

THE ASSOCIATION BETWEEN SOCIAL MEDIA USE, CYBERBULLYING, AND GENDER

Nitza Davidovitch, Roman Yavich

Ariel University, Israel

E-mail: d.nitza@ariel.ac.il, romany@ariel.ac.il

Abstract

Cyberbullying has emerged as a pressing global issue, impacting internet users worldwide. This study examines the association between social media, bullying, and gender, with the aim of assessing the influence of social media on the aggressive tendencies of adolescents. The study involved 157 young adults aged 18 to 28 in Israel, who completed a self-report questionnaire regarding their social media usage and inclination toward cyberbullying.

The findings revealed an association between the extent of adolescents' social media engagement and their inclination to cyberbullying, specifically in the context of gender. Notably, this effect was primarily observed among men. While young women demonstrated higher online platform usage compared to their male counterparts, they exhibited a lower inclination towards cyberbullying. The study underscores that prolonged exposure to an environment lacking normative behavioural reinforcement contributes to an increase in bullying tendencies.

Given the widespread use of social networks by young people, it is imperative for the educational system to address this issue during adolescence and provide guidance on the various facets and consequences of social media usage. School programs should be developed to establish online behaviour standards, akin to those practiced in face-to-face interactions among young adolescents.

Keywords: cyberbullying problem, post-Covid period, social media, WhatsApp groups, young adults

Introduction

In the years since their inception, the massively growing use of the internet and social media has changed human life. The internet offers unique affordances, unprecedented throughout history. It enables anonymous encounters and offers access to endless information and content, yet at the same time, it facilitates criminal activity, deviant sex, infidelity, and other anti-social practices. In recent decades, with the expanding spread and availability of online communications, studies have been conducted on its impact on society in general and on the psychology of individuals in particular. Many findings have consistently shown that internet use has undeniable effects on society and on individuals.

One of the definitions of a social network is “one’s social ties.” This network includes relatives, friends, and colleagues at work and in other settings. Each network has content-related features that depend on the nature of the participants and the cultural environment. Social networks have affected how we meet people, do business, order food, and form relationships. Although most online relationships constitute a continuation of the real world, some are conducted independently of real life (RL). The term “friend” has acquired a new meaning in the context of social media (Abbott, 2017), and it is not surprising that the ties formed between people in the real world are unlike those formed online, through social networks.

Social media were enthusiastically received by their target population from the day they appeared. Platforms such as Facebook, Twitter, Instagram, and MySpace became popular extremely rapidly, driven by extremely rapid word of mouth (Davidovitch & Yavich, 2016, 2023; Wallbridge, 2009). The anonymity, the lack of visibility and eye contact, as well as

the norms that developed among users, facilitated the flourishing of social media. The online environment appeared to be one of equality and a lack of restrictions, not possible in the real world primarily due to cultural barriers such as religion, ethnicity, age, but also as a result of realistic constraints such as geographical location.

Although social media have many positive effects, a considerable number of studies have indicated that their use has particularly negative consequences. The impact on teenagers is particularly strong, both due to their young age, their susceptibility to the influence of contents to which they are exposed, and the difficulty of monitoring their online activities (Boniel-Nissim & Dao, 2009). Socially, it seems that the use of social networks and the possibilities they offer have led to disconcerting social illnesses among adolescents. Many teens live with an overwhelming sense of depression and anxiety as victims of daily tormenting on the web. Cyberbullying is indeed an individual case of bullying and harassment, but it seems to have unique features that distinguish it from general bullying. Although studies have shown a rise in teen awareness of web-based dangers and means of defence against them in recent years (Livni, 2010), it seems that we have a way to go until this phenomenon is eradicated.

Online social media platforms not only allow people to form connections from a great distance, but they have also diversified our modes of communication. The existence of blogs, chats, and social networks has made connections different, rich, and varied (Perel, 2012). Aside from being a communication tool, social media have fundamentally changed how we consume and share knowledge (Weissblei, 2018). Particularly in the Western world but elsewhere as well, the web has become the main “venue” for social interactions, knowledge acquisition, and advertising various products and services. The pervasive influence of the internet has progressively expanded, suggesting an imminent scenario where internet usage becomes an integral part of daily life for the global population.

