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Measuring Romanian Students' Attitude towards the Ethical Use of Social Networks

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Abstract: The aim of this study is to assess students' ethical attitudes towards social networks (SNs) in order to identify ethical norms and principles, which should be implemented in universities. A self-reported survey was conducted on 583 Bachelor and Master students majoring in different domains in a Romanian university. The results revealed that students in higher education express an overall positive attitude towards the ethical use of SNs, taking seriously various ethical concerns such as the use of appropriate language, the selection of the content they share, and copywriting. Students also expressed a positive attitude towards the use of emoticons in their SNs communications. Significant differences were detected between different groups of students according to their gender, age, and specialization. The model of ethical attitudes provides a new perspective on how students and teachers know and respect the rules of using social networks in the academic environment.

Keywords: attitude; ethical implications; higher education; social networks; teacher–student communication



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1. Introduction

Ethical issues such as data privacy, security, and integrity, are key issues in today's information era. The rapid changes brought about by technological developments, and the emergence and spread of social networks (SNs), not only revive old ethical issues but also raise new challenges [1]. Information dissemination through SNs has important ethical implications for communication standards, individual, and social development [2]. The political, historical, and economic impact of social networks on individuals, groups, and society as a whole, is also highlighted [3]. In this context, it is important to understand new risks, together with opportunities provided by the social networks [4]. The negative effects of social networking sites, in terms of cyberbullying and harassing behavior, have often been reported, leading to a 'moral panic' [5]. Various ethical dilemmas can be noted as a result of worsening communication between users on social networks [6].

There are several barriers which affect trust online, such as perceived risk, website design and content, privacy concerns [7], and the loss of control and ownership of data [8]. Another issue is related to the fact that giving informed consent for the use of personal data is becoming increasingly irrelevant, as it cannot be said with certainty the ways in which, and by whom, such data will be used [9]. Since 2019, increasing numbers of privacy violations, theft, and commercial abuses have been reported, which has led to reactions from authorities regarding communication via social networks [10], and requires the commitment of all relevant parties such as community, family, government, universities, and media. Chandra [11] highlights the importance of involving the whole society in order to control the problem of unethical practices on social networks. According to Johnson et al. [12], harnessing the power of social networks is a key skill to focus on in teacher training, in order to strengthen awareness of ethical and social responsibilities.

In an academic context, ethical issues related to social networks refer to uncertainty about the boundaries between the private and professional use of social networks [13], the lack of security in the online environment [12], the fear of becoming a target of cyberattack [14], and the fear of losing control over intellectual property [15]. These uncertainties arise due to the lack of clear legislative provisions regarding the use of social networks in higher education [12,13]. One negative effects is the reluctance of teachers and students to use social networks for educational purposes [16]; therefore, our focus will be on raising awareness of how social network facilities at university level can be exploited from an ethical perspective. The objective of this study consists in identifying ethical attitudes of students, as a result of the ever-increasing use of social networks in universities.

Ethical principles underlying the fair use of social media are found in the standards developed by higher education institutions [15]. A number of universities have introduced specific cyber safety rules in their policies, to protect the online identity, professional reputation, integrity, and privacy of students and academic staff. Not only do SNs change the way we deal with technology, but also the way we behave or think, and the use of SNs leads to attitudes engaging responsible ethical analysis.

2. A Theoretical Framework on Ethical Attitudes towards Social Networks

2.1. Ethical Implications of Using Social Networks in Higher Education

Social networks are those which enable individuals to create profiles, make connections, and take part in activity posted within a network [17]. The main action taken is to communicate with friends who are included in the social network, rather than to network in the sense of extending the connections of social interaction online. Social networks “shape a new information ecosystem that is characterized by users interacting with each other and the media” [18]. There is a “dialogical relationship” between social networks and people; people choose these networks because of their specific functionalities, but at the same time, the same characteristics shape human activities ([19], p. 73). The typical activities of social networks are: introducing; finding out about their connections; posting information as text, sound or image; reacting to other people’s posts; and joining communities [20]. Another feature relates to allowing user groups to connect and communicate over three levels of privacy: secret, closed, and open groups [21].

