Discussions:

Applying differential association theory to online hate groups: a theoretical statement

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Social media (e.g. Facebook, Twitter, Google+) and information and communication technologies (ICT) more generally has altered human interaction. This technology provides tools for instantaneous communication and facilitates social organization. The participants in the uprisings of the Arab Spring used cell phones, text messages, Twitter and Facebook to circumvent and, in Tunisia and Egypt, topple totalitarian régimes (Stepanova, 2011). With each passing crisis, the importance of social media for disseminating information becomes increasingly clear. For example, after the 2007 mass murder at Virginia Tech, many survivors used social media to inform loved ones that they were alright, get information about their friends' wellbeing, or get information about the tragedy (see Mastrodicasa, 2008; Eberhardt, 2007; Hawdon & Ryan, 2012). Similarly, in 2011, police in Queensland Australia used Facebook to dissemination emergency information and locate those needing assistance during a series of flash flooding events (Taylor et al., 2012). Indeed, social media facilitates daily communication, organizational meetings, political campaigns, product marketing, and even attempts to apprehend criminals (see Garrett, 2006). Yet, as a space for open communication, the Internet also enables the formation of hate groups that glorify mass murderers, espouse racist and xenophobic ideology, or advocate violence for a wide range of reasons. Social media sites have been attractive forums for school shooters (Kiilakoski & Oksanen, 2011) and others aiming to commit acts of terror such as the 2011 tragedy in Utøya Norway (Murer, 2011).

Although the use of social media by hate groups emerged contemporaneously with the Web, few have researched what influence these groups have. Does it matter if children hear or read hate messages online? Will increasingly active online-hate groups lead to more acts of mass violence and terror, or is concern over the widespread web presence of hate groups simply a moral panic? If we consider the potential influence of these groups in light of criminological theories, it becomes clear that they pose a danger. Although mass shootings are likely to remain rare, social media sites may very well con-

tribute to a relative increase in these tragic phenomena. In this paper, I will consider how social media can nurture and encourage mass murder within a framework of one of the most prominent and widely supported criminological theories: differential association. I will briefly discuss the presence of hate groups on the web, and then I will review how the core principles of differential association are met and potentially amplified through social media. I then provide an example of the interconnectedness of hate groups, and conclude with a call for future research.

The presence of hate groups on the Web

The use of social media by hate groups is not new as the first online hate group began in 1995 (Gerstenfeld et al., 2003; also see Levin, 2002). However, the rise of social media has opened additional avenues for promoting activism and radicalism that allow a plethora of hate groups to establish an online presence (Kiilakoski & Oksanen, 2011). Recently, there has been a proliferation of online hate groups, both from the political left and right, from white supremacists to eco-terrorists to transnational jihadists (Brown, 2009; Chen et al., 2008). According to the Southern Poverty Law Center, which monitors hate-group activity, the number of hate groups operating in the United States increased significantly once the Web began penetrating mainstream society. The number of active rightwing-hate groups operating in the United States increased by 66 percent between 2000 and 2010 and exceeded 1,000 in 2010 (Potok, 2011). Leftwing online hate groups, although not as active in the U.S and Europe as they were in the 1960s and 1970s (see Fletcher, 2008), are nevertheless present online. Not only have the number of online hate groups increased recently, social media have allowed these groups to be increasingly visible. While there were approximately 150 active online hate sites in 1996, by 2009, there were at least 11,500 social networks, websites, forums, and blogs that focus on spreading intolerance, recruiting new members, and instructing people on how to commit violent acts (Cooper, 2010).

The uses of the Web to disseminate messages of hate are reaching significant numbers of Internet users, and these groups have been successful in recruiting members. For example, the English Defence League had over 90,000 members prior to a 2011 system crash, and still claims 10,000 members and to be "the world's biggest protest group." Sim-

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ilarly, the US-based Stormfront, thought to be the first hate group with a Web presence, had over 159,000 members by 2009 (Bowman-Grieve, 2009) and is one of the most frequently visited hate groups on the Internet (Brown, 2009). It operates in numerous nations, including Stormfront Scandinavia, which promotes "white nationalism in Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, and Sweden" (http://www.stormfront.org/forum/f44/). *Kansallinen Vastarinta*, a neo-Nazi hate group in Finland, is also highly active online, and a recent hack of their website pastebin.com by the anti-hate group Anonymous Finland resulted in the public release of 16,000 of its members' private information, including their usernames, real names, and social security information (Mick, 2011). Finally, Chau and Xu (2007) document that hate groups have been gaining popularity in blogs since the early 2000s. Thus, hate groups are with us, they seem to be here to stay, and they appear to be recruiting members at rapid rates. Moreover, it is very likely estimates of the extent to which hate groups are present and active on social media are underestimates. Many groups remain hidden in closed and highly encrypted spaces of the "dark net" (see Chen et al., 2008).

