

Student attitudes toward use of social media in the learning process: A comparative study of Croatian and German students

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Abstract

The emergence of social media changed the communication landscape and the way people interact. Additionally, instead of being only a digital content consumer, one can also be a digital content producer. The interactivity of social media also provides potential for enhancing the student experience within the higher education. Various types of social media platforms could be used as instructional and communication tools, since student adoption rate of social media is very high. In recent years, social media use in higher education received some attention among academic researchers. As some studies suggest, social media facilitates dynamic interactivity, accessibility, and a new level of semi-formal relations between students and instructors. Social media will continue to play an important role within the constantly changing learning environment. However, the perceived semi-formal character of social media can limit its use. Especially, from a lecturer perspective. On one hand, students seem more willing than faculty to interact through social media while faculty seem relatively cautious toward interaction with students through different social media platforms. Using data from a convenience sample of undergraduate students in Croatia and Germany, this article focuses on the use social media for student-lecturer interaction. . The main aim of this study is to investigate what motivates students to use social media in a course, together with their perception of student-lecturer interaction through social media. The study also focuses on attitude differences between Croatian and German students.

Keywords: higher education, social media, social networking sites, blended learning, teacher-student interaction

Introduction

Social media and social networks changed the way we communicate and interact with our friends and peers. They also changed the way we consume media content. Social media gave us an opportunity to become contributors and creators of digital content. Just a decade ago, during the emerging phase, social media platforms were considered a novelty and their commercial value was still questionable, at least outside the IT industry. However, a growing user base and saturation of traditional mass media resulted in further commercial exploitation of social media platforms. According to eMarketer (2015), social network ad spending reached \$23.68 billion worldwide in 2015. Marketers are shifting their budget from declining traditional media, such as print and TV, toward more dynamic and interactive digital media, such as social media and mobile platforms (RSO Consulting, 2014).

Social media also became relevant in academia. With widespread adoption among students, social media has huge potential as a communication and education tool (e.g. Ellefsen, 2016; Fasae and Adegbilero-Iwari, 2016; Sheldon, 2015; Draskovic, Caic and Kustrak, 2013; Dabbagh and Kitsantas, 2011). In overall, educators are aware of social media's benefits and high adoption rates (Moran, Seaman and Tinti-Kane, 2011). However, there are also some reservations and challenges preventing full adoption of social media for lecturer-student engagement, such as differing opinions about social media's role in the higher education environment and the rather informal nature of social media (Draskovic, Caic and Kustrak, 2013; Madge et al., 2009).

The aim of this study is to provide further analysis of the nature of lecturer-student interaction through social media. Furthermore, this study investigates and compares potential differences in social media use between Croatian and German students in academia.

Social media and higher education: a literature review

We will first define social media to establish a platform for further understanding its role in facilitating learning process. Social media could be defined as a group of Internet platforms build on the ideological and technological foundations of Web 2.0 that allow the creation and exchange of user-generated content (Kaplan and Haenlein, 2010). According to Bryer and Zavatarro (2011), social media gather various technologies including blogs, wikis, networking platforms (social networks), virtual worlds and media sharing tools that serve social purposes with the emphasis on social interactions facilitation, collaboration possibilities and deliberation across stakeholders. As the authors suggest, social media in the educational context has a wide variety of implementation and use both in terms of outcomes and media through which it can be facilitated. Additionally, different social media platforms contributes differently to the learning experience. For example, wikis being tool for collaboration as opposed to blogs that are more focused on authorship (Bryer and Zavatarro, 2011). However, each of the social media platforms that can be used in an educational environment should focus on integrating and contextualizing knowledge in the most efficient way.

What some scholars emphasize is the contemporary susceptibility of social media with constructivist learning theory and a learner-centered model. This approach focuses on learning as a social process in which one constructs the knowledge, as opposed to simply gaining it through the traditional model of learning (Duffy and Cunningham, 1996). George Siemens (2005) in his article on a learning theory in the digital age has further explained the existing learning theories in the context of social media, thus explaining that, as opposed to traditional view, learning does not happen inside the person. Rather, numerous connections are important to facilitate the process. Therefore, Siemens has proposed the new learning theory view called connectivism that relies on the following principles (2005, p7):

- Learning and knowledge rests in diversity of opinions.
- Learning is a process of connecting specialized nodes or information sources.
- Learning may reside in non-human appliances.
- Capacity to know more is more critical than what is currently known.
- Nurturing and maintaining connections is needed to facilitate continual learning.
- Ability to see connections between fields, ideas, and concepts is a core skill.

- Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.
- Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision.

Concisely, connectivism could be considered a networked social learning (Duke, Harper and Johnston, 2013). In this context, the interactions and collaboration that social media can provide in the learning process will contribute to knowledge construction through meaningful and smart connections, contextualization and synthesis of learning problems. It can also contribute to the more efficient assessment of learning outcomes. Moreover, social media places students into familiar surroundings and helps advance information literacy and metacognitive development (King, 2011). The fact that communication through social media often times requires interpretation of presented or acquired data makes participation and collaboration an important aspect of learning.

With Facebook exceeding 1.5 billion active users and many other platforms with hundreds of millions of users (Statista, 2016a), social media should be considered a mainstream communication platform in the developed world. Social media is an integral part of both our professional and our private lives. Additionally, social media likely gained popularity as an important communication and educational tool within higher education in response to the high adoption rate among students and its potential role in improving student participation (Draskovic, Caic and Kustrak, 2013). It could be argued that social media platforms present educational, ethical, economic, and revolutionary changes in the organization and structure of the higher education system worldwide (MeabonBartow, 2014). Indeed, the support for using social media platforms within the higher education environment is currently growing (Ellefsen, 2016; Fasae and Adegbilero-Iwari, 2016; Taylor, McGrath-Champ and Clarkeburn, 2012; Kassens-Noor, 2012).

According to Foroughi (2011, p 3), the learning environment could benefit from the application of social media for the lecturer-student interaction:

- *Learning-related benefits*: facilitation of collaborative learning, development of independent learning skills, problem solving, team work, reflective learning, responsive feedback from instructors, overcoming geographic isolation, peer-to-peer support/feedback, visibility of students work, integration of multimedia assets, and the creation of informal relations between educators and students.
- *Social benefits for students*: increased engagement in course material, development of a sense of community and transferable skills that enhance student employability, increased sense of achievement, control, and ownership of their work.
- *Benefits for institutions of higher education*: increased cross-institutional collaborations, support and community building outside the course environment, development of communities of practice, increased student enrolment and retention.

Although social media introduced more active ways of learning for students, sometimes it seems that instructors do not share same level of enthusiasm due to concern that less formal communication via social media might erode their authority (Draskovic, Caic and

Kustrak, 2013). Furthermore, utilisation of social media as a teaching and communication tool requires additional effort and proper level of computer literacy. Many of today's students are highly proficient in their use of digital media (Bodle, 2011). On the other hand, the overall level of digital literacy and competency of faculty still requires some improvement and more systematic approach to the teacher education (Tømte et al. 2015; Krumsvik, 2014; Krumsvik, 2008).

To address the problems of student collaboration, engagement and interaction, many higher education institutions use e-learning platforms known as Course Management Systems (CMS) to ensure a more satisfactory and meaningful experience. Facilitating student participation is not only a requirement in a contemporary classroom due to technological changes, but it is strongly linked to learning outcomes. However, usage of CMS, although appealing to lecturers due to its controlled collaborative features that such closed systems enable, is not always efficient in terms of true collaboration and the sharing that social media facilitates (Bryer and Chen, 2012). In addition, CMS as a learning tool cannot be entirely considered in the context of social media and its benefits in learning/teaching environment because it is essentially an online translation of traditional brick-and-mortar classroom surroundings where students are treated as information receivers and not as information co-creators (McLoughlin and Lee, 2008).

Social media is also important through virtual communication or what can be called a computer-mediated communication (CMC). Regarding this particular channel, Mazer, Murphy and Simonds (2007) argue that "the use of CMC in the instructional context could ultimately have a positive effect on the student-teacher relationship, which can lead to more positive student outcomes. Additionally, these findings may offer an explanation with regard to communication between students and their teachers." In this particular article, the authors discussed the teacher-disclosure through Facebook (i.e. the amount of information that an instructor discloses to students) and the impact on student motivation, learning and classroom climate. They found a positive correlation, meaning that higher disclosure enhances mentioned factors. This is important because not only it provides a valuable insight for instructors in terms of whether their students might view such activity as positive, but it also provides instructors with a certain power of creating their digital image strategically, which is usually harder to achieve in face-to-face communication. Lecturer's presence on Facebook can therefore not only enhance student motivation and learning, but also help them brand themselves in a strategic way.

