STUDENTS' PERCEPTIONS OF BENEFITS AND DRAWBACKS OF FACEBOOK-CONNECTIONS WITH TEACHERS

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ABSTRACT

Aim/Purpose	The purpose of the current study is to explore positive and negative aspects of student-teacher communication via Facebook, as perceived by students in secondary education.
Background	Student-teacher relationship is key to students' cognitive, social and emotional development. In recent years, as social networking sites (e.g., Facebook) became popular, these connections have extended to such platforms. However, most studies of the use of social networking sites in the school context are pedagogically-driven, and research on the ways student-teacher relationship is facilitated by these platforms is meager.
Methodology	We utilized a qualitative approach, analyzing middle- and high-school students' responses to open-ended questions about this topic (N=667). We used both top-down and bottom-up analyses.
Contribution	This study contributes to the growing literature about the overall impact of using social networking sites on the educational milieu. Specifically, it contributes by shedding light on students' perspectives of that phenomenon. Insights from this study are important for educators and education policy makers.
Findings	We found that student-teacher communication is mostly practical, although students who are not connected de facto but wish to connect romanticize it as more appealing. Furthermore, we found that students' perceptions of negative aspects of such communication is complex, reflecting a deep understanding of the social media. Students were mostly concerned with privacy issues, and much less with other peda-

gogical, technological and social concerns. Altogether, it seems that the students acknowledge the benefits of connecting with their teachers online and implement this communication rather responsibly.

Recommendation for Practitioners	We recommend that educators who wish to do so wisely use social networking sites and instant messaging services as part of their professional conduct, taking advantage of the benefits of using these platforms, and being aware of (and cautious about) potential drawbacks. We encourage educators to learn more about the potential uses of social networking sites and instant messaging services, and then to examine whether these uses may fit their educational agenda. We recommend education policymakers make evidence-based decisions regarding the use of social networking sites by teachers and encourage school communities to discuss these issues together.
Recommendation for Researchers	As technology develops rapidly, we recommend researchers examine the topics raised in the current research with regards to other platforms, in order to better understand the technological aspects that may affect students' perceptions of the use of social networking sites and instant messaging services to communicate with their students. We also recommend studying what types of resources are available to education policymakers when making decisions on relevant policies.
Impact on Society	Understanding teens' perspectives of their relationship with their teachers in today's digital, networked world gives us a better understanding of this generation, hence may assist in planning and realizing a better educational system.
Future Research	Future studies should focus on other social networking sites and instant messaging services, as well as on other countries and cultures.
Keywords	student-teacher relationship, student-teacher communication, social networking sites, Facebook, SNS-mediated communication

INTRODUCTION

Student-teacher relationships, which are vital to successful learning (Birch & Ladd, 1998; Davis, 2003; Hamre & Pianta, 2001; Sabol & Pianta, 2012), include major social components as well as academic ones. Naturally, student-teacher relationships go beyond school time, and it was shown that this relationship is more interpersonal for students who engage with their teachers beyond the classroom than for students who do not (Dobransky & Frymier, 2004). As social networking sites (SNS)—like Facebook, Twitter, Instagram, etc.—have been widely adopted among Internet users of all ages, they serve as a natural arena for social interactions for both students and teachers. Mostly, people's use of the communication and interaction enabled by SNS is driven by their social actions (Cheung, Chiu, & Lee, 2011; Nadkarni & Hofmann, 2011; Yang & Lin, 2014). Following that, student-teacher relationships are also being facilitated via those platforms.

Some intriguing questions have been raised regarding student-teacher connections on SNS and their effects on student-teacher relationships in "real-life" and vice versa. Even the very term used in many SNS to describe connected users; that is, "friends" may challenge traditional student-teacher hierarchy, as traditionally teachers are allowed some power over their students even when close relationships between the two parties are developed (Ang, 2005; Vie, 2008). Closeness and friendship may be different in SNS compared to the real world, as noted by Subrahmanyam, Reich, Waechter, and Espinoza (2008), which may affect communication and interaction.

SNS may affect mutual perceptions and beliefs (Mazer, Murphy, & Simonds, 2007, 2009), thereby changing student-teacher relationships, followed by an even greater change in traditional hierarchical structures in schools. For this reason, school authorities and policymakers have been pondering about their position regarding student-teacher SNS-based communication. Education policymakers worldwide have adopted different educational approaches, often prohibiting teacher-student communication via SNS altogether (Forkosh-Baruch & Hershkovitz, 2014). Public discussion on teacher-student communication via SNS reflects the complex nature of this issue, and demonstrates the difficulty in adapting innovation in large-scale systems and organizations. However, most policies are not based on empirical evidence, but rather on notions and public opinion. This study aims at utilising empirical evidence based on students' perceptions. We focus on the secondary school population, as many SNS (in particular Facebook) require their users to be at least 13 years old. In addition, secondary school students are less dependent on their teachers and are more mature than elementary school children. Overall, non-pedagogical aspects of SNS in grade-schools are still under-researched.

BACKGROUND

While school borders define the boundaries of education, including issues such as pedagogy, teacher-student communication and participants' roles, current schooling is characterized by blurring of these boundaries, allowing more frequent and free out of class communication. This, in turn, allows paradigmatic change in teacher-student connections, which may have impact on schooling altogether (Wentzel, 2010). It has been argued that students who have good interactions with their teachers have close, warm relationships with them, and are often motivated and more interested in learning (Fredriksen & Rhodes, 2004; Mazer, 2012). However, examination of communication behaviors of teacher and the ways it may influence students' well-being, engagement and interest in school and what it has to offer, is meagre (Mazer, 2013).

Indeed, the importance of positive teacher-student connections and relationships is undisputed, being interdependent (Frymier & Houser, 2000). There is also agreement that out-of-class communication (OCC) is important for students, as students who engage in OCC with a teacher may view their relationship with this teacher differently than students who do not engage in OCC (Fusani, 1994). Furthermore, OCC, due to its intimate nature, is also related to mutual trust between students and teachers (Jaasma & Koper, 1999).