Asif and Khan’s [22] study found that people are not aware of information sharing policies, even though they are clearly stated. The research data indicated that the participants do not know how their personal data can be shared, and that they have passed on their private information to unauthorized people due to their ignorant attitude. As Dwyer et al. [23] also point out, social network users claim to be concerned about privacy risks, but do nothing to protect their information. The research data initiated by Abdulahi et al. [7] show that social media networking sites have a negative impact on users in terms of privacy and cyber security issues.

Some researchers have been particularly interested in exploring the relationships between ethical aspects of social networks and other variables. Findings from the study by Hashim and Hassan [6] show that there is a significant relationship between religious awareness and cyber ethics. According to data obtained by Chandra [11], unethical acts on social networks have a negative impact on the individual’s health, due to the lack of ability to make correct decisions. Chen et al. [24] investigated how hiding and revealing the individuals’ real identity in cyber space affects the users’ engagement in moral vigilance. The study data demonstrate that perceived risk encourages the participation of users in discussions about moral/ethical violation topics.

In the study of Gogus and Saygın [25], the authors examined high school students’ social media use and perception of personal privacy on social media, among other components, in terms of internet privacy. Their findings revealed that high school students are concerned about their personal data privacy when it comes to their public contact information. However, most students do not worry about the settings in their accounts,

and about sharing photos and other material with their friends, relatives, teachers, other acquaintances, and the government.

The teachers' use of social media to communicate with students can be intrusive [26]. Various studies [27–29] found that teachers restricted students' access to their Facebook profiles. The results of an interview-based study of faculty members and students by [30] revealed 15 challenges, which hinder the appropriate use of social media for formal academic communication. Among these challenges, there are security and ethical awareness issues. Boeyink and Borden [31] specify the ethical rules to be followed by social network users, such as truth-telling, confidentiality, and fairness. In situations of controversial ethical violations, the three principles may be in conflict. Froment et al. [32] believe that it is important for teachers to always maintain confidentiality and avoid behaviors which might breach the students' privacy when interacting via social networks. Network identity policies [24] will be established at the academic level to comply with the reliability of the user authentication mechanisms, as well as the user's privacy perception.

2.2. Changes Generated by Social Networks on Student–Teacher Communication

The social scenario of communication has changed significantly over the last two decades, with the development of digital platforms and the expansion of mobile internet access [18]. Digital communication is transforming the traditional one-way, top-down model of communication, in which the media and other social agents convey each other's messages, into a model in which users can adopt a creative role through the use of social networks. Communicative practices are subject to transformation through the use of high-level affordances [33]. Communicative affordances represent “an interplay between the subjective perceptions of usefulness and the objective qualities of technology which alter communicative practices” ([34] p. 1238). Three main advantages of communicative affordances can be distinguished: availability, findability, and multimedia.

Their use has led to noticeable changes in the way people communicate [35], so they provide a new way of communication between teachers and students in higher education [36]. Less ethical communication actions in the digital domain can be diverse [37]: creating fake social networking profiles or malicious websites; attack websites; collecting fake signatures for certain petitions; or obtaining personal data and access codes on behalf of an organization.

The most used social network for teacher–student communication is Facebook, which appears in 65 out of 95 studies analyzed by Froment et al. [32]. Another result highlights that the new type of teacher–student communication on social media correlates positively with enhanced academic motivation; student engagement and involvement; creation of a positive classroom environment; increased student satisfaction with the relationship with the teacher; and greater student resilience. Inappropriate and irresponsible use of social networks as a communication tool between teachers and students can have negative effects on the educational relationships [38], as well as on the teacher's authority and status [39], or on the students' motivation towards learning [40]. Other researchers' concerns [41] have been to explore the reasons behind the use of social networking sites for academic communication. The main ethical issues in electronic communication are [42]: the use of inappropriate, informal language; misunderstanding of information; distortion of the message; subjective interpretation of information; the ambiguity of information; and disrespect of the teacher's private time.

2.3. Ethical Attitude towards Social Networks

Although social networks are increasingly used in higher education, there are few studies which aim to identify the ethical attitudes of students, teachers, and researchers. Golder et al. [43] conducted a systematic review of research, which investigated the ethical attitudes of using social networks as a source of input for research. The focus of Sebastião et al.'s [37] research was to assess public relations practitioners' attitudes towards their professional use of social networks. Chen et al. [44] investigated the deter-

mining factors of the participants' attitudes towards social network data research ethics. Brady et al. [45] have developed a method to measure expressions of moral outrage at the level of texts used on social networks. A new direction of research includes investigating the attitude towards the ethics of artificial intelligence, which includes eight themes: confidentiality; responsibility; safety and security; transparency and explainability; fairness and non-discrimination; human control of technology; professional responsibility; and promotion of human values [46].