While anyone can be exposed to and influenced by online hate groups, it is most probable that these groups influence youth most. The current youth generation is the first born after the introduction of Internet, and many young people increasingly live online. Young people are clearly the primary users of social networking sites. For example, Facebook, the most frequently used social networking site and available in 70 different languages, has over 845 million monthly active users, and it is predicted that that number may reach 1 billion by the end of 2012 (Hunter, 2012). Unsurprisingly, most users are under the age of 35 (Dey et al., 2012). According to a recent study by the Kaiser Family Foundation (Rideout et al., 2010), nearly three-quarters of all American 7th through 12th graders have a profile on a social networking site, and those who have profiles spend an average of 54 minutes per day on social networking sites. Similar numbers are likely in most developed nations with high rates of Internet penetration such as Finland and the other Nordic countries (see for example Näsi et al., 2011; Räsänen & Kouvo, 2007). Globally, the Nielsen Corporation reports that there was an 82 percent increase in time spent on social network sites between 2008 and 2009 (Nielsenwire, 2010).

The presence of online hate groups in an environment frequented by youth is a potentially dangerous combination. First, research shows that various online communities and social networking sites offer important sources of social identification for youth, and many youth do not distinguish between people they meet online from those they meet offline (Lehdonvirta & Räsänen, 2011). Thus, hate groups, even those engaged with virtually, can become important socializing agents in the lives of youth should they become exposed to these groups. Exposure to online hate ideology seems to occur relatively frequently. For example, Livingstone and associates (2011, 98) found that 18 percent of European children ages 15 to 16 hear or read hate messages online. Moreover, recent studies reveal that hate groups actively recruit young people using online technology and do so creatively and effectively (Lee & Leets, 2002; Douglas et al., 2005). Indeed, numerous hate groups dedicate pages designed to connect with and recruit youth. Stormfront, for example, has a page for children (kids.stormfront.org).

While it is undeniable that hate groups exist on the Internet, are highly active in the virtual world, actively target youth, and have their messages reach a significant number of youth, does this imply youth will embrace their ideology or put their ideology into action? It does not, of course. However, if we consider the principles of differential association, we can see that the likelihood of some youth engaging in hate-inspired actions is likely to increase.

Differential association theory

Differential association theory (Sutherland & Cressey, 1974) emphasizes the socialization process and maintains that crime is learned through intimate interactions. Sutherland's theory has been one of the most prominent criminological theories ever professed and is the fundamental theory upon which several other theories (e.g. Aker's learning theory) were developed. Differential association is one of the most widely tested and supported theories of crime (see Pratt et al., 2010), and a growing body of literature demonstrates its applicability to online settings.

For example, among a sample of university students, Hollinger (1993) found that friends' involvement in computer piracy significantly increased respondent involvement in piracy. Similarly, Skinner and Fream (1997, 510), studying 581 undergraduate students in an American university, report that "differentially associating with friends who participate in computer crime is the strongest predictor of piracy and the computer crime index," which included piracy, accessing or trying to access a computer account, changing another's computer files, or writing or using a virus. Testing several criminological theories, including strain theory, techniques of neutralization, social learning theory, and self-control theory, Morris and Higgins (2009) found that differential association was the most pronounced theoretical predictor in self-reported piracy. Finally, Aker's (1994) social learning theory, which is an elaborated version of differential association theory, has been supported in a number of studies of online piracy (Higgins et al., 2009; Higgins & Makin, 2004a; Higgins & Makin, 2004b; Ingram & Hinduja, 2008).

