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Disquieted by online hate: negative experiences of Finnish adolescents and young adults

Abstract

Online hate is becoming a growing public concern, but so far the phenomenon has not been studied from the perspective of fear of crime. This study examined why some people are disquieted more by hateful online content than others. The data consist of Finnish participants ($n=1,726$) between 15 and 30 years old. The main analysis focused on participants who had seen online hate content during the past 3 months. The feeling of being disturbed by this type of material is, in this article, operationalized with the concept of *disquiet* referring to a feeling of anxiety or uneasiness. The findings, based on ordinary least squares regression analysis (OLS), show that the intensity of such negative experiences was stronger for women, immigrants and those who had faced previous online and offline victimization. Risk-takers were less likely to be disquieted by online hate. In addition, those worrying about becoming online hate victims were more disquieted by online hate than others. The findings underline that online hate content may have a strong impact on those who are already in a vulnerable position. Overall, the study supports the idea that online and offline worlds are not two separate realities, but rather coexisting dimensions of one social sphere.

Keywords: online hate, victimization, fear of crime, disquiet, anxiety, youth

1. INTRODUCTION

The Internet and social media are crucial and mundane parts of young people's lives. There have been many pivotal technological inventions, but as a socially connecting mechanism, the Internet is revolutionary (Keipi et al. 2017). New technologies, especially smartphones, have made it possible to log on from almost anywhere and at any time. Currently, 97 percent of Finnish youth from 16 to 24 years old report that they use the Internet several times a day. Of this group, 93 percent are on social media and 57 percent are either constantly on the Internet in general or log in several times a day to social networking sites such as Facebook or Instagram. (Official Statistics of Finland 2015.)

As the importance of social media grows, it is essential to examine the threats and negative features of online communication. One of the most notable problems is the spread of hate content (Burnap and Williams 2015; Costello et al. 2016; Costello et al. 2017; Faris et al. 2016; Kaakinen et al. 2018; Keipi et al. 2017; Oksanen et al. 2018; Perry & Olsson 2009). Even though addressing online hostility is recognized as an important policy aim, it remains challenging for authorities to surveil, control or prevent (Wall & Williams 2013; Williams et al. 2013). This is also manifested in the high prevalence of hateful material in mainstream social media. For instance, in a study of 723 Finnish Facebook users from 15 to 18 years old, more than 67 percent answered that they had been exposed to online hate content in the past 3 months (Oksanen et al. 2014). Also, recent scholarship in computational social sciences has underlined how quickly hate content spreads online, especially after triggering events such as terrorist attacks (Burnap et al. 2014; Williams and Burnap 2015).

The phenomenon of online hate (i.e., cyberhate) is related to the current discussion on hate speech. According to the Committee of Ministers of Council of Europe [Recommendation No. R (97)20], hate speech should be understood as “all forms of expression which spread, incite, promote or justify racial hatred, xenophobia, anti-Semitism or other forms of hatred based on intolerance, including intolerance expressed by aggressive nationalism and ethnocentrism discrimination and hostility against minorities, migrants and people of immigrant origin” (p. 76). In this article, we rely on the preceding hate speech definition and use online hate content as an umbrella term that covers the spread of hateful material in all of its forms, including different types of social media content from text messages to pictures and videos. We believe this choice of terminology acknowledges multifaceted forms of communication online.

This study focuses on Finnish adolescents and young adults who have been exposed to hate content online. Our purpose is to examine why some people find this type of content more disturbing than others. The feeling of being disturbed by this type of material is, in this article, operationalized with the concept of *disquiet* referring to negative experiences, such as feelings of anxiety or uneasiness. This aspect of online hate has not been previously analyzed. The study is grounded in the fear of crime research tradition, which usually focuses on violent crimes or other physical crimes such as property crimes.