In addition to these studies, there are also a number of relevant contributions in terms of measuring ethical attitudes towards the use of social networks in higher education. Ricciardelli et al. [2] explored the ethical implications and attitudes towards social networks of students studying Social Work. Hokke et al. [47] conducted a survey on Australian researchers and human research ethics committee members, in order to examine the ethical attitudes and concerns towards the engagement of participants via social media. They found that the prevalence of studies based on exploring ethical attitudes towards research data used in social media was higher than that of studies aimed at assessing the attitudes of students and teachers. Maisiri and Hikwa [48] investigated which factors influence faculty members when applying information ethics to the use of social networks in their scholarly work. The authors found that studies that attempted to measure the effect of ethical attitudes on social network use were largely deductive.

Engaging in processes of reflexivity becomes a new way to improve ethical thinking in the case of using social networks [49]. Other recent research [50] highlights the importance of cultural factors in investigating the attitudes of social network users, with reference to privacy concerns. Michaelidou et al. [51] used a mixed methods research approach to develop and validate an instrument to investigate the ethical dimensions of social media research. Moafa et al. [52] developed a model to measure the ethical effects of using social networks on students. Kia et al. [53] have proposed different ethical models of social network use in economics. In the present study, the ethical model is designed in the context of social network use in the academic environment. The concept of ethical attitudes towards social networks is at the core of the model. Following the adaptation of the definition of attitudes according to Chelcea [54], we can define ethical attitude as a global, persistent, cognitively, affectively, and intentionally motivated position of a person towards social networks, within a context of interpersonal relationships (Figure 1).

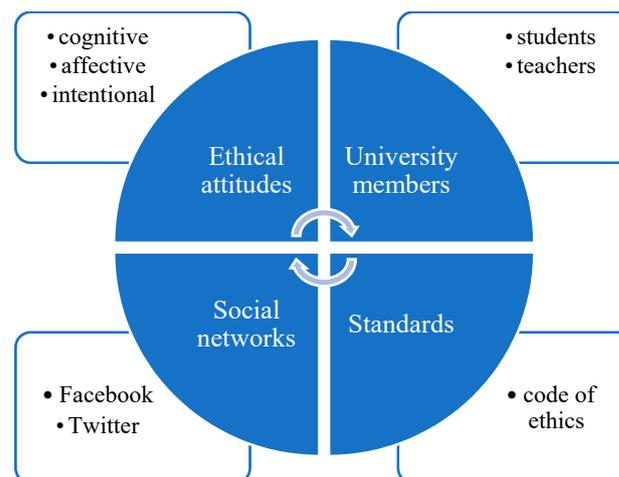


Figure 1. A model of ethical attitudes towards the use of social networks in higher education.

2.4. Research Objectives

Although previous studies have examined some aspects of social media ethics and users' attitude, the examination of university students' attitudes towards the ethical use of SNs is mostly insufficiently researched. As suggested by Hashim and Hassan [6], it is

important the ethical attitude towards SNs be assessed in different groups of students, according to their location, age, and gender.

Recently, researchers have identified several differences in SNs' behavior (namely, language style, use of emoticons, etc.) among users of different demographic characteristics. For this reason, several predictive models have been applied to recognize the user's age or gender from social media posts [55] and direct messages [56]. This implies that SNs' users indicate significant differences in their SN attitudes and communication approaches, and also in the students' population.

Motivated by the above-mentioned issues, and by the determinant role of SNs in students' social activities, the main objective of this study is to assess the ethical attitudes of university students towards social networks. The study also seeks to explore the differences in ethical attitudes towards SNs among students of different socio-demographic characteristics.