As many studies suggest (e.g. Ellefsen, 2016; Fasae and Adegbilero-Iwari, 2016; Sheldon, 2015; Draskovic, Caic and Kustrak, 2013; Pestek, Kadic-Maglajlic and Nozica, 2012; Dabbagh and Kitsantas, 2011), social media has potential as an educational tool that could improve student motivation and in-class participation levels. However, use and implementation of social media in the classroom depends on both student and instructor. Unfortunately, instructors typically share rather conservative attitudes towards using both social media and contemporary technology, and prefer using more traditional media (Mayberry et al., 2012; Roblyer et al., 2010). This gap between lecturers and students and their perceptions of social media's role in higher education (Draskovic, Caic and Kustrak, 2013) could be bridged with better understanding of student motivation and preferences toward social media use for educational purposes.

Methodology

As the literature review suggests, there is great potential for social media as an educational tool in higher education. However, there are also certain obstacles restricting its adoption rate among both lecturers and students. The main goal of this study is to further explore student motivation for social media use in the context of lecturer-student interaction. As a follow-up of the qualitative research phase which provides an overview of both lecturers and students perspectives on the social media (Draskovic, Caic and Kustrak, 2013), this study focuses on the student side of the story. In order to detect possible student's country of residency related specifics that could affect the social media adoption rate or the way students use social media (e.g. IT infrastructure, culture, university rules and regulations), the research was simultaneously conducted in Croatia and Germany during the fall semester of 2015. In both cases, the survey was conducted on a convenience sample. The survey was administered online to participants and their participation was voluntary. The sample is comprised of 81 students residing in Croatia and of 84 students residing in Germany. The respondents' age is between 18 and 30; 63.6% identified as male and 36.4% female.

Based on the secondary research and findings from the preceding qualitative study (Draskovic, Caic and Kustrak, 2013), the following hypotheses were developed:

- H1: Both Croatian and German students use social media on daily basis;
- H2: Students are open to using social media for educational purposes;
- H3: Students prefer to use social media for communication with their lecturers;
- H4: There are differences in attitudes toward lecturer-student interaction through social media among Croatian and German students.

Research results

The participants answered a questionnaire that surveyed their use of and access to social media, as well as their platform to access. The majority of respondents used different social media platforms. Only 4.2% of the respondents were not social media users, which reduced our sample size to 158 respondents. The majority (90.4%) used social media on a daily basis. With regards to technology and social media access options, there are no significant differences among Croatian and German students. In both cases, students most commonly accessed social media through their smart phones and laptops (Figure 1).

There are no major differences in motives to use social media among Croatian and German students. Staying in touch with friends and abreast of current events were the most popular choices, with the scores of 71.5% and 70.3% respectively. Among the respondents, Facebook is the most popular social media platform (91.1%), followed by YouTube (82.3%), Instagram (59.5%) and Skype (59.5%), with similar preferences among Croatian and German students.

In overall, only 25.9% of respondents communicated with their lecturers through social media (Figure 2). However, 34.2% of respondents did not communicate with their lecturers through social media but expressed willingness to do so in the future. Surprisingly, German students communicated less with their lecturers (12.0%) than their

Croatian counterparts (38.3%) and were also less prepared to change that behaviour in the future (16.9% vs. 32.1%).

Figure 1: Social media access (n.b. multiple answers were possible)