The availability of social media on the internet and its features are a source of attraction for adolescents, who spend excessive time online, where people are aware of the dangers that exist in the virtual space. Young people are particularly vulnerable on social media but their presence there is nonetheless massive. Some types of social networks have attempted to limit users’ age, but not very successfully. For example, although Facebook prohibits the registration of members under 13 and despite its promise to prevent use by children if known, many users fake their age to create a profile and a FB page. These young adults use social networks mainly for social interactions and communications with their peers. In the US an estimated 60-75% of 9-year-olds use social media. In Europe, the prevalence is only 26% (Ahmad et al., 2018).

Even if children were forced to wait to reach the age of 13 in order to open a FB page of their own, their use of social media would still be a problematic issue, as it is uncertain whether they understand FB’s privacy policy or are able to protect themselves against privacy violations (Ellison et al., 2007). Most children access the internet with no adult supervision, parents do not discuss the dangers of the internet with them, and about two-thirds of parents do not limit children’s time on the internet. Consequently, children are exposed to many dangers online.

A study conducted in the US revealed that 59% of the available fields in a typical profile are completed, which implies that users, including adolescents, are willing to provide extensive personal information about themselves. At the same time, the study found that users mainly communicate with friends whom they know offline, i.e., outside the web, in the real world (Acquisti & Gross, 2006). This study found no congruence between adolescents’ declared and actual maintenance of privacy online. The explanation proposed by the researchers for this discrepancy was that adolescents do not understand the privacy policy of social media platforms and do not admit the existence of information abuse. Those who reported that they make efforts to maintain their privacy appear to trust themselves to refrain from revealing details that would put them at risk.

Social networks are interactive platforms that allow users to receive and send messages, comment on contents uploaded by other users, send pictures and videos, update one's status, and conduct video conversations. Users can create a profile that contains information on their age, appearance, areas of interest, and social interests, and is accessible to other users. Information about one's areas of interest makes it possible for users to locate and communicate with others who share their interests in the same type of content (Ahmad et al., 2018). Social media and user accounts on Facebook, Instagram, YouTube, LinkedIn, and WhatsApp are accessible from almost anywhere on earth, although sometimes via an app and not through a browser (Ahmad et al., 2018). A unique feature of social media is that users are both content consumers and content creators (Wallbridge, 2009).

Social media use is defined as any action taken on social media, whether for purposes of communication or for individual use, such as setting up an app and updating one's information. Since social media make it possible to locate both present and past acquaintances, irrespective of geographic distance, many users use them to renew former contacts. Connections on the web also help users arrange events and meetings, meet new acquaintances, document their lives, live stream events, convey information, and engage in marketing and advertising (Livni, 2010). Social media uses also depend on the nature of each medium. Some applications, such as WhatsApp and Telegram, are designed to facilitate correspondence and messaging, while others such as Instagram and TikTok focus on visual content. Social networks offer one mode of connection to and engagement with others on the internet. People access social media for current information on global events, scientific breakthroughs, technological innovations (Davidovitch & Yavich, 2022), current affairs, fashion trends, and daily updates on their friends and acquaintances. Through such exposure, social media affects the lives of millions around the world not only in external matters such as clothing, slang, and physical gestures, but also contributes to the spreading of values, norms, beliefs, and opinions. Feminist movements such as My Too, demonstrations in support of LGBTQ+ rights, as well as the Arab Spring uprisings throughout the Arab world owe a debt to social media. Studies have shown that beside these obvious influences, we are not always aware of how the media shapes our lives (Davidovitch & Yavich, 2016).

Research reports indicate that 3 billion people worldwide use social media, and that both the number of users and the time an average person spends on social media have risen in recent years. The average person spends two hours a day online, mainly engaged in tweets, updates, likes, and comments on friends' updates (Perez-Grabow, 2019). Individuals of all age groups, from children to adults spend a considerable part of their leisure time on social media. A study in Israel showed that 99% of children and adolescents who have a mobile phone are regularly active on social media. It also found that WhatsApp is the most popular social network in Israel (Aizenkot, 2017), used on mobile phones by both adolescents and adults (87% and 93%, respectively), followed by Instagram (38%, 72%, respectively), Facebook (63%, 80%, respectively), and Snapchat (50%, 9%, respectively) (Dolev-Cohen & Lapidot-Lefler, 2016). Today's adolescents and young adults were born into a reality where the use of technological devices is taken for granted. They are surrounded by social media and interactivity and their interpersonal communication takes place mainly on these platforms, which explains why teens use social media more frequently than any other population group (Livni, 2010). Studies found that young people and teens with low self-image were found to use social media to improve their self-image and image in the eyes of their peers in the media, and that individuals with low self-image spend more time on social media than their high self-image peers (Teens with low self-image seem to feel more protected on the web than in the physical world, which allows them to express themselves more easily and to emphasize the traits they wish to portray (Ahmad et al., 2018; Livni, 2010).

