Incidental News Exposure Online and its Impact on Well-Being

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Abstract

Research indicates that consuming predominantly negative news is detrimental for emotional well-being. As well as the amount of time spent on consuming news is a factor affecting well-being. Most literature investigating the influences of news on mental health focussed on traditional news media as TV broadcasts. Nowadays new media plays a big role in retrieving news, especially social media, and online news websites. However, news on social media are mainly of incidental nature and are processed rather passively. The aim of the study is to extend knowledge by exploring incidental news and its impact on well-being. Hence, the constructs of incidental news exposure, negative or so-called hard news, well-being and social media use are investigated by using a questionnaire. Participants were recruited via convenience sampling and a total of 163 completed the survey questions. Surprisingly, analysing the data led to the conclusion that incidental news exposure does not impact well-being. Nonetheless, it was found that spending more time on social media leads to higher exposure to incidental news. Concluding, from the results it is important to consider the passive processes implied when faced with incidental news. As attention might be a strong explanatory variable for the nonsignificant associations. The study and its findings are interesting to consider for future research. Limitations and prospects for further research are discussed below.

Introduction

News Exposure Online

The current age is shaped by technological development influencing daily life behaviors of individuals. One changing behavior is the way how people consume news. The trend is leaving traditional news channels and orients more towards new media to retrieve news (Westlund& Färdigh 2011). Traditional media are mainly newspaper and television broadcasts whereas new media are online news websites and social media news profiles (Karnowski & Struckmann, 2015). As these platforms gained high user rates, it became an important channel to spread news (Masip, Ruiz-Caballero & Suau-Martínez, 2017).

An article by Chan (2015) shows a visible development of the population to prefer mobile devices like a smartphone or tablet to retrieve news over traditional media channels. Stated reasons for this trend are the freedom and possibilities to retrieve news whenever and wherever if structural components allow this. Structural components are for instance the requirement of having a phone contract allowing for data roaming as well as a stable connection to mobile data. Whereas, traditional media is tied to certain places and time. Newspapers cannot be updated at any moment as they are delivered at certain times, as well as TV news, is only broadcasted to certain times. Therefore, news suppliers changed their strategy to get the attention of individuals to their news portals or magazines by using social networking sites (SNS) like Facebook and Twitter (Molyneux, 2018, as cited in Schäfer, 2020). From the perspective of SNS user's news posted on social media platforms are mostly accessed per incident and are labelled as snack news (Schäfer, 2020). Snack news addresses news topics very briefly by using stimulating headlines, images, or teasers. Coming across news posts incidentally while scrolling through the news feed of SNS elicits passive processes and reduces engagement compared to actively looking for news on an online website (Schäfer, 2020; Bergström & Jervelycke Belfrage, 2017). This can be explained as opening Social Media platforms is often a habitual behavior when having the smartphone at hand and not an active decision (Chen, Gil de Zúñiga & Kim, 2013).

Hard News and Soft News

The news people attend to when opening social media platforms, online news websites or using traditional media can be differentiated into two types, soft news and hard news as defined by Tuchman (1972). Hard news refers to the news which frames predominantly negative topics and relate the topics to the public good, policies or society. Whereas, soft news

shows to be of a balanced mix of positive and negative news while not relating the topics to the public but rather focus on for instance the crime itself (Boukes & Vliegenthart, 2017). Further distinctive characteristics are the influence and significance of the news. Hard news is highly important and needs to be acted on immediately by reporting them directly. The consequences of the reported happenings are influencing large parts of the public and its surroundings. Whereas, soft news is mostly of interest for certain groups and contain for instance local news and entertaining content as scandals, gossip, and fashion (Lehman-Wilzig & Seletzky, 2010).

Hard News and Negativity Bias. Thinking about what type of news is dominating in our society, headliners about political instability, natural disasters, war, and crime come into mind. These topics are all afflicted with negativity and representative of hard news. Further, they demonstrate the prevalence of asymmetry of negative and positive information (Fournier, Nir & Soroka, 2019). Asymmetry can be determined as most of the news are of negative nature and positive information is spread rarely. To be drawn towards negative information is due to the so-called negativity bias (Soroka & McAdams, 2015). Studying negativity bias in humans shows the strong influence of negative information on attention, perception, and memory processes as well as having physical, behavioral, motivational, affectional, and cognitional effects (Norris, 2019).