1.1. Fear of Crime

Fear of crime is an established research domain and has been recognized as a major social and political problem (Henson et al. 2013; Jackson 2009; Lee and Farrall 2008). Fear of crime studies examine fear and anxiety about crime and the reasons why so many people worry about crime (Cops et al. 2012; Jackson 2009). The label, *fear* of crime, can be misleading because it also includes many negative emotions related to crimes—not just fear (Hough 2004; Warr 1984). Fear of crime can also express people’s concerns and feelings about social uncertainties (Cops et al. 2011; Smolej and Kivivuori 2006). Previous studies have reported that both fear of crime and actual victimization experiences are connected to lower individual well-being and life satisfaction (Hanslmaier 2013; Moore 2006; Tan and Haining 2016), an increased sensation of distress (Shechory-Bitton and Soen 2016) and vigilant avoidance in daily routines and cognitions (Hamby and Grych 2016; Mesch 2000; Vilalta 2016).

Research has revealed that a fear of crime can be even more salient than criminal victimization itself because it affects such a significant portion of the population (Cops et al. 2011; Henson et al. 2013). Studies have suggested that most people do not have a realistic image, especially of the incidence of severe crimes (e.g., Jackson 2005). People can say they are fearful when they are worried about general hostility, decay of moral values or social order (Jackson 2005; Kivivuori et al. 2002). There are also many studies investigating the role of media and crime news, and it has been pointed out that crime news and tabloid headlines can generate fear and increase public anxiety (Callan and Rosenberger 2015; Kohm et al. 2012; Smolej et al. 2006). Media sensationalism is considered one of the reasons people do not have a realistic sense of the incidence of crime (Jackson 2005; Smolej et al. 2006). The media can create horrific pictures that are not realistic and, thus, cause unnecessary fear. Especially in fear of crime research, fear can be viewed as a social—rather than individual—experience (Smith and Pain, 2009).

Many studies have suggested that certain attributes are repeatedly associated with an increased fear of crime. First of all, people with previous victimization experiences (Box et al. 1988; Smolej et al.

2006), or who perceive their personal risk of becoming a victim higher than that of others (Hicks and Brown 2013), are more likely to show a fear of crime. Crime victims, and those with a serious fear of becoming one, also show psychological and behavioral changes, including decreased well-being (Hanslmaier 2013; Shechory-Bitton and Soen 2016; Tan and Haining 2016), risk-avoidant behavior such as constrained mobility in public places (Mesch 2000; Vilalta 2016) and stronger, generally negative emotions towards crime or even hyper-vigilant or hyper-avoidant cognitive tendencies (Hamby and Grych 2016; Smolej et al. 2006). However, we do not know much about the consequences of fear of crime and victimization in the online space.

Of demographic correlates, gender has been the strongest predictor of fear of crime (Callanan and Rosenberg 2015; Snedker 2015). Women report higher levels of fear despite the fact that men are significantly more likely to be violently victimized (Callan and Rosenberg 2015). However, gender differences in fear of crime might be due to the asymmetric risk of sexual victimization (Warr 1984), the typical picture of women as victims of crime (Callanan et al. 2015) or that women tend to be “more sensitive to the consequences of victimization than men, and less able to control its occurrence” (Jackson 2009, p. 368). For example, women report higher levels of fear of sexual assault and other personal crimes (Henson et al. 2013; Smolej et al. 2006), but gender is not a statistically significant predictor in the fear of property crimes (Jackson 2009).

Even though the fear of physical crime is a well-studied topic, the fear of crime in cyber environments still needs more examination. Naturally, the fear of crime in the online context is a relatively new research area, but attention to it is more and more essential as new technologies have become an inseparable part of people’s lives. The Internet enables anonymous communication, and it is easy to spread hateful and illegal content online (Burnap and Williams 2015; Keipi et al. 2017; Perry and Olsson 2009). However, the online environment is different because both physical violence and face-to-face contact are absent. According to Henson and colleagues (2013), individuals are generally not fearful in cyber environments, but previous victimization experiences and perceived risk of victimization still have a significant positive influence on fear in cyber environments. However, online and offline worlds should not be viewed as two separate places. Offline victimization is associated with online victimization, and it is necessary to examine offline problems in order to understand online problems (Helweg et al. 2012; Mitchell et al. 2011).