While these studies clearly support differential association theory and demonstrate its applicability to online crime and deviance, existing studies address relatively minor criminal or deviant acts, such as software piracy. Committing an act of mass violence and terror is very different from illegally downloading one's favorite song, movie, or game. Nevertheless, this research does suggest that differentially associating with deviant peers increases criminality even if the associations occur in the virtual world. It is therefore at least possible, if not probable, that differential association can prove to be a valuable theoretical explanation for more serious crimes. To my knowledge, there are no data that could potentially test if participating in online hate groups increases violent be-

havior; yet, we can begin to assess the potential influence of such groups by examining how differential association theory would work in the virtual world of ICTs. I now turn to that task.

Differential association and online hate groups

Differential association can be summarized in the following nine principles (see Sutherland & Cressey, 1974, 75–76):

1) Criminal behavior is learned;

2) Criminal behavior is learned through communicative interaction;

3) Criminal behavior is learned from intimate personal groups;

4) Learning criminal behavior includes learning techniques of, specific motives for, attitudes toward, and rationalizations of crime;

5) The specific direction of motives is learned from definitions of the legal code as favorable or unfavorable;

6) A person becomes delinquent because of an excess of definitions favorable to the violation of law over definitions unfavorable to the violation of law;

7) Differential association varies in frequency, duration, priority, and intensity;

8) Learning criminal behavior involves all the learning mechanism that learning non-criminal behavior involves; and,

9) While crime is an expression of general needs and values, it cannot be explained by these since non-crime is also an expression of these same needs and values.

Let us consider the central tenants of differential association with respect to online hate groups.

The first two principles of differential association are that criminal behavior is learned through communicative interaction. This clearly applies to online settings. Communication using ICT can occur in all forms that offline communication occurs. Online users can read messages, engage in voice conversations, listen to recorded messages, and see images. Moreover, technology now allows online communication to occur in real time, just like offline communication. In addition, learning hate online can be through imitation; however, it can also occur by reading information, engaging in debate and dialogue, critically reflecting on arguments, and through all the learning mechanisms that all learning can occur, as stated in Sutherland's eighth principle (Sutherland & Cressey, 1974, 76).

Next, Sutherland and Cressey (1974, 75) assert that criminal behavior is learned from intimate personal groups, and this proposition would apply to online settings too. For many youth, and especially those who are heavy users of social media, their online networks primarily include their offline friends; however, online networks tend to be larger than offline networks because they include people with whom they rarely interact with face-to-face or have never met (see Acar,

2008; Subrahmanyam et al., 2008; Uslaner, 2004). Once youth establish their online networks, they use social media to maintain those networks and strengthen their friendships (see, especially Subrahmanyam et al., 2008; also see Uslaner, 2004; Oksman & Turtiainen, 2004; Valkenburg & Peter, 2007). Using a nationally representative sample of Finnish residents, Näsi, Räsänen and Lehdonvirta (2011) report that youth, especially those between 18 and 25 years old, are most likely to identify with online communities (also see Lehdonvirta & Räsänen, 2011). Thus, youth who participate in online groups are likely to view the group's members as "friends," and this would include the members of an online hate group's blogs, chatrooms, and discussion groups with whom the youth interacts.

Differential association theory becomes more specific with the assertion that learning criminal behavior requires learning the techniques of, specific motives for, attitudes toward, and rationalizations of crime (Sutherland & Cressey, 1974, 75). Do online hate groups provide their participants with these lessons of hate? It appears they do. Simply Googling "I hate" and a given group (black people, immigrants, Jews, Christians, Muslims, etc.) can provide several examples of messages conveying these lessons of hate. Alternatively, one can see these examples in the Simon Wiesenthal Center's *Facebook, Youtub +: How Social Media Outlets Impact Digital Terrorism and Hate* (Cooper, 2010). There are numerous examples of sites and pages denigrating people of African descent, immigrants, gays, Muslims, Christians, and other groups. These and similar messages clearly provide the "attitudes toward" groups that, according to the site, should be hated. In addition, several sites and online games can provide the "techniques" of hate. For example, there are several online games where players shoot members of some despised group (see Cooper, 2010). School shooting games depicting the Columbine tragedy (Super Columbine Massacre RPG) and the Virginia Tech murders (VTech Rampage) are available online. One can also find instructions on how to behead, build bombs, create a cell-phone detonator for bombs, use Light Anti-Armor Weapons, commit mass murder with and without firearms, how to successfully be a suicide bomber, and other methods of committing violence and terror. There are also several sites calling for hate-filled action. For example, one Facebook page calling for violent action against westerners says, "Without determination we will cease to exist. We can wait patiently while they pick us off one by one, or we can go out to meet them. That is why I am a human bomb" (see Cooper, 2010). Therefore, the Internet clearly contains messages that provide the motives for, techniques of, and rationalizations for hate-inspired violence.

