Research Article

Annals of Behavioral Neuroscience

Social Media Use in UK Teens and their Perceived Effects: A Survey of UK Teenagers' Use of and Views on Social Media

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Received date: May 23 2021; Accepted date: Aug 12, 2021; Published date: August 17, 2021

Abstract

Background: The use of social media has been growing rapidly with easy access for young people. Psychologists have studied the social and psychological impact of social media use on adolescents; however there is very little qualitative data of social media use among adolescents and their views.

Aims: To explore the views of adolescents in Sussex about the educational, social and psychological impacts of using social media sites and analyze adolescents' descriptions of their own personal experiences of social media use.

Method: 500 young people between the ages of 11 to 18 years in Sussex (UK) were invited to take part in a questionnaire survey exploring their use and views about social media.

Results: A total of 465 (93%) of students completed the questionnaire. 73% of participants used three or more sites. On average each participant spent 22 hours weekly on social media sites. In all five domains explored, the majority of participants scored the negative impact of use of social media as low with an overall mean of 2 out of possible 5. Over 70% scored low negative impact for Education, 75% for relationships, 64% for Self-esteem, 73% for Health and 71% for Safety. On the other hand, the percentage scoring 4 or 5 for positive impact were 22% for Education, 36% for Relationships, 24% for Self-esteem, 12% for Health and 15% for Safety. However there was a difference between younger and older teens.

Conclusion: Studies have shown negative social media impact on teens including self-esteem, anxiety and depression. However young people have a different view. Young people have balanced views about the effects of social media. They felt that social media use improved their relationships, particularly among younger students. Older teens perceived higher negative effect on their safety. Further work is needed to improve the safety awareness of young teens.

Keywords: Social media, teenagers, negative effects, positive effects

Introduction

The use of social media worldwide by young people has increased significantly over the last few years [1-3]. Similarly, social media use has become synonymous with being a teenager in the UK today. Following the birth

of mobile technology devices and the popularization of social media platforms, the youth of today have ready access to media and means to share it in a way no other generation has experienced. As the creation and

consumption of media rises, so do the challenges and opportunities facing society [4]. A Pew Research Centre survey (2015) of American adolescents' social media use found 92% daily self-reported use, including 24% who reported being online "almost constantly". This survey was repeated in 2018 and found that those reporting almost constant use had increased to 45%, lending itself to the body of research that social media use is compulsive [5-7]. The increased use of social media has been associated with increased prevalence of mental illness in youth with increased hospital admission and self-harm [2,8,9].

Global research suggests that youth and social media is not inherently a bad combination, however society needs to consider how best to use it in a developmentally positive way [10-12]. To our knowledge, there has been very little research exploring the views of the UK teenagers. Our survey aimed to document what social media sites are most commonly used by teens in East Sussex, how much time is spent weekly on social media, and how this data compares to US data. It also aimed to explore the views of teens about the negative and positive effects social media has on their education, relationships, self-esteem, health and safety. The data could help inform health professionals and policy makers with better understanding of adolescents' views and to identify areas for improving support and providing tools for better protection to adolescents.

Materials and Methods

Participants in the study were recruited from East Sussex, UK. East Sussex is a county in the South East of England and has a total population of 555,110 with 19.1% under the age of 18, 53.6% between 18 and 64, 23% between 65 and 84 and 4.3% over 85 years old [13]. Two schools, were selected (one private girls' school and one state mixed sex school) in East Sussex, UK. This decision was made to reflect both educational sectors, and also due to ease of access. Head teachers of each school were approached, explaining the project and seeking their approval for distribution and collection of questionnaires. The logistics of distributing the questionnaires was subsequently agreed with teachers who lead each age group in each school. Questionnaires were then distributed to students during form time in the presence of their tutors. It was here that the purpose of the study was explained to students and an information sheet provided. The students were all informed that participation was voluntary, questionnaires were anonymous, and that individual questions could be missed if they did not feel comfortable answering. This

was a school project and did not require ethical approval by the schools. All participants took part on a voluntary basis and consented to the use of the anonymised data as part of the project.