In today's digital era, OCC is manifested through various digital platforms. Digital media opens new opportunities for OCC, thereby allowing greater scope in terms of width, depth, and range of topics within online communication. In recent years, the popularity of instant messaging services, such as WhatsApp, Snapchat, and Facebook Messenger, and social networking sites, such as Facebook, YouTube, and Instagram, for interpersonal communication has grown dramatically (Bozkurt, Karadenis, & Kocdar, 2017; Eginli & Tas, 2018). This phenomenon is prominent among teens, and, according to a recent survey, U.S. teens heavily use YouTube (85%), Instagram (72%), Snapchat (69%) and Facebook (51%) (Pew Research Center, 2018). Due to their popularity, these means of communication also serve children and teens for out-of-class communication with teachers at the expense of more formal means of communication, such as email.

In these platforms, communication is naturally highly social and is often characterized by self-disclosure. In such cases, any communication between teachers and students is naturally interpersonal; hence, both the teacher and the student communicate with each other as individuals, but still taking into account their school roles (i.e., teacher role or student role) and their group affiliation. This complicates the more frequent teacher-student communication, which is based on their traditional roles (Dobransky & Frymier, 2004). Furthermore, this new type of OCC may affect the traditional learning spaces (Mazer et al., 2009).

Therefore, student-teacher SNS-based communication has been debated. In Israel, where the study reported in this article was conducted, the Ministry of Education first adopted a banning policy;

however, about a year and a half later, the regulation was refined, allowing restricted SNS-related communication (Israeli Ministry of Education, 2011, 2013). Banning teacher-student SNS-mediated communication has been an issue of debate in many countries; teacher-student communication via social media was barred in several regions in the US and in Australia (Queensland Department of Education, Training and Employment, 2016; Schroeder, 2013), while other regulators have chosen to warn rather than ban, as in the case of Ireland, where it is formally stated that "Teachers should […] ensure that any communication with pupils/students […] is appropriate, including communication via electronic media, such as e-mail, texting and social networking sites" (The Teaching Council, 2016, p. 7), or as was the case in other regions in the US (Cook, 2016; Naughton, 2016). Public discussion on teacher-student communication via SNS reflects the complex nature of this issue and overall demonstrates the difficulty in adapting novelties in large-scale systems and organizations (Christensen, Baumann, Ruggles, & Sadtler, 2006; Rogers, 2010). However, most policies are not based on empirical evidence (Warnick, Bitters, Falk & Kim, 2016).

A recent literature review of the use of instant messaging in education has found only three studies conducted in secondary school level and no studies whatsoever in primary schools (Tang & Hew, 2017); moreover, two of these three studies are explicitly limited to pedagogical aspects. This highlights the need to study non-pedagogical use of SNS and instant messaging software in the context of grade-school. Similarly, the use of social networking sites for teacher-student communication has been mostly studied in formal, pedagogical contexts. When examining OCC via these platforms, various advantages are being recognized, encompassing both functional and social aspects; these serve a wide range of purposes, such as information exchange, facilitating a positive social atmosphere, creating a dialogue among students, and supporting learning (Asterhan & Rosenberg, 2015; Bouhnik & Deshen, 2014; Schouwstra, 2016).

To summarize, we observe a gap between our knowledge of the extensive use of social networking sites worldwide, in particular, the younger population, and our knowledge regarding the manifestation of student-teacher relationships via these platforms. In order to bridge this gap, we formulated the following research questions:

1. What are the positive aspects of student-teacher communication via Facebook?
    a. From the perspective of those students who are "friends" with a teacher of theirs?
    b. From the perspective of those students who are interested in a "friendship" with a teacher of theirs?
2. What are the negative aspects of student-teacher communication via Facebook?

In light of the insights gained from reviewing the most relevant, updated literature on social aspects of using social networking sites by students and teachers, we want to find out whether OCC via these platforms will be facilitated in a similar manner to traditional OCC, that is, it will be present, however with a degree of separation between "school" and "home".

METHODOLOGY

DATA COLLECTION AND INSTRUMENTS

The data analyzed in this paper was collected as part of a broader research of student-teacher relationship and Facebook-mediated communication (Forkosh-Baruch & Hershkovitz, 2018; Hershkovitz & Forkosh-Baruch, 2017). Data was collected anonymously during December 2013-April 2014, during which a vast majority of Israeli teens were using Facebook (over 90% of 13-18 years old had an active Facebook account, based on a survey of a representative sample, Israel Internet Association, 2014). We used an online questionnaire that was distributed via schools' communication platforms (with the assistance of educators and schools), social networking sites (mostly Facebook and Twitter), and various relevant professional and personal mailing lists. Our target population was students in lower and higher secondary schools. Informed consent was attained through the

online questionnaire. Participation was voluntary, and participants were not remunerated for taking part in the study.

As part of the full questionnaire, students were asked about their current use of Facebook and their connections with teachers via Facebook. According to their response, they were grouped into four categories:

1. Connected students, who have an active Facebook account and are connected to a current teacher of theirs;
2. Wannabe Connected students, who have an active Facebook account, are not connected to a current teacher, but are interested in such a connection;
3. Not Wannabe Connected, who have an active Facebook account, are not connected to any current teacher, and are not interested in such a connection;
4. Not on Facebook students, who do not have an active Facebook account.

In this article, we focus on two open-ended questions that were part of the online questionnaire. First, "How [does/will] the connection [with your current teacher] on Facebook contribute to you?"; this question was presented only to the Connected and the Wannabe Connected participants. Second, "What, in your opinion, are the negative aspects of teacher-student relationship via Facebook?"; this question was presented to all participants.