Thus, ICT can provide a forum and peer network for learning hate-inspired crime; however, simply learning the motives for and techniques of crime does not necessarily mean a person will become criminal. The fundamental principle of differential association explains if what an actor has learned about crime manifests into actual criminal behavior. According to Sutherland and Cressey (1974, 75), a person becomes criminal if definitions favorable to the violation of law exceed definitions unfavorable to the violation of law. As Akers

(1994, 97) notes in his version of learning theory, definitions are "orientations, rationalizations, definitions of situations, and other evaluative and moral attitudes that define the commission of an act as right or wrong, good or bad, desirable or undesirable, justified or unjustified," and they can be either general, such as moral norms, or specific to particular behaviors. Positive definitions define the behavior as good and desirable, negative definitions define the behavior as undesirable, unacceptable or wrong, and neutralizing definitions define the behavior as tolerable or justifiable. The basic argument of differential association as applied to acts of mass violence would therefore be if a person's positive definitions of hate-inspired mass violence exceed his or her negative definitions of mass violence, the person is likely to commit an act of mass violence.

Yet, the ratio of positive to negative definitions of crime is not simply the result of the number of each type of definition. Sutherland and Cressey (1974, 76) note that in addition to differential association varying in frequency, it also varies in duration, priority, and intensity. Thus, it is possible that despite being exposed to anti-violent definitions more frequently than pro-violent definitions, one can become violent if he or she learns crime early in life (priority), is exposed to pro-violent definitions for a prolong period (duration), or is taught violence by someone who is highly influential (intensity). While social media cannot match offline interactions in terms of "priority" since youth will be exposed to pro- and anti-hate messages long before they are users of ICT, the frequency, duration, and intensity of their ICT interactions can be at least as high, if not higher, than those occurring offline.

First, social media can clearly enhance the *frequency* and *duration* of exposure to pro-violence definitions. If we consider the extreme position of those contemplating an act of mass violence, it is unlikely that many people would find sympathetic friends to provide them with positive definitions and reaffirmations concerning their extreme violence within their offline peer networks simply because most people's offline networks are limited in scope. For a potential school shooter, for example, his or her network of peers would most likely include classmates, and the probability of finding two classmates in the same school who view mass murder positively is unlikely. While the Columbine case demonstrates that this can happen (see Cullen, 2009), it is nevertheless unlikely. However, with social media extending networks across the globe, the probability of finding like-minded friends increases exponentially. Prior to the rise of ICT that permits networks to transcend geographic boundaries, one's choice of associates was limited by those geographic boundaries; now, however, the virtual world knows no boundaries. As a result, the probability of finding someone who shares your views – regardless of what those views are – increases. Given the amount of time youth spend on social media sites, youth harboring hateful thoughts can easily find millions of others who can provide them with numerous pro-violence and violence-neutralizing definitions, even for the most violent acts imaginable. Indeed, recent analyses of online hate groups demonstrate that one of their major objectives is to share their ideology with others (see Chau & Xu,

2007).

Next, youth's online friends form a strong peer network, and these peers undoubtedly influence what they think and how they view the world. This insight is likely to be as applicable to online hate groups as it is to other online groups. Therefore, online networks can provide *intense* definitions. A recent study of youthful online-community participants from the United Kingdom, Spain and Japan found that the youth identified as strongly with their online communities as they did with their families, and they had a stronger allegiance to their online friends than with their offline recreational groups (Lehdonvirta & Räsänen, 2011). As youth identify with their online groups, the group becomes a central socializing agent.