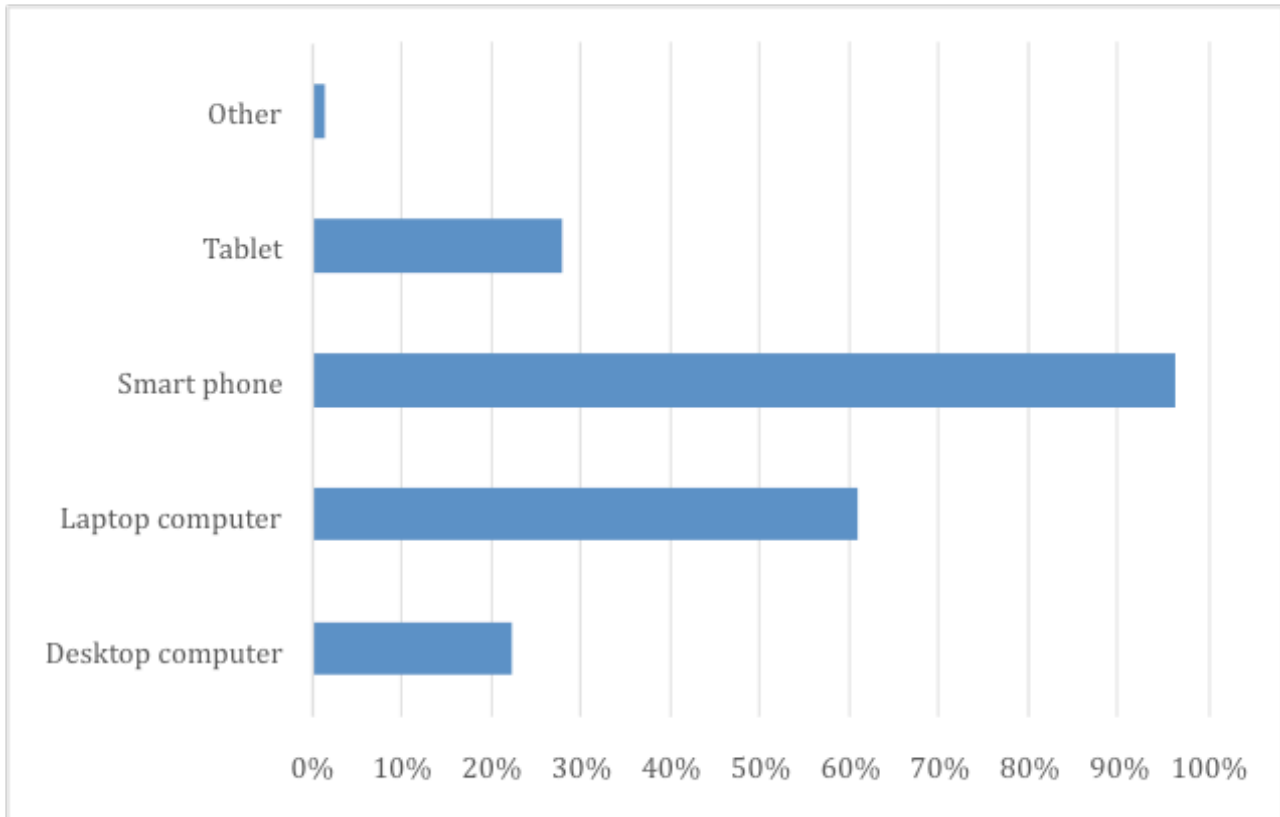
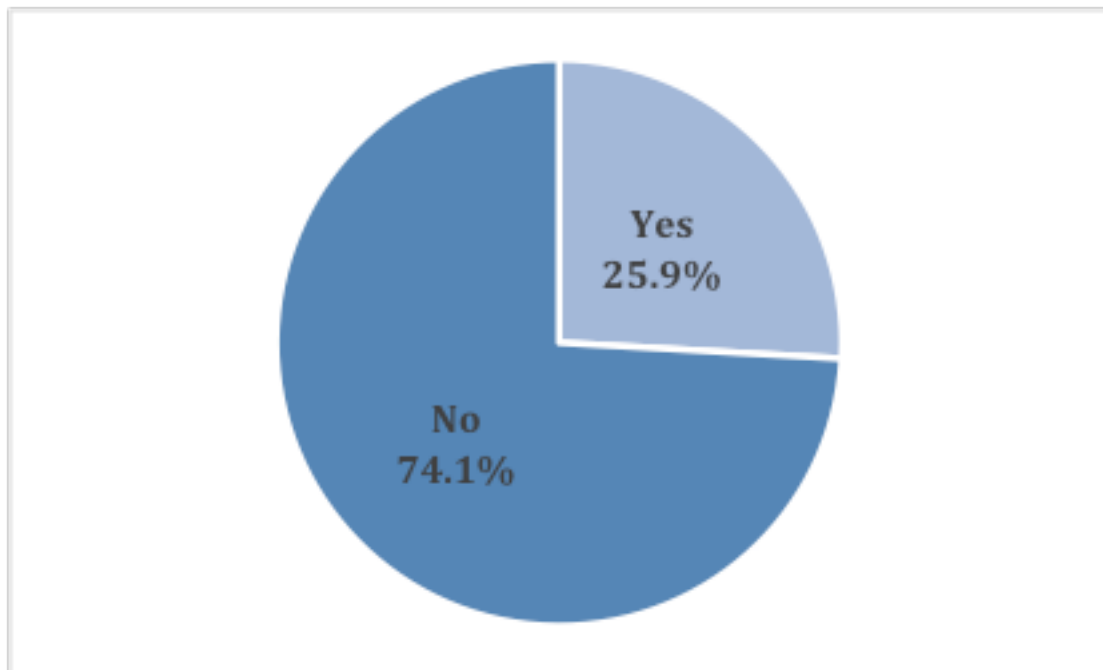