A total of 500 participants-aged between 11 and 18 years old-were provided questionnaires to complete on social media use and its perceived effects by the user. There were no other inclusion or exclusion criteria.

At the time of testing there was no validated questionnaire for this age group so a questionnaire was designed by combining appropriate questions taken from themes of other research. The questionnaire consisted of 5 demographic questions, a question on usage of website and 12 questions on perceived effects of social media use. All questions were tested on a pilot group of 10 students to ensure no confusion over wording. The questionnaire proved to be user friendly with no problems from participants completing it.

Results were then analyzed using descriptive statistics on demographic information (e.g. gender, year of study) as well as usage and perceived effects. Perceived effects were categorized into five domains: education, relationships, self-esteem, health and safety. Participants gave a score out of 5 (with 1 being not very much and 5 being a lot) indicating how strongly they felt social media affected the five different domains.

Results

Of the 500 questionnaires that were handed out, 465 were returned (93%). There was a male: female split of 48.2% (224 participants) to 51.2% (238 participants) with 0.6% (3 participants) abstaining from listing a gender.

27.7% (129 participants) of our sample were in the 11-12 years age bracket, 40.0% (186 participants) were 13-14 years old, 28.2% (131 participants) were 15-16 years old and 3.4% (16 participants) were age 17-18 and 0.6% (3 participants) did not list their age.

Social media usage

73% (341/465) of participants used three or more social media sites, with 11.8% (55/465) using two social media sites and another 7% (33/465) using one social media site. Of those only using a single site, 29 of the 33 used YouTube exclusively. 7.7% (36/465) did not answer this question. The total amount of time spent on social media sites by our sample was 572,905 minutes per week, with the mean amount of time spent by our participants

being 1232 minutes per week but this sample showed large variance, with a standard deviation of 1561.8 (table 1).

81 of the participants reported using other social media sites, although only 64 of these gave a numerical value for the amount of time spent on these sites.

Some participants (74/81) used the free text box to specify what other social media sites they would use. Common trends were Skype (23), WhatsApp (10), Wattpad (6), Xbox live (5). Some participants considered video-calling/messaging software such as skype or streaming services such as BBC iPlayer or Netflix as social media.

Perceived negative effects of social media

Participants were asked to score the negative effects of social media on 5 domains: Education; Relationships; Self-esteem; Health; Safety. The score was from 1 (minimal impact) to 5 (large impact) and the higher the score the bigger the negative effects. A space was provided to state the main negative effects in the view of the participants. Some participants did not answer some questions (on average 21 people per domain) - this was not a single cohort so we analyzed data per domain based on answers given (table 2).

269 participants used the free text box to make comments on the main negative effects. Common themes were: distraction from homework or studying, loss of face to face contact with family and friends, eye strain & headaches, loss of sleep, cyberbullying and hacking. Some specific quotes illustrating this are: "Instagram makes you question your body image", "sometimes you don't know who you're talking to", and "people can say things on social media that upset you a lot. People say things they wouldn't dare say in person."

Perceived positive effects of social media

Participants were once again asked to score on a scale from 1 to 5 how much of an impact social media made in the five domains previously listed. More participants abstained from answering in each domain this time around (average of 52 per domain). Data was again analyzed based on the answers given (Table 3).

241 participants used the free text box to make comments about the main positive effects of social media. There were two main themes: keeping in touch with friends/family when far away, and keeping in touch with what friends are doing. Some other themes identified

were around contacting peers for help with homework and helping with confidence.

Some quotes to illustrate these themes: "it's easy to connect with friends", "it gives new ideas/inspiration" and "it helps me relax when I'm stressed".

Comparison

We evaluated the data by subtracting the mean negative impact scores participants gave from the mean positive impact scores to get a net outcome. A score of zero indicates adolescents feeling there is no consistent, systematic perceived impact i.e. the perceived positive and negative impacts are equal. A negative score indicate that the perceived negative impact is higher than the positive one and a positive score the opposite. There was a score of zero for both health and safety, however the domains of education, relationship and self-esteem all have positive scores of +0.4, +0.9 and +0.4 respectively.