Just as online crimes are different from physical crimes, hate content and crime news are different in the online environment. For example, exposure to crime news and tabloids is associated with greater anxiety about crime (e.g. Kohm et al. 2012), but Roche, Pickett, and Gertz (2016) found no evidence that online news consumption increases anxiety about crime. In cyber environments, a person has more options for what to do when exposed to crime news or hate content. It is possible to ignore or block disturbing content to some extent, or to optionally dig in deeper and try to understand the different aspects of certain events or phenomena (Henson et al. 2013; Roche et al. 2015).

Another area that needs more attention is fear of crime in adolescents and young adults. Studies have shown that social uncertainties and insecurity are positively correlated to fear (Cops et al. 2011). Younger people usually experience these kinds of feelings more strongly before they make the gradual steps from adolescence to adulthood (Cops et al. 2011). They are also a highly relevant group of examination because they have grown up using new technologies and they use social networking services more frequently than older age groups (Boyd 2014). Although younger people may have better and more sophisticated social media skills, this does not mean that they are more likely to avoid the risks involved (Ybarra et al. 2011). On the contrary, studies have shown that younger people are actually more likely to become victims of online crime than older people (Oksanen and Keipi 2014), and online activity, such as frequent use of social networking services, is associated with a higher

risk of online victimization (Navarro and Jasinski 2012; Prat et al. 2010). Thus, it appears that young people who engage the most with new affordances of social media also confront more risks in the online space (Livingstone and Helsper 2010).

Ethnic minorities often demonstrate a higher fear of crime than members of an ethnic or racial majority (See e.g., Wu et al. 2016). In addition, foreigners and ethnic minorities are often targets of online hate content (Näsi et al. 2015; Hawdon et al. 2017), and therefore, it is necessary to analyze whether they are disquieted by online hate more than others. People from different cultural backgrounds may also react differently to online hate content than Finnish people do, even if the hate content does not concern them directly.

1.2. Fear, Anxiety and Disquiet

Feelings of fear, anxiety and disquiet are strongly related to each other and sometimes in discussion they are even used as synonyms (Hough 2004; Jackson 2005). However, when specifying emotions, there are distinct differences and features that separate these terms. Fear can be understood as an emotional response to a threat that involves a physical primitive response to a danger and an anticipation of victimization (Hough 2004; Moons et al. 2010). Anxiety, on the other hand, is a vaguer emotion, and it may lack an object. Anxiety is more like a mental state, whereas fear is a mental event (Hough 2004). In psychology, the terms *fear* and *anxiety* are used to “differentiate reactions to immediate threats (fear) from reactions to future or past events (anxiety),” but this distinction is not as clear in fear of crime studies (Warr 2000).

The term *disquiet* relates to anxiety and refers to a similar mental state that differs from fear by its nature. Hough (2004) argues that anxiety, disquiet and worry are not “comprised of a series of events that can be located in space and time” (p. 174). Rather, they are “rumbling states of events, often partly submerged and sometimes fully surfacing” (Hough 2004, p. 174). Hate material can also cause fear, but online environments lack an immediate physical threat and keep a certain kind of distance between people that reduces the intensity of fear (Henson et al. 2013). Here, disquiet refers to an emotional state of being disturbed. Hate content can leave people disquieted, but this condition does not necessarily involve direct fear of the phenomenon.

1.3. The Current Study

The purpose of this study was, first of all, to examine why some young people are disquieted by online hate more than others. We aimed to examine the range of emotions that exposure to online hate may provoke among young people. Another research aim was to contrast the findings with earlier fear of crime research and investigate whether the prior findings in fear of crime studies also apply in the online context and when examining the phenomenon of online hate. The following research question was investigated: Is the intensity of disquietude by online hate content associated with worry about becoming targeted by online hate and previous online and offline victimization experiences?

Our main hypothesis was that individuals who worry about becoming targeted by online hate, or have been victims offline or online, will show stronger negative emotions towards and avoidance of online aggression and, thus, report a higher intensity of disquietude when exposed to online hate. In other words, we expected that both worry about becoming targeted by online hate and previous online and offline victimization experiences are associated with the intensity of disquietude.