Increased possibilities to spread news due to online media as well as increased competition among news producers, led to an expansion of sensational and confrontational news content. On SNS the news content is summarized in sensational headings and perceived as incidental news by its audience. Therefore, the ratio to negative news or hard news increased with expanded use of social media (de Hoog & Verboon, 2019).

News Exposure, Mental Health, and Well-Being

As mentioned widely discussed topics on news broadcasts are categorized as hard news and include among other disasters as terrorism and traumatizing events. This in turn wakens negative sensations in its readers and consequently may lead to decreased mental health. For instance, studies stress the high possibility of developing Posttraumatic Stress Disorder (PTSD) due to heavy exposure to television news and images of traumatic events (Asmundson, McCabe, Carleton & Collimore, 2008). An example is the news coverage of the attack of September 9th in New York 2001, studies demonstrated that individuals who were highly exposed to the aftermath of the event via television had an increased risk of PTSD compared to individuals who were less exposed. (Ahern, Galea, Resnick & Vlahov, 2004; Ahern et al., 2002; Caddell et al., 2002; Silver, 2002).

Since the establishment and popularity of SNS, news of disasters and events can be spread at a fast pace. Consequently, the audience can feel as being a witness on the spot by retrieving videos and updates of the event on their social media immediately (Holman, Garfin, Jones & Silver, 2016). A study dealing with the news coverage of the Boston Marathon bombings in 2013 showed that individuals who were exposed to the corresponding news via social media as well as via traditional news channels had higher exposure to disturbing news. The heightened exposure to negative content led to an increased risk of psychological distress (Holman, Garfin, Jones & Silver, 2016).

Further studies manifested that negative news has a high influence on anxiety as well as stress and worry levels, depression and general psychopathology (Johnston & Davey, 1997; Hopkinson & Szabo, 2007; Harrel, 2000; de Wit, van Straten, Lamers, Cuijpers & Penninx, 2011).

Well-being. Symptoms as presented above lead to a disruption of mental health and presumably a decrease in well-being. Well-being is defined by the World Health Organization as: "a state [...] in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (WHO, 2004, p. 12, as cited in Bohlmeijer et al., 2010). It is further elaborated that well-being does not exclude mental health issues per se, and an absence of psychopathology is not ultimately needed to be flourishing in life. Nevertheless, having symptoms of a mental disorder is more likely to result in low well-being (Bohlmeijer et al., 2010).

The three main concepts of well-being comprise the existence of emotional well-being as well as psychological and social well-being. Emotional well-being involves the presence of positive feelings and emotions as well as having a sense of being satisfied with life (Keyes, 2009). Psychological well-being is defined by dimensions of self-acceptance, personal growth, purpose in life, positive relationships with others, autonomy, and environmental mastery (Ryff, 1989). Those dimensions contribute to psychological functioning in life. Social well-being is measured among the dimensions of social integration, social contribution, social coherence, social actualizations, and social acceptance. Social well-being is achieved when individuals evaluate their public and social life as satisfying and positive (Keyes, 1998; Keyes, 2002).

Looking at recent studies the effect of negative news on the concept of well-being is investigated. A study focusing on emotional well-being shows that the increasingly sensational and confronting news reports directly influence the emotional state negatively (de Hoog & Verboon, 2019).

Another article by Boukes and Vliegenthart (2017) investigated the influence of hard

news versus soft news on well-being. The study found out that higher exposure to hard news has a negative effect on emotional well-being. Whereas, soft news is positively influencing emotional well-being. Conclusively, it is visible that negative news affects emotional well-being negatively (Boukes & Vliegenthart, 2017).

The Study

By looking at existing research on the topic of media exposure and its effect on well-being it becomes apparent that the negativity of news and its increasingly high accessibility is a threat to mental-health and consequently to well-being.

After all, most research focusses on news spread through traditional media like television and newspaper while leaving out social media platforms, online news providers, and the joint increase of incidental news exposure. As the popularity of social media use and retrieving news online increased, the confrontation with incidental news increased as well. Therefore, it is interesting to investigate incidental news exposure online and its influences on well-being as well as how incidental news is associated with the preference for news types. The study might lead to the conclusion that due to the new possibilities to spread news online and their incidental characteristic there might be an even more detrimental health impact than demonstrated in earlier studies.

