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LIFE-CYCLE OF INTERNET TROLLS

ABSTRACT

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This paper is a master's thesis about internet trolls and trolling with the main goal of finding what is the life-cycle of internet trolls. In other words, how a person becomes a troll, how their trolling evolves, and how does trolling stop. Trolling definitions are also examined to see whether they are adequate. This thesis also covers the current state of research done on trolling, with the emphasis on literature that is relevant to the life-cycle of a troll. The literature will also be evaluated against the results from this study. Past research on trolling is quite scarce when comparing to the multiple topics it holds, suggesting that the scientific understanding of internet trolls is still less than ideal. Most of the previous studies have not been able to utilize trolls' views, whereas this study only uses commentary from trolls. This study was conducted using a qualitative research method, thematic analysis, and used three different methods for data collection.

Trolling has become more commonplace in recent years and it has been claimed to be a formidable problem for civil discourse on the internet and therefore deserves better insight on the matter. Media accounts, literature, and public opinions rarely match when it comes to trolling. This shows that there is plenty of confusion and misunderstandings on the topic. By discovering the reasons why an individual decides to troll, and how they decide to stop, there can be better technological solutions developed that might discourage people to start trolling or encourage them to stop.

Keywords: Internet trolling, Trolling, Internet troll, Antisocial behavior, Life-cycle

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1 INTRODUCTION

Internet trolling has been around for decades now and it has gained more notoriety in the past decade due to increased media coverage of trolling activities. Trolling affects users in many different online spaces and it appears to be present everywhere (Coles & West, 2016a). Trolling has many faces and the term "trolling" has often been used widely about all kinds of malicious or harassing activities on the internet. Such activities might be starting inflammatory conversations, harassing individuals or groups, sharing hurtful imagery, vandalizing community updated pages, defacing memorial pages and it has even been used synonymously with cyberbullying. The media has often concentrated in the worst of cases and thus helped with creating this monstrous image of internet trolls. Wider public also uses the term trolling in various ways, adding more confusion to what actually constitutes as trolling. It is not uncommon in modern online discourse that anything from being offensive to merely expressing different opinions are enough for branding the poster as a troll. Trolling however does have a more humorous side to it and not all trolls do it out of malice. Trolls have even contributed to the wider online culture in the form of memes, which are now widespread and mainstream.

Literature about trolling is still rather scarce and many studies have pointed this out (e.g. Shachaf & Hara, 2010; Hardaker, 2010; Griffiths, 2014; Wi & Lee, 2014; Hardaker, 2015; Synnott, Coulias & Ioannou, 2017). Trolling studies vary from particular areas such as RIP trolls, misogyny, automatic troll detection, newspaper comment section trolling, how trolling is perceived, why do they troll, vitriolic discourse in online forums, political trolling and other trolling topics. Many studies have been among the first to tackle their specific topics as there are still many untapped topics and ways to approach trolling. Definitions of trolling have been constantly evolving due to trolling also evolving in the changing online environments, causing confusion about the basic issue of what trolling is. Studies about internet trolls are also difficult to perform as trolls are elusive and deceptive by nature, forcing researchers to find alternative approaches to study them. It is understandable that relatively new phenomena such as trolling in its current form can be hard to tackle. Sanfilippo, Yang and

Fichman (2017a, p. 1802) summed up well the diversity of trolling, "Trolling behaviors are extremely diverse, varying by context, tactics, motivations, and impact," and also added that the definitions vary, as well as perceptions and reactions to trolling. It is clear from this that trolling as a topic needs examination from multiple angles to be fully understood. Also, there seems to be a lack of clear consensus about many main topics within trolling studies, which is an obvious problem and therefore definitive answers are hard to find.

This study attempts to provide much needed information from the trolls' perspective and more precisely bring understanding of why and how trolling starts, progresses and ends. Most studies have not been able to use trolls for their studies and have had to rely on views of systems operators or non-troll members of online communities. Those approaches have often received different results. Another factor that has caused results between studies to differ has been their source, as different online spaces have different views of trolling, the results are different as well. This study uses data from 109 different trolls' own accounts of their trolling, both active trolls and trolls who have quit, from different sources. Three methods were used to collect data: online discussion interviews, online survey and online search of internet material in the form of confessions, comments and interviews. This is a novel approach that avoids the problem of relying on non-trolls' views and receiving information only from a limited number of online spaces. Information that is received directly from trolls can provide insights that other means may not be able to provide. However, there is still the possibility of trolls giving false statements. This problem is mitigated in this study by not focusing on the individual commentaries from trolls but to the overall picture provided by many trolls. Qualitative research method was used because of its ability to answer questions of how and why, therefore it is the most suitable method for the purpose of this study. For the analysis of the data, thematic analysis was used. This was a logical choice as it forces to get acquainted with the data thoroughly, provides means to sort out the varying data and makes possible for unexpected findings to emerge. In overall, this thesis attempts to answer three research questions:

1. Life-cycle of trolls: What is the life-cycle of a troll, how does one start trolling, what is their active trolling time like and why do they stop trolling? Especially of interest are the factors behind starting and stopping trolling. This is the main question for the thesis.
2. Troll definition: Are current definitions adequate and should there be a new way to define trolling?
3. Evaluation of past research: How well has the past research understood why trolls start, their behaviors and how they could be stopped?

In the literature review part of this study, over 70 scientific articles were read to compile a thorough summary of the current literature. Purpose was to include every article that was found on the topic of trolling, so an accurate overview of the studies could be made. The empirical part of this study consists of 109 different trolls' statements from multiple sources and the results are used to ex-

plain the life-cycle of trolls. In other words, the journey of a troll from start to finish. The results from this study can possibly bring more clarity to the topic of trolls and help future studies to calibrate their approaches and pursue topics that are more relevant.

The literature review part of this study first covers the definitions of trolling and makes a clear distinction between trolling and other online behaviors that are often conflated with it. Also, information of what literature knows about the trolls themselves and what drives them are looked at. Next, the activities that trolls take part in and what kind of behaviors they have, are presented. Last chapter of literature review looks at how trolls are perceived by other users online as well as what ways are there for dealing with trolls or for preventing trolls. Research method chapter will explain the used methods and how the research was conducted for this study. Results chapter goes through the findings from this study and explains why they start trolling, what happens while they are trolls and how it ends. Results are discussed in the discussion chapter and the life-cycle is presented.

2 TROLLS, WHO ARE THEY AND WHY DO THEY TROLL?

Trolling in its original form is an act of using a deceiving post as bait to get other members of an online community to respond to it, often not knowing that the troll is merely winding them up with a false story. Trolling has since transformed and consists of multiple and very different behaviors. This chapter will present the various definitions of trolling in the literature as well as how trolls are understood by the wider public. Also, the literature regarding who the trolls are and why do they troll is presented.

2.1 The Term Troll and Trolling

2.1.1 Origin of the Term

Troll and trolling as terms have an uncertain origin and the time when it was taken into use is obscure. A common view among scientific articles is that the use of the term trolling, regarding its use on the internet, originates from a form of fishing where a baited line is set in the water and dragged slowly by a boat to encourage the fish to bite (Herring, Job-Sluder, Scheckler & Barab, 2002; Cambria, Chandra, Sharma & Hussain, 2010; Binns, 2012; Griffiths, 2014; Bishop, 2014a; Golf-Papez & Veer, 2017). When considering trolling in fishing and in the earlier forms of internet trolling, there is a clear resemblance between those two activities - internet trolls also set a bait in the form of text to get an unwary user to bite.

It is not known when trolling had emerged as a term for behavior in electronic communications, but there is evidence that it has been around for longer than the modern internet. According to Hardaker (2013), Tepper (1997) said that Usenet has been credited as the place where trolling started, even though there is no direct evidence for it. Usenet is one of the first worldwide discussion systems on computers. Hardaker (2013) had found examples of messages in the

Usenet (e.g., Doyle, 1989; Maddox, 1989; and Mauney, 1982), where the term troll or trolling was used in a similar manner as the earliest definitions of trolling. The fact that Usenet began in 1980 (Giganews) and the oldest example by Hardaker (2013), that showed the use of the word troll, was from 1982, this would suggest that the term troll developed rather quickly since Usenet became available or perhaps it was adapted from some earlier source.

Another possible origin for the term trolling has been suggested by Bishop (2014a), who wrote that US Navy pilots had used a term, "trolling for MiGs" during the 1960s in Vietnam for the practice of provoking the enemy fighter pilots. Shepherd, Harvey, Jordan, Srauy & Miltner (2015) also pointed to this origin and noted that, perhaps not coincidentally, the Internet as well, has its origin in the US military.

Even though the most apparent source for the term trolling is from the form of fishing as explained earlier, it is now widely considered to portray the mythological creature, based on Scandinavian folklore, that hides under a bridge and snares people that go by (Herring et al., 2002; Binns, 2012). This association of the term is more accurate to modern trolling and is widely used by the media and the public. Especially illustrations and comparisons that are used with topics related to trolling in news, blogs, art etc., are of the mythological creature (e.g. Stein, 2016; Koyczan, 2014).

It can be observed that the association of the term troll, going from a fishing term to a mythological creature, can show that earlier times, the emphasis of the metaphor was placed on the activity and later to the person. Another example of the personification of the term troll is a rather recent comparison to the classic Trickster archetype from ancient folklores (Coleman, 2012; Buckels, Trapnell & Paulhus, 2014).

2.1.2 Definition of Trolling

Definition of trolling is still debated among researchers due to the vast amount of different trolling behaviors and activities. Studies have also used trolling and troll inconsistently in the definitions, making it unsure how it should be called. Definitions have changed during the years to match the growing variety of different trolling activities and the latest research, but there are still different definitions emerging and consensus has not been achieved. Coles & West (2016a) pointed out the difficulties related to the terms troll and trolling "as with other categories, both 'troll' and 'trolling' may have multiple, inconsistent and incompatible meanings, depending upon the context in which the term is used and the aims of the person using the term."

A table (table 1) was made to present examples of different definitions, even though not being a comprehensive account of definitions, they still give a good view of how the definitions have changed during the years. It can be seen from the definition on Netlingo in the year 1995 (Bishop, 2012a), the act of trolling was more about posting rather harmless messages in newsgroups that exaggerated something on a particular topic. According to Hardaker (2013),

Tepper (1997, 41) had described trolling to be more about defining group-membership and that it was mostly done by ingroup members to novices or to outgroup members. It has been suggested that this behavior was not meant to be harmful but more of an act to initiate new members into the group (Bishop, 2014a). Donath (1999) characterized trolling as a game about identity deception which is played without the consent of other players and added that a troll attempts to pass as a legitimate user, can disrupt discussions, and can damage the feeling of trust. These definitions already show a development going from merely exaggerating something, to being something that can cause damage for trust in an online community. What is common with these definitions is that there was no indication of viciousness or harassment in the trolling behavior during the 1990s.

