and utilization. The scale reliability was defined by Cronbach's alpha  $\alpha = .873$ .

## Findings

The study examined the linkage between the usage of different digital social networks, the time spent in social digital networks, and the EC of the respondents. Linkage between the time spent in digital social networks and EC is presented in Table 1.

The study determined a significant relationship between the time spent in digital social networks and interpersonal EC. These results revealed that the use of digital social networks, whether for personal or business purposes, had

**Table 2.** Usage of different social digital networks and EC.

	Interpersonal EC	Intrapersonal EC	EC
Facebook	0.123	0.056	0.187*
Instagram	-0.151*	-0.252**	-0.002
LinkedIn	0.163*	0.118	0.175*
Snapchat	0.111	0.075	0.158

\*\*\* p<0.01. \*\*p<0.05. \*p<0.1.

a positive relationship with the interpersonal EC. This in line with the findings of Shankar and Tewari (2021), which revealed that many popular posts in Twitter were shared by people in the motivational speaking business, closely followed by people working in the psychological profession, i.e., people whose work was closely related to interpersonal communication. Moreover, Bouchillon (2020) suggested that individuals who were competent interpersonally tended to use social networking more. Hence, this way, people satisfy their communication needs whether for personal and work purposes.

Analyzing the links between the usage of different digital social networks and the EC of the respondents, correlations between the usage of such digital social networks as Facebook, Instagram and LinkedIn and the EC were found (Table 2). In the meantime, no correlation was found between the usage of Snapchat and EC.

The study revealed a positive significant relationship between the usage of Facebook and the general EC of respondents. According to Cheung (2011), Facebook is used to maintain interpersonal communication, for social development, and fun pastimes. Nadkarni and Hofmann (2012) explain the use of Facebook as a need to belong and a need for self-presentation. Moreover, according to Bouchillon (2020), usage of Facebook is indirectly associated with interpersonal competence. Despite the fact that while using Facebook, users spend a lot of time communicating and keeping in touch with others, thus potentially developing their communication skills, our study did not find a statistically significant relationship between the usage of Facebook and interpersonal or intrapersonal EC. Such results can be explained by truly surprising findings of Masciantonia et al. (2021) suggesting that both passive and active usage of Facebook was negatively related to well-being and one of the reasons referred to social comparison. Thus, it is likely that social comparison causes the lack of interpersonal and intrapersonal EC.

Regarding Instagram, significant negative correlations were found between the usage of this platform and both intrapersonal and interpersonal EC. Despite the fact that active usage of Instagram was positively related to the satisfaction with life, the same study disclosed a negative impact of active usage of Instagram as well (Masciantonia et al., 2021). Thus, these controversial results might have been influenced by the content that followers were interested in in Instagram. Nevertheless, the Instagram focuses on monitoring other users and gathering information (Sheldon and Bryabt, 2016), thus respondents who spend a lot of time watching other users spend less time

**Table 3.** Linkage between the usage of digital social networks and emotion identification, emotion comprehension, and emotion regulation.

	Emotion Identification	Emotion Comprehension	Emotion Regulation
Facebook	0.137	0.129	0.970
Instagram	-0.224**	-0.337**	-0.205**
LinkedIn	0.047	0.004	0.183*
Snapchat	-0.042	-0.171*	0.038

\*\*\* p<0.01. \*\*p<0.05. \*p<0.1.

immersing in themselves and their emotions, which makes their personal EC less developed.

The study identified a significant relationship between the usage of LinkedIn and general and interpersonal ES. LinkedIn is dedicated to professional advancement and self-presentation (Kim and Cha, 2017), thus, it develops communication skills and, at the same time, interpersonal ES. The usage of digital social networks is related to the emotion identification, emotion comprehension, and emotion regulation. Meanwhile, no significant relationship between the usage of digital social networks and emotion expression and emotion utilization has been found. Table 3 presents only those constructs between which significant correlations have been found.

As mentioned before, the most significant relationship has been found between the usage of Instagram and intrapersonal EC. Analysis of the five main areas of EC - emotion identification, expression, comprehension, regulation, and utilization – determined the most significant negative correlations between the usage of Instagram and emotion identification, comprehension, and regulation. It means that the more time the respondents spend using this platform, the less sophisticated they are in recognizing, understanding, and managing their emotions. There was also a significant negative correlation detected between using Snapchat and understanding one's emotions. However, when evaluating the usage of LinkedIn, a significant positive correlation was found between the usage of this platform and the regulation of one's emotions. This might be explained by LinkedIn being a digital social network used primarily for work purposes, thus requiring and developing emotion management.

In order to be able to manage one's emotions, one first needs to recognize and understand them. A person who can understand and manage their emotions can use them to achieve a goal in decision making (Goleman, 2006) and has a better understanding of their values and goals. This study revealed that the use of Instagram was negatively related to these personal abilities. It was found that Instagram was more often used by younger respondents, while older respondents spent substantially less time on this platform. These results reveal that new generations may face challenges in achieving goals, making decisions, and not having a good understanding of their values and goals. These outcomes are in line with the findings of many scholars (Statnickė et al., 2019; Simion and Bănuț, 2021; Eriksen and Bru, 2022) who are concerned about the EC of youth due to their immersion in digital technologies, from online games to digital social networks.

Summing up, the study revealed that the usage of digital social networks could have both positive and negative linkage with the EC. Respondents who use digital social networks as a means of communication develop their interpersonal EC; however, the usage of Instagram is negatively related to intrapersonal EC. It can be assumed that this is due to the different purpose of digital social networking, where Instagram is used simply to follow other users and the use of this social digital network does not encourage a better perception of oneself, one's feelings and emotions.

## CONCLUSION

The study found that respondents who spent more time using digital social networks had a better-developed interpersonal EC. This notwithstanding, the usage of certain digital social networks had a controversial relationship with the intrapersonal and interpersonal EC. The usage of Facebook and LinkedIn had a positive relationship with the interpersonal EC, whereas the usage of Instagram was negatively related to the intrapersonal and interpersonal EC. Individuals who spend a lot of time using the Instagram platform experience difficulties with their emotion identification, comprehension, and regulation. It is important to note that uses of digital social networks differ in their purpose - Facebook and LinkedIn platforms focus on interpersonal relationships, while Instagram is mostly used to monitor other users. The outcomes of the study are in line with findings of numerous scholars who study the linkage between the usage of digital technologies and EC. Controversial findings raise the need for qualitative analysis of digital social networking content to explain the relationships between different digital social networks and EC.

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