Long-term studies on the internet's effect on the brain and on long-term social consequences have yet to be conducted. Parents, educators, and therapists must address the time spent by teens on social media when endeavouring to provide a response and treatment for teens in distress (Henson, 2015).

Cyberbullying

Aggression is usually an expression of anger or negative feelings toward an individual or group (Aizenkot & Kashy-Rosenbaum, 2018; Tanwar, 2016). Actions are not defined as aggression when the perpetrator does not think that they will harm the person assaulted. Therefore, behaviour that harms someone unintentionally is not considered aggressive (Minimol & Angelina, 2015). Researchers (Dolev-Cohen & Lapidot-Lefler, 2016; Groves et al., 2016) distinguish between two types of aggression: hostile aggression, characterized by impulsivity, lack of purposeful thought, and emotional arousal intended to harm another; and instrumental aggression, aimed at achieving something, where the aggression and the harm done are only the means. Aggression has various manifestations: verbal, physical, financial, sexual, and emotional, where all expressions of violence are considered an extreme manifestation of aggression. The ultimate aim of violence is to cause extreme physical, psychological, or sexual harm (Dolev-Cohen & Lapidot-Lefler, 2016).

Cyberbullying is an individual case of bullying. This is a new phenomenon that did not exist before the emergence of the technologies developed in the early twenty-first century. Beside technological developments' great benefits for humanity, they also are the source of considerable harm. Cyberbullying is one of the more severe, disconcerting, and distressing of these. Cyberbullying is serial behaviour that involves recurrent tormenting, shaming, exclusion, threats, and sending embarrassing contents on an online platform (Aizenkot & Kashy-Rosenbaum, 2018; Groves et al., 2016). Cyberbullying may assume various forms: messages that include coarse phrases and expressions of anger (flaming); harassment that includes insults and rude phrases; repeated sending of threatening or denigrating messages, and causing a sense of insecurity (stalking); slander and gossip, causing embarrassment or harm (denigration); impersonating someone in order to send messages in his name, with the aim of ruining their reputation or causing them trouble (impersonation); fraud, disclosure of secrets, deception, breach of trust (trickery); rejection or exclusion of an individual by their friends (Lusthaus, et al., 2023; Patchin & Hinduja, 2008).

While cyberbullying shares features with other forms of aggression, it is distinguished by the following characteristics:

- Anonymity – Cyberbullying can take place even when the perpetrator and the victim are unidentified. A victim's personal information can be revealed without revealing the identity of the perpetrator and without the perpetrator bearing any consequences.
- Number of people – In contrast to bullying in the physical world, cyberbullying online may involve a large number of people.
- Accessibility – In order to perpetrate bullying in the physical world it is necessary to take into account constraints involving time and place. These constraints do not exist, or hardly exist, online. The perpetrator can attack at any time and in any place (Patchin & Hinduja, 2008).
- Exposure of the violence and reporting – Cyberbullying is difficult to detect and there is no way of verifying who was affected. Online harms are not visible as are real injuries. Findings show that online victims of cyberbullying report harm less frequently than do offline victims.
- Means of realization – Digital bullies use computers and mobile phones, which are not necessary in the physical world.

Many studies have shown that children involved in cyberbullying usually know each other from school (Alshawareb & Alnasraween, 2019), and Israel is among the first in the world in this respect (Boniel-Nissim et al., 2020).

Studies found that teens with low well-being, who lack social support, experience a high degree of loneliness and who spend a long time on social media are subjected to abuse online more frequently (Alshawareb & Alnasraween, 2019). Digital aggression, student involvement in violence and harassment on the web, and its frequency were found to be positively correlated to social factors such as loneliness and negatively correlated to factors such as social support, self-efficacy, perceived well-being. Variables found to predict digital aggression include low well-being and self-efficacy, and gender – namely, boys have a higher risk of perpetrating digital aggression (Yavich et al., 2019). Studies found that predictors of violence in the physical world predict digital aggression as well (Shpigelman & Gill, 2014).

A correlation was found (Alshawareb & Alnasraween, 2019) between considerable internet use, drug use, truancy, and delinquency, as well as between hazardous behaviour and vandalism and digital bullying. Both victims and perpetrators reported severe psychological distress. A study conducted at the Amman University by Alshawareb and Alnasraween (2019) found a moderate correlation between social media use and bullying but found no gender effects. Another study of adolescents aged 12 to 15, conducted by Boniel-Nissim et al. (2020) in 42 countries, confirmed a positive association between cyberbullying and internet use, and showed a high prevalence of recurring patterns of aggression. However, other studies failed to find associations between digital aggression and the frequency of computer use (Lacher-Edenburg, 2019).