In the definitions of the 2000s, there was some indication that trolling had started to shift away from the trickster type humorous behavior to more annoying behavior. Herring et al. (2002) defined that trolling can be pointless and time consuming for the victims. The Urban dictionary definition of a troll from the same year indicated that the troll's intent was to cause "maximum disruption and argument" (Alien entity, 2002). Turner, Smith, Fisher & Welser (2005) defined that a troll attempts to cause disruption by asking provocative questions. These definitions started to point out that the trolls now aimed to disrupt online communities by using provocative messages to create arguments and consume the victims time. By the end of the 2000s, trolling had shifted even further to disruptive behaviors. Cambria et al.'s (2010) definition, which included that trolling attacks were of an emotional kind and the responses from victims were provoked through malicious and vulgar comments. Shachaf & Hara (2010) defined trolling in their study of Wikipedia trolls as being repetitive, intentional and harmful actions where the trolls work alone, has hidden their real identities and they violate the policies of the page by being destructive in the community.

Since 2010, the definitions of trolling have started to take into account new aspects that are present in the behaviors and thus reflect more accurately the modern trolling and the increased research done on the topic. Hardaker's (2013) definition contained new factors like impoliteness, aggression, and manipulation to be a part of trolling and the definition also specified that Computer-mediated communication is used to create context that triggers or antagonizes conflict. Buckels et al. (2014) brought up behaving in a destructive manner in a social setting and added that it is done with no apparent purpose. Golf-Papez & Veer (2017) and Bishop (2013a) mentioned in their definitions that trolling is done for the entertainment of the troll(s) or their followers. Sanfilippo et al. (2017a) included that trolling can draw attention to different things such as anger that is caused by provocation, humor and trolling can be even used to communicate serious opinions. What is apparent from the definitions that emerged in the 2010s, is that trolling has received more research interest and the wide variety of trolling behaviors that are present today have added complexity to the definitions.

TABLE 1 Examples of different definitions for trolling

Year	Different definitions of troll/trolling
1995	"act of posting a message in a newsgroup that is obviously exaggerating something on a particular topic." This was the definition of trolling in the Internet dictionary Netlingo in the year 1995. (Bishop, 2012a, p. 1.)
1997	"Tepper (1997, 41) explains how trolling can define group-membership: those who 'bite' (i.e. who rise to the troller's bait) signal their novice, outgroup status, whilst ingroup members will identify the troller, will not be baited, and may even mock those who are" (Hardaker, 2013, p. 61).
1999	"Trolling is a game about identity deception, albeit one that is played without the consent of most of the players" (Donath, 1999, p. 43).
2002	"Trolling entails luring others into often pointless and time-consuming discussions" (Herring et al., 2002, p. 372).
2002	"One who posts a deliberately provocative message to a newsgroup or message board with the intention of causing maximum disruption and argument" (Alien entity, 2002).
2005	"A Troll attempts to cause disruption within a newsgroup by asking (and often successfully dragging out) a provocative question" (Turner et al., 2005).
2010	"In social web context, emotional attacks on a person or a group through malicious and vulgar comments in order to provoke response are referred to as 'trolling' and the generator is called 'a troll'" (Cambria et al., 2010, p. 2).
2010	"repetitive, intentional, and harmful actions that are undertaken in isolation and under hidden virtual identities, involving violations of Wikipedia policies, and consisting of destructive participation in the community" (Shachaf & Hara, 2010, p. 1). This definition was about Wikipedia trolls, but could very well apply to trolling in general.
2012	"the troll may be subtly or blatantly offensive in order to create an argument or may seek to lure others into useless circular discussion" (Binns, 2012, p. 548).
2013	"sending of provocative messages via a communications platform for the entertainment of oneself, others, or both" (Bishop, 2013a, p. 302).
2013	"Trolling is the deliberate (perceived) use of impoliteness/aggression, deception and/or manipulation in CMC to create a context conducive to triggering or antagonising conflict, typically for amusement's sake" (Hardaker, 2013, p. 79).
2014	"Online trolling is the practice of behaving in a deceptive, destructive, or disruptive manner in a social setting on the Internet with no apparent instrumental purpose" (Buckels et al., 2014, p. 1).
2016	"'Trolling' refers to a specific type of malicious online behaviour, intended to disrupt interactions, aggravate interactional partners and lure them into fruitless argumentation" (Coles & West, 2016a, p. 233).
2017	"deliberate, deceptive and mischievous attempts that are engineered to elicit a reaction from the target(s), are performed for the benefit of the troll(s) and their followers and may have negative consequences for people and firms involved" (Golf-Papez & Veer, 2017, p. 1339)
2017	"set of diverse pseudo-sincere behaviors that draw attention, ranging from anger at provocation to appreciation of humor to recognition of serious opinions communicated" (Sanfilippo et al., 2017a, p. 1802).

Even though there are many definitions of trolling, it remains unclear whether they can express the modern trolling accordingly and be universally understood and accepted. Coles & West (2016a) stated that trolling is a complex activity, which is still far from being clearly defined or understood, and the meaning for troll is assumed by research papers to have one fixed meaning even though there are many sub-classifications. Hardaker (2015, p. 2) had also addressed the problem of creating a clear definition of trolling: "particularly within media and social networking circles, it is possible to find widely divergent denotations and usages that make the creation of any clear definition almost impossible." Sanfilippo et al. (2017a) had reviewed trolling definitions and found that there were different perspectives ranging from act of deviance to a form of comedy and some were accepting of the behavior, even though many academic definitions are condemnatory. According to Synnott et al. (2017), the attempts to define trolling have been limited due to different manifestations of trolling across cultures and from constantly evolving in order to adapt to changing online environments and interactions. Synnott et al. (2017) also emphasized that reducing trolling to a single definition is not possible, because of contributing factors that have to do with the individual, group processes and cultural context. Also, the wide range of practices adds to the difficulty of defining it (de Seta, 2013). Definitions of trolling have turned the term troll to an umbrella term that encapsulates various negative online behaviors together, possibly even adding other predefined behaviors to it (Hardaker, 2013; de Seta, 2013; Golf-Papez & Veer, 2017).

Coles & West (2016a, p. 242) found that academic definitions have met disagreement from members of various online communities and they had come to a conclusion that "the category 'troll', and its associated activity of 'trolling' are disputed, contentious phrases." Sanfilippo et al. (2017a) also noted the disagreement that exists between academics and the public about the applicability of the term trolling. Academic research has often had to rely on definitions that have academic origins, citing often older definitions from times when trolling behavior was different and more limited due to older and fewer platforms. Therefore, definitions from nearly two decades ago, such as Donath's (1999) definition are greatly outdated in expressing the nature of modern trolling. A great number of studies have relied on choosing a definition from the different existing definitions or constructed a new one, thus creating more complicated field of definitions. Creating past definitions in academic research have, according to Hardaker (2013), had the problem that studies have taken definitions from the media, intuition and from online use. Addressing the problem of different definitions and disagreement of the current ones among members of internet communities, Coles & West (2016a) concluded that there needs to be a unified and consistent definition of trolling, that also considers the views held among members of online communities. Sanfilippo, Fichman and Yang (2018) has recently suggested that according to their findings there is reasonable cause to separate troll and trolling from each other and treat them differently.

2.1.3 Trolling Compared to Flaming

Trolling and flaming are terms that holds much resemblance in certain aspects and they are, according to Golf-Papez and Veer (2017), often used synonymously in academic research and in the media. Especially in the media discourse, the term flaming, and its behavior has been conflated into trolling (de Seta, 2013). Flaming as a term has presumably preceded trolling, but lately trolling has gained more attention in the media, academic research and in general use.

It can be argued that flaming is closely related to trolling (Hardaker, 2010) and it has even been referenced to being in some way, an ancestor to trolling (Milner, 2013). Many studies refer to flaming as being separate from trolling, even though the activities can cross (Hardaker, 2013; McCosker, 2014a; Shepherd et al. 2015; Puig Abril, 2017; Golf-Papez & Veer, 2017). Behaviors that are called trolling in the majority of trolling studies, have been occasionally passed as flaming in others (e.g. Jane, 2015). Griffiths (2014) stated that trolling can often merge other types of online behaviors like flaming. Flaming has also been counted as being one of the trolling practices (e.g. Manivannan, 2013) or considered to be merged together (e.g. Karppi, 2013). Besides these different views on the relationship of trolling and flaming, there are studies that reference both without addressing their relationship (e.g. Jones, 2013) or uses both to draw conclusions (e.g. Wi & Lee, 2014). Flaming has been used independently and also with trolling context. There are remarks about trolls doing flaming (e.g. Shachaf & Hara, 2010; Jane, 2015) or starting flamewars by posting "flame bait" (Manivannan, 2013). Know Your Meme website, which is focused on reporting troll and meme related content, explains a term "Flame trolling", that represents certain type of trolling, where a troll conducts flaming (RandomMan, 2015). Flame trolling has also been used differently by Bishop (2012c) to describe all trolls whose intentions are to harm others. As it can be seen from the different views in academic research, it is obviously still a contended issue what the relationship between flaming and trolling should exactly be. It is even unclear to Internet users what the line is between them (de Seta, 2013).

Even though the term flaming has existed at least since the 1980s, Moor and Heuvelman (2010) stated that the term flaming is controversial, has suffered from inconsistency of its definition and it could be argued to be a problematic concept. Jane (2015) wrote that flaming consists solely of heated online communications and added that an adequate definition of flaming is still missing. Flaming studies still suffer from using constructs created in the 1980's and 1990's, when the online environment was vastly different (Jane, 2015). Flaming has been characterized as a message which is intended to insult, provoke or rebuke (Herring et al., 2002) and it involves hostility and the use of offensive language (Moor & Heuvelman, 2010; McCosker, 2014a). Flaming is intended to incite anyone who reads it (Herring et al., 2002). Flaming can be used to express disagreement, different opinions, and humor (McCosker, 2014a) or it can be a response to perceived offense by other users (Moor & Heuvelman, 2010;

Hardaker, 2013). Hardaker (2015) suggested that "flaming should be understood as a sincere (over-)reaction to provocation."

Flaming has been portrayed in a more positive light than trolling. The activity related to flaming is narrower and is restricted to aggravated comments. Cho and Kwon (2015) suggested that on some occasions flaming can provide emotional release to the flamer, but even though the purpose might be harmless, the receiver of the message might find it offensive. Flaming can have emotional effects and be unconstructive to online discussion culture, even turning it into a norm in an online community (Cho & Kwon, 2015). Jane (2015) had expressed concern over the flaming literature mainly addressing the issue in its mild form and wanted to steer the future studies to include more hostile and harmful behaviors to flaming.