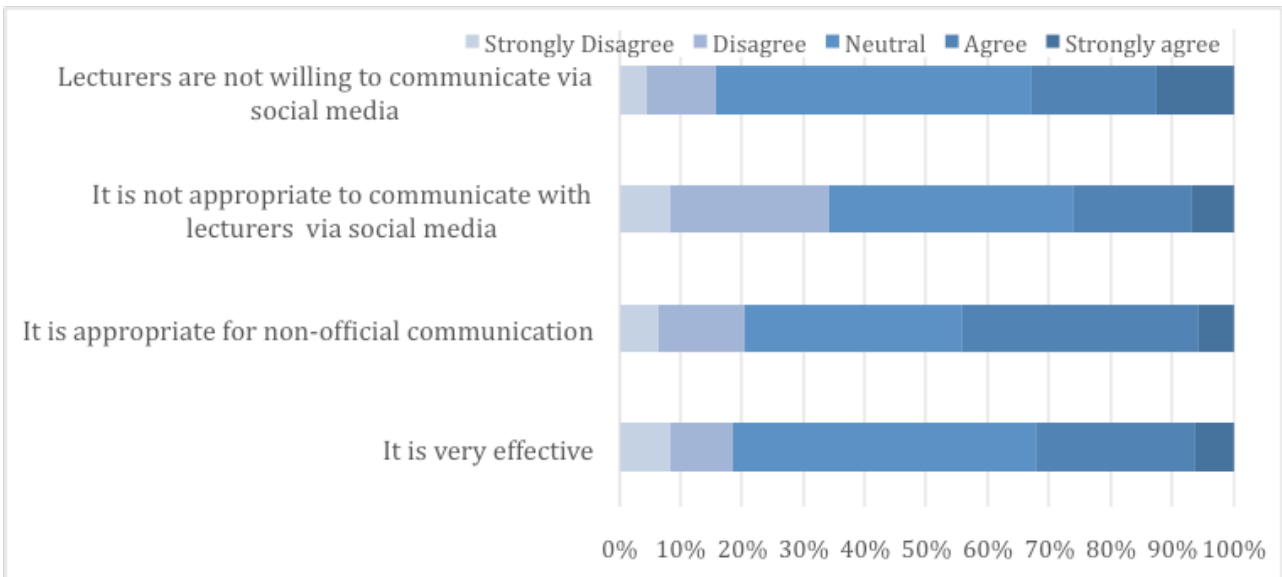