Further, the reviewed literature focussed mainly on one aspect of well-being, the emotional state, by leaving out psychological and social well-being. Therefore, further research into all three core constructs of well-being is useful. As a result of reviewing literature, the main research question of this paper will be: "To what extend does incidental news exposure online impact well-being?"

Corresponding to the research question four hypotheses will be tested:

H1: High social media use is associated with high incidental news exposure.

H2: High incidental news exposure is associated with low well-being.

H3: High access to hard news is associated with low well-being.

H4: The association between high incidental news exposure and low well-being is stronger among those who have high access to hard news.

Method

Design

A quantitative, questionnaire survey design was employed, using an online questionnaire. The current study was part of a larger project investigating several topics related to news exposure and well-being. Only the relevant aspects of the study for this research question and hypotheses are described. The current study Three independent variables were investigated, namely preference for news type, incidental news exposure and social media use. The dependent variable comprised levels of well-being.

Participants

To recruit participants the non-probability sampling method of convenience sampling was used. Participants were mainly recruited by an email invitation, including the link to the survey or by following the link posted on Social Media platforms such as Facebook, Instagram, and WhatsApp. Further, the Sona Systems platform of the University of Twente was used to make aware of the study and collect responses. Participating via this platform was compensated by 0.25 credit points.

The study did not investigate a specific population but rather a diverse and wide range of individuals of all gender and educational status. The only restriction was that respondents had to be at least 16 years old.

In total, 188 individuals started the survey of which 25 dropped out and did not complete all questions. This led to a total of 163 participants who volunteered their time to complete the study. Of the 163 respondents 103 were female, 60 male and no one stated being of diverse gender. The age of the individuals who participated ranged from 16 to 88 (M = 32.44, SD = 16.56).

Materials

To examine the variables of hypotheses and research question a questionnaire was used. The questionnaire was created via the software Qualtrics and its version of April 2020 (Qualtrics, Provo, UT). As it was an online questionnaire a device with internet connection and screen was needed, for instance, a laptop, computer, or smartphone.

The questionnaire consisted of different blocks and was available in two languages. The languages to choose from were German and English, the translation was validated due to the method of forward backward translation. As the questionnaire was used by a larger group of

researchers not all questions were relevant for this paper. Therefore, only the questions related to the research question and hypotheses are discussed in the following. Before continuing with the relevant questions, respondents had to give consent for their participation and answer demographic questions about age, gender, nationality, and educational state,

The next questions were related to the variables of hypotheses and research question. Firstly, a single item assessed the amount of time spent on Social Networking Sites (SNS) on an average weekday. The answer possibilities were divided into six continuous time specifications ranging from 10 or fewer minutes per day to three or more hours per day.

The variable of incidental news exposure was researched by asking how often respondents see themselves exposed to incidental news online. The item was measured on a 4-point Likert scale ranging from "never" to being "often" exposed to incidental news online. The questions about social media use and incidental news exposure online were adopted from a national U.S. survey based on an online panel maintained by the organization Clearvoice Research Panel (Kim & Lee, 2017).

The following two questions asked about the content of the news retrieved via a mobile device. Firstly, it was asked about the frequency of retrieving hard news, and secondly participants indicated how often they retrieve soft news. Answers could be made on a 4-point Likert scale ranging from "never" to "often". The two questions were adopted from a computer-assisted telephone interviewing scheme which was used in different countries (Chan, 2015). Further, the wording of the two questions included the definitions of soft and hard news defined by Lehman-Wilzig and Seletzky (2010) which increases their usefulness to measure the constructs of accessing soft and hard news. As the four questions mentioned above are picked from two larger surveys there are no statements about their psychometric properties made.

The subsequent block of questions is the Mental Health Continuum-Short Form (MHC-SF). The scale consists of 14 items that aim to investigate emotional, psychological, and social well-being (Guo et al., 2015). Participants report their feelings during the past month on a 6-point Likert scale. The sub-scales as well as the total scale have a Cronbach alpha value of above 0.80 which speaks for its high reliability (Guo et al., 2015).

Procedure

Starting the survey, respondents could choose their preferred language and were faced with an introduction to the topic and purpose of the study as well as conditions for participating. Based on that they gave informed consent. After the demographic questions were presented to them. Following, they answered the questions about social media use and incidental news

exposure. Subsequently, two questions about news types were answered. Firstly, asking about the amount they access hard news and after the same question about access to soft news. Lastly, the questions of the MHC-SF had to be filled in. Participants of the questionnaire were forced to answer each question before continuing. After filling in the different scales of the survey, they were notified that their response is recorded and were thanked for their time. Further, it was possible for the participants to leave their email address in case they were interested to get informed about the results of the study.