The timing of the questionnaire distribution is important for this study, as a few months prior to this period, the Israeli Ministry of Education had modified its policy regarding SNS, allowing limited Facebook-based connections between students and teachers via groups and only for learning purposes. Previously, any teacher-student SNS-based communication was prohibited.

PARTICIPANTS

Altogether, 667 middle- and high-school students participated in the full study. Participants' age ranged between 12-19 years old (M=14, SD=1.6), of whom 403 were female (60%) and 264 were males (40%). Participants' age distribution is shown in Figure 1.

Participants were from all over Israel, as a result of the ubiquitous accessibility to the online form. Participants' self-reported locations (places of residence) are illustrated in Figure 2, on the map of Israel. Of the participants, 72 participants did not respond to the open-ended questions referred to in this article and therefore were omitted from the current analysis.
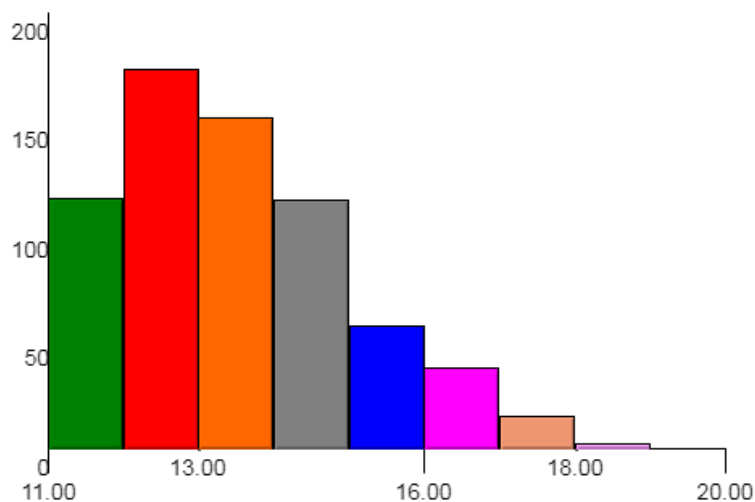
Figure 1. Participants' age distribution

Figure 2. Participants' locations on Israel map

ANALYSIS

The analysis of responses to both questions leaned on Ang's (2005) framework of student-teacher relationship, which includes three axes: satisfaction, instrumental-help, and conflict. Regarding the first question, which is focused on contributions of student-teacher Facebook-mediated communication, the two first axes were clearly identified with minor diversity within each axis. In contrast, the second question, which discusses negative aspects of such communication (relevant to the conflict axis in Ang's framework), presented a variety of topics and sub-categories. Therefore, the responses to the first question were coded using the directed content analysis method, while responses to the second question were coded using the conventional (bottom-up) method, which involved open coding, and then selective coding (Corbin & Strauss, 2008; Hsieh & Shannon, 2005). In both cases, a single response could have been coded as belonging to more than one category. The coding process was done manually, color-coding statements in MS Word, with no dedicated software.

FINDINGS

We will now present the analyses of the responses to the two questions, first regarding the contribution aspect of student-teacher Facebook-mediated communication to students, then regarding perceptions of negative aspects of such communication.

CONTRIBUTIONS OF STUDENT-TEACHER COMMUNICATION

The question regarding actual or potential contributions of Facebook-mediated communication between students and teachers was answered by only two sub-groups of the participants – the Connected and the Wannabe Connected students. Of the 67 who were categorized as Connected, 57 students (85%) responded to that question, of whom only 37 responses were coded. Of the 124 who were categorized as Wannabe Connected, 115 students (93%) responded to that question, of whom only 109 responses were coded. Responses that were irrelevant were not coded.

Connected students

Of the 37 responses, 10 (27%) were coded as Satisfaction-related, and 31 (84%) were coded as Instrumental Help-related. Recall that a single response may have been coded in both categories.

Satisfaction-related mostly mentioned feelings of closeness and trust, ranging from "It's just nice to have" (S32, M:12 (S is the student ID number, M means Male, and 12 is the age)) to "[It contributes to a] more close and intimate connection" (S235, M:13). Some responses explicitly mentioned either the students' or the teachers' point of view, e.g., "I can share with her what happened to me today" (S266, F:13), "Closeness to the teacher and a feeling of caring by the teacher" (S483, F:15). Some students referred to a feeling of intimacy deriving from seeing the teacher as a human being, e.g., "[This connection] shows that the teacher is not just a teacher, but also a person with a family and a life beyond the education system" (S135, M:13); "You can see that the teacher is a person like us, and you can see more positive sides in the teacher that you couldn't see on a daily basis" (S251, F:13).

Instrumental Help-related responses referred to issues of accessibility, convenience and immediacy that characterize communication via SNS, e.g., "[It is] direct and more convenient communication" (S241, M:13); "It's much easier to transfer information, projects and tasks, and to ask question about studies and teacher attendance and events we're both involved in" (S307, M:14); "For me and other students there's better access to files and information that's relevant to our studies. It's easier to transfer forms and important and urgent messages" (S427, M:15). There was also a reference to the clarity of communication, "It helps the communication to be more understood" (S192, F:13). Finally, the extension of class boundaries was also mentioned, "It allows consultation and discussions that are not connected to school and usually there's no time for them in school" (S135, M:13).

Wannabe connected students

Of the 109 responses, 44 (40%) were coded as Satisfaction-related, and 76 (70%) were coded as Instrumental Help-related. As these respondents were not de facto connected to a teacher of theirs, these statements should be referred to as "wishful thinking". Again, recall that a single response may have been coded in both categories.