2. METHODS

2.1. Participants

This study used three samples that were gathered during the spring of 2013 in Finland. The first sample (YouNet 2013 Facebook survey, FB) was collected using three Facebook advertising campaigns targeted at Finnish users ($n=982$), aged 15 to 30. The second sample ($n=534$) consisted of respondents who were recruited from a demographically balanced panel administered by Survey Sampling International (SSI). The third sample ($n=210$) consisted of respondents to the YouNet 2013 YLE Finland Survey. The respondents were recruited by providing a link to a survey in a news article on hateful online content from Finland's national public broadcasting company, YLE. These three surveys include a total of 1,726 complete responses from participants aged 15 to 30. In all samples, the respondents' profiles were similar to one another, especially in terms of basic sociodemographic characteristics.

The study follows the general guidelines of the Finnish Advisory Board on Research Integrity and is consistent with international research ethics guidelines (e.g., APA's *Ethical Principles of Psychologists and Code of Conduct*). The respondents voluntarily agreed to participate in research surveys and they were informed about the aims of the study. They had the possibility to withdraw, totally or partially, from the survey at any time during the completion process. We also provided them with information about how to follow the progress of the study. The data collection maintained the anonymity of the participants and the datasets were de-identified after the data collection.

Despite the differences in respondent recruitment processes, all three surveys were identical and included questions about online hate, online activity, social trust, self-esteem and offline victimization experiences, along with sociodemographic variables. The survey's first question on online hate inquired whether the respondent had "in the past 3 months, seen hateful or degrading writings or speech online, which inappropriately attacked certain groups of people or individuals." Those who reported having been exposed to online hate were then asked a set of follow-up questions, including the topic of witnessed hate content and whether they found the content disturbing. We also asked them whether they had been personally victimized by online hate and whether they were worried of becoming victims. As our aim was to study the psychological impact of online hate, only those respondents who had witnessed online hate were included in the final analysis. This led to the final data set of 1,092 respondents.

2.2. Variables

In order to determine *exposure to online hate content*, participants were asked the question "In the past 3 months, have you seen hateful or degrading writings or speech online that inappropriately attack certain groups of people or individuals?" The response options were yes or no.

Disquietude intensity was the dependent variable in our main analyses. It was measured by asking "In your opinion, how disturbing was the hateful or degrading material?" The respondents were asked to assess their answers on a scale from 1 (*not at all disturbing*) to 5 (*extremely disturbing*). See Table 1 for details on whole data and separately for SSI, FB and YLE samples. This question was shown only to those respondents who reported having been exposed to online hate.

Our central independent variables were (1) worry about becoming targeted by online hate, (2) previous online victimization experiences and (3) previous offline victimization experiences. The

first central independent variable, worry about becoming targeted by online hate, was measured by responses to the claim “I worry about being targeted for hateful or degrading material online” (no=0, yes=1). To measure online hate victimization experience, respondents were asked to answer yes or no to the statement: “I have personally been the target of hateful or degrading material online.” We also used another measure for online victimization. The online harassment victimization experience was asked with the question: “In your own opinion, have you been a target of harassment online, for example where people have spread private or groundless information about you or shared pictures of you without your permission?” (no=0, yes=1).

To measure offline victimization experiences, we created a sum variable from three yes-or-no questions: in the past three years (1) “Has someone bumped into you or touched you in a way that felt insulting to you?” (2) “Has someone you did not know attacked or threatened you in a way that really scared you?” and (3) “Has someone you knew attacked or threatened you in a way that really scared you?” These questions had acceptable inter-item reliability ($\alpha=.63$). The sum variable was coded into a dummy variable in order to indicate whether or not respondents have been offline victims.

The other independent variables were gender, age, immigration, scope of online activity, risk-taking tendency and online anonymity preference. Gender was simply divided into female or male, and age varied from 15 to 30 years old. Immigration was measured by asking whether a respondent was born in Finland or somewhere else. The scope of online activity measurement was based on 22 survey items in which respondents were asked to indicate which online services they had used in the past 3 months. Answers (no=0, yes=1) were then combined to a sum variable ($\alpha=.69$). To measure risk-taking tendency and online anonymity preference, respondents were asked to respond to the statements “I enjoy taking risks” and “I find it easier to talk about private things online when others don’t know who I am” using a scale from 1 (*not very true of me*) to 10 (*very true of me*).