Data Analysis

To analyze the data set, the statistical software SPSS Version 24 was used (IBM Corp., Armonk, N.Y., USA). Firstly, some changes to the variable of preference for news type, social media use and well-being had to be made. To fit those variables to the hypotheses they had to be recoded. Therefore, social media use was recoded into a categorical variable with the values, "low time" users, "average time" users, and "high time" users (Egli et al., 2017). To recode preference for news type, difference scores were used. Leading to subtracting the score of accessing soft news from the score of accessing hard news. If the results turned out to be positive individuals were categorized as accessing more hard than soft news, whereas a negative score showed a preference to access more soft than hard news and scoring zero equals accessing the same amount of soft and hard news. Therefore, the three categories are "access to more hard than soft news", "access to more soft than hard news" and "access to the same amount of hard and soft news". To make use of the results of the MHC-SF, the scores were recoded into three categories, namely low, moderate, and high well-being (Keyes, 2002).

The first hypothesis implied to test whether high social media use is associated with high incidental news exposure. This hypothesis fits a one-way ANOVA analysis via SPSS as it is hypothesized to find a difference between those who are more active on social media and those who are less active and their exposure to incidental news. If the results of the ANOVA analysis were statistically significant, a post hoc test was conducted to determine where the differences among the groups lie.

Hypothesis two aims to show that high incidental news exposure leads to low well-being. Thirdly it was hypothesized that high access to hard news is associated with low well-being. As last hypothesis of this paper a moderation was tested stating that the relationship between high incidental news and low well-being is stronger when the access to hard news is high. Those three hypotheses were tested within one model by using the modelling tool for logistic regression analysis PROCESS SPSS Macro version 3.4.1 by Andrew Hayes (2018). It

allows to directly test whether there is an interaction effect of high access to hard news on the association between high incidental news exposure and low well-being.

Results

Descriptive Statistics

The four variables used for further investigation were incidental news exposure online, preference for news type, wellbeing, and social media use. Information about the descriptive s tatistics is presented in Table 1.

Scoring high on the Mental Health Continuum scale applied to 59 of the participants, the majority of 96 individuals were categorized with having a moderate level of well-being and 8 were categorized as having low well-being. Lastly, looking at the variable of social media use shows that 68 of the participants were classified as low time users, 65 as spending average time on social media, and 30 as high time users.

Table 1

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Well-Being	163	.00	2.00	1.31	0.56
Incidental News	163	1.00	4.00	3.28	0.86
Preference News Type	163	.00	2.00	0.72	0.89
Social Media Use	163	1.00	3.00	1.77	0.74

Social Media Use and Incidental News Exposure

To investigate the first hypothesis of the paper, a one-way ANOVA test was conducted. It was tested whether high social media use is associated with high incidental news exposure. The results of the one-way ANOVA showed a significant difference between the groups of low, average, and high social media users and the dependent variable of incidental news exposure F(2, 160) = 8.12, p < .001. Consecutively Post-hoc comparisons were made by using the Tukey HSD test. The results of this test indicated that there is a significant difference between low time social media users and average time users and their exposure to incidental news (p = .001). As well as there is a difference between low time users and high time users and their incidental news exposure (.018). However, there was no significant difference found between the groups of average and high users and their exposure to incidental news.

Moderation Analysis

The fourth hypothesis of the study stated that high access to hard news moderates the association between high incidental news exposure online and low well-being. Therefore, an interaction analysis was conducted by using PROCESS Macro for SPSS. The results show that the overall model is significant F(3, 159) = 2.75, p = .04, $R^2 = .05$. However, the results of the moderation analysis show that there is no interaction of accessing more hard than soft news on the relationship between incidental news exposure and well-being b = .14, t(159) = 1.78, p = .08.

Further PROCESS Macro analysis investigated the associations stated in hypothesis two and three. According to those results hypothesis two needs to be rejected as there is no association between high incidental news exposure and low well-being b = -.08, t(159) = -1.59, p = .11. Further, hypothesis three cannot be supported as the results are statistically insignificant, and show no association between high access to hard news and low well-being b = -.11, t(159) = -1.64, p = .10.