Satisfaction-related responses referred to the potential contribution of Facebook-mediated communication to both parties, e.g., "[The teacher] could ask me how I am, that's kinda nice" (S344, F:14); "[The teacher] is just an interesting and quite a cool guy, it's just interesting for me what he's doing when he's not teaching" (S280, M:14). Moreover, some students mentioned possible involvement of teachers in the lives of their students, e.g., "Teachers can participate in the lives of their students" (S560, F:16). Additional benefits include trust and closeness, e.g., "It can strengthen the relationship between the teacher and the students and to cause the student to count on his teacher" (S592, F:17); "Every teacher maybe can create a better relationship with every student, if they want to" (S345,

F:14). There was even a reference to the blurring of role boundaries and to the student seeing the teacher as a friend, "Maybe that there'll be a better connection and to be like friends, not like a teacher" (S76, F:12).

Again, most Instrumental Help-related responses referred to issues of accessibility, convenience, and immediacy, e.g., "[The teacher] could update me easily and quickly about things that happened when I didn't come [to school]" (S344, F:14); "[The teacher] could help me in the afternoon with school stuff if I needed help" (S87, M:12); "That way, we could talk with the teacher and ask questions – it'd be much more comfortable than giving him a call" (S307, M:14); "The teacher can help me in personal issues or in my studying" (S193, F:13); "It could assist me if I was absent from school, I can ask what the homework were" (S214, F:13). Furthermore, in some cases, the online platform allowed communication that might not otherwise take place, e.g., "Things that you want to say to the teacher personally and you're too shy – it's possible using Facebook" (S586, M:17).

A summary of the positive aspects in both groups is illustrated in Figure 3. Distribution of Satisfaction- and Instrumental Help-related categories in both groups of students is summarized in Table 1. We checked for differences between the two groups. Since a single statement could have been coded to multiple categories, we utilized a multiple response set procedure. Pearson Chi-Square test resulted in a marginally significant difference, $\chi^2(2)=4.90$, at p=0.086.
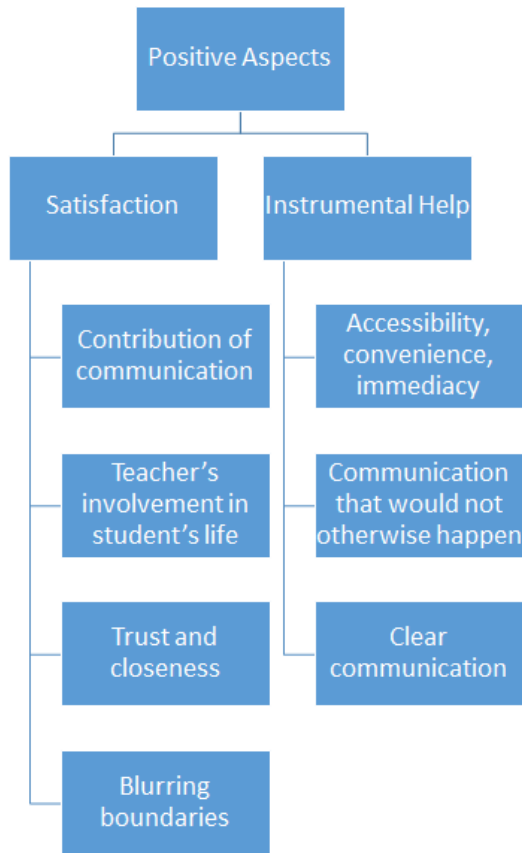
Figure 3. A summary of the positive aspects of student-teacher Facebook-mediated communication

Table 1. Distribution of Satisfaction- and Instrumental Help-related categories in the Connected and Wannabe Connected groups

	SATISFACTION	INSTRUMENTAL HELP
Connected	10	31
Wannabe Connected	44	76

NEGATIVE ASPECTS OF STUDENT-TEACHER COMMUNICATION

The question regarding negative aspects of Facebook-mediated communication between students and teachers was presented to all participants. Of the 667 students, 585 (88%) responded to that question, of whom 507 responses were coded. Responses that were not coded were irrelevant. Coding was done in a bottom-up manner, resulting in the definition of seven categories, one of which was coded as "No negative aspects" (57, 11% of coded responses). The resulting categories are a product of a spiral process of analyzing the data; both the definition of the categories and the coding of the responses to the categories were done by both authors until full agreement was achieved. Following is a description of each of the categories (omitting the "No negative aspects" category).

Exposure to information and privacy

This category includes statements referring to potential consequences of excessive exposure to information by either students or teachers, thereby leading to a negative outcome in terms of invasion of privacy. Interestingly, many students explicitly mentioned photos as a source of information that social network users are exposed to, therefore as a source for privacy invasion. Overall, 227 responses were coded in this category. Statements under this category may be examined along different dimensions.

Unidirectional vs. bidirectional view of privacy invasion. Many students mentioned only either students' or teachers' privacy as being invaded. For example, "The teachers can penetrate to the students' personal lives, to their daily life, family life, etc. Sometimes the student doesn't want the teacher […] to be involved in his personal life" (S585, F:17); "There are some things or posts that I share that I don't want my teachers to know about" (S501, F:15); "The teachers [shouldn't] see all my social life" (S478, F:15); "The students can see everything that [the teacher] posts, which makes it non-private" (S256, M:13).

However, some saw the risk of invasion of privacy as two-sided: "That teachers and students can see beyond basic information of a teacher and a student on their private lives" (S630, F:18); "There can be personal photos, personal details that we don't want our teachers to see, or the other way around" (S357, F:14); "The most important thing is that things that students wanna share only between friends, or photos that teachers wanna show only to their families, can be seen by the teachers or vice versa by students" (S216, M:13); "Sometimes it can shatter the privacy of the student or of the teacher" (S562, F:16)

Scope and depth of exposure. Students referred to both scope and depth of shared information. Scope refers to the amount of information that is posted on Facebook and may be accessible to the poster's friends. For example, "That one is exposed too much to the private world of the other" (S524, F:15); "That they know too much about the kid" (S309, M:14); "The teachers can stock us and everything we post on Facebook they can see" (S125, F: 13).