Our adolescent sample held a balanced view about the effects of social media although they felt particular benefits for building, keeping and improving relationships. More interesting than that is when we looked at the shift between age groups within the study population. It appeared that older adolescents saw use of social media as less safe, less good for their self-esteem although felt it may promote healthier behaviors as shown by table 4.

We found that 11-12 years old reported positive effect in the domains of education (+0.4), relationship (+0.7), self-esteem (+0.6) and safety (+0.6) and a slight negative effect on health (- 0.1). While 13-14 years old reported positive effects in the domains of Education (+0.4), relationship (+0.9) and self-esteem (+0.4) with 0 effect on health and safety. The older age groups of 15-16 years older reported smaller positive effect on education (+0.2) and self-esteem (+0.1), big positive effect on relationship (+1.0) effect with 0 effect on health and slight negative effect on safety (-0.3). However the age group 17-18 reported the biggest negative effect on safety (- 2.6); 0 effect on self-esteem and positive effect on education (+0.3), relationship (+0.8) and health (+0.3) as shown in table 5.

Discussion

The aim of this survey was to determine the current attitudes of adolescents towards their social media use in the UK. The study sample consisted of adolescents who attended two schools in East Sussex in Years 7-13 (aged 11-18 years).

Table 1: Participants use of individual social media sites and time spent per site.

Site	Number of users	Total time spent per week (mins)	Mean time spent by users per week (mins)
Facebook	272	85,668	315
Twitter	115	21,163	184
LinkedIn	6	975	162.5
Google+	78	9,579	122.8
Tumblr	76	24,624	324
Instagram	293	94,698	323.2
YouTube	403	179,347	445
Flicker	7	1,210	172.9
Vine	96	17,822	185.6
Meetup	1	180	180
Tagged	0	N/A	N/A
Ask.fm	15	710	47.3
Meetme	0	N/A	N/A
Snapchat	271	93,781	346.1
Classmates	11	4,050	368.2
Pinterest	57	6,797	119.2
Other	64	32,420	506.6

Table 2: The number of responses (and valid percent) per domain for negative effects. Mean, median and interquartile range is reported for each item.

Education	156 (35.0%)	157 (35.2%)	93 (20.9%)	29 (6.5%)	11 (2.5%)	Mean=2.0 Mdn=2 IQR=2
Relationships	226 (51.1%)	106 (24.0%)	62 (14.0%)	32 (7.2%)	16 (3.6%)	Mean=1.8 Mdn=1 IQR=1
Self-esteem	189 (42.6%)	97 (21.8%)	100 (22.5%)	40 (9.0%)	18 (4.1%)	Mean=2.0 Mdn=2 IQR=2
Health	205 (46.4%)	118 (26.7%)	65 (14.7%)	32 (7.2%)	22 (5.0%)	Mean=1.9 Mdn=2 IQR=2
Safety	190 (42.7%)	127 (28.5%)	72 (16.2%)	29 (6.5%)	27 (6.1%)	Mean=2.0 Mdn=2 IQR=2

Table 3: The number of responses (and valid percent) per domain for positive effects. Mean, median and interquartile range is reported for each item.

Education	80 (19.3%)	111 (26.7%)	131 (31.5%)	72 (17.3%)	21 (5.1%)	Mean=2.3 Mdn=2 IQR=2
Relationships	68 (16.5%)	62 (15.0%)	131 (31.6%)	104 (25.2%)	47 (11.3%)	Mean=2.7 Mdn=3 IQR=3
Self-esteem	87 (21.0%)	93 (22.5%)	134 (32.4%)	72 (17.4%)	28 (6.8%)	Mean=2.4 Mdn=3 IQR=2
Health	177 (43.0%)	97 (23.5%)	88 (21.4%)	27 (6.6%)	23 (5.6%)	Mean=1.8 Mdn=2 IQR=2
Safety	158 (38.4%)	102 (24.8%)	91 (22.1%)	37 (9.0%)	23 (5.6%)	Mean=1.9 Mdn=2 IQR=2

Table 4: Net perceived impact of social media by adolescents in domains tested.