Hence, the research questions (RQs) are formed as follows:

RQ1: *What is the students' attitude towards the ethical use of SNs?*

RQ2: *Are there significant differences in the students' ethical attitudes towards SNs, according to their characteristics of gender, age, specialization, level of study (Bachelor's degree, Master's degree), year of study (1st, 2nd, 3rd), and residential environment (rural, urban)?*

3. Methodology

3.1. Participants and Procedure

The study involved 583 (female = 433, male = 150) students at the Bachelor's level ($N = 399$) and at the Master's level ($N = 180$) from the following domains: Communication Sciences ($N = 114$), Engineering ($N = 67$), Philology ($N = 98$), Physical Education and Sport ($N = 87$), Informatics ($N = 55$), Biology ($N = 40$), Economics ($N = 42$), and Education Sciences ($N = 80$) from "Vasile Alecsandri" University of Bacau, Romania. The distribution of the students' specialization is depicted in Figure 2.

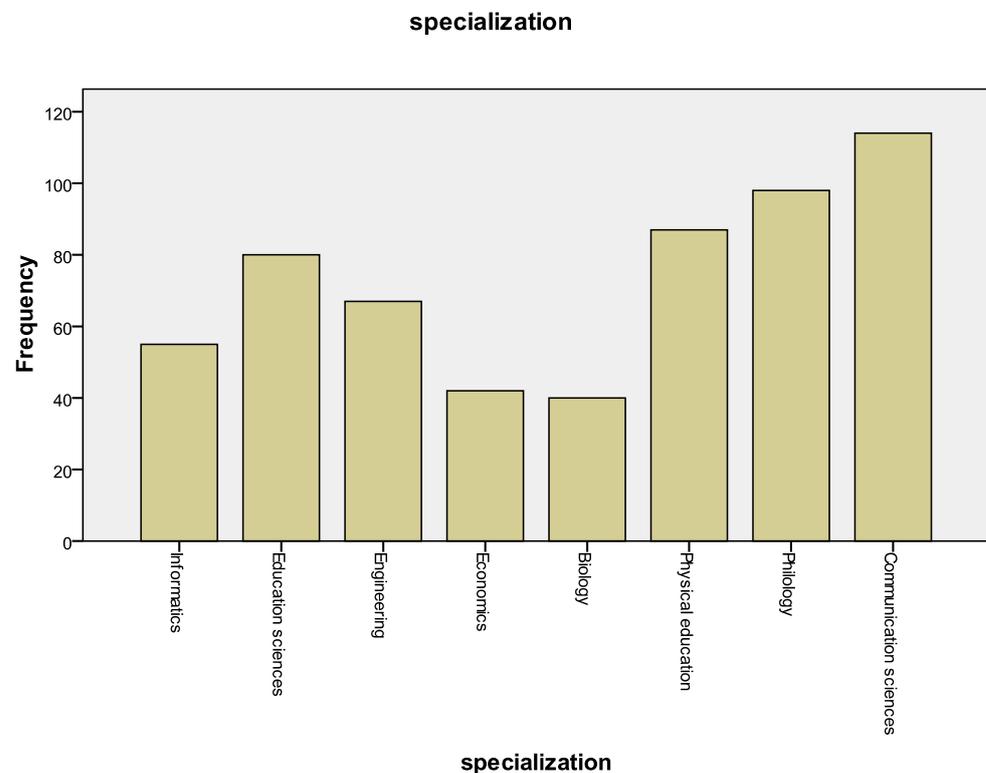


Figure 2. Students' specialization domains.

As regards the year of study, 55.1 % ($N = 321$) students were in the first year of study, 12.2% ($N = 71$) were in the second year and 32.8% (191) were in the third year of their studies. Most of the students (76.7%) belong to the age group of 19–29 years old, 12.7% are between 20–30 years old, while 10.6% are between 41–51 years old. Finally, 69% ($N = 402$) of the students come from an urban environment, while 31% ($N = 181$) come from a rural environment.

Electronic informed consent was required from all of the respondents for participation in the study. After obtaining their electronic informed consent, the eligible participants were asked to fill in an online questionnaire including items on their attitude towards the ethical use of SNSs.

3.2. Measurement Model

The self-measurement tool was based on the scale of the ethical attitude towards the use of social networks, developed by Hashim and Hassan [6]. At the basis of the development there is the 5-point Likert scale, where 1 = “strongly disagree”, 2 = “disagree”, 3 = “neither agree nor disagree”, 4 = “agree”, and 5 = “strongly agree”. It has a single subscale consisting of 13 items. A high total score on the scale indicates a positive ethical attitude, while a low score reflects a negative ethical attitude.