The depth of the exposure mostly refers to the type of information being shared and to the fact that often this information may include intimate details. For example, "Kids who learn in a religious school but are not religious don't need [their] teachers […] to see the things they post and their photos with […] improper dressing" (S165, F:13); "Teachers can see photos of students smoking or

drinking [alcohol] or provocative photos" (S537, F:16); "The teacher can know very private details about the teacher, and the other way around" (S286, F:14)

Paradigm shift of student-teacher relationship

This category refers to the undermining of traditional student-teacher relationship as part of an educational paradigm shift in which relationships tend to undergo radical changes. Teacher-student hierarchy is challenged in general, more so when both parties are engaged in professional and social interactions via social networking sites. Overall, 91 responses were coded in this category. The paradigm shift referred to under this category might be evident in different aspects of student-teacher relationship.

Respect. Students explicitly mentioned that when they become Facebook-friends with their teachers, authority-related issues may arise. Specifically, many of the participants mentioned issues related to honor and respect. For example, "A personal relationship that may damage the honor between a teacher and a student" (S539); "The distance between the teacher and the student is broken, and it's kinda damages the respect you should have for a teacher just by the fact that he's a teacher" (S525); "Less respect for the teachers and thinking that teachers are less important than expected" (S276). Specifically, some students referred to the discrepancy between a relationship on Facebook, which may become close and intimate, and an in-class relationship, which is based on a more traditional, hierarchical paradigm. For example: "Lack of distance between the teacher and the student as it should be in class" (S442); "A kind of illusion is created between the teacher and the student, and it's always better in real conversation" (S170); "That the teacher loses some of his authority as a teacher the moment he communicates with his students on Facebook" (S614); "Teachers on Facebook can sometimes act in an unprofessional and non-educational way, which can have a bad influence on the students and even contradict [the teachers'] behavior in school" (S563). On the other hand, some students expressed concerns regarding the possibility of teacher-student relationship become more remote: "'Coldness' of the teacher, I mean, there's no warm and more personal attitude, compared to that of face-to-face connection which is better" (S431).

Friendship. Students referred to the perception of teachers as friends on an equal basis, rather than differentiating between students' and teachers' roles. For example: "When teachers and students connect on Facebook, the students treat the teachers as friends" (S443); "Not separating between formality and friendship – in most cases students don't know to make the difference" (S620); "The kid can talk to [the teacher] like just any other friend" (S60); "That you turn your teacher to your friend and you tell him personal stuff" (S531); "[The students] can treat [the teachers] as friends and not as teachers, and I think it shouldn't be like that. There's teachers and there's friends!!!" (S219).

Communication and Language. Some students mentioned issues related to the very language being used on Facebook, which might be different from the language used in classroom communication; the former is "Less polite language" (S422). On the one hand, students are worried "That the teachers can see our language on Facebook and think bad things about us" (S472). On the other hand, they are concerned that "The interaction between the teacher and the student becomes much less meaningful and personal" (S623).

Improper behavior and identity issues

This category refers to behavior that was considered by the students to be unfit in the context of communication between students and teachers. This includes cases in which identity might be manipulated. Altogether, 89 responses were coded under this category, in which several aspects can be identified.

Inappropriate Behavior. Many students mentioned different degrees of inappropriate behavior. On one end of this continuum, students expressed their concerns about mutual use of bad language and exploiting Facebook to bother each other. For example, "Students may use Facebook not for learning purposes but for negative purposes, such as hurting, cursing, and so on" (S382); "Bad language be-

tween the teacher and the students" (S150); "If a teacher bothers [a student] – or the other way around – it causes situations or an argument between the teacher and the student" (S128); "It can lead to humiliation and serious problems between them" (S449); "Students can exploit Facebook to smirch a teacher" (S548). In some cases, students were concerned that negative aspects of their relationship with their teachers may broaden and continue via Facebook, as in this example: "The teacher will insult you also on Facebook, not enough that he's humiliating me in front of all the class?!" (S487).

On the other end of the continuum, many students expressed concerns about extreme behavior that might result in dangerous, even illegal actions. For example: "Personal contact between a teacher and a student on Facebook may become a problem of sexual harassment and such" (S479); "It could lead to a relationship between [male] teachers and [female] students" (S626); "Of course, there's first of all this issue that always comes up: 'A [male] teacher harassed a kid using Facebook!'" (S220); "There were some incidents abroad that teachers initiated a 'study meeting' and would rape [the student]" ("[A hack into a teacher/student account] can end in a lawsuit, or even worse, a murder, that the teacher and the student's parents will kill each other" (S140)

Covert Communication. A few students mentioned the dangers of communicating in a closed environment such as Facebook. On the one hand, they are worried that inappropriate communication might take place without anybody knowing about it besides the teacher and student involved. For example, "[Facebook] can cause confrontations between teachers and students in the chat, without anyone knowing about it" (S50); "There could be 'forbidden connections' between teachers and students without anyone knowing about it" (S179). On the other hand, students feel that 'what happens on Facebook stays on Facebook' and are afraid that "Things can leak accidentally" (S279).

Identity Issues. Students also raised identity-related concerns. Generally, they mentioned that "There are imposters" (S38), hence "You can't know who you're talking to" (S74). This might have some serious consequences, for example: "Someone can hack into [my] Facebook account and curse teachers and hurt them, and they'll think it's me" (S389); "Maybe you think you're talking to the teacher on Facebook and telling them personal things, and in the end it's not the teacher but someone you don't know" (S5). Content manipulation is also related to this aspect, in which either teachers' or students' identity might be compromised, for example: "A teacher that posts a [personal] photo to Facebook […] should know that the students can spread out fake photos, or the other way around" (S484).

Boundaries

This category refers to students' concerns regarding the blurring of boundaries when student-teacher communication is mediated via SNS. Mostly, students set clear boundaries between school time and after-school time. Altogether, 81 responses were coded under this category; we identified the following aspects that reflect different points of regarding boundaries in student-teacher relationship.