The third dataset (YouNet 2013 YLE Finland Survey) was controlled in the regression model because respondents of this sample were more disquieted by online hate than others. One explanation might be that people who paid attention to the YLE news story may have seen a lot of hate content before or find it particularly disturbing. Another reason may be the media-framing effect, in which the content of the news article reflects respondents’ answers (Scheufele, 1999). In our final dataset, we had a dummy variable indicating whether an observation was originally from this sample (0=SSI or Facebook data and 1=YLE data).

2.3. Statistical Techniques

We first used logistic regression analysis to show what kind of factors were associated with online hate content exposure. This analysis involved the full dataset (n=1726). The logistic regression models report regression coefficients (B) and their standard errors (SE), odds ratios (OR) and statistical significance (p). The table also reports Cragg and Uhler’s pseudo R². We have considered results to be statistically significant if $p < .05$.

The descriptive statistics of the dependent variable and independent variables are reported as standard deviations and means for the scaled variables as well as percentages for the categorical variables in Table 1. These are provided for those respondents who had been exposed to online hate (n=1,092).

Ordinary least squares regression (OLS) was employed to predict the disquietude intensity from a set of independent variables. Regression models were conducted using the final dataset consisting of the

three subsamples. We do, however, control for the original dataset in our models. The required assumptions were noted and multicollinearity was tested to ensure the legitimacy of OLS use. Our analytical procedure has three steps. Analysis begins with an initial model that includes only sociodemographic variables (age, gender and immigration background). In the next model, online activity, online anonymity preference and risk-taking tendency were taken into account. The third model includes previous online and offline victimization experiences, and in the final model, a variable representing worry about being targeted by online hate in the future was added, along with all previous predictors and control variables. In Table 2, we present the effects of the independent variables with the coefficients (unstandardized B and standardized β) and standard errors (SE). We also report the statistical significance (p) for every variable and variances accounted for each model (R^2).

3. RESULTS

Out of 1,726 respondents, 63.27% ($n=1,092$) had had been exposed to hate content online. Exposure to online hate was more common among FB and YLE samples (66% FB and 89% YLE) than the SSI sample (48%). Based on logistic regression analysis, those exposed to online hate had a higher scope of online activity, but they did not enjoy taking risks. They also had previous victimization experiences both offline and online (online harassment victimization). We found no statistically significant results on age, gender and immigration background (see Table 2).

The main analysis focuses on how disquieted the respondents were when exposed to online hate (i.e., how disturbing the respondents considered the hate content they had seen). Descriptive statistics of the independent and dependent variables used in the analysis are presented in Table 1. Among those respondents who were exposed to hate content, the mean level of disquietude intensity was 3.14. Descriptive statistics are presented in Table 1. Women reported significantly higher disquietude intensity than men (3.37 vs 2.73) and immigrants higher than others (3.47 vs 3.12). Variation was also found between the data sets (SSI, 2.97; FB, 3.07 and YLE, 3.57).

All three regression models predicting the level of disquiet about hate content are shown in Table 3. Model 1 is statistically significant ($F=31.88$, $df=3$, $p<.001$) and includes only sociodemographic variables. Not surprisingly, female respondents ($\beta=.27$; $p<.001$) and immigrants ($\beta=.06$; $p<.05$) were more disquieted by online hate content than males and those born in Finland. Also, older age was associated with a higher disquietude intensity.

Model 2 adds psychological variables and controls. It is statistically significant ($F=17.36$, $df=7$, $p<.001$). Of the control variables included in the model, female gender ($\beta=.23$; $p<.001$), immigration ($\beta=.07$; $p=.013$) and risk-taking tendency ($\beta=-.07$; $p=.018$) were statistically significant predictors of the intensity of disquiet. A tendency to take risks is associated with a lower level of disquiet, so people who like to take risks and found online hate content were less disquieted by it than people who tend to avoid risks.