The scale of Hashim and Hassan [6] consists of two components measuring the students’ religious awareness and cyber ethics in writing and posting on SNSs, consisting of 27 questionnaire items in total.

This study used 13 questionnaire items of the component ‘Cyber-ethics in writing and posting in SNSs’, since the component examining the role of religious awareness was out of the current research scope. The structure of the questionnaire is presented in Table 1. All items were reliable with the Cronbach’s alpha of 0.743.

Table 1. Questionnaire Items of the Students’ Attitudes towards Social Networks.

Item	Description
Item 1	If I am too emotional while writing a message online, I save, check, and send it later.
Item 2	It is advisable to use appropriate language on social networks.
Item 3	I avoid writing in CAPS (capital letters) because it can be interpreted as shouting or screaming at others.
Item 4	I usually avoid using emoticons because they do not convey the message very well on social networks.
Item 5	Whenever personal information is posted on my social media account I reply directly on the sender’s page.
Item 6	The chain forwarding of messages on social networks is very annoying.
Item 7	I am very selective in forwarding jokes on social networks.
Item 8	I am very selective in forwarding messages on social networks.
Item 9	It is polite to identify important messages on social messages.
Item 10	Sending any links that I have not reviewed is unethical.
Item 11	It is unethical to use other content images on the site without the user’s permission.
Item 12	I clearly identify on social networks the authors of a work which does not belong to me.
Item 13	It is unethical to add content on social media and pretend it is mine.

Note: Source: Hashim and Hassan [6].

3.3. Data Analysis

After analyzing distribution in the dataset, an approximately abnormal distribution ($p < 0.05$) emerged for all items, as depicted in Table 2. For this reason, the comparative analysis followed a non-parametric approach by using Mann–Whitney U and Kruskal Wallis tests to examine the difference among the different groups of students. All data were imported and analyzed in SPSS software.

Table 2. Normal Distribution Test.

Item	Kolmogorov–Smirnova			Shapiro–Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Item 1	0.231	583	0.000	0.896	583	0.000
Item 2	0.420	583	0.000	0.574	583	0.000
Item 3	0.229	583	0.000	0.891	583	0.000
Item 4	0.251	583	0.000	0.891	583	0.000
Item 5	0.207	583	0.000	0.904	583	0.000
Item 6	0.219	583	0.000	0.879	583	0.000
Item 7	0.273	583	0.000	0.795	583	0.000
Item 8	0.264	583	0.000	0.779	583	0.000
Item 9	0.266	583	0.000	0.849	583	0.000
Item 10	0.227	583	0.000	0.877	583	0.000
Item 11	0.261	583	0.000	0.807	583	0.000
Item 12	0.239	583	0.000	0.883	583	0.000
Item 13	0.309	583	0.000	0.733	583	0.000

3.4. Ethical Considerations

The study was approved by the University Ethics and Professional Deontology Commission of “Vasile Alecsandri” University of Bacău, Romania (No. 10940). Participants expressed their consent to complete the questionnaire, stating that they had read all relevant information, and agreed to continue. They were also informed of their right to withdraw from the survey at any time.

4. Results

4.1. Descriptive Statistics

Table 3 depicts the descriptive statistic results for all items in the examined dataset. As depicted, the lowest value was reported in item 4: ‘I usually avoid using emoticons because they do not convey the message very well on social networks’, while the highest score was in item 2: ‘It is advisable to use appropriate language on the social networks’.

Table 3. Descriptive statistics for the students’ sample size ($N = 583$).

Item	Item	Mean [1,5]	Std. Deviation
Item 1	If I am too emotional while writing a message online, I save, check, and send later.	3.18	1.070
Item 2	It is advisable to use appropriate language on the social networks.	4.65	0.643
Item 3	I avoid writing in CAPS (capital letters) because it can be interpreted as shouting or screaming at others.	3.55	1.128
Item 4	I usually avoid using emoticons because they do not convey the message very well on social networks.	2.58	1.060
Item 5	Whenever personal information is posted on my social media account I reply directly on the sender’s page.	3.19	1.000
Item 6	The chain forwarding of messages on social networks is very annoying.	3.72	1.073
Item 7	I am very selective in forwarding jokes on social networks.	4.13	0.892
Item 8	I am very selective in forwarding messages on social networks.	4.18	0.884