Flaming differs from trolling by not being deliberately deceptive, even though it can share the aspects of being aggressive and potentially manipulative, as with trolling (Hardaker, 2013). Trolling is meant to provoke, whereas flaming is a reaction to provocation (Golf-Papez & Veer, 2017). Trolling and flaming behaviors often merge, because both behaviors are intended to disrupt conversations, can lead to aggravated arguments (Herring et al., 2002) and they share the act of baiting for responses (Manivannan, 2013). Puig Abril (2017) writes that trolling does not start with insults, unlike flaming, otherwise trolling has failed, or it could be labeled as flaming. Shepherd et al. (2015) stated that, because of the crossing of the behaviors, it poses a question on where to draw the line. Puig Abril (2017) also suggested that flaming can be just flaming, but can also appear in trolling, whilst all trolling does not contain flaming. Flaming seems to be an activity that can be utilized by a troll for trolling purposes, making that act of flaming actually trolling. The difference whether flaming is just flaming, or trolling, can be found in the motives of the person doing it (Puig Abril, 2017). This creates a problem for the studying of both behaviors, because research done by observation or interviewing observers can never really know whether some messages are flaming or trolling, unless the person posting them expresses it. Trolling can be done in many ways and drawing lines between flaming and trolling merely by observation is problematic, because the real intent and motivation might not be obvious.

It is outside of this study to compare flaming literature against trolling literature but there seems to be some level of overlapping with these two research fields. Overlapping causes researchers to cite trolling studies for flaming research and vice versa (e.g. Jones, 2013; Wi & Lee, 2014; Jane, 2015). There should be a clear use of the terms throughout both research fields without conflating them.

2.1.4 Trolling Compared to Cyberbullying

Trolling has often been compared or linked to cyberbullying, especially in the media and this conflation of terms creates a problem for understanding what is meant by trolling (Shaw, 2013; Whelan, 2013). Trolling and cyberbullying do

share some aspects, such as being forms of cyberharassment or cyber aggression, and they are influenced by anonymity and online disinhibition (Zezulka & Seigfried-Spellar, 2016). The media has been known to present cyberbullying as a type of trolling (Phillips, 2011; Karppi, 2013; Bishop, 2014a), as well as some academic studies have made the same comparison (e.g. Bishop, 2012b; Lumsden & Morgan, 2012; Bishop, 2013a; Bishop, 2014a). Some studies have accompanied cyberbullying in their research alongside trolling without addressing their relationship (e.g. Coles & West, 2016b). Many academic studies though, treat trolling and cyberbullying as distinct entities (de-la-Pena-Sordo, Pastor-López, Ugarte-Pedrero, Santos & Bringas, 2014; Kopecký, 2016; Zezulka & Seigfried-Spellar, 2016; Sest & March, 2017; Golf-Papez & Veer, 2017; Seigfried-Spellar & Chowdhury, 2017).

Hardaker (2010) had identified aggression, deception, disruption, and success as basic characteristics of trolling, which according to (Kopecký, 2016) warrants the need to differentiate trolling from other antisocial behaviors online, such as cyberbullying. Trolls target strangers anonymously and are rarely personally invested in what they say, unlike in cyberbullying where the perpetrators are often known to the victims in real life, making trolling different from cyberbullying (Craker & March, 2016; Seigfried-Spellar & Chowdhury, 2017). Buckels et al. (2014, p. 1) also viewed that "The deceptive and 'pointless' disruptive aspects may distinguish trolling from other forms of online antisociality, such as cyber-bullying". In cyberbullying the intent is more straightforward, and the behaviors are very direct and specifically targeted (Buckels et al., 2014; Craker & March, 2016). Cyberbullying is also a repeated activity and its intent is to cause harm at specific individuals, unlike trolling which consists of wider variety of behaviors and can be one-time thing, unintentional or untargeted (Cheng, Bernstein, Danescu-Niculescu-Mizil & Leskovec, 2017; Golf-Papez & Veer, 2017). Cyberbullies target people who are not able to easily defend themselves and thus there exists a power imbalance, this power imbalance is not necessarily included in trolling (Golf-Papez & Veer, 2017). Cyberbullying is traditional bullying in an online setting (Zezulka & Seigfried-Spellar, 2016) and according to Olweus and Limber (2017) the future studies of cyberbullying should concentrate in the bullying context to avoid confounding findings from cyberaggression and cyberharassment where the perpetrator and victim do not belong in the same school or social unit.

Even though trolling is different from cyberbullying, some of the trolling tactics can be similar to what is used in cyberbullying (Kopecký, 2016), thus adding to the misconception of the relationship between these two activities. Zezulka and Seigfried-Spellar (2016) found in their study that there are individual differences between people who engage in trolling, cyberbullying or in both, therefore providing more evidence to support the distinction of trolling and cyberbullying.

It is important from the perspective of how to deal with trolls, to be able to identify whether it is cyberbullying or trolling. Normal defense tactics employed with trolls, such as the commonly used rule of "do not feed the troll",

might not work when dealing with a cyberbully. A Cyberbully does not seek a reaction for their own enjoyment but seeks to cause harm for their specific target. Zezulka and Seigfried-Spellar's (2016) study had respondents self-report their behaviors and interestingly 42 % reported engaging both in trolling as well as cyberbullying. It is important to note though, that due to conflation of the two behaviors in media it is possible that the respondents incorrectly identified their behavior, or that people who are more prone to trolling are also prone to cyberbullying. Sanfilippo et al. (2017c) noted that academic research distinguishes between trolling and cyberbullying, unlike the media where journalists equates them.

2.1.5 The Use of the Term Troll in Wider Public Use

The use of the term troll and trolling is widespread in public discourse nowadays. There is a wide range of different meanings and ways to use the term trolling within media and online discourse (Hardaker, 2015; de Seta, 2013). The term troll, can be used to discredit others in discussions (Pulman & Taylor, 2012) or even silence someone with unwelcome opinions by labeling them a troll (Sindorf, 2013). A trolling label can also cause serious abuse to be dismissed as merely trolling and can divert attention away from abuse such as sexism, racism and homophobia (Shepherd et al., 2015).

Academic definitions and uses have met resistance from online community members (Coles & West, 2016a). Hardaker (2010) studied how members defined trolling and as a result found four characteristics: Deception, aggression, disruption and success. Coles and West (2016a) analyzed user data to find out how they used the term troll, and as a result, four repertoires that describe trolls were identified: Trolls are easily identifiable, nostalgia, vigilantism and trolls are nasty. Their analysis found that even though users viewed that trolls are easily identifiable it was still not a simple and straightforward task. Coles and West (2016a) criticized previous studies, such as the studies by Hardaker (2010) and Shachaf and Hara (2010), for asking users directly to define trolling or drawing conclusions with data from a single online space. Asking directly from users can risk imposing the researchers own meanings to the answers. Meanings of terms can be fluid across situations and drawing data only from a single source risks the use of the term to be fluid in a similar way within that source, therefore the results might be accurate only to that source and their understanding of the term. (Coles & West, 2016a.) Use of trolling term and what constitutes as trolling can vary widely between different sites (Binns, 2012). Users also make a distinction between the use of the term trolling and being a troll, furthermore there is no fixed meaning for them (Coles & West, 2016a). Coles and West (2016a) cautioned that if trolling is understood differently by forum users, moderators, legislators and academics, it might result in ineffective measures to reduce trolling.

According to Leaver (2013), Australian media representation of trolling basically means any online abuse and the label of troll can be given from using

harsh words online or criticizing others, thus it can halt meaningful conversation on the topic. de Seta (2013) makes a rather similar point including American, British and Australian media using trolling as a term for generalizing internet abuse by conflating other behaviors into trolling. The use of trolling as a term is also dependent on culture and can appear differently in other countries. For example, Chinese Internet culture does not recognize trolling or a troll in a similar way to western culture, but trolling is present in different figures with terms of their own (de Seta, 2013).

2.2   Who are the Trolls?

Trolls that wreak havoc on the internet are often seen, but because of the protection that anonymity provides them, they are not known, unless they are caught, or they reveal themselves. The majority of trolls remain unknown and only a small number of them are exposed. Studies so far have suggested trolls as being born by having predisposing personality and biological traits to trolling (Cheng et al., 2017). Phillips (2015) had concluded that trolls are likely to be privileged individuals, a notion that received some support from Synnott et al. (2017) from their study where they noticed troll activity lessen during the day, when people usually would be at work. There was another view, where trolls are not considered to be only people who have certain traits or characteristics. Karppi (2013) and Cheng et al. (2017) suggest that anyone can become a troll.

Anonymity creates a problem for studying who the trolls are. Phillips (2013) stated that it is impossible to verify precise demographics, because trolls do not reveal information that could lead to identifying them and they can pose as being different gender or age. In Phillips' (2013) study concerning trolls in 4chan's /b/ board, she noted that some basic demographic indicators can be identified by looking at the language used and engagement to topics about American culture and politics. 4chan is an anonymous online image board and /b/ is the infamous board which is inhabited by many trolls. Phillips (2013) concluded that 4chan anons (anon is a name the members of 4chan have adopted and is short from anonymous) mostly identify as middle-class suburban Americans. Even though Phillips (2013) made some assumptions through observations about trolls' demographics on 4chan, observing trolls to determine some demographics can be problematic due to differences in online spaces. Binns (2012) found that there are huge differences in what classes as a troll in different sites and behavior that is welcomed somewhere can be offensive elsewhere.

Regarding the gender of trolls, it is often said to consist mainly of male participants partly because men have historically been more involved in negative behaviors online. According to Buckels et al. (2014) men rank higher in overall internet use and in antisocial behaviors online. Some studies have found that men were engaging in trolling more than women (e.g. Buckels et al., 2014; Craker & March, 2016). Phillips (2011), while doing her research on trolls, only

encountered "a mere handful of female trolls," supporting the view of trolling being heavily male dominated activity. Social online spaces have, according to Milner (2013), been historically more masculine and to participate in them has required to perform masculinity, thus strengthening the masculine ideology. Phillips (2011) had noticed female trolls and others who were impersonating as female, engaging in similar use of language as the male trolls. Nearly all studies, that have addressed the gender of trolls, agree that trolling is male dominated behavior. March, Grieve, Marrington & Jonason (2017) on the other hand, found that there was no difference in numbers between men and women who trolled in Tinder. This suggests that platforms where people troll, can have an impact on the gender distribution of trolls.

Trolls are generally considered to be white, even though there is not much evidence for that, it has been assumed from the behavior they exhibit. According to Phillips (2013), a lot of the humor by trolls is directed at people of color and there is a general assumption of whiteness among members of 4chan, which suggests that trolls are mostly white. Phillips also noted that on rare occasions when someone is not white, they have to flag themselves as racially other. Higgin (2013) did not directly mention trolls being white but referenced their actions as being a hostile response to diversity being introduced to the white, masculine and heterosexual online spaces. Whiteness among trolls however is a claim that should be considered in context of the western countries because trolling has been shown to be present also in other parts of the world (e.g. de Seta, 2013; Wi & Lee, 2014).