Research Focus

This study is the association between social media and the aggressive behaviour of adolescents. A literature review revealed that the problem of online violent behaviour is highly salient and increasingly capturing the attention of various professionals, including educators, psychologists, and social workers. This issue is pressing due to the high prevalence and frequency of online violence observed among adolescents in particular. The current study tested the following hypothesis:

H1: There is a positive association between the extent of social network use by young adults and their inclination to cyberbullying.

H2: There is a positive association between the number of devices regularly used by young adults and their inclination to cyberbullying.

Research Methodology

General Background

The research falls within the realm of quantitative research, with a focus on examining cyberbullying and social media use among young adults in Israel during the year 2022. The study was grounded in the humanistic approach, emphasizing the importance of individual experiences, personal growth, and self-actualization. This framework informed the development of the research instruments and analysis techniques, promoting a holistic understanding of the subjects under investigation. The research was conducted in accordance with ethical standards and approved by the Ethics Committee for Non-Medical Studies.

Sample Selection

To ensure that our research provided reliable insights, a random sampling method was meticulously employed. This method guarantees that each member of the population has an equal chance of being selected, enhancing the validity and generalizability of the findings.

The questionnaire, a central tool in our research, was thoughtfully designed based on well-documented instances of cyberbullying, as supported by a thorough review of the existing literature. Subsequently, the questionnaire was widely distributed via multiple social media platforms and WhatsApp groups. Participation was open to any user within the age range of 18 to 28 years.

Demographic data for the research participants are summarized in Table 1. Our sample comprised 157 individuals, consisting of 34 men (21.7%) and 123 women (78.3%). The majority of participants had achieved a secondary education level with full matriculation (66.2%), while 25.4% had attained academic degrees (either undergraduate or graduate). Most participants reported their marital status as single (88.5%). On average, the participants' age was 22.21 years, with a mean age (*M*) of 22.21 and a standard deviation (*SD*) of 2.36.

Table 1
Distribution of Demographic Variables (n =157)

Variable	Categories	Number of Participants	Percentage of Participants
Gender	Male	34	21.7
	Female	123	78.3
Education	Secondary without full matriculation	13	8.3
	Secondary with full matriculation	104	66.2
	Undergraduate degree	39	24.8
	Graduate degree	1	0.6
Personal Status	Single	139	88.5
	Married	18	11.5
Age	<i>M</i>	22.21	
	<i>SD</i>	2.36	

Instruments

Participants completed a self-report questionnaire comprising three sections: The first section contained demographic questions on sex, age, family status, and number of devices used to access social media. The second section measured social media use frequency. This section was adapted from the Online Activities at Facebook questionnaire developed by Shpigelman and Gil (2014). The original questionnaire contained 33 items comprising three scales: frequency of use of technological devices, frequency of performing a variety of social-media-related activities, participation in social networks; number of friends on social media. In our study participants completed only the 8 original items pertaining to participation in social networks, and responded to these questions on a scale from 0 (*never*) to 3 (*regularly*). Sample item: “How often do you read posts on social media?” The total score was the mean rating of

all eight items, where a higher mean indicates more frequent social media use. The reliability of this section based on a previous study conducted in Israel was $\alpha = .94$ (lecher-EdenburgLacher-Edinburgh, 2019). In the current study, Cronbach's alpha reliability in this section of the questionnaire was .80. The third section measured inclination to cyberbullying. This section was developed specifically for the current study and included 5 items. Participants rated their agreement with these items on a Likert-type scale ranging from (*strongly disagree*) to (*strongly agree*). Sample item: "I often write curses to others on social networks. The reliability of this section in the current study was $\alpha = .91$.

Procedure

The questionnaire was uploaded to Google Forms and an invitation to members of the target group of participants was posted on multiple social media platforms. A total of 157 young adults in Israel participated in this study, wherein they completed a self-report questionnaire assessing their social network usage and propensity for engaging in cyberbullying.

Data Analysis

A *t*-test for independent samples was used to examine the gender differences in the inclination for cyberbullying and social media use. The research data were analysed using a Pearson test to examine correlations between age, inclination to cyberbullying, and social media use.