Table 3. *Cont.*

	Item	Mean [1,5]	Std. Deviation
Item 9	It is polite to identify important messages on social messages.	3.93	0.888
Item 10	Sending any links that I have not reviewed is unethical.	3.69	0.962
Item 11	It is unethical to use other content images on the site without the user's permission.	4.05	1.003
Item 12	I clearly identify on social networks the authors of a work which does not belong to me.	3.66	0.967
Item 13	It is unethical to add content on social media and pretend it is mine.	4.32	0.907

4.2. Significant Differences between Student Groups

As depicted in Table 4, significant gender differences occurred in items 2, 7, 8, and 11.

Table 4. Mann–Whitney U Test for the ‘gender’ variable ($N = 583$).

Asymp. Sig. (2-Tailed)	Z	Wilcoxon W	Wilcoxon W	Item
0.034	−2.117	40,201.000	40,201.000	Item 1
0.001 *	−3.330	39,131.500	39,131.500	Item 2
0.079	−1.756	40,791.500	40,791.500	Item 3
0.142	−1.469	123,945.000	123,945.000	Item 4
0.284	−1.071	124,625.000	124,625.000	Item 5
0.466	−0.728	125,192.500	125,192.500	Item 6
0.027 *	−2.213	40,167.500	40,167.500	Item 7
0.008 *	−2.665	39,439.000	39,439.000	Item 8
0.756	−0.311	43,283.500	43,283.500	Item 9
0.159	−1.408	124,061.000	124,061.000	Item 10
0.011 *	−2.557	39,540.000	39,540.000	Item 11
0.811	−0.239	126,032.000	126,032.000	Item 12
0.168	−1.379	41,588.500	41,588.500	Item 13

* Difference is significant at $p < 0.05$ level.

Several significant differences were identified among different age groups, as depicted in Table 5. In particular, the oldest age group (41–51) reported significantly higher scores in items 4 and 5, regarding the avoidance in using emoticons and their immediate responses to messages.

Item 9: ‘It is polite to identify important messages on social messages’, was rated higher by the youngest age group (19–29). Finally, items 10, 11, and 13, were reported higher by the middle age group (30–40), expressing their positive attitude towards the ethical use of forwarding and sharing other users’ material.

Students from different domains revealed significant differences in items 2, 3, and 8 (Table 6). Overall, students in Economics, Philology, and Communication Sciences expressed the most positive attitude towards the ethical use of SNs, while students in Informatics, Engineering, and Physical Education expressed the lowest scores.

Table 5. Mann–Whitney U Test for the ‘age’ variable.

Asymp. Sig.	Df	Chi-Square	Item
0.120	2	4.239	Item 1
0.559	2	1.162	Item 2
0.100	2	4.599	Item 3
0.001 *	2	14.465	Item 4
0.019 *	2	7.963	Item 5
0.612	2	0.982	Item 6
0.077	2	5.127	Item 7
0.109	2	4.437	Item 8
0.008 *	2	9.780	Item 9
0.006 *	2	10.125	Item 10
0.008 *	2	9.659	Item 11
0.131	2	4.071	Item 12
0.018 *	2	8.042	Item 13

* Difference is significant at $p < 0.05$ level.

Table 6. Kruskal Wallis test for the ‘specialization’ variable.

Asymp. Sig.	Df	Chi-Square	Item
0.050	7	14.095	Item 1
0.022 *	7	16.356	Item 2
0.000 *	7	27.215	Item 3
0.388	7	7.405	Item 4
0.066	7	13.251	Item 5
0.144	7	10.874	Item 6
0.348	7	7.825	Item 7
0.013 *	7	17.693	Item 8
0.272	7	8.740	Item 9
0.230	7	9.330	Item 10
0.034 *	7	15.185	Item 11
0.378	7	7.512	Item 12
0.068	7	13.183	Item 13

* Difference is significant at $p < 0.05$ level.

The highest score in item 2: ‘It is advisable to use appropriate language on the social networks’ was reported in Economics, followed by Communication Sciences, while the lowest was reported by the students in Engineering and Physical Education.

Item 3: ‘I avoid writing in CAPS (capital letters) because it can be interpreted as shouting or screaming at others’, was rated at the highest levels by the students majoring in Philology and Communication Sciences, and the lowest by those in Physical Education and Informatics.