There are very few studies that have addressed trolls age, and none have attempted to find out what age groups trolls actually are. Trolling has often been associated in public discourse with teenagers, and according to Griffiths (2014), the media coverage around trolling by teenagers has increased in the recent years. Phillips (2013) had estimated it to be likely that most of the posters she studied in 4chan are somewhere between 18 and 30 years old, which was based on the cultural references that were used. Griffiths (2014) wrote about a campaign by vInspired, directed to young people aged 14-18, called 'Lolz Not Trolls' where 2000 young people participated in a survey. The survey found that one in ten of the respondents admitted to trolling (Rice, 2013). The survey however was not part of an academic research and the way trolling was defined only as an act of sending mean comments to strangers, was very inadequate.

Scientific literature in overall, knows very little about who the trolls behind their computer screens are and even though there are some research knowledge regarding gender, the other information is based on unverified assumptions. Studies that have addressed the question of who the trolls are, have not looked at it from a global perspective, thus the results are more accurate only to certain spaces. de Seta (2013) had some critique about generalizing the view Phillips (2015) had presented about trolls being, white, male and privileged, because her study was mainly about the North-American trolling culture and is related only to specific online spaces. Therefore, it could be argued that

studies that research only certain cultures and online spaces will end up finding results that are not necessarily valid elsewhere.

2.2.1 Who can Become a Troll?

Cheng et al. (2017) studied what might make users engage in trolling, they found out that trolling is not limited to the antisocial minority but can be done by ordinary people as well. They proposed two primary trigger mechanisms that can make someone troll. First was the individual's mood and the second was the discussion and its surrounding context. Through a simulated online discussion experiment they witnessed that both, negative mood and seeing other troll posts increased the probability of a user to engage in trolling as well. When both prerequisites were present the probability doubled. Their model showed that mood and the context of the discussion together is better at explaining trolling behavior than someone's history of trolling. What was interesting in the results of the study was that trolling behavior can also spread from person to person in discussions and reach further in the community. This provided evidence that trolling behavior can be contagious and in right conditions make ordinary people act like trolls. (Cheng et al., 2017.) These results however might be compromised as Seigfried-Spellar and Chowdhury (2017) had criticized how Cheng et al. (2017) had defined comments as trolling just by being obscene or profane. Hardaker (2010) had explained another way normal users might perform trolling, which might happen when users encounter a troll but turn the tables on them and start trolling the troll. Burroughs (2013) noticed that regular users may participate in trolling without being trolls through the use of memes that trolls use.

These results show that normal users can engage in trolling in certain circumstances, but there are no studies so far that have addressed how people, that could be considered as trolls, became trolls.

2.2.2 The Number of Trolls

It is hard to draw conclusions on how many trolls there are within a population, because the surveys and studies that have produced some figures, may not have taken into account the public understanding of trolling and the definitions may have been different as well. Also, to repeat the point that was made earlier, there are differences of how trolling is understood in different online communities and therefore surveys that ask how many participants have trolled, can produce different figures.

Griffiths (2014) showed a result that 10% of young people of age 14-18 admitted to trolling. Buckels et al. (2014) conducted a study, of 418 participants, where 5.6% reported that they enjoyed trolling others online. This result has since started to circulate in the media as a scientific fact of how many people of the overall internet users are trolls. For example, Dalbey (2016) wrote an article about TIME magazine author Joel Stein and managed to twist the result from

Buckels et al. (2014) to "According to Stein, 5.6 percent of the entire internet user base identifies as a troll." A survey conducted by YouGov.com (Gammon, 2014) showed that 28% of Americans admitted malicious online activity directed at somebody they didn't know. The study had used trolling synonymously with malicious behavior, not clearly indicating what trolling means. This survey also said that 12% of posters admitted to having crossed the line in such that their comments were removed by the moderator. Results like these, that have vaguely defined trolls in the survey, differ from the results that Buckels et al. (2014) study produced.

Golf-Papez and Veer (2017) referenced to the YouGov study and concluded that the number of people conducting trolling could be expected to be higher due to consumer misbehaviors being often under-reported. Cheng et al. (2017) suggests that actual trolls are relatively uncommon in online discussions and trolling is often done by the normal users. It could be argued that according to these studies, trolling is common, but the trolls are not and therefore some surveys are more indicative of the percentage of people who engage in trolling but not for how many people are actually trolls.

Another point to consider is that observing the number of trolls locally in an online space will not give a good reference point to how much trolls there might be, because "a single person could and usually would operate a number of profiles simultaneously" (Phillips, 2011). Online discussions can be hostile even without the presence of trolls and as Cheng et al. (2017) showed, comments of poor taste might result in worse comments from others. It can be hard to perceive whether members who post inflammatory comments are trolls when many are behaving badly.

2.3 Why do They Troll?

The reason why people engage in trolling has been generally studied from two different angles, either by studying the individuals engaged in trolling or by studying the situations where trolling occurs (Golf-Papez & Veer, 2017).

Studies that have focused on the individuals have found a wide variety of reasons behind trolling. However, the research done so far has been mostly conducted by observing trolls or interviewing people who deal or have encountered trolls. Not enough researchers have been able to actually interview trolls and get firsthand information. Regarding the studies that are related to where trolling occurs, in other words the effect that computer-mediated communication has on the emergence of trolling, has stronger theoretical constructs and are more unified throughout literature.

2.3.1 Reasons for Individuals to Troll

Reasons for trolling are not quite understood yet and the scientific literature has presented multiple different results on what motivates trolls in their behavior. Motivations and reasons that are often present in public discourse as well as in scientific literature are attention, boredom, and entertainment.

Attention has often been considered as one of the main reasons for trolling, both in media and academic studies. The common advice of "don't feed the troll" is predicated on the assumption that trolls want attention and when starved of it, they leave. Shachaf and Hara (2010) studied trolling in Wikipedia and suggested that the most common reasons to troll were boredom, revenge and seeking attention. Herring et al. (2002) also listed attracting attention as a motivation along with exercising control of others and feeling superior by manipulating others.

Trolling being entertaining to trolls is another more widely expressed reason to troll. In the study about Wikipedia, it also reportedly functioned as an entertainment venue for the trolls that found amusement and pleasure from vandalizing it (Shachaf & Hara (2010). Griffiths (2014) reported that nearly a quarter of the 14-18-year-olds, who had admitted to trolling in the survey, did it because they thought it was funny. That result complied with results, according to Griffiths (2014), Thacker & Griffiths' (2012) study where they found that reasons for trolling included amusement, boredom and revenge. Sanfilippo et al. (2017c) listed motivations that they found, and enjoyment was considered to be the most motivating factor.

Other studies have listed a variety of motivations: Social and ideological motivations (e.g. Sanfilippo et al., 2017a); negative mood (e.g. Cheng et al., 2017); did it because friends were doing it (e.g. Griffiths, 2014); activism, enjoyment and malevolence (e.g. Fichman & Sanfilippo, 2015); harassment, entertainment and social learning (e.g. Seigfried-Spellar & Chowdhury, 2017); trolls get pleasure from pranking and being offensive (e.g. Coleman, 2012).

Sest and March (2017) followed in the path of the studies that linked psychopathy and sadism to trolls and suggested that the thrill-seeking aspect of psychopathy is a central motivator for trolling. They concluded that trolls are motivated to inflict cruelty online. Damaging a community was also mentioned in Shachaf and Hara's (2010) study where they suggested that trolls are also motivated by causing harm. Harm as a motivation was addressed by Kopecký (2016), who found that the primary objective for trolls is not to hurt their victims but rather just have fun at their expense. Shepherd et al. (2015) discussed that trolls are often motivated by a sort of nihilistic superiority complex and not by hate or vitriol. Craker and March (2016) found social interaction of trolling to be a motivational factor in the form of social reward, which is derived from gaining negative power and influence over others.

Higgin (2013) proposed that trolling is a response to feeling threatened when the white, straight and masculine internet spaces are challenged by diver-

sity. Higgin also suggested that trolls "are all united by the common desire for freedom whether from diversity, political correctness, or censorship."

Fichman and Sanfilippo (2015) expressed some errors in previous studies where the context of comments has caused researchers to misinterpret some motivations. Similarly, other online users may perceive the troll's motivations incorrectly due to the context of the discussion. Results for trolling motivations have varied in the past studies and it could be either from drawing conclusions incorrectly from observations, in some cases, or there are a great number of different motivations that are gradually identified. The latter might be true, as recent findings by Sanfilippo et al. (2018) suggest that there are multiple factors that motivate trolling.

2.3.2 Effect of Computer-Mediated Communication

Computer-mediated communication refers to communication that is between humans but is mediated through a device, providing fast communication over space and time (Hardaker, 2015). Even though computer-mediated communications provide many benefits, it is also accompanied by negative aspects such as disinhibition, dehumanization, reduced ability to interpret intentions etc. as well as the negative effects brought by anonymity (Hardaker, 2015). Text-based computer-mediated communications has been suggested to cause more disagreements, lead to express more polarized views and reaching consensus takes longer than in face-to-face communication (Herring et al. 2002). According to Golf-Papez and Veer (2017), the studies that have explored the situations where trolling happens, trolling is caused by features of computer-mediated communications, such as "the availability of instantaneous exchange of messages, the lack of physical and social cues and a lack of shared norms governing interactions."

Computer-mediated communication often provides anonymity and many studies have identified that as an important factor when it comes to trolling. Internet provides people a way to find online spaces and people that match their interests, even if the interests are of a small niche (Buckels et al., 2014). Anonymity allows people to feel safe while discussing sensitive, inappropriate and dangerous issues (Herring et al., 2002). The benefits of anonymity are important to especially oppressed minority groups, but unfortunately anonymity provides trolls a way to abuse them. Anti-social people can also connect with likeminded people and find ways to express themselves anonymously (Buckels et al., 2014). Anonymity allows discussions where people can express their personalities and conduct lively debate, but trolls see this as an opportunity to disrupt and annoy them (Binns, 2012).

Anonymity facilitates trolling (Hardaker, 2013) and according to de Seta (2013) most studies identify its origin in anonymity, reduced accountability and lack of social cues that are present in face-to-face communication, resulting in people being able to express themselves more strongly online. Griffiths (2014) stated that according to many authors, anonymity facilitates disinhibition,

which allows users to feel more confident as well as provides them an opportunity to present themselves differently online. Thus, when people can behave differently online without repercussions, trolling becomes an opportunity for some (Griffiths, 2014). According to Binns, (2012, p. 549), Suler (2004) explained toxic disinhibition, which is characterized by "rude language, harsh criticism, anger hatred and a desire to explore a dark underworld," and is driven by "anonymity and dissociated imagination, in which users convince themselves that what they are writing is not part of the 'real world' or represents the 'real them'". Dissociated imagination was also present in the results from a survey from vInspired, which found that one in six teenagers claimed they did not think that abusive messages would hurt the recipient and half of the teenagers thought it was ok to say things online that they wouldn't say to someone in person (Rice, 2013). Deindividuation is another effect linked to anonymity, which is considered to "foster a sense of impunity, loss of self-awareness, and a likelihood of acting upon normally inhibited impulses" (Hardaker, 2010).