For example, in a study of Finnish, Spanish and Swiss youth, young people use virtual communication to facilitate identification with groups and their values and develop their individual identities (Suess et al., 1998). Indeed, several studies (e.g. Anderson, 2001; Subrahmanyam et al., 2006; Salimkhan et al., 2010; Bargh et al., 2002) find that youth use social media to forge and present their identities. As numerous scholars have noted, online networks provide opportunities for youth to experiment with different aspects of their identities, and online communication allows users to receive feedback from friends concerning these "presentations of self." As Salimkhan and her associates note (2010) about the use of photographs to construct identities on the social network site MySpace,

> Friends commonly evaluate and leave public comments in response to their friends' photos, providing immediate and powerful feedback for these self-displays. Indeed, research shows that users are acutely aware of the criteria for social approval from peers on social networking sites and are quite deliberate in choosing photos to represent themselves on their profiles that fit these standards.

As youth reveal personal information on their social-media profiles to present the self they wish to present, they will likely receive self-validating or self-degrading feedback. If their friends' feedback is positive, it will reinforce the projected identity and encourage them to solidify that image into a consistent identity. Conversely, if the feedback is negative, they will likely adjust their projected identity to solicit favorable feedback.

The growing body of research indicating youth use social media to present, try, alter, manage and eventually solidify their identities demonstrates the importance of offline networks to today's youth. As is well known, peers have a tremendous influence on teenager's behaviors, far more than that of parents, teachers, neighbors, or other adults. Consequently, it is likely that interactions with online groups have a relatively high level of "intensity." That is, youths are likely to assign a relatively high level of prestige to their online friends, thereby giving those friends' opinions added value. If these friends are providing them with pro-violence defini-

tions, these definitions can quickly exceed the anti-violence definitions they amassed over the years.

Consequently, social media and ICT more generally can provide youth with extremely frequent and exceptionally intense definitions of crime. Of course, these definitions can be positive, negative or neutralizing. In all likelihood, most ICT-using youth will be exposed to all three types of definitions with respect to hate and violence. Just as offline peer networks vary in the extent to which they provide their members pro- and anti-criminal definitions, online networks will also provide variable levels of support for or resistance to violence. However, it logically follows that the greater the exposure to and involvement in online hate groups, the greater the likelihood youth will receive definitions favorable to violent attitudes and actions. As the number of online hate groups increases and their presence on the Internet and social media sites grows, the probability that youth will be exposed to and become involved with these groups also increases. It therefore appears that online hate groups can serve as violence-producing agents in the manner outlined in differential association theory. Yet, there is an additional aspect of social media that is likely to amplify the effects of differential association for those youth who venture into the virtual world of online hate: what Pariser (2011) calls the filter bubble.

ICT, the filter bubble and differential association

Beginning in 2009, Google started using algorithms to tailor responses to the person using their search engine (Pariser, 2011). The collection of personal information is currently common practice on the Internet, and cyber-technology now enables social networking sites, search engines, and news sites to use algorithms to collect information about our interests, wants, desires, and needs to personalize what we see on our computer screens (Pariser, 2011). As Pariser (2011, 3) says,

> Search for a word like "depression" on Dictionary.com, and the site installs up to 223 tracking cookies and beacons on your computer so that other Web sites can target you with antidepressants. . . . Open – even for an instant – a page listing signs that your spouse may be cheating and prepare to be haunted with DNA paternity-test ads. The new Internet doesn't just know you're a dog; it knows your breed and wants to sell you a bowl of premium kibble.

As individuals use search engines, news sites and social media sites, they inadvertently provide Google, Facebook, Apple, Microsoft, Gmail, and others the most intimate details of their lives, and data companies now have on average 1,500 pieces of data on the 96 percent of Americans in their database (Pariser 2011, 6). The result of all this data collection is a personalized web experience. Businesses use this ability to personalize web experiences to target marketing efforts, and social media sites use it to connect users to others,

products, and information that are personally relevant to the user.

In addition to making businesses larger profits and increasing the enjoyment of people's ICT experiences, personalized ICT has consequences for social relations. As Pariser (2011) argues, personalization shapes how information flows. News websites now cater headlines to personal interests, and personalization influences the links programs such as Facebook show us, thereby partially determining the content of videos we see on YouTube, the advertisements we see, and the blogs we read. And, increasingly, what we see on the Intent is consistent with what we previously told the Internet we liked. Thus, a personalized ICT experience filters the world's information and directs users on a path that largely reflects where they have already been and what they already believe. To again quote Pariser (2011, 2)

> "Proof of climate change" might turn up different results for an environmental activist and an oil company executive. In polls, a huge majority of users assume search engines are unbiased. But that may be just because they're increasingly biased to share our own views. More and more, your computer monitor is a kind of one-way mirror, reflecting your own interests while algorithmic observers watch what you click.