Media. Students differentiated between various communication means, assigning different communication channels to different purposes. For school-related issues, they prefer the more traditional or formal media to be used after school hours, for example, "Facebook is for communicating with friends and family, and (after school) communication between the teacher and the student should be done by phone or e-mail" (S1); "There's time for [teachers and students to talk] during school hours or via the 'Mashov' system" (S570) ("Mashov" is a formal administrative school system that is used, among other uses, by teachers, students and parents for communication with each other); "Students and teachers should communicate only in class or using messages" (S76). A more extreme approach sees out-of-school digital communication between teachers and students as unfit. As such, one of the students explicitly stated that "When the teachers talk to the students outside school, and even on the Internet, it's not professional and it doesn't respect the education system" (S436).

Teacher's role boundaries. Students also referred to different aspects of the teachers' role regarding in-school and after-school interactions. From the students' point of view, the availability of SNS to teachers creates an undesirable situation in which the teachers' private time is being used for professional purposes; while the teachers often choose to do so, communicating with their students via SNS might "drag" the students unwillingly to this situation. Consequently, students mentioned that "Teachers' time can be used beyond conventions" (S166); "The distinction between school time and the teacher's private time is hardly evident" (S622); and "The teachers […] can think they're responsible for [the student] also after school time" (S316). Moreover, one of the students stated that "A teacher should know a student's personal life only to a certain extent (S249). Furthermore, the students are concerned about the lack of boundaries that may be evident in the diffusion of communication from Facebook to the classroom or vice versa. This was reflected in the following two statements: "If there's concern about a student [regarding something he or she posted on Facebook], maybe it's possible to raise it as a general conversation during a class meeting or in a general conversation with the student and try to connect it to the post" (S593); "There shouldn't be a connection [on Facebook] between a student and a teacher if it's not about studies" (S392). This diffusion may have consequences in real-life situations, for example: "When I'm writing something—mocking or writing not nice stuff but I'm just kidding—the teachers can see it and I can get punished" (S147).

Students' personal boundaries. The students explicitly mentioned that Facebook is a place where they "hang out" during their free time and do not want to be bothered by their teachers during that time: "I don't want my teacher to know what I do in my free time" (S465); "The students don't always want their teachers to know what they're doing after school" (S330); "The teachers don't give the students space" (S311); "There's no freedom and independence to the kid after school" (S418); "You have to separate between morning hours, which are school, and afternoon, which is students' lives after school" (S603); one of the students expressed this notion bluntly, using an extreme metaphor: "That teachers go on and on about homework and stuff we study in a site that is supposed to be like a refuge for us from our studies" (S650). In this seemingly closed area, students are very clear about being in control regarding how and what to communicate: "Teachers shouldn't get into the students' personal life more than the students choose to share" (S391); "The student won't be able to feel free and will have to think all the time about what the teacher will tell him and what to do" (S141); "If the teacher is watching the student's profile, he won't express himself" (S523).

Inequity issues

Under this category, statements refer to situations of discrimination based on uneven conditions which are a result of Facebook-based communication. Overall, 34 statements were coded in this category, consisting of two sub-categories.

Accessibility to information. Students were worried that they or their peers who do not have a Facebook account, or who do not frequently connect to Facebook, will not have equal opportunities to those of the connected students. The non-connected students can find themselves therefore lacking important academic or administrative information: "If the teachers sends homework and assignments using Facebook, some of the students won't receive it, because not everyone has a [Facebook] account" (S168); "Not everybody has access [to Facebook] all the time. The teacher can post an important message there and you could miss it" (S589). Moreover, the reliance on Facebook for school-related information might hinder those students who choose to be inaccessible and to disconnect from Facebook, for example: "There is too much dependence on Facebook in the learning aspect, which does not allow to totally disconnect from it" (S549).

Effects on relationship. Not only information accessibility might discriminate between students, but also the potential consequences of Facebook communication on teacher-student relationship. Participants were concerned about teachers preferring students with whom they communicate on Facebook: "That they are too closed and this can cause the teacher to prefer one student over another" (S565); "A less strong relationship between the teachers and the students who don't have Face-

book" (S163). Furthermore, among students who are Facebook-friends with their teachers, there may be additional preferences: "They are our friends on Facebook and they [only] talk to some of the students" (S306); "When a teacher 'likes' [a posting of] one kid from the class and not of another one, it shows like he loves the first one more" (S47). Students also expressed their concern regarding a distorted image of the teacher due to postings on Facebook, resulting in a distorted relationship: "Students can get preferred treatment because they're 'friends' of teachers on Facebook, or to love teachers only because of photos or statuses" (S473).

Technological and Socio-Technological Aspects

This category refers to technology-related issues in using Facebook that are perceived as having a negative influence on student-teacher relationship. Altogether, 23 statements referred to this category.

The ease of negative online behaviors. Students identified situations in which the media itself and its characteristics enabled teachers and students with a greater ease to engage in negative behaviors. One type of such behaviors is avoidance, i.e., to ignore each other's postings and online presence in general. For example, "There's the possibility that the teachers, out of choice, will decide to ignore requests or questions of the student due to a convenient possibility of avoidance" (S600); "There could be a situation in which […] students prefer to avoid [materials or messages]" (S623). Another type is loss of focus and time wasting behavior: "The computer causes the kids to focus on other stuff and to be less concentrated in the learning that occurs on Facebook" (S535); "The teacher and the students can stay on [Facebook] after their chat and waste precious time" (S148); "It makes me use Facebook more" (S332).