Online spaces that do not require showing identifying information are often said to be more attractive to trolls. According to Synnott et al. (2017), Cho and Acquisti (2013) found that when the level of identifying information increased, the less offensive the used language was. However, studies have also pointed that anonymity itself does not always lead to deindividuation. Coles and West (2016b) had found that members of an online community, even when there is no requirement to use their real names, were treating each other as individuals with unique personalities. This shows that interactions are not truly considered anonymous even when there is no identifying information available.

A more recent study has shown that it might not be just the anonymity that should be blamed for trolling. Coles and West (2016b) suggested in their study that it is not necessarily the anonymity that causes undesirable personality traits to flourish online, but it is the internet and the negative interactions experienced there. This suggests that anonymity is highly involved, but the toxic environments found online can also affect one's decision to troll. Anonymity is not always a requirement for trolling, as the following case presented by Phillips (2011) shows. In order to perform memorial page trolling, often referred as RIP trolling, a man created a page with his real identity in Facebook for a deceased person (Phillips, 2011). That page was created only for trolling purposes, showing that anonymity is not necessary for trolling.

2.4 Personality of Trolls

General view in the media and in public discourse has long been that trolls are bad people, even though there have not been studies showing this until recently. In recent years the personality of trolls has gained more research interest and especially the ones that use the Dark Tetrad personality traits as basis for their studies. These studies have found sadism and psychopathy to be the strongest

traits that drive trolling, but there are also other views present in the literature that are less supportive of personality traits being in such a big role.

Buckels et al.'s (2014) research of the personality traits of trolls was, according to them, the first one to comprehensively examine personality profiles of internet trolls. They found that trolls displayed high levels of the Dark Tetrad (narcissism, Machiavellianism, psychopathy, and sadistic personality) traits compared to other respondents. Sadism, however, was the only one that showed clear and strong predictive capability of trolling. They concluded that trolls are prototypical everyday sadists and they added that sadists troll because they enjoy it. (Buckels et al., 2014.) Craker and March (2016) also used Dark Tetrad in their study and their hypothesis of it being capable to predict Facebook trolling was only partially supported – narcissism and Machiavellianism were not supported, but psychopathy and sadism were. Sest and March (2017) had continued with a similar study that provided more support for sadism and psychopathy being present in trolls. They concluded that "the prototypical troll is male, high in trait psychopathy and sadism, and has low affective empathy" and added that trolls are master manipulators who understand the emotional distress they cause but do not empathize with their victims suffering.

Buckels et al. (2014) study had found that trolling enjoyment was negatively correlated to narcissism even though it was one of the Dark Tetrad traits. Narcissism did not predict Facebook trolling in Craker and March's (2016) study either and they suggested that individuals with high levels of trait narcissism may not engage in trolling, because they are too interested in themselves to disrupt others through trolling. Craker and March (2016, p. 83) also found that negative social potency was able to predict trolling in Facebook and concluded that "Facebook® users who engage in trolling behaviours are likely to be intrinsically motivated by obtaining negative power and influence over other people as a social reward." They also noticed in their results that sadism and psychopathy stopped predicting positively trolling behavior when negative social potency was added. Thus, Craker and March (2016) suggested that the best predictor of trolling might be social motivations instead of personality. Cheng et al. (2017) suggested that trolling is not driven by individual's inherent traits but is caused more by the environment.

The previously mentioned studies had not interviewed trolls directly but used other means like surveys to acquire data. One researcher that had interviewed trolls showed a different point of view about their personalities. In the study by Phillips (2011), many trolls she had worked with were dismissive of the presumption of trolls being sociopathic. As a more practical example of troll's personality, Phillips (2011) described a troll she had collaborated with, as a pleasant normal guy who just happens to be a troll and she made a point to remind that trolls are people like everyone else. Trolling associated with 4chan is according to Phillips (2013) predicated on them identifying subculturally as such: "Trolls are people who act like trolls, and talk like trolls, and troll like trolls, because they've chosen to adopt that identity." Phillips' (2013) view was geared more towards troll's being individuals who choose to participate in

trolling instead of being driven to trolling by their personalities. Studying trolls can be difficult because they are known to be deceptive with their presentation of themselves and tending to lie while trolling. Phillips (2011) managed to witness how a troll who had talked to her in a pleasant manner, giving reasonable answers, gave later an interview to a reporter, where he gave a villainous and remorseless image of himself, which differed from the one Phillips (2011) got. This example suggests that trolls can play the role of a villain when there is some level of notoriety to be achieved from it.

Individual differences between trolls have not been addressed very well in the research field of trolls and the previously mentioned personality studies treated trolls as a homogenous group, ignoring the fact that trolls participate in a wide variety of behaviors. Study by Seigfried-Spellar and Chowdhury (2017) had addressed the individual differences by studying RIP trolls and how they differ from trolls who do not participate in RIP trolling. Their results suggested that there are personality and morality differences between these trolls and that trolls do not all participate in the same behaviors. According to Coleman (2012) trolls have moral restraints in their behavior and the morality is tied to a notion that troll's pranking ways should stay on the internet.

Even though multiple studies have supported sadism and psychopathy as stronger traits in trolls, there are still some problems present with these results. Trolls were shown to have individual differences as well as they can be engaged in different trolling, it could be argued to be problematic to claim that all have sadism and psychopathy as personality traits. Another problem was that the studies have been conducted by participants self-reporting in surveys and as the study by Cheng et al. (2017) acts as an example, there are still differences on how a troll is defined and understood, therefore mislabeling of trolls is possible.

2.5   Definition of a Troll for This Study

This section covered the definitions of trolling by the academic literature, media and members of online communities. Also, the question "who are the trolls" was examined as well as the personality traits of trolls. Next the definition that will be used for this study will be discussed.

The empirical part of this thesis requires a definition of trolling and from reviewing the literature in this section it is clear that trolling definition will not be able to comprehend all of the aspects of trolling in one definition. This is caused by the complexity of individual differences, vast amount of trolling activities, different cultural contexts and the variety of platforms where trolling is done. Therefore, for this thesis the definition of trolling will be separated from the troll itself. This has been suggested by Sanfilippo et al. (2018). Trolling is not always done by trolls and by automatically linking the behavior to a troll creates problems when identifying actual trolls. It is possible to identify trolling

behavior, but it is more difficult to identify whether the person doing it is actually a troll.

Definitions for troll and trolling were created for the use of this study after reading through the trolling literature. The definitions are not based only on the previous definitions but on the overall image that emerged from the studies. The following studies impacted the formation of the definitions the most: Herring et al. (2002), Phillips (2011; 2013; 2015), Binns (2012), Shachaf and Hara (2010), Coles and West (2016a; 2016b), Hardaker (2010; 2013; 2015), Fichman and Sanfilippo (2015), Sanfilippo et al. (2017a; 2017b; 2018), Synnott et al. (2017), Whelan (2013), Milner (2013), Shepherd et al. (2015), Golf-Papez and Veer (2017).

Definition of a troll: Person who anonymously performs trolling as a pastime in a regular or irregular basis, seeking entertainment on others expense by the means of their choosing, ranging everywhere from prankster humor to serious abuse in a platform(s) of their liking.

Definition of trolling: Trolling is a deliberate act of baiting, provoking, entertaining, deceiving or using other means to fool others or elicit a reaction. Trolling can be used to seek entertainment or pursuit other goals, such as political or social influencing, vigilantism etc.

Trolls mainly seek entertainment whereas others might use trolling for whatever purpose and may even do so without the cover of anonymity. Only people who conduct trolling anonymously are considered as trolls by this study. Otherwise it would lead to a situation where a person would be labelled as a troll too easily and it would conflate people who are genuinely behaving antisocially with people who are trolling.

This study will also distinguish flaming and cyberbullying from trolling. Flaming will be considered in this study as a sincere aggravated attack on others in an online space, requiring the person to be angry and either take out their anger on others or become angry from provocation by others. Cyberbullying will be considered as a continued attack against individuals or community of people and is not driven by the entertainment provided by other's responses, but by abuse and causing harm.

Drawing clear lines between these often-conflated behaviors will help to distinguish trolling more easily and avoid including people who are not actually trolls. Also, detaching trolls from trolling provides a way to investigate the phenomena of trolling and trolls in a manner that reflects the public perception more accurately (e.g. Coles & West, 2016a; Sanfilippo et al., 2018). It also provides a way to exclude people from studies that are not real trolls and place them in a category of non-trolls. People who are trolling with their real identities are more likely to express their own attitudes and world views instead of treating trolling as a pastime.

3 TROLL ACTIVITIES

3.1 Types of Trolls and Trolling

There are many types of trolls and trolling, but there are very few studies that have addressed them in detail. Studies have acknowledged that there are different types and even subtypes of trolls, but generally they have all been considered negatively (Bishop, 2012c). Usually types of trolling have emerged into the literature with new studies that has studied a specific topic. There are studies that have spoken of Facebook trolls (Phillips, 2011), RIP trolls (Phillips, 2011), gendertrolls (Mantilla, 2013), Munchausen by the internet trolls (Pulman & Taylor, 2012), Wikipedia trolls (Shachaf & Hara, 2010), McCann trolls (Synnott et al., 2017), social and political trolls (Sanfilippo et al., 2017a) and others. What is often common with these troll types is that they are tied to a specific topic or to a specific platform, making them easily distinguishable from others. Some categorization has been attempted to make but there are no general categories that are followed by all researchers. Trolling is often treated as one and the same in studies even though the differences have been acknowledged by many studies.

3.1.1 Troll Categorization

The term "troll", holds many different behaviors and as such, its use is ambiguous on its own. There is a need to categorize different trolling to make it possible to express directly what kind of trolling is being discussed. As an example, it would be difficult to have a meaningful discussion about apples and oranges if they both were called only as fruit. The terms "troll" and "trolling" have been taken as having one fixed meaning when there are actually many subclassifications for them (Coles & West, 2016a).

Different kinds of trolling have been given many alternative names as an attempt to categorize them, yet none of them have been adopted to wider use so far. Bishop (2014b) divided trolls into two distinct main categories: Flame trolling, that is intended to abuse and offend, and kudos trolling, which is in-

tended to provoke for mutual enjoyment. Even though attempting to separate the abusive and humorous trolling, these definitions still are too strict and leaves many trolling behaviors out. Sanfilippo et al. (2018) made a similar but more functional division of trolling into two types: first being negative and deviant trolling and the other one is light-hearted trolling.