Personalized ICT experiences, according to Pariser (2011, 6), create the filter bubble: a unique universe of information for each of us, and this "fundamentally alters the way we encounter ideas and information." While humans have always tended to flock to that and those which interests them most (see, for example, Kandel, 1978; Vaisey & Lizardo, 2010), the new filter bubble amplifies these trends. The filter bubble isolates us because each person's bubble is unique, and it presents us with a bias–our own–but does so without us knowing it. These factors combine to create a virtual world where we see, hear, and read information that typically reaffirms our views and limits us from seeing information that may contradict our opinions, challenge our assumptions, or raise alternative perspectives on a given issue (see Pariser, 2011). And, since we are largely unaware that the information we are consuming is biased, we likely believe it is not.

The social implications of the filter bubble are numerous, but one implication particularly applies to differential association and online hate groups. The personalization of ICT shrinks our social networks and exposure to competing information and alternative worldviews (see Pariser, 2011). Thus, if a young person begins a venture into the world of online hate, his or her online world starts to coalesce around that position. Every time a youth opens a hate group's webpage, reads their blogs, adds their members as a Facebook friend, views their posts, watches their uploaded videos, or listens to their music links, his or her computer is tailored to this perspective. The information the individual receives about the world is filtered to reflect this hate-inspired worldview.

A self-sustaining process then develops. Individuals with some predisposition to hate (and I ignore for now where this

predisposition may originate) will likely by attracted to on-line hate messages. As these individuals investigate these hate messages, their computers, through the process of personalization, begin to introduce them to content and individuals who share this hate-oriented worldview. Every time these individuals click on the videos, webpages, blogs, new sources, editorials, and Tweets that agree with their ideology of hate, ICT refines their profiles to narrow the range of information they see and reflect their ideology and interests. They will eventually develop online connections with likeminded people because people's friendship networks tend to include those with similar habits, lifestyles, and cultural worldviews (McPherson et al., 2001; Vaisey & Lizardo, 2010).

As this occurs, the users' virtual world shrinks as they surround themselves with fellow haters and share with them ICT that reaffirms their mutual ideology. Network studies of online hate groups and blogrings indicate that these networks are densely-knit and connect likeminded people (see Chau & Xu, 2007; Burris et al., 2000). Then, as Laumann (1973, 104) noted long ago, "homogeneity in one's intimate social milieu tends to sustain a certain consistency and definiteness in orientation toward the world." Therefore, a network of likeminded people who increasingly see a world that reflects their extreme ideology and shields them from much of the information that could counter it becomes consistent and definite in their worldview. As a result, the frequency, duration, and intensity of definitions favorable to hate-inspired violence increase while the definitions opposed to such behavior simultaneously decrease, thereby increasing the probability that these individuals' definitions favorable to violence will exceed their definitions unfavorable to violence. Ultimately, this process will therefore increase the likelihood that some individual or set of individuals involved in this hate-oriented network will act violently toward the group or groups they hate.

Online hate groups as differential association: a Finnish example

From the above discussion, it is hopefully clear how online hate groups can serve as a source of differential association. Those involved in these groups interact with others like them, thereby creating and recreating, affirming and reaffirming, a culture of hate. Their discourse, both verbal and non-verbal, disseminates the definitions favorable to violence. They teach each other and learn from each other; they reward each other for espousing violence; they glorify past violent acts and actors. In this way, they create an environment where the techniques of, specific motives for, attitudes toward, and rationalizations of violence are repeated frequently, for long durations, and intensely by people whose opinions they value.