Distorted relationship. Students perceived SNS-mediated communication as distorting relationship between them and their teachers, due to the limitations of digital media. Mainly, they mentioned the shortcomings of text-based communication that does not include elements such as expressions, gestures or body language. For example, "You can't see feelings on Facebook, and that's why things don't always come out as they should. […] Interaction between the teacher and the students becomes much less meaningful and personal" (S623); "A teacher can never know what is standing behind the words of a kid on Facebook, because what [the kid] is saying in most cases is false and you can find out about it only through body language" (S267). As a result, relationship that is built upon this kind of communication is perceived as distorted: "[It's] not a face-to-face connection and can be false" (S406); "It's not the same as in real-life […] connections on Facebook are not so efficient" (S99). Students report an advantage over their teachers regarding technological literacy in a way that could harm the relationship between them: "The students can hurt teachers because they know more about how to use Facebook" (S119). This advantage of students may also result in lack of control of teachers over students: "Teachers don't know how to control students in an online environment. Curses and spam are unavoidable in these groups, especially because of the feeling of lack of power of the teacher over students on the Internet" (S555).

A visual representation of the negative aspects and their respective sub-categories is brought in Figure 4. Distribution of the seven categories referring to negative aspects in the four groups of students (by their connection type) is summarized in Table 2. Here again, we checked for differences between the groups using multiple response set procedure. Overall, Pearson Chi-Square test resulted in a marginally significant difference, $\chi^2(21)=30.55$, at $p=0.081$. We tested for differences between each pair of groups and found that in only one case—between the Not Wannabe Connected and the Not on Facebook groups—the result was significant, $\chi^2(7)=20.58$, at $p<0.01$. When excluding the Not on Facebook group, there was no significant difference between the groups, with $\chi^2(14)=14.59$, at $p=0.407$.
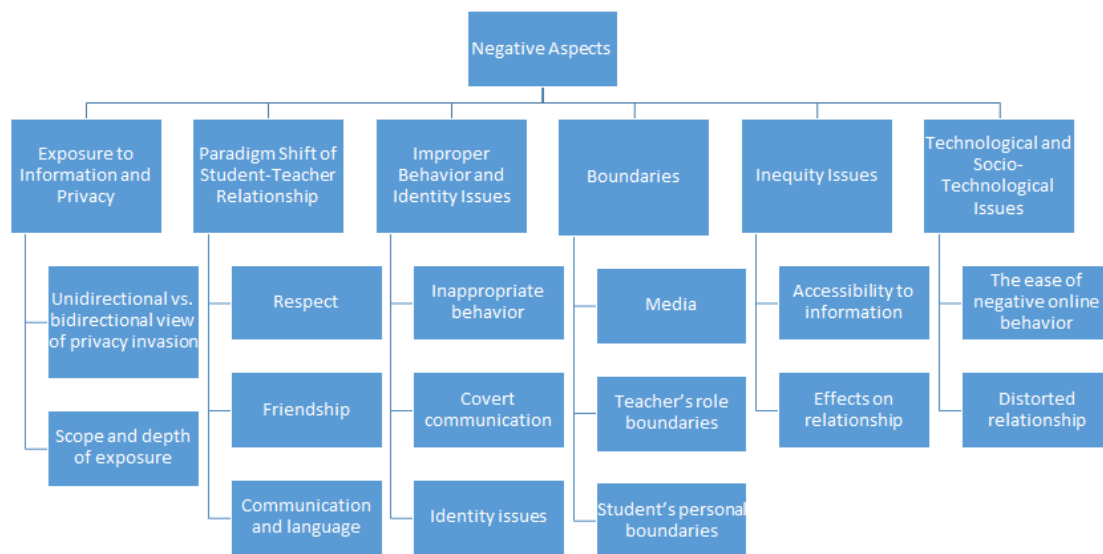
Figure 4. The negative aspects of student-teacher Facebook-mediated communication

Table 2. Distribution of the categories referring to negative aspects in the student groups

GROUP	CATEGORY						
	Exposure to Information and Privacy	Paradigm Shift of Student-Teacher Relationship	Improper Behavior and Identity Issues	Boundaries	Inequity Issues	Technological and Socio-Technological Aspects	No negative aspects
Connected	25	13	10	8	3	4	3
Wannabe Connected	36	15	19	11	6	4	14
Not Wannabe Connected	150	49	48	58	21	10	36
Not on Facebook	16	14	12	4	4	5	4

DISCUSSION

Student-teacher interactions are an integral part of student-teacher relationship, which are key to a successful academic, social and emotional growth of students (Birch & Ladd, 1998; Davis, 2003; Hamre & Pianta, 2001; Sabol & Pianta, 2012). As social networking sites (SNS) are very popular, interactions are often extended to the virtual media, continuing schooling beyond time and space boundaries. While many studies about SNS and learning have focused on academic aspects (Manca & Ranieri, 2016), in our study we explored benefits and pitfalls of teacher-student connections on Facebook, as perceived by middle- and high-school students. Overall, we found that many students

identified advantages of befriending their teachers. Mostly, they refer to a practical point of view, as observed by the relatively high number of statements mentioning teacher's support and assistance, compared to statements exhibiting closeness. Despite of the potentially rich opportunities that SNS offer, students still use these platforms in an on-demand manner (Teclehaimanot & Hickman, 2011). Furthermore, teachers and students who communicate via social media mostly benefit from social and functional opportunities (Schouwstra, 2016) and even wish to keep this communication task-oriented (Foote, 2011). Nevertheless, even if this kind of communication is examined through the (limited) lenses of out-of-class (OCC) communication it might have an important role, as OCC was shown to be associated with both affective and cognitive learning (Goldman, Goodboy, & Bolkan, 2016).