Other studies have attempted to create more complex categorizations according to trolls' behaviors, such as broad main categories with obscure names (e.g. Bishop, 2014c) and corresponding subtypes, also with obscure names, (e.g. Bishop, 2012a). Fichman and Sanfilippo (2016) also divided trolls into six categories but used motivations and topics as the dividing factors – Grief, RIP, ideological, LOL, nonideological, religion and political. Most recent categorization has been in a study by Sanfilippo et al. (2018) where they recognized four different behavioral types: Serious trolling, serious non-trolling, Humorous trolling and Humorous non-trolling.

There are also some independent categories introduced by other studies. Hardaker (2010) mentioned trolling behavior that is seen as a nuisance and not necessarily personally aggressive towards specific users as being termed as spam trolling. Coles and West (2016a) identified a category of a troll that they called as "acceptable trolling" and it was divided into two broad types of inept trolls and nostalgic trolls, where both are not successful trolls and therefore accepted and even liked because of the humor they bring unintentionally. Gendertrolling has been suggested by Mantilla (2013) as one category which is directed at women and consists of coordinated attacks by several trolls, gender-based insults, vicious language, credible threats, unusually intense attacks and it is often a reaction to women speaking out.

Trolling is also widespread in video games, but it has not garnered much research so far. Video game trolls is a category of its own but there is some confusion within the category. Trolls have been called as griefers according to Griffiths (2014), Adrian (2010). Even though an earlier study by Chesney, Coyne, Logan & Madden (2009) which researched griefing in an online game called Second Life, compared it to be closest to cyberbullying and gave no mention of trolls. Griefing seems to be an independent behavior that differs from trolling but is often used synonymously because of being later absorbed into trolling by some researchers.

Categorizing trolls is a difficult task and as the mentioned examples show, there are many ways to go about it. Very few studies have attempted this and currently there are no widely accepted categories that are used throughout the literature. One possible reason for the suggested categories not being adopted by other studies is the difficulty of replicating them in other contexts or because the categories have been too restrictive by their definitions and therefore not exhaustive. Another difficulty with some of the mentioned categorizations and why they have not been adapted by other studies may have to do with them not being self-explanatory and therefore difficult to understand and implement as they would require a thorough explanation.

When looking outside of the academic research area you can find plenty of different categories for trolls on the internet. Nuccitelli (2017) has collected definitions of over 100 different types of trolls in his website from different sources on the internet. This shows that categorizing trolls according to specific behaviors can produce an infinite amount of troll types and is therefore counterproductive to use specific behaviors as dividers when attempting to categorize trolls.

3.1.2 Troll Activities

Trolls have been identified to take part in numerous different activities and some are not limited to common trolling but have real world impacts as they can be illegal as well. Trolls often participate in trolling on forums and social media websites, which are commonly known activities but here will be explained some of the other behaviors that are present.

Some trolls take part in doxxing (e.g. Phillips, 2011; Bartlett, 2015; Bergstrom, 2011), which is an act of acquiring someone's personal details and revealing their information. Doxxing can be done to others or to themselves if someone decides to reveal identifying information or their true identity. Doxxing is a practice used by trolls and it has also been used against trolls by other members of online communities. (e.g. Phillips, 2011.) Doxxing can be used as a tool to intimidate or harm others, as trolls can for example threaten or send incriminating conversations to their targets employer (Hardaker, 2015). Community members can also do the same for trolls in an attempt to make them stop trolling (Sanfilippo et al., 2017a). Doxxing is also used by journalists to make stories about high profile trolls (e.g. Milner, 2013). Trolls have been known to doxx other trolls for entertainment as well as for strengthening the community norms about maintaining anonymity (Manivannan, 2013).

Raiding is an act of multiple trolls performing a coordinated trolling attack against a target. Raids are used by trolls that have some level of connectivity to other trolls, either by being part of a trolling group, visiting sites where raids are spontaneously discussed or just following popular topics where other trolls are attacking. (e.g. Bergstrom, 2011; Phillips, 2015; Higgin, 2013.) A popular example of raids are the Habbo Hotel raids where trolls coordinated their attack on 4chan and invaded one of Habbo's most popular destinations. They created dark skinned characters with afros and were forming swastikas, shouting racial slurs and blocking other players access to the pool. (Higgin, 2013; Holmes, 2013.)

Trolls also use other tools like spamming offensive or nonsensical content (e.g. Synnott et al., 2017) and flaming (e.g. Coles & West, 2016a) in their trolling efforts. Trolls also adapt to their environments by creating new ways to troll that are made possible by policies and design of a platform (e.g. Phillips, 2011; Massanari, 2017).

3.1.3 Organized Trolling

Trolling can be done alone, in groups or be coordinated spontaneously. Shachaf and Hara (2010) suggests that trolls operate mostly individually and because of that they lack in shared ideology. Wi and Lee (2014) acknowledged that even though trolls mostly appear in small numbers on different online spaces they can establish a community in online spaces where their numbers are larger. Binns (2012) wrote that committed trolls can take part in a community through their own forums where they communicate with other trolls and organize attacks against individuals, sites, or brands. Trolls can also be organized without a dedicated forum or online space that contains many trolls. Phillips (2011) noticed that trolls could coordinate attacks on Facebook and even share targets with trolls from other countries.

Anonymity is important regardless of the online space they inhabit or even when trolls are interacting only with other trolls. According to Wi and Lee (2014) anonymity is enforced by the system level in some spaces but also by the norms present in the communities. Trolls are careful of revealing any identifying information in order to ensure that they can go to extremes with their posts (Wi & Lee, 2014). Organized trolling is an anonymous activity and 4chan as an example does not allow for trolls to keep a consistent online persona because of the nature of the site (e.g. Higgin, 2013) but Facebook on the other hand can foster some connectivity between trolls with persistent personas (e.g. Phillips, 2015). Facebook allowed trolling to become a social activity unlike most of the forum trolling where trolls are completely anonymous and do not create social connections with other trolls (Phillips, 2015).

According to Bartlett (2015), trolls enjoy communicating with other trolls and use secret channels to coordinate their trolling efforts or to just argue with each other for fun. Some trolls have turned trolling into a game where they can compete with each other. Bartlett (2015) demonstrated a case where trolls were playing a game on Reddit. There was a group called "Game of trolls" and the trolls involved in the game received points from successfully trolling people and lost points if they were recognized as trolls – points were displayed in the group on a leaderboard (Bartlett, 2015).

Some other types of groups have been identified in the literature such as the McCann trolls in Twitter (Synnott et al., 2017) and PN group whose purpose is to disturb Second Life players, among other targets (Holmes, 2013). The most famous trolling group has been Anonymous that started off from 4chan and eventually formed into a hacker collective that is known around the world (Phillips, 2013). Other studies have recognized organized trolling taking place. Mantilla (2013) wrote about gendertrolling and stated that it is often accompanied by a coordinated trolling effort by tens or hundreds of trolls.

3.2 Behavior

There are many studies that have addressed trolls' behavior, but as with other parts of trolling there are many alternative views on the topic. Trolling behaviors have been considered rather uniform in the past but more recent studies have started to widen the understanding of trolls' different behaviors.

Deception is, according to Hardaker (2013), the most important part of trolling and it involves false identities, disingenuous intentions and lies. Deception was also witnessed by Phillips (2011) in her study where she stated that trolls often pretended to be someone else by creating different profiles and personas (Phillips, 2011). Trolls can claim to be experts on some issues and post useless messages in order to disrupt and derail discussions (Dlala et al., 2014). Golf-Papez and Veer (2017) stated that trolls used illegitimate or unjustified complaining as a tool to get reactions from brands or from consumers. Trolls can even create fraudulent websites and forums for their purposes (Kopecký, 2016).

Aggression was stated by Hardaker (2013) to be an important part of trolling and it was either expressed by the troll or, as in most cases, the target, who could be manipulated into showing aggression. In order to provoke their targets, they can use inflammatory and outrageous messages (Cambria et al., 2010), constantly spam nonsensical statements, use vitriolic language and post offensive memes (Synnott et al., 2017). Kopecký (2016) suggests that the primary objective of trolling is not hurting the target but to have fun at their expense by inciting highly emotional responses and quarrels. According to Phillips (2013), trolls enjoy transgression and disruptiveness.

Studies that have provided new information about trolls' behavior are usually conducted by other means than interviewing actual trolls. Studies that draw conclusions without the input of trolls have managed to find behavioral aspects in general level whereas studies that have collaborated with trolls have gained more detailed knowledge about their behavior. Following studies present findings about trolls' behavior in general level and were conducted by interviewing others than trolls. Sanfilippo et al. (2018) viewed trolling to be more complex than the previous literature would suggest. They concluded that trolling behaviors are influenced by unique contexts that evolve over time and therefore behaviors vary in different communities. The contexts are influenced, for example, by social expectations, technical features and policies. (Sanfilippo et al., 2018.) Their study also identified seven behavioral dimensions of trolls:

    1) communicated serious opinions;
    2) were representative of public opinions;
    3) were pseudo-sincere;
    4) were intentional;
    5) were provocative;
    6) repeated; or
    7) were satirical. (Sanfilippo et al., 2018, p. 6)

Behaviors are often identified through a certain lens which affects the results. Shachaf and Hara (2010) had identified four behaviors in their study about Wikipedia trolls: 1. Intentional, repetitive and harmful actions 2. They violate policies 3. Have interest and destructive involvement within the community 4. They use fake identities and work in isolation. Their study had used Wikipedia system operators as their information source whereas Sanfilippo et al. (2018) used regular community members. It can be observed from these two listings of behaviors that the source of information and the point of view they had, made a difference. System operators, or moderators in other words, have a different view due to them having to deal with trolls on regular basis, whereas regular members may not have to deal with trolls at all.

Researchers that have collaborated with trolls, mainly Whitney Phillips, have been able to bring more detailed insights about trolls' behavior that is missing from studies that have interviewed people who are mainly not trolls. Phillips (2011) had collaborated with trolls for her study and found that not all trolls take part in same behaviors or even find all trolling funny. For example, "real" RIP trolling, as in targeting family and friends of a deceased person, was considered by some of the trolls that Phillips (2011) interviewed as being uninteresting or distasteful. She had made other important findings as well. Phillips (2013) viewed trolling as a subculture and according to her trolls self-identify as trolls. This self-identification though has not been present in all other studies. Synnott et al. (2017) did not see the subcultural aspect in the trolls that they studied as the trolls did not self-identify as such. Phillips (2013) explained that 4chan trolls have adopted a concept called "lulz", which indicates laughter at others misfortune and is often derived from minority groups by trolling them. Trolls are in it for the lulz and they take it seriously, making sure they engage their audience and ensure that they pay attention (Phillips, 2013). Trolls also express sexist ideologies and language toward women, emphasizing masculinity among the community (Phillips, 2011). Even though trolls often use homophobic language and memes, there is a lot of gay porn and homosexual behavior present in /b/. Trolling is characterized by one-upmanship and therefore /b/ is often full of offensive and illegal content. (Phillips, 2013.)