Research Results

Before presenting an analysis of the research hypotheses, the descriptive statistics of the research variables is presented below.

Table 2
Means, Standard Deviations, Median, Minimum, and Maximum of the Research Variables (n=157)

Variable	<i>M</i>	<i>SD</i>	<i>Md</i>	<i>Min</i>	<i>Max</i>
Number of devices in use	1.82	0.81	2	1.00	5.00
Social media use	1.68	0.53	1.63	0.25	3.00
Inclination to cyberbullying	1.24	0.57	1.00	1.00	5.00

It is evident from Table 2 that on average, the research participants used 1.82 devices ($M = 1.82$; $SD = 0.81$), where the median was 2 devices. That is, the majority of participants used two devices regularly. Participants used social media moderately, based on the mean and median, where the distribution of this variable was limited ($M = 1.68$; $SD = 0.53$). The inclination to cyberbullying, as reported by the research participants, was very low on average, and the median too was very low, where the distribution of the mean was very limited ($M = 1.24$; $SD = 0.57$). Additional analyses were conducted to examine the differences between the research variables by demographic aspects. The results are presented in Table 3.

Table 3
Correlation between Age and the Research Variables (n=157)

Variable	1
Age (1)	1
Use of social media (2)	0.16-*
Inclination to cyberbullying (3)	0.09

* $p < .05$

A statistically significant negative association was found between age and social media use ($r_p = -0.16; p < .05$), and no statistically significant association was found between age and inclination to bullying ($r_p = .09; p > .05$). The findings of the t-test for independent samples to examine the differences between women and men in inclination to cyberbullying and social media use were as follows:

Table 4
Results of t-test by Gender (n =157)

Variable	Men N = 34 (M) SD	Women N = 123 (M) SD	t
Social media use	1.50 (0.54)	1.72 (0.51)	1.98*
Inclination to cyberbullying	1.41 (0.82)	1.19 (0.47)	2.22-*

* $p < .05$

As seen in Table 4, a statistically significant difference was found between men and women in social media use ($t = 1.98, p < .05$), such that women displayed a higher level of social media use ($M = 1.72, SD = 0.51$) than did men ($M = 1.50, SD = 0.54$). Furthermore, a statistically significant difference was found between men and women in the inclination to cyberbullying ($t = -2.22; p < .05$), such that men displayed a higher inclination to cyberbullying ($M = 1.41; SD = 0.82$) than did women ($M = 1.19; SD = 0.47$). The results of a Pearson test to examine the association between age and the variables of inclination to cyberbullying and use of social media are presented in Table 5

Table 5
Results of Pearson Test (n =157)

Variable	1	2	3
(1) Number of devices in use	1		
(2) Social media use	0.01-	1	
(3) Inclination to cyberbullying	0.05-	0.18*	1

* $p < .05$

We found a positive association between social network use by young adults and their inclination to cyberbullying ($r = 0.18$; $p < .05$), confirming H1. With regard to Hypothesis 2, which posited a positive association between the number of devices regularly used by young adults and the inclination to cyberbullying, no statistically significant positive association ($r_p = -0.05$; $p > .05$). H2 was not confirmed.

Discussion

Social media currently account for a considerable part in the life of young people (Boniel-Nissim & Dao, 2009), generating many benefits for them, including the ability to communicate and maintain contact with others and easily access information and new knowledge (Livni, 2010). Nonetheless, extensive social media use might detract from the opportunities that exist in real-life interactions (Wallbridge, 2009), exacerbating risks for young people, including the risk of involvement in harmful communication with others. Extensive social media use also increases opportunities for abuse, such as cyberbullying (Lacher-Edenburg, 2019). In this study, two hypotheses were posited.

The first research hypothesis posits that a positive association would be found between adolescents' social media use and their inclination to cyberbullying. The research results confirmed the hypothesis, showing that more frequent social media use was associated with a stronger inclination to cyberbullying among young people. These findings appear to be compatible with several studies that indicated a consistent association between the social media use and engagement in cyberbullying (Davidovitch & Yavich, 2016, 2018; Lacher-Edenburg, 2019; Yavich et al., 2019). Hence, it can be said that more frequent and extensive use of social media exposes young people to aggressive behaviour manifested in cyberbullying. This finding is also compatible with the theory of problematic behaviour, which argues that certain risk behaviours are varied, organized, and clustered, and that specific risk profiles underlie offences, whereby repeat exposure to online aggression caused by role models may cause a behaviour to seem more acceptable. People are motivated to adapt themselves to group norms in their social environment (Davidovitch & Yavich, 2016). Moreover, social media platforms lack rules and norms of proper communication or impose negative consequences on cyberbullying (Lacher-Edenburg, 2019). Therefore, the younger the person is exposed to a social media platform that promotes problematic behaviour through the absence of explicit norms and penalties, the more this individual becomes accustomed to deficient behaviour and in certain cases may even be unaware of its harmful effects on others. The social rewards of digital aggression or bullying, such as a rise in one's social status, also reinforce this behaviour.