Yet some students wish to extend the connection with their teacher to a more informal, personal mode, possibly in an attempt to strengthen the relationship with a significant adult (Galbo, 1989). These students find SNS very suitable for that purpose, as these platforms are social in nature, equity-based, and do not preserve traditional hierarchies. As SNS are considered by the young generation as an extension of the physical world, it is only natural to extend relationships into this online arena (De Souza & Dick, 2008; Palfrey & Gasser, 2008; Patterson, 2012). In turn, this may lead to a closer relationship (Ledbetter et al., 2011). In our study, the Wannabe Connected group illustrates students' unfulfilled wish to extend relationship with their teachers, while the Connected group demonstrates how this connection is facilitated in practice; as we found, the prominence of the Instrumental Help axis on the Satisfaction axis is milder in the former compared to the latter. That is, the Wannabe Connected students tend to perceive Facebook-connection with teachers as fostering closeness and warm relationship more than those students who have experienced this connectedness. Similar results were obtained when students were directly self-reporting on their perceptions of their relationship with their teachers (Forkosh-Baruch, Hershkovitz, & Ang, 2015). Such high expectations might be explained by students' beliefs that broadening the usually limited opportunities available for interactions with their teachers may serve as a bridge to closer relationship (McHugh, Horner, Colditz, & Wallace, 2013). When asked whether Facebook can be used for learning, a similar difference was observed between these groups of students: The Wannabe Connected group exhibited a higher rate of positive responses than the Connected group (Hershkovitz & Forkosh-Baruch, 2017).

As findings suggest, participants' overall viewpoint on the negative aspects of Facebook-connections with teachers is complex. This reflects a deep understanding of the social media and its implications on student-teacher relationship at large. This complexity is reflected in our data by at least two points. First, the richness of negative aspects of Facebook-mediated communication recognized by the students; some of these challenges were also recognized by elementary-school children (Schouwstra, 2016). Second, some of these aspects were considered by students as positive. Specifically, three themes were mentioned both as concerns (while asked about negative aspects) as well as benefits (when asked about positive aspects): exposure to information, paradigm shift of student-teacher relationship, and boundaries. This is in line with a growing body of knowledge that highlights the ability of teenagers to effectively, skillfully, and wisely use social media in the pursue of their well-being, despite being exposed to risky behaviors (boyd, 2014; Buzzetto-More, Johnason, & Elobaid, 2015; Flanagin & Metzger, 2008; Gabriel, 2014).

The most prominent concern raised by the participating students was regarding information exposure and privacy. Indeed, privacy is perceived as a major risk for media users (Kumar, Saravanakumar, & Deepa, 2016). Recent studies on young Internet users' perceptions of privacy and self-disclosure in SNS show that young users implement various strategies for managing their privacy and risk-taking in SNS, as in the physical world (Ahituv, Bach, Birnhack, Soffer, & Luoto, 2014; de Andrade & Monteleone, 2013; Lapenta & Jørgensen, 2014). Nonetheless, self-disclosure of personal information is not necessarily associated with experience or perception of susceptibility and might be associated with trust (Metzger & Suh, 2017; Tsay-Vogel, Shanahan, & Signorielli, 2018).

Interestingly, according to our findings, there are no differences between the students' groups in the distribution of the categories related to negative aspects of student-teacher Facebook connection. Recall that there is a difference between the notion of the Wannabe Connected students regarding connecting with their teachers, and the way this connection is utilized in practice. Contrary to that, there is no difference between the groups of students regarding the pitfalls of such a connection. This might be a result of the overemphasis on negative aspects of online communication in the mass media (Bishop, 2014; Stern & Odland, 2017; Young, Subramanian, Miles, Hinnant, & Andsager, 2017). In spite of efforts of education systems, these negative aspects diffuse into schools and homes, highlighting harmful incidents over potential benefits. Our findings indicate that students recognize benefits of connecting with their teachers online even prior to the actual connection. These expectations should be preserved and actualized. Furthermore, such a connection may assist in coping with difficulties the students encounter as both online consumers and adolescents. Of course, teachers should be equipped with means for dealing with such issues.

Overall, our findings are in line with a more recent analysis of students' perceptions of student-teacher communication via WhatsApp (currently, a very popular instant messaging app), which also took a perspective similar to the one we took, also in the context of secondary schools (Rosenberg & Asterhan, 2018). Findings from that study indicate advantages of such communication, mostly accessibility and the existence of multiple communication channels, as well as on a host of challenges, like information overload and socio-technological issues. In a broader context, this complex mix of benefits and limitations portrays a delicate situation in which teachers and students should navigate; they could benefit from its potential while being cautious due to its risks (Manca, 2018).

This study is, of course, not without limitations. First, it was situated in a single country, characterized by a specific culture of education, technology, and implementing technology in schools. Our findings should be validated by similar studies in other countries. Second, it was referring to a single social networking site. As not all the SNS are to be considered the same, the study should also be replicated with regards to other SNS; this will allow the examination of the specific features that make a given platform more appropriate than the others for student-teacher communication. Additionally, even when considering this narrowed-down point of view, the sampled population is not to be considered as representing the whole student population in the country discussed here. Despite these limitations, we feel that the contribution of the current study is of importance for promoting a better student-teaching communication via SNS and a better learning in the digital age at large.

CONCLUSIONS

In this paper, we analyzed students' perceptions of benefits and drawbacks of using Facebook to communicate with teachers. Overall, the participating teens portray a complex picture of positive and negative aspects of this communication, which indicate a deep understanding of the role of social networking sites in their life. This insight is important for educators, who are—contrary to their traditional role in the hierarchical, slow-to-change school milieu—equal partners with their students in the complex, ever-changing social networking sites arena. Therefore, teachers and students should take collaborative efforts in order to understand how to effectively utilize these platforms to promote their relationship, as well as learning and teaching at large. As our findings suggest, the most crucial issues to discuss are privacy issues and blurring of boundaries. We recommend further studying of these issues in the context of other online social platforms (including instant messaging services, which become very popular for student-teacher communication) and in other countries (e.g., other cultures). Continuing this line of study will assist education policymakers in taking evidence-based decisions.

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