In conclusion, the results of the conducted analyses showed that only hypothesis one can be supported by showing a significant difference whereas hypotheses two, three, and four need to be rejected.

Discussion

This study investigated incidental news exposure and the extent to which it impacts well-being. Further, it explored the influence of hard news on well-being and the role of social media platforms as transmitters of incidental news. The study demonstrated that there is no association between high incidental news exposure and low well-being. Further, high access to hard news does not show to lower well-being either. Therefore, high access to hard news could not elicit an interaction effect on high incidental news exposure and low well-being as there was no associations found. Those findings were rather surprising as existing literature showed that higher news exposure and accessing more hard than soft news has a detrimental effect on emotional well-being (Boukes & Vliegenthart, 2017; de Hoog & Verboon, 2019). The result that higher access to hard news does not lower well-being, might have been influenced by the fact that the present study did not only focus on emotional well-being, as earlier research did, but on all three aspects of well-being, including social and psychological well-being. In fact, this might explain the discrepancy between the current study and earlier research and suggests looking into the single concepts of well-being more deeply. Further, results implicated that most respondents access a balanced mix of hard and soft news which makes it difficult to demonstrate an effect for high hard news exposure.

A possible explanation for the finding that incidental news had no impact on well-being is stated in a paper by Schäfer (2020). It is addressed that incidental news which commonly occurs as snack news on SNS are processed in another way than news articles one actively searches for. The processes involved in consuming snack news are fast, flexible, and stimulate only low levels of elaboration. Further, to follow a link to obtain the full news article strongly depends on the interest of individuals and research showed that only a minority follows links presented in snack news (Bakshy et al., 2015, as cited in Schäfer, 2020). It shows that retrieving news accidentally is mostly not connected with interest or engagement in the addressed topic. This in turn might lead to a lack of attention towards this news, so that they do not elicit a reaction but are read more passively. The passivity might then lead to misjudge whether they were exposed to hard or soft news and consequently lead to false answers on the questions asking for the amount of soft and hard news access.

In addition, it was explored whether social media use influences incidental news exposure. Results showed that indeed a higher social media use leads to a higher exposure to incidental news. The findings are in line with literature stating that most confrontations with news on SNS are incidental and higher activity on SNS leads to more exposure to incidental

news (Fletcher & Nielsen, 2018; Valeriani & Vaccari, 2016, as cited in Schäfer, 2020). In conclusion, the findings lead to answer the research question by stating that there is no evidence that high incidental news exposure lowers well-being.

Implications

Implications of these findings for studying news exposure and its influence on well-being are for once that it suggests to further investigate incidental news exposure on new media channels as online websites and SNS. There is no extensive research of how this form of news exposure might influence well-being. The study showed that higher incidental news exposure does not lower well-being. This result might reinforce researchers to investigate this association more and focus on explaining why high incidental news exposure might be not as detrimental to well-being as news exposure via other channels as demonstrated in earlier research (Boukes & Vliegenthart, 2017; de Hoog & Verboon, 2019). Further, it is suggesting that all three constructs of well-being can be affected differently, and psychological and social well-being might be less sensible to accessing a high amount of hard news. Moreover, the increased importance of social media in accessing news gets clear and implements that it is a popular platform were people are confronted with news in a rather passive way.

Limitations

Nonetheless, the present study does not come without limitations. Firstly, it is to mention that the study was conducted during the Corona Pandemic 2020. The recruitment took place during the beginning of introducing measurements to reduce the spread of Corona including social distancing. Regarding social isolation, it should be kept in mind that this might have influenced the scores of well-being (Ambler et al., 2015). The situation marked the start of a phase which was new and different to everyone and might have elicited stress reactions leading to a decrease in well-being (Johnston & Davey, 1997; Hopkinson & Szabo, 2007; Harrel, 2000; de Wit, van Straten, Lamers, Cuijpers & Penninx, 2011).

Further, news coverage was mainly addressing the situation with Corona and was highly present in everyday life. Participants even contacted researchers to clarify that some answers were strongly influenced due to the consequences of the current situation with COVID-19 especially those for the MHC-SF.

Another limitation necessary to acknowledge is the fact that the study is based on self-reported data. As stated by Boase and Liang (2013) the method of collecting self-reported data tends to have low criterion validity and may fail to be representative. Especially in respect to

the questions asking about the amount of time spent on social media, the preference of news type, and incidental news exposure.