This environment is evident in the online activities of two recent Finnish school shooters Pekka-Eric Auvinen and Matti Saari. Auvinen murdered eight people in his Jokela High School in November of 2007, and Saari murdered 10 in Kauhajoki in September 2008. Both of these school shooters were members of a network formed around YouTube and the IRC-Galleria social networking website (Helsingin Sanomat, 2008; also see Kiilakoski & Oksanen, 2011). School shootings fascinate this community, which includes members from Finland, Germany, and the United States. Both Auvinen and Saari publically displayed their personas in online communities that would likely reward and reaffirm their violent identities. As Kiilakoski and Oksanen (2011, 255) note, "Auvinen performed a violent identity-play using the net," informing people of his hate-filled ideology and violent intentions on several Internet forums, including IRC-Galleria, Youtube and Rapidshare. Similarly, Johanna Sumiala (2010, 5, emphasis in the original) writes about Saari,

> (He) registered with YouTube, IRC-gallery, Suomi24 (Finland's largest online community), and Battlefield 2 long before the massacre took place. It is also worth noting that, in these virtual communities, the killer took up his place as a *resident* rather than a visitor. Having established his online profile, he sought out contact with like-minded users, and engaged in social relationships in global online communities that were, quite literally, a world away from his home in Finland.

The members of these communities recommend videos and other ITC related to school shootings to each other, and they frequently refer to previous school shootings (Helsingin Sanomat, 2008). For example, many of Auvinen's videofiles are tributes to Eric Harris, one of the Columbine murderers, who he idolized. Auvinen created a video entitled *Eric Harris*, quoted him in his manifesto, and used the same music in his videos that Harris did in the ones he made (see Kiilakoski & Oksanen, 2011). When Saari was a member of the group and planning his heinous act, Auvinen had become among those the group idolized. For example, one video glorifying Auvinen says, "He was intelligent. He was beautiful" (Helsingin Sanomat, 2008). While the final investigation could find no evidence that Saari and Auvinen were personally connected, it is likely that Saari knew of Auvinen, saw his violent profile, and was aware of the admiration his online friends showered on him. He also likely knew that he would soon become one of the heroes of this community, and the anticipated admiration by and fame among his online peers undoubtedly served as an extremely intensive "definition favorable to violence."

While it is undeniable that these recent mass murderers used ITC to express their hate with others who likely approved of them, this does not mean that their online activities caused, or even contributed to, their violent acts. Nevertheless, it demonstrates how ITC can connect those who hate with others who share and will reaffirm their worldviews. Research on online hate groups indicates that these groups have a decentralized structure with groups sharing similar interests and ideologies being closely connected (Burris et al., 2000; Chau & Xu, 2007). What is scary, in my opinion, is that most studies of the connectedness among online hate group participants were conducted prior to December

2009 when Google and others began personalizing ITC experiences. Given the density of the networks and similarity in their worldviews of online hate groups prior to personalized online experiences, this now-common practice will likely only amplify the homogeneity of these groups' social relations, solidify their consistency and definiteness in worldviews, and serve as even more intensive sources of differential association.

Conclusion

I have tried to apply a well-known and widely supported theory of criminological behavior to demonstrate how online hate groups can act as sources of differential association. The theory fits the current online environment well, and recent trends of personalizing online experiences only strengthen this fit. As online hate group visitors virtual world become personalized and tailored to their interests, they are likely to be directed to those sharing their ideology and directed away from those who disagree with them. This process, unintentional as it is, will serve to increase their exposure to definitions of the world that teach them the motives for, techniques of, attitudes toward, and rationalizations of hate-inspired violence. In addition, by using ICTs, it becomes easier to bypass the control and censorship of parents, neighbors, public bodies and state officials because users can disseminate their opinions, goals, and agendas horizontally, from peer to peer. Therefore, not only is it more likely people harboring extreme hate to find like-minded friends using ICTs than if they were limited to geographically bounded offline networks, it is also less likely that their extreme ideology will be discovered by those able to enact social control over them or offer a counter-ideology that could diffuse their hate. All of this increases the probability they will accumulate definitions favorable to hate in excess of definitions unfavorable to hate.

The above discussion clearly implies that the increasing presence of online hate groups will result in an increase in hate-inspired violence. Moreover, it implies an increase in all of the forms in which violence can occur: against individuals or groups, personally or structurally. These are, of course, empirical questions, and while I believe these hypotheses may be supported by future longitudinal empirical analyses, I emphasize that I am not predicting an epidemic of hate crime. Violence is extreme behavior, and most people, fortunately, avoid it (see Collins, 2011). Moreover, most online reactions to extreme acts of violence continue to be overwhelming negative, not supportive (see, for example, Lindgren, 2011). This is likely to continue. Nevertheless, a relative increase in hate crimes, as small as it is likely to be, may well be attributable to the growing presence of online hate groups. Only time will tell, and I sincerely hope I am wrong.

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