Trolling is often directed at political issues, but it has been said that trolls only do it for the lulz. Trolls believe that nothing should be taken seriously and therefore they take an oppositional position against sentimentality and ideologies. (Phillips, 2013.) Trolls mainly provoke and as a general rule, they don't take principled stands on issues, but their trolling often ends up making a political statement, even when it is not intended (Phillips, 2011). Mocanu et al. (2015) had noticed in their study that trolls have engaged in producing "caricatural versions" of news that are distributed by alternative media outlets. The versions trolls post, often have a parodical flavor to it and they contain false information, but regardless of that, they have been able to spread widely and affect the formation of opinions among people who tend to trust unsubstantiated sources (Mocanu et al., 2015). Higgin (2013) suggests that all trolling has some level of

politics involved and even though trolls might claim that it's only for fun, trolls are concerned at least about political issues that are related to ensuring their freedom to troll.

Memes

Memes used on 4chan and by trolls are a core part, along with lulz and anonymity, in trolling culture. Internet memes can be of various forms such as image macros (images that contain text in a reoccurring format) and Rickrolling (act of tricking someone to view the music video of Rick Astley's song "Never gonna give you up") that are "self-replicating" in the sense of being widely distributed and remixed. (Leaver, 2013.) Trolls use memes and anime references in their trolling, reusing cultural objects for their purposes (Phillips, 2013). After trolls had created and amplified memes, they have become mainstream, and are a part of normal online interactions nowadays. (Leaver, 2013; Phillips, 2015.) Even though memes are considered as a source of humor now, they were originally a tool for trolls and still are. Memes can carry misinformation and be taken seriously by people, even ending up as proof in political discussions (Mocanu et al., 2015). Memes can "express not only political identities but also larger cultural values within networked popular culture" (Burroughs, 2013).

Racism and Intentions

According to Milner (2013), the assumption of whiteness in online spaces leads to considering people as white or not white and the central view of whiteness among trolls can support oppressive ideology. Many jokes in image macros shared by trolls are based on racial stereotypes and require the viewer to understand them. The jokes also work as reinforcing those stereotypes as well as the rampant racism expressed by the users on 4chan's /b/ board. The logic of lulz make it difficult to distinguish racism from irony, satire and parody that are prevalent in lulz. Poe's Law is an internet axiom which states that without clearly expressing intent it is difficult to distinguish if a person is presenting extreme views or satire of those views. This is often the case with trolls because it cannot be known whether a troll is expressing genuine racism or if it is merely "just for the lulz." (Milner, 2013.) Hardaker (2013) addressed the problematic nature of interpreting intentions and stated that trolls exploit the fact that their targets cannot know or prove what the troll's intent is. Because of this, trolls can be intentionally provoking their target while claiming to just debate them, but it also can cause someone to be blamed as being a troll when they are not (Hardaker, 2013).

Some researchers have interpreted some racially offensive behaviors by trolls as social critique about race in online spaces, whether they were unintended or not (e.g. Higgin, 2013; Phillips, 2015). Trolls have also been shown to engage in racist behavior just for entertaining themselves. Malmgren (2017) wrote about a case where Pepe the frog character that had long been used by users of 4chan for humor, was branded by the media as a symbol for white nationalists, because alt-right had used it. Users of 4chan decided to make that statement true and they started to harass people with racist images of the frog

on Twitter (Malmgren, 2017). This case shows that something that originated from 4chan and was not intended racist was turned into a racist meme because of the media attention it received.

Targeting

Current literature has not been very focused on how trolls choose their targets, therefore only few topics have produced information on the matter. These topics have been mostly about memorial page trolling, women, other stigmatized groups and how trolls follow media to acquire targets.

The biggest media responses from trolling have been because of RIP trolling cases. As a result, trolls have been condemned widely from attacking mourning people online. RIP trolls claimed to target "grief tourists," who are people that come to pay their respects out of selfish reasons and are not part of the family or friends of the deceased (Phillips, 2011). This explanation however can be hard to accept when some RIP trolls have been reported to attack, the pages created by family members, with offensive posts (e.g. Synnott et al., 2017). Trolls often target their victims according to what is big news in the media at the time (Phillips, 2011). Kopecký (2016) stated that trolls use controversial and taboo topics because of the possibility of larger emotional responses.

Herring et al. (2002) speculated that stigmatized groups are targeted because trolls have an underlying motivation of hatred towards people that are different and therefore threatening to the troll. Women, especially feminists are often targeted by trolls online (Herring et al., 2002; Shaw, 2013). Trolls often uphold misogynistic views and disseminate those views with memes and with the language that they use (Milner, 2013). According to Higgin (2013) women are met with hostility because when the online spaces that are considered white, straight and masculine are confronted by diversity there is often a hateful reaction, leading to creating a toxic environment in order to keep outsiders away (Higgin, 2013). According to Shaw (2013), trolls' attack feminists because they have strong anti-feminist beliefs. Trolls are not the only ones to blame for the hostility towards women online, but they are perpetuating and reinforcing the problem by attempting to deter women from using online spaces (e.g. Lumsden & Morgan, 2012; Mantilla, 2013).

Phillips (2015) described trolls being opportunists and taking advantage of what is popular in the media, what were sensitive topics and who were easy targets. Often trolls took advantage of the media hype around certain topics and flocked to troll people surrounded or discussing them and even used catastrophes to spread false information that sometimes ended up in the news (Phillips, 2015).

3.3 Trolling in Different Platforms

Recent studies have recognized that trolling is different across platforms (e.g. de Seta, 2013; Phillips, 2015; Bartlett, 2015; March et al., 2017; Synnott et al., 2017;

Sanfilippo et al., 2017b). Trolls have usually adapted to their new surroundings and some trolling methods are platform specific. Studies have mostly addressed that there are differences between platforms but specific studies on how certain platforms affect trolling have not been made yet.

Trolls appear to be present in almost every online space available (Bartlett, 2015; Coles & West, 2016a). Phillips (2013) argues that 4chan's /b/ board is the epicenter of online trolling activity and is populated by tens of thousands of self-identifying trolls. This statement might be giving too much credit for 4chan as other studies have shown that trolling is not exclusive to the Western or North-American online culture. Trolling is present in great numbers on local platforms in China (e.g. de Seta, 2013) and South-Korea (Wi & Lee, 2014). Even though most studies have addressed trolling in the Western cultures, it is however present globally.

Synnott et al. (2017) suggested that when studying trolls, it is necessary to recognize the specific form of trolling and take into consideration the online space where it is occurring. Trolls in different online spaces have adapted to their environment, thus trolling is different on Facebook, YouTube, video games and Twitter for example (Griffiths, 2014; Bartlett, 2015). Phillips (2015) stated that platforms impact greatly how communities are formed and what activities are possible to accomplish in them. This makes it necessary for trolling research to adapt to the evolving circumstances in the platforms, communities, interactions and behaviors (Phillips, 2015). Sanfilippo et al., (2018) also acknowledged the evolving nature of communities and emphasized the importance of contexts within communities.

> trolling behaviors vary from community to community because they are characterized by unique contexts evolved over time, through different social expectations, including triggers and opportunities for trolling, and different configurations, including technical features and policies that may enable and limit trolling. (Sanfilippo et al., 2018, p. 2)

de Seta (2013) argues that by the time research has gained understanding of one phenomena, it has already mutated into something else, because of the changing online environments, platform policies and cultural issues. Phillips (2015) stated that platforms rarely create new behaviors in their users but instead they are allowing the users to engage more efficiently in behaviors that they are already doing. For example, 4chan merely provided a platform where individuals who already had the impulse to troll could thrive (Phillips, 2015).

To sum up, trolling is different between platforms and it can be different in the various communities that are within a platform. Trolling evolves along with the communities and therefore trolling can change over time within a community.

3.4 Trolling Strategies

Trolls can use multiple strategies and there are many examples of different trolling acts present in the literature, but only some studies have addressed their strategies in more detail.

According to Herring et al. (2002), trolls use a strategy of first appearing sincere to other users, followed by laying a bait and finally provoking others to take part in a futile argument. More recent study by Hardaker (2013) identified six strategies that trolls use, but she also acknowledged that the list is not exhaustive, and the strategies might not be fully accurate because they were identified by normal users, not trolls. The six strategies were digress, (hypo)criticize, antipathize, endanger, shock and aggress. Hardaker (2013) also created a scale for the strategies where the opposite ends were covert and overt strategies. Strategies that are closer to covert end are based on affect, friendship, and trust in the approaches, whereas on the overt end, they are based on aggression and shock. (Hardaker, 2013.)

Digression of the discussion, where a troll intentionally diverts the discussion off from the main purpose. This can be achieved, for example, by spamming or bringing irrelevant topics to the discussion. (Hypo)criticize is a simple strategy of overly criticizing others in an antagonistic manner while being hypocritical. An example of this is attacking someone's grammar in a post with a post that contains grammatical errors as well. Antipathy trolling is a strategy of deceiving and manipulating others to response emotionally to a sensitive and antagonistic context the troll has created. Endangerment trolling is a strategy where a troll pretends to be helpful and gives advice or information which is wrong and even potentially dangerous. This often leads others to intervene in order to prevent any harm to unsuspecting users. Shock as a strategy consists of being insensitive and inappropriate about topics that are sensitive to others or leaving offensive comments about upsetting or emotional situations. Aggress as a strategy is a straightforward attack against a target without any justification and the purpose is to get the target to retaliate with aggression. (Hardaker, 2013.)

As Hardaker (2013) mentioned that her list of strategies is not exhaustive, other studies have identified more strategies. Some of the strategies involve deception to be successful and would be considered covert. Trolls can blend into an online community by pretending to be something they are not, but once they are in they start to antagonize users and even the ones that belong to a group they are pretending be part of (Coles & West, 2016b). Concern trolling is according to Shaw (2013) a strategy of masking trolling efforts by representing oneself as being concerned for others. Trolls can also use a strategy where they position themselves as victims, aggravating their target to show aggression and then play the role of the victim (Hardaker, 2015). Phillips (2015) explained a strategy of using subtle cues, such as a signaling word that invites other trolls to join in and troll the same target. Synnott et al. (2017) recognized the same strategy,

used by a trolling group, where one troll used a term "shill" against the researcher, prompting many more trolls to join in on the discussion. Other strategies that are straightforward and aggressive, thus overt, have been identified as well. Phillips (2011) wrote about a Facebook specific strategy of kamikaze attacks, where trolls create a profile for one vicious attack before the profile gets deleted by Facebook. In a study about McCann trolls on Twitter, a simple strategy was present in their behavior: they attacked anyone who disagreed with them, they ignored factual comments and even blocked persistent users who continued to present facts (Synnott et al., 2017). Trolls may, in cases where the target attacks back, rely on doxxing as a strategy, either by threatening to release the targets private information or actually release them in order to cause harm (Hardaker, 2015). Puig Abril (2017) found in her study that most trolls did not attack directly but used indirect attacks by using insinuation, therefore Puig Abril suggested that trolling can be successful even without profanity.