As Model 3 in the table indicates ($F=18.22$, $df=9$, $p<.001$), online and offline victimization experiences significantly predict the intensity of disquiet when someone is exposed to online hate content. The variables for being a victim of hate material online ($\beta=.11$; $p<.001$) and being a victim offline ($\beta=.12$; $p<.001$) are both statistically significant, so respondents who had either online or offline victimization experiences were more disquieted. Risk-taking tendency ($\beta=-.07$; $p=.015$) and gender ($\beta=.21$; $p<.001$) remain statistically significant, and values stay almost immovable. Also, the immigration variable remains statistically significant ($\beta=.06$; $p=.045$).

In the final step, the effect of worry about being targeted by online hate is added to the model, which includes all previous predictors and control variables. It seems that worry about being targeted by online hate in the future had a stronger positive effect ($\beta=.16$; $p<.001$) than previous online ($\beta=.09$; $p=.003$) and offline ($\beta=.10$; $p<.001$) victimization experiences. Only gender had a stronger effect than worry ($\beta=.18$; $p<.001$). Other significant predictors in the final model were age ($\beta=.06$; $p=.047$), immigration background ($\beta=.06$; $p=.038$) and online anonymity preference ($\beta=-.06$; $p=.046$). Older people and immigrants were more intensively disquieted by online hate, whereas respondents who prefer anonymous communication online were less so. Adding the worry variable to the model had a negative effect on the significance of risk-taking tendency, and in the final model it was no longer significant ($\beta=-.05$; $p=.060$). Model 3 was statistically significant ($F=19.77$, $df=10$, $p<.001$) and accounted for approximately 15 percent of the variance of disquiet. The last part of the analysis was to examine whether there were potential interactions within the models. We found that there were no interactions between sociodemographic factors and worry about being targeted for hateful or degrading material online.

4. DISCUSSION

The primary goal of this study was to examine the intensity of disquietude among Finnish adolescents and young adults when exposed to online hate content. In other words, our aim was to analyze why some people find online hate more disturbing than others. Across all of our datasets, seeing online hate content was highly common. It was, however, more common among those who used extensively different online services and among those who had previous victimization experiences both offline and online. The main focus was to examine how worry about becoming targeted by online hate in the future and previous online and offline victimization experiences affect the intensity of how much adolescents and young adults were disquieted by online hate content. There have been only a few studies on the fear of crime in cyber environments (e.g., Higgins et al. 2008; Henson et al. 2013; Vuori et al. 2013), and exposure to online hate content has not been studied from this perspective.

According to our theoretical framework for fear of crime, individuals with a high level of worry of becoming a victim of crime show more distress in general (Shechory-Bitton & Soen 2016) and are more fearful of crime and more prone to avoiding risky situations, as well as picking up threatening signs from their environment, than those who are not worried (Mesch 2000; Smolej et al. 2006; Tan & Haining 2016; Vilalta 2016). This was supported by our empirical results, as those individuals with a higher fear of personal victimization and previous victimization experience sensed more disquiet when they encountered hostile behavior online. The findings also support the presumption that offline problems reflect online behavior. Previous victimization experiences are also significant in cyber environments and they increase the level of disquiet when one is exposed to online hate content. However, it is also possible that the causal link is reversed, and people who are already disquieted and concerned about delicate issues are more likely to become targeted by online hate content and, thus, become victimized.

Online activity was not associated with the level of experience, but respondents who preferred anonymous communication online were less disquieted by hate content. One possible explanation for this might be that people who act anonymously in online forums are less likely to be targeted personally, and this gives them more freedom to act without negative consequences (Keipi et al. 2017). In addition, respondents who were more likely to take risks found hate content less disquieting. People with a higher risk-taking tendency may be less sensitive and vulnerable (Jackson, 2011) and, hence, less disquieted about daily issues overall. Immigration was positively linked to disquiet,

meaning that immigrants reported higher levels of disquiet. A large amount of online hate content focuses on ethnicity and nationality (Kaakinen et al., 2018), so it is not surprising that immigrants were more disquieted by this.