Domain	Net impact (difference in sample means)
Education	0.4
Relationships	0.9
Self-esteem	0.4
Health	0
Safety	0
Overall	0.3

Table 5: Comparison by age group of mean net perceived effects of social media use.

	Education	Relationships	Self-esteem	Health	Safety	Total
11-12 years	0.4	0.7	0.6	-0.1	0.6	0.4
13-14 years	0.4	0.9	0.4	0	0	0.3
15-16 years	0.2	1	0.1	0	-0.3	0.2
17-18 years	0.3	0.8	0	0.3	-2.6	-0.2

This study's results showed that adolescent students view social media use as having a net positive impact on their lives. This positive impact is greatest in younger adolescents and it was felt that social media's greatest positive effect is in the building and maintaining of relationships. Older adolescents appeared very conscious of the potential risks to safety of using social media and there was ambivalence over whether social media is good for their self-esteem or health. The reasons for this increase in awareness is still uncertain from this current study - it would be valuable in the future to see if young people of this age group felt interventions from their schools and families changed their views or whether the shift is more attributed to simply being older and more risk adverse.

This survey showed YouTube to be the most commonly used social media site as well as the site with the most amount of time spent on by users. Initial thoughts may question whether YouTube is indeed a social media site, however the Oxford English Dictionary (2020), defines social media as "websites and applications that enable users to create and share content or to participate in social networking" - by this definition, YouTube would fill the criteria [14]. Our study has shown results consistent with the Global Web Index's 2015 social media report documenting social media trends in adolescents in the UK and US, with Instagram coming second after YouTube, and Facebook coming third in the list of the social media sites [15]. A further report from the marketing agency Social Media Today (2015) documented similar results to our findings [16]. The more recent report by Pew Research Centre (2018) on social media use in the US, showed similar results with the most frequented sites being YouTube, Instagram and Snapchat in that order[6].

There are few other studies documenting adolescents own views toward social media and its effects. The Pew Research Centre study documented 31% of adolescents reporting a net positive effect, compared to 24% recording a net negative effect. This same study was consistent with ours, finding the major benefit to be in maintaining relationships but the major negative being bullying

and the impact on safety and self-esteem. A significant number of adolescents did not think their use of social media affected their social and emotional well-being one way or the other [5,6].

However the results are inconsistent with the evidence of a number of studies that showed negative effect from the increased use of social media on sleep [17,18] and mental health with increased risk of depression and suicidality [19,20]. This survey showed a significant discrepancy between the documented negative effects on the mental wellbeing of teenagers who are higher users of social media and the perceived effects of social media use by the young people. More work is needed to engage with teenagers to improve their awareness of the psychological and social effects of excessive use of social media. Young people could benefit from targeted interventions to help protecting them from harm and reduce the risks on their mental health as reported by Abi-Jaoude et al, 2020 [21].

The major limitations of our study were the small sample sizes in older adolescents and that as the population came from two schools in East Sussex the results may not be generalizable to the rest of the UK. Also, there was no prior power calculation to determine the study population number. Our results are consistent with other studies as discussed, though these are international. The variance in our samples was very large, and in future work having a clearer definition for young people of what constitutes social media would be an effective way of improving this. Some participants of our sample included time spent on media sites such as BBC iPlayer in their time spent totals making the results less reliable.

This survey provides evidence of the current usage of and attitudes towards social media by adolescents in the UK. Future studies need to explore whether this is unique to the schools identified in this study and if not, what would be the most effective way to bridge the gap between adolescents' perceived effects and the effects documented and acknowledged by studies. The

Department for Education' Social Media Policy (2020) focuses on how schools use social media to communicate, rather than the impact of said communication [22]. Teaching social media and its effects as part of the school curriculum at all levels would help improving awareness, and how best to minimize the negative impact of such sites and better protect adolescents.

Declarations

The study was part of extended project and all precipitants and their parents/ carers consented to take part and for publication. All the data is available. There are no competing interests for all the authors.

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