Students in Economics and Communication Sciences, followed by the Philology students, also highly rated item 8: ‘I am very selective in forwarding messages on social networks’, and item 11: ‘It is unethical to use other content images on the site without the user’s permission’, which received the lowest scores by students in Physical Education and Informatics, correspondingly.

No significant differences were detected in measured items between the students of different residential environments, level of study, and year of study.

5. Discussion

The model of ethical attitudes in the context of integration of social networks in the academic environment offers a new perspective on how students and teachers know and respect the rules of use. This model is based on several constructs, such as attitude towards the ethical use of social networks, ethical codes, and online technological resources. There is an interdependent relationship between variables, which determines an integrative approach to ethical attitudes towards social networks. Higher education institutions are already capitalizing on online instructional resources and applying ethical ways to design innovative and creative educational environments that help improve teaching-learning experiences. Therefore, the model allows for determining the effects of the policies adopted by universities, regarding the use of social networks on the ethical attitudes of students.

The results of the research are analyzed in correlation with the data of other studies regarding the ethical attitude towards the use of social networks. A first category of results refers to the students' attitude towards the use of emoticons on social networks. The findings on emoticons can be explained by the demographic characteristics of participants since young users (who are the majority in the current sample) tend to use emoticons (or emojis) in their SN communication more frequently [56]. One of the reasons for using social networks is the ability to express emotions by adding emojis [57].

The second category concerns the variables analyzed in terms of the ethical attitude towards social networks, such as age, gender, and specialization. Koch et al. [56] have identified age- and gender-linked language variation that may explain the variations in the users' attitude towards SNs' language style. In line with this, the current study results outlined that female students perceived significantly higher (more positively) than male students the ethics towards the language they use on SNs. Furthermore, female students take more seriously than male students the forwarding of jokes and messages, and the use of images without permission. This finding can be possibly explained by the fact that female users tend to show more influence from social norms [58] and also perceive higher levels of risk when interacting with digital services [59]. Another reason why female students might perceive higher levels of ethical risk awareness in SNs is because they tend to be more active in creating and sharing content, as well as in sending direct messages [60]. Recent research showed that age groups can be predicted through their language style on SNs and direct messages, since younger users tend to use more informal language and emoticons in their SNs communications [56].

The study findings can provide universities, teaching directors/ managers and other educational stakeholders with deeper knowledge on students' ethical attitude towards the use of SNs. This will increase their awareness of ethical risks and assist them in the design of SN regulation strategies in their institutions. With regards to the ethical use of social networks, there are proposed principles for the proper design of online social environments to reduce unintended harm caused by users during online interaction, as well as to make users aware of the moral charge of their interactions [61]. Finally, the detected differences among student groups can be considered by future research studies in the deployment of new predictive models based on students' SN activities, such as sharing, posting and language style. University professors and instructors will implement precautions to manage issues such as identity theft, hacking, invasion of privacy, and other unethical activities that may arise from the use of social networks. At the same time, ethical approaches should be introduced into courses to inform students about the dos and do-nots of online learning environments. Therefore, students will become aware of what they can and cannot do in terms of social media ethics in academia.

The limitations of this study mainly concern the self-reported nature of the data collection, which can possibly cause some bias in the results. In addition, more research is suggested on different student populations, with more balanced gender and age distributions.

6. Conclusions

This study has examined Romanian students' attitude towards the ethical use of SNs. The results provide insights on students' communication approach and their ethical concerns in their social media activities. In line with previous research, the results revealed significant differences among different gender and age groups. Interestingly, differences also occurred in the context of specialization. Overall, results indicate that students have ethical concerns towards sharing material they do not own, the use of appropriate language, and the selection of content they share/post. Moreover, they have a positive attitude towards the use of emoticons in their communication messages, and on the instantaneous time they respond to messages they receive.

Female students expressed higher levels of ethical concern towards the use of appropriate language and the selection of content they share in SNs. Younger students expressed a more positive attitude towards the use of emoticons, while older groups considered copy-writing issues higher for the content they share. In terms of their specialization, students in Engineering and Physical Education indicated the lowest scores in their attitude towards ethical use of SNs, compared to other specializations. Students in Economics, Philology, and Communication Sciences, expressed the highest scores in positive ethical attitudes.

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