Figure 2: Students communicating with their lecturers through social media



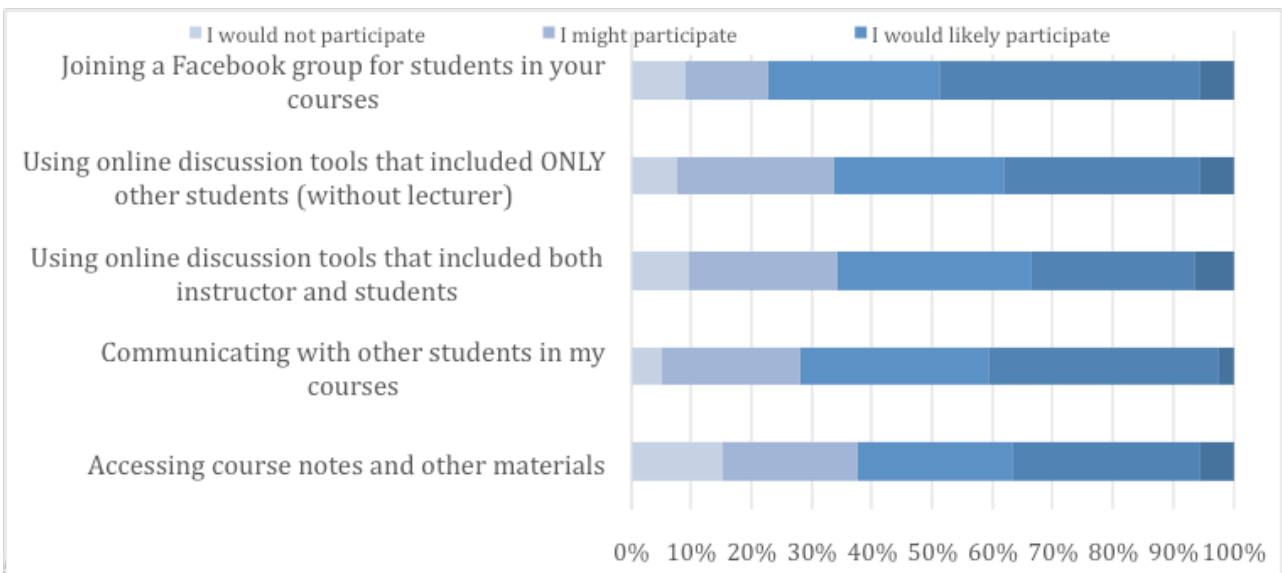
In most cases, respondents used social media for official communication with their lecturers (53.7%), to gather course-related information (46.3%) and to stay in touch after graduation (39%). When it comes to students' attitudes toward various aspects of voluntarily interaction through social media in the context of higher education, the respondents are quite heterogeneous (Figure 3). Furthermore, the majority of students took a neutral stance. Obviously, there is some lack of motivation on the student side.

Figure 3: Students' overall opinion about the communication with lecturers via social media



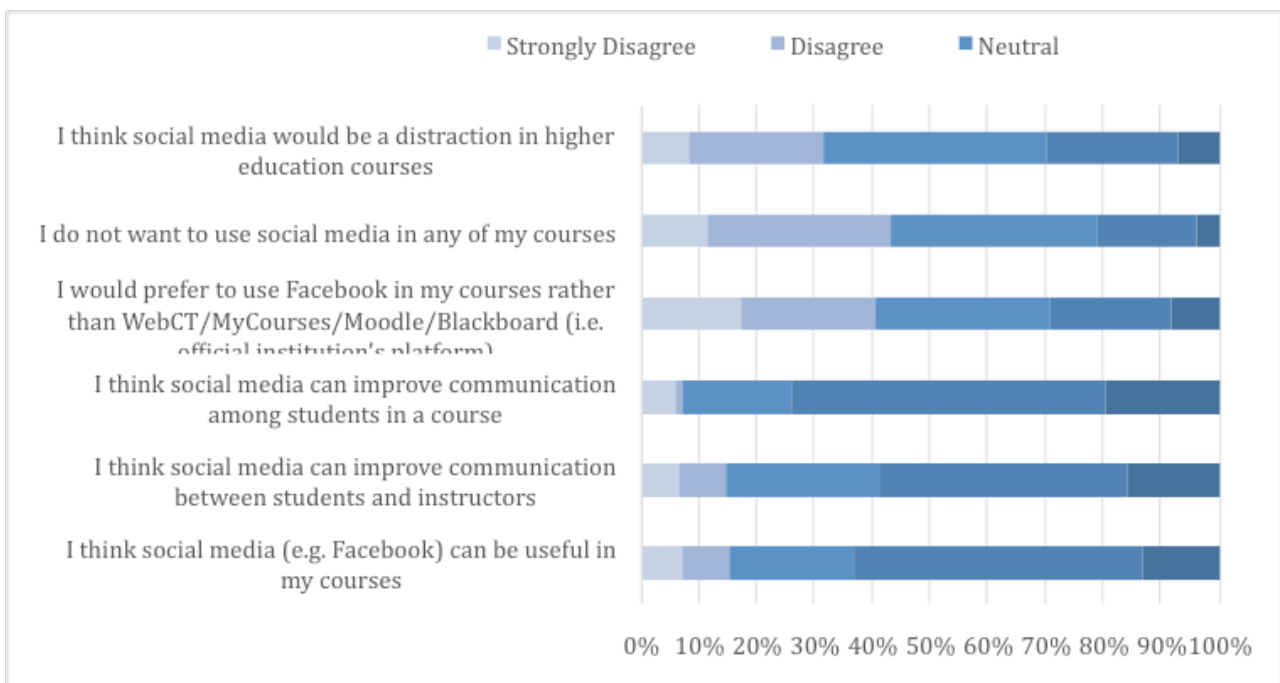
If the initiative to use social media originates from the course lecturer, students have a much more positive attitude (Figure 4). In most cases, below 10% of respondents are not prepared to participate. Overall, there are no major differences among Croatian and German students.