Further, the study might show some limitation as certain questions might have been too vague especially regarding measuring the amount of incidental news exposure and the questions about accessing hard and soft news. The wording of the questions might need adjustment as they were asking about the general amount of exposure. Further, the four-point Likert scale as answer possibility might miss some degree of elaboration.

Another factor regarding the survey questions about social media use, incidental news exposure online and access to hard and soft news is their reliability. The questions were used in earlier research however they are cherry-picked from two different questionnaires and there is no clear statement about their reliability.

Moreover, it should be noticed that there was no specific target group which might lead to overlooking differences among groups especially in regard to age. Literature substantiates that for example, social media use is higher among adolescents which consequently has an influence on their exposure to incidental news and therefore might differentiate on how the exposure influences their well-being in contrast to the older population. (Holman, Garfin, Jones & Silver, 2016).

Future Research

The listed limitations evocate suggestions for future research. Firstly, it would be of interest to examine the role of attention regarding news and explore whether the level of attention to a news topic leads to worse or better well-being in individuals. Especially, research is needed in the field of attention towards incidental news on social media feeds. In addition, it could be of big interest to test the hypotheses among certain age groups and compare whether there are differences between the younger and older population and their exposure to incidental and hard news and the effect of these news on their well-being.

With respect to designing a questionnaire for similar future studies it would be suggestible to take care of the wording of the questions. It would be of advantage to be more specific about how often respondents access news online and what sort of news. It could be an idea to implement a sort of tracking device to determine more accurate results. However, the high effort connected to implying tracking software is important to be considered and may outweigh the value. In terms of the MHC-SF future research should take a deeper look at the three constructs of well-being solely and analyze whether there might be differences in how those are influenced by incidental news and hard news.

Conclusion

In sum, the study adds important insight into incidental news exposure and its influence on well-being. Results show that incidental news exposure does not influence well-being as well as accessing more hard than soft news does not lower well-being or acts as a moderator on those variables. The findings are crucial as they add to the existing literature by focusing on all constructs of well-being instead of only emotional well-being and exploring incidental news. Further, the study puts value on the role of SNS as a channel to spread news. Though, only one hypothesis could be supported the results lead to interesting new hypotheses worth researching. For instance, exploring age differences and a more detailed analysis of the three constructs of the well-being scale. As well as putting effort in researching attention processes involved when retrieving news online.

Appendix

Informed Consent

Dear Participant,

Welcome to this study! Various studies have shown that the focus of news nowadays is more on negative topics and avoids positive subjects. This can trigger feelings of fear, pessimism and hopelessness. Therefore, this study deals with news consumption and its influence on the mental health of individuals. A particular focus lies on dealing with news on crime and climate change. It also examines whether positive psychological resources, such as optimism and hope, can be helpful in dealing with news.

A prerequisite for participation in the study is the minimum age of 16 years. The study consists of a set of questionnaires you will have to answer which takes approximately 20 minutes. There are **no correct or incorrect answers** to the questions, so we ask you to answer the questions according to your personal opinion.

Participation will have no consequences for you in the short or long term. Yet, if you wish to withdraw from the study, you can do so at any point in time without consequences and reasoning. Your data will be treated confidentially and anonymously, meaning nobody including the researchers can match any of the data to individual participants. This research was approved by the Ethics Committee of the University of Twente, Drienerlolaan 5, 7522 NB in Enschede. If you experience any problems or questions coming up, please do not hesitate to contact us via mail: ... Please indicate whether or not you agree to the specifics below.

Thank you for your time and participation!

Survey Questions

What is your gender?

- Male
- Female
- Diverse

What is your age?

What is your Nationality?

- German
- Dutch
- Other, namely

What is your highest level of education? If you are currently in full-time education please put your highest qualification to date.

- No degree
- Middle or high school degree
- Vocational education (MBO)
- Higher professional education (HBO)
- University (Bachelor's degree)
- University (Master's degree and higher)

On an average weekday, how much time do you spend visiting social networking sites such as Facebook or Twitter?

- 10 minutes or less
- 10-30 minutes
- 31-60 minutes
- 1-2 hours
- 2-3 hours
- 3 hours or more

Please indicate how often the following statements apply to you.

- Never
- Rarely
- Sometimes
- Often

I come across news when I am online even if I am not looking for news.

I use my mobile phone to access online news about economic, political, or social topics and issues.

I use my mobile phone to access news magazines, documentaries, or entertainment-related news.

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