The second hypothesis contended that a positive association will be found between the number of devices regularly used by adolescents and their inclination to cyberbullying. The research findings refuted the hypothesis, indicating no association between the reported number of devices used by participants and inclination to cyberbullying. Moreover, the data also indicated no association between the number of devices used by participants and the frequency of their social media use. These findings contradict the claim that increased access to gadgets tempts one to increase usage and also increases the problematic use of social media (Davidovitch & Yavich, 2016).

Another finding was uncovered. A negative association was found between age and frequency of social media use, indicating that younger people spend more time on social media, which places them at greater risk of becoming habituated to radical conduct and developing harmful digital behaviour, including cyberbullying (Lacher-Edenburg, 2019; Yavich et al., 2019). This finding shows that it is precisely young people who must receive explanations on the risks of extensive social media use and who should be made aware of the negative results of extensive use. Moreover, this study also found that women use social media more frequently, yet their use seems to take a less problematic form, as our study found that men are more inclined to commit cyberbullying than are women. These findings are compatible with the findings of a study by Boniel-Nissim et al. (2020) and Sang et al. (2023), which indicated

that men use social media more often to display aggression and they perceive the social media platform less as a social space worthy of respectful discourse.

Conclusions and Implications

This study reveals a positive association between intensive social media use and a higher inclination toward cyberbullying among young Israeli adults, especially among men. While young women were found to use social media more frequently, they exhibited a lower inclination toward cyberbullying. These findings underscore the critical importance of early educational interventions in schools to encourage responsible social media use and cultivate appropriate online conduct among adolescents.

The research presents findings that challenge common assumptions. It was hypothesized that a positive association would be observed between the number of devices regularly used by adolescents and their inclination toward cyberbullying. However, the results contradict this hypothesis, as no significant association was found between the reported number of devices used and the inclination to cyberbullying. This means that the relationship between technology access and cyberbullying tendencies is more nuanced than previously assumed.

The study also found a negative association between age and the frequency of social media use, highlighting the need for educating younger individuals about the potential risks associated with extensive social media use. It is vital to make them aware of the negative consequences of such use.

In light of these findings, it is crucial to recognize the limitations of this study, particularly the skewed sample composition. Women were overrepresented in the study, and the majority of participants lacked academic degrees. These limitations could have influenced the observed gender-specific inclinations toward cyberbullying. Future research endeavours should aim for a more balanced sample and delve deeper into additional factors like loneliness and personal characteristics. Despite these limitations, this study significantly contributes to the understanding of cyberbullying and the need for proactive efforts, including educational programs, to promote responsible online behaviour among young adolescents.

Appendixes

Social Media Use Questionnaire

The following 8 questions refer to your use of social media. Please indicate the frequency you perform each activity on a scale from 0 (never) to (regularly).

	Never	Rarely	Frequently	Regularly
How often do you read posts on social networks?	0	1	2	3
How often do you comment on posts on social networks?	0	1	2	3
How often do you "like" posts on social networks?	0	1	2	3
How often do you look at other people's pictures on social networks?	0	1	2	3
How often do you upload photos to social networks?	0	1	2	3
How often do you send personal text messages on social networks?	0	1	2	3
How often do you upload video clips to social networks?	0	1	2	3
How often do you access social networks?	0	1	2	3

Inclination to Cyberbullying Questionnaire

Please indicate your agreement with the following five statements on a scale from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I often curse others on social networks.	1	2	3	4	5
I often engage in aggressive dialogues on social networks.	1	2	3	4	5
I often argue with others on social networks.	1	2	3	4	5
I often post offensive comments on social networks.	1	2	3	4	5
I use social networks as a place where I can relieve my stress and anger through offensive behaviours.	1	2	3	4	5

Declaration of Interest

The authors declare no competing interest.

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Nitza Davidovitch

PhD, Professor, Department of Education, Ariel University, Ariel
4070000, Israel.

E-mail: d.nitza@ariel.ac.il

ORCID: <https://orcid.org/0000-0001-7273-903X>