Figure 4: Students' level of participation if the lecturer suggests use of some social media



In general, respondents had a mostly positive opinion about the potential use of social media within higher education (Figure 5). Respondents mostly agreed and strongly agreed (63.3%) that social media can be a useful tool within a course. Furthermore, the majority of respondents (58.8%) considered social media a tool that could improve communication between lecturers and students. Additionally, almost three quarters of respondents (74%) believed social media could also improve communication between students enrolled to the same course. Although the overall optimism toward the use of social media for educational purpose was quite high, the majority of respondents indicated they would like to keep the existing online platforms used by their universities (e.g. WebCT, Moodle, BlackBoard, MyCourses). Again, response was consistent among Croatian and German students, so there were no significant differences.

Figure 5: Overall student opinion about using social media as an academic tool



Discussion

Our results show that students use social media frequently and Facebook is the most popular platform. As expected, both German and Croatian students use social media on a daily basis, which supports H1. The fact that most students accessed social media via their smart phones and laptops is consistent with global trends. It also supports the logic to shift marketing budgets toward increasing promotion on digital and mobile platforms (Statista, 2016b), and shows a high level of computer literacy.

We found that social media use is similar among German and Croatian students, and that a smaller portion of students used social media solely for communication purposes. Our findings suggest there are a significant number of students who are currently not communicating with lecturers using social media in academia, but are willing to do it in the future. This shows that students see social media as a platform of further social engagement that can, in terms of the higher-education ecosystem, translate this engagement to benefit both the learning experience and institution.

When it comes to student openness in usage of social media for educational purposes, results were somewhat heterogeneous. Overall opinion towards communication with lecturers was neutral, but if the initiative to engage on social media was coming from the lecturer, attitudes were more positive. H2 can therefore be accepted with emphasis that lecturers should serve as initial motivators for student engagement, which is consistent with the literature.

H3 can be accepted since students had mostly positive attitude towards the usage of social media within the course. They consider social media as a useful tool that can increase the level of communication with the lecturers. However, regardless of general attitude students still prefer to keep communication via CMS as well, placing social media as desirable secondary platform for communication and engagement. Moreover, German students stated not only that they communicated less with lecturers via social media but are more unwilling to do it in the future. This can be explained through the lens of cultural norms as German educational institutions are more formal or different attitudes toward lecturer's authority. This aspect should be addressed in future studies. There were no significant differences in attitudes toward lecturer-student interaction through social media found among Croatian and German students. Therefore, H4 is not accepted.

Conclusion

Our research suggests that students use social media frequently and have positive attitudes to integrating social media in education. Lecturers should serve as primary motivators for students to participate and communicate via social media for educational purposes. Since students prefer CMS for educational and communication purposes in academia, they should continue to be used. This study also reveals that there are no significant differences in social media use and preferences among Croatian and German students.

The study has some limitations. One of the limitations is the sample size, together with a sampling technique. With the relatively small sample size and a sample that may not be representative of the entire population, the study may be limited in generalization making about the entire population. Therefore, the findings should be considered as indicative. Further, in future studies more higher education institutions from different countries should participate to increase the level of objectivity and provide results that can be reported on larger scale.

The use of social media in education is an interesting and desirable research topic because, as literature also suggests, educational institutions should become more connected with students on all possible touch points and use social media to engage students in more interactive learning. As this study indicates, students have some constrains in lecturers' engagement through social media and they are also not very excited about voluntarily usage of social media within a course. However, if a lecturer suggests social media usage for educational purposes, students have quite positive attitudes towards it. Obviously, further studies should be conducted to explore how to increase student motivation to use social media in the learning process. Nevertheless, lecturers' adoption rate and willingness to use social media as an educational tool also requires some additional attention among researchers.

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