Females were significantly more disquieted by online hate content than males, and gender indeed was the strongest predictor of experiences. Fear of crime research has pointed out that females report continuously higher levels of fear than males (e.g. Snedker 2015; Warr 1984). That same result has also come up in studies on fear of online victimization (Henson et al., 2013), even though cyber environments lack the immediate threat of physical violence that has been offered as one explanation for females' higher levels of fear. However, the fact that someone is a female should not be seen as a cause of the reported experiences. One simple explanation is the existing stereotype that women are more vulnerable and fearful than men, who are expected to be strong and smother their feelings. This may reflect on male respondents' answers when they report their intensity of disquietude. Jackson (2009) has also addressed this issue and argued that men may feel as vulnerable as women, but are less willing to admit it. It might also be that young men are more used to seeing disturbing online content than women, and therefore they might not be so disquieted (Anderson et al., 2010; Oksanen et. 2016; Ybarra et al., 2011). This issue still needs more examination in fear of crime research. It is a difficult phenomenon to examine by using a survey, so interviewing might be a more appropriate method for future work.

4.1. Limitations

This study has some limitations that should be noted when interpreting the findings. First, cross-sectional research design does not allow for causal inference. In other words, even though our theoretical framework assumed that a fear of crime would predict disquietude intensity when exposed to online hate, the direction of this association was not tested in this study. This issue would be an intriguing one to address in future research.

Second, the data were gathered in 2013 for a specific research project, so the questions in the survey were not designed specifically for this study. Our data were not based on a random sample of Finnish citizens. Hence, some issues that would have been interesting to include in this study were not examined. For example, there was no question measuring the perceived risk of victimization. Worry about becoming a target addresses the fear of crime element, but it does not measure how likely respondents think they are to become a victim.

Third, we used the term *disturbing* to measure how disquieted the respondents were. However, the term *disturbing*, as mentioned in the questionnaire, relates to anxiety and disquietude, but respondents may also have interpreted the term differently. It might also be that some people were generally more disquieted by online hate, but the hate content that they were actually exposed to was not disturbing for them, or they might find hate content disturbing but not disquieting.

Finally, in the questionnaires, the respondents defined themselves in terms of whether they had been victims of online hate content or not. Some people may see themselves as victims more easily than others, and sometimes these perceptions can be misguided. Similarly, interpretations of what hate content is and is not may vary between respondents. In addition, we did not have information on the respondents' victimization of offline hate crimes, which would serve as a likely predictor of a heightened disquiet and disturbance. On the other hand, however, when examining disquiet, it is more important to rely on respondents' own judgements and feelings, rather than to evaluate whether they are justified or not.

4.2. Conclusion

Hate content is an inevitable part of online communication. Social media allows people to communicate freely, and it is hard to block hateful content until it is already posted for everyone to see. Exposure to hate content can be traumatizing for anyone, and especially for those who become its targets (Keipi et al. 2017). Therefore, it is important to first survey those groups that find hate content most disquieting, and second, to consider and study more closely the reasons why people in these groups report higher intensities of negative experiences when exposed to online hate content.

This study contributes to the fear of crime research, and the findings indicate that the framework it offers is indeed useful in explaining the intensity of negative feelings associated with online hate exposure, even though the earlier discussion on fear of crime has mostly concentrated on the offline environment (for exception, see Henson et al. 2013). It seems that some people are more disquieted by online hate, and this is especially true among people who are worried about becoming targeted by online hate or have previous victimization experiences, but also among women and immigrants. Given the difficulties in surveilling and controlling aggression in an online space (Wall and Williams 2013; Williams et al. 2013), it is worth noting that some groups will be more vulnerable to threatening and degrading material as it becomes integrated into mainstream social media. In addition, a sense of vulnerability affects people's feelings toward hate content and crimes in both online and offline worlds, and cyber environments should not be considered a separate reality (Keipi et al. 2017).

Young people's negative experiences regarding online hate exposure is an issue that should be researched more in order to understand worry about crimes, and hate content in general. Future research should examine more closely the reasons behind the negative feelings and focus on vulnerability and perceived risk of victimization. It would also be recommendable to examine more closely how belonging to some minority groups, such as a sexual or religious minorities, affects the intensity of disquiet about certain types of online hate content. Another interesting approach would be to investigate how people define hate content and decide what is acceptable and what is not. It is possible to be disquieted by online content that, in its own context, is not meant to be hateful at all. If a person misses the exact context or has strong preconceptions about the matter or the writer, it may cause a chain of events that can lead to a phenomenon called a social media storm. Sometimes these storms can be justifiable, but sometimes they are a result of misunderstanding and can cause unnecessary harm.

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Table 1. Descriptive statistics of independent and dependent variables used in the analysis

<i>Continuous variables</i>	Range	All		SSI		Facebook		YLE	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Disquietude intensity	1-5	3.13	1.17	2.97	1.16	3.07	1.17	3.57	1.10
Age	15-30	20.69	4.43	22.44	4.22	19.18	3.89	23.55	4.22
Scope of online activity	0-18	8.13	2.80	7.25	2.86	8.38	2.85	8.46	2.29
Online anonymity preference	1-10	4.98	3.05	4.67	2.85	5.16	3.14	4.76	2.95
Risk taking tendency	1-10	5.66	2.47	5.73	2.25	5.79	2.54	5.13	2.41
<i>Categorical variables</i>	Coding	n	%	n	%	n	%	n	%
Gender	Male	403	36.9	126	49.41	235	36.15	42	22.46
	Female	689	63.1	129	50.59	415	63.85	145	77.54
Immigrant	No	46	4.21	238	93.33	627	96.46	181	96.79
	Yes	1,046	95.79	17	6.67	23	3.54	6	3.21
Online victim	No	736	67.4	201	78.82	428	65.85	107	57.22
	Yes	356	32.6	54	21.18	222	34.15	80	42.78
Offline victim	No	539	49.4	142	55.69	309	47.54	88	47.06
	Yes	553	50.6	113	44.31	341	52.46	99	52.94
Worry about being targeted online	No	324	29.67	206	80.78	459	70.62	103	55.08
	Yes	768	70.33	49	19.22	191	29.38	84	44.92
Data	SSI	255	23.35						
	Facebook	650	59.52						
	Yle	187	17.12						

Table 2. Exposure to online hate among Finnish adolescents and young adults

	B (SE)	OR	p
Age	-0.03 (0.01)	0.98	0.811
Gender	-0.00 (0.11)	0.92	0.931
Immigrant	-0.07 (0.26)	0.90	0.799
Scope of online activity	0.22 (0.02)	1.22	<.001
Online anonymity preference	0.03 (0.02)	1.03	0.093
Risk taking tendency	-0.07 (0.02)	0.94	.001
Online victim	0.27 (0.13)	1.31	.034
Offline victim	0.70 (0.11)	2.00	<.001
R² (Cragg & Uhler)	0.199		

Table 3. Disquietude intensity among Finnish adolescents and young adults

	Model 1			Model 2			Model 3			Model 4		
	B (SE)	β	p	B (SE)	B	p	B (SE)	β	p	B (SE)	β	p
Constant	2.41 (.17)		<.001	2.65 (.24)		<.001	2.46 (.24)		<.001	2.37 (.23)		<.001
Age	.02 (.01)	.09	.002	.01 (.01)	.04	.150	.01 (.01)	.05	.105	.02 (.01)	.06	.047
Gender	.66 (.07)	.27	<.001	.57 (.07)	.23	<.001	.51 (.07)	.21	<.001	.45 (.07)	.18	<.001
Immigrant	.36 (.17)	.06	.035	.38 (.17)	.07	.024	.33 (.17)	.06	.045	.34 (.16)	.06	.038
Data				.36 (.10)	.11	<.001	.32 (.09)	.10	.001	.26 (.09)	.08	.006
Scope of online activity				.01 (.01)	.03	.331	.01 (.01)	.02	.608	.00 (.01)	.01	.773
Online anonymity preference				-.01 (.01)		.183	-.02 (.01)		.129	-.02 (.01)		.046
					-.04			.04			.06	
Risk taking tendency				-.04 (.01)		.009	-.03 (.01)		.015	-.03 (.01)		.060
					-.01			.07			.05	
Online victim							.28 (.07)	.11	<.001	.22 (.07)	.09	.003
Offline victim							.28 (.07)	.12	<.001	.24 (.07)	.10	.000
Worry about being targeted										.42 (.08)	.16	<.001
Model n	1092			1092			1092			1092		
R² adj.	.08			.10			.12			.15		