In the Synnott et al. (2017) study the observed trolls did not self-identify as trolls, but rather as a group of justice seekers but an analysis of the language used regarding justice seeking indicated that it was just a way to mask their trolling intentions. This could suggest that the trolls can try to avoid being branded as trolls in order to gain more legitimacy in their behavior and elude being treated as trolls. After attempting to engage trolls for their study, Synnott et al. (2017) also experienced trolls using personal attacks and were mocking the researcher's achievements and capability to conduct research. The statements were similar to what Bishop (2013a) faced when interviewing a troll.

In a case of a memorial page trolling in Facebook written about by Phillips (2011) when trolls were not able to tarnish the official memorial page, due to it being heavily moderated, one person created a new page purely for trolling the deceased there. This shift in strategy allowed trolls to get as nasty as they wanted in a public space that was purely dedicated to trolling the deceased. This worked, and it created a lot of publicity. This case shows how it might not be enough to fight off trolls by controlling your space rigorously.

Strategies presented here could possibly be just a fraction of possible strategies that are used by trolls. There can be platform specific variations of these strategies and other ones that have yet to be reported in scientific literature.

4   DEALING WITH TROLLS

Trolling has also been studied from the view of bystanders, victims and moderators. This chapter will present the various ways that trolling is perceived, what outcomes trolling can cause, how trolls should be dealt with and what ways are there to prevent trolling.

4.1   How Trolling is Perceived

Trolling does not always have the same effect because it is tied to the perceptions of people who are witnessing or experiencing it. Depending on the people and the context, trolling can be offensive or even humorous.

According to Sanfilippo et al. (2018) scientific literature has often been concentrated on the negative aspects of trolling because of how victims and bystanders have perceived trolling to be antisocial or deviant. Cheng et al. (2017) also recognized the emphasis of negative aspects in previous studies and media. Many believe trolling to be committed by sociopathic individuals and this view has been reinforced by studies that have showed trolls having predisposed personality traits like sadism (Cheng et al., 2017). Negative perceptions are especially prevalent in the medias interpretation of trolling. Sanfilippo et al. (2018) stated that media views trolling purely negatively because of the extreme trolling examples and the medias tendency to conflate cyberbullying with trolling. Many examples of trolling however have been only annoying or humorous, which shows that there is a disconnect between media and scholarly understanding of trolling (Sanfilippo et al., 2018).

Not every study has supported the exclusively negative view of trolling as some studies have also identified positive perceptions of trolling. Coles and West (2016a) noticed in their study that members of an online community viewed some forms of trolling to be desirable and concluded that there might be a need to preserve some forms of trolling. Hardaker (2015) found that some members of a community where they had been accustomed to trolls, they were

amused by trolls of poorer quality and even criticized them for it. Trolling is viewed as being more acceptable if it is perceived to be ideologically motivated, such as championing free speech (Sanfilippo et al., 2018). Trolling, even when highly hostile, can be considered as a playful game within a community and be highly valued when showing humor and in-depth knowledge of the community conventions (Jones, 2013). Coles and West (2016b) showed a perception that posters had viewed trolls as being a form of "social glue" that allows community members to join together and rally against the trolls. Trolling is often tolerated because of the freedom of expression values communities hold.

What is perceived as trolling varies between different online spaces and communities (Binns, 2012). The kind of language, opinions or behaviors that could constitute as offensive or hateful in one community might be welcome or valid criticism in another (Binns, 2012; Shepherd et al., 2015). Community norms affect how trolling is perceived in a community and on a personal level the context of trolling, personal experiences, values and the observer's role in the community affects the perceptions (Sanfilippo et al., 2017a; 2017b). Whelan (2013) viewed that perception of trolling is dependent on which category someone is affiliated with, for example whether they are men or women, what political ideology they follow, are they supporters of free speech and so on.

Participants in Sanfilippo et al. (2017a) study perceived that trolling has diversity that warrants for behaviors to be treated differently. Some trolling that is considered socially acceptable, can be difficult to manage as handling the situation poorly can cause public view to turn more negative. Example of such trolling was satirical and pseudo-sincere posts against the Governor of Texas after he had given controversial statements about women's reproductive rights. Public can even sympathize with trolls that are acting on social or political issues like the aforementioned, therefore such trolling can be perceived as desirable by the public that agrees with the troll's stance. However, even though the study participants perceived this type of trolling as desirable it is not desirable for the one being trolled. (Sanfilippo et al., 2017a.) Sanfilippo et al. concluded that it is not appropriate to consider all trolling as deviant behavior that needs to be punished or discouraged because some ideological trolling can promote open public discourse.

Community members perceptions of trolling may even lead to claims of an innocent member being a troll, whereas covert trolls may go undetected for long periods of time (Hardaker, 2013). Therefore, trolling can be used as a way to silence others either unintentionally or intentionally.

Participants tended to trust the visible name of a troll to indicate whether they were men or women and reacted according to that perception. Participants viewed trolls who were men more negatively, because women were interpreted as being confused. (Fichman & Sanfilippo, 2015). Context is an important factor on how trolling motivation is perceived. Different cultures and online spaces consider behaviors differently, making context an important part. (Fichman & Sanfilippo, 2015). As it was with Rick Perry case, the context made it more acceptable to some of the people of the public.

Trolling is perceived more negatively and as a bigger problem by users who value ideal community norms, are moderators who fight the trolls and those who have a bigger vested interest in the community, such as active participants, commercial sponsors, and new members seeking inclusion. (Sanfilippo et al., 2017a). Other study noticed participants perceiving trolling more positively than previous studies and media accounts would suggest. It was suggested to be because of the participants had a sharp differentiation between trolling and cyberbullying. (Sanfilippo et al., 2018.) It could be suggested that better understanding of what trolling is can make a difference to results. Sanfilippo et al. (2018) also found that participants acknowledged there was confusion over the term and its use, leading to misapplication of the term and gradually leading the term becoming less meaningful.

4.2 Outcomes of Trolling

"Trolling can have serious consequences for both the perpetrators and the victims of such behaviours, not only in their online spaces, but also in their daily life" (Binns, 2012). Trolls actions have been seen to harm the community they inhabit (e.g. Shachaf & Hara, 2010). According to Puig Abril (2017) trolls in Twitter can be detrimental for discussions about controversial issues because they are capable of halting and preventing future discussions of the issues. Presence of trolls can turn an online space into a hostile environment which is unwelcoming to new members and can even lead to creating a new norm out of uncivil behavior (Coles & West, 2016a). High levels of deception by trolls in a group can cause the group to become sensitive to trolling, even rejecting honest questions by members as trolling. For new members this can be off-putting and being labeled as a troll can cause damage to their online reputations. (Pulman & Taylor, 2012.) Trolls who target support groups and spin emotional stories can get other members emotionally invested and destroy trust within the community. Trust is crucial for people dealing with sensitive issues but even one troll can cause long-lasting problems for those communities. (Pulman & Taylor, 2012.) Trolling has been suggested to have also positive effects to online communities. Herring et al. (2002) wrote that due to disruptions on an online community there might even be an unintended consequence of forcing them to create norms and rules that strengthens the community's self-definition as a community.

The 'Lolz Not Trolls' campaign that was mentioned earlier, found that a third of the respondents had been trolled online in the last six months and just over a quarter faced regular attacks. As a result of trolling, the ones that had been attacked reported that about a third of them lost confidence and felt shattered and almost half kept the attacks secret, due to the feeling that they had no one they could tell about it. (Griffiths, 2014.) In Griffiths's (2014) paper he also found that people who experienced trolling had a negative association with self-esteem due to the trolling attacks. Victims of trolling can face public em-

barrassment in an online community from being trolled and can even be mocked by other members for falling for the troll (Hardaker, 2015). Psychological effects of experiencing online trolling are similar to what offline harassment causes (Craker & March, 2016). According to Coles and West (2016a) trolling might even lead victims to getting suicidal ideas and harming themselves. Teenagers have even committed suicide over extreme cases involving abuse (Cambria et al., 2010). However, Jane (2015) wrote that even though media reports have solely blamed cyberbullying in the cases of suicide, depression and suicide are complex issues and are most likely caused by many different factors.

The harmful outcomes of trolling are not only restricted to individuals or communities' wellbeing, but they also cause financial consequences to businesses. Magazines that have online communities have an interest in preserving their brand and community suitable for their readers, but even few dedicated trolls can affect the atmosphere and make it less appealing to regular visitors (Binns, 2012). News sites are also experiencing the same problems. Trolls can cause damage to the user experience of readers and consequently for the site in the form of losing subscribers, damage to reputation and increased use of time deleting unwanted messages (Turner, 2010). A troll presence however is not always bad for news sites. According to Coles and West (2016b), MacKinnon and Zuckerman (2012) wrote that trolls who have successfully created controversy in an online newspapers comment section may actually increase traffic and create more revenue for a news site. Shutting down comment sections, to avoid the negative effects of trolling, might not be a viable option. Sindorf (2013) explained a case where an online newspaper shut down their commenting function because of worsened politeness, leading many readers to disagree on the basis of it being a blow against free public expression.

Trolling can also bring harmful consequences for the trolls themselves. Trolling can sometimes cross the line of illegal behavior and there are multiple cases where trolls have ended up in court and prison (e.g. Morris, 2011; Lumsden & Morgan, 2012). Trolls can get harsh sentences, as in a case mentioned in Bishop's (2012b) study, where a troll was sentenced to four years in prison because the judge wanted to set an example that would work as a deterrent for other trolls. Trolling has prompted action even in the government level, as it did in Australia because of the actions of RIP trolls. Minister of communications demanded more internet regulation, using the troll's actions as proof to show the necessity of stronger regulation. (Pulman & Taylor, 2012.)

Trolls can also end up getting problems from regular community members. Bergstrom (2011) presented a case where a troll who had pretended to be an elderly man on Reddit for two years was revealed to be fake. The troll was then doxxed and publicly berated by other Reddit members. Bergstrom pointed out that the other members were ultimately guilty of greater violations in their quest for revenge than the troll during his two years of trolling.

There have been other outcomes as well from trolling. In the case of white nationalists in USA who call themselves the "alt-right" and have adopted trolling in spreading their agenda, they have managed to create an illusion of

having greater number of members than they actually do (Malmgren, 2017). Trolls have successfully managed to fool media several times and sometimes even caused real worry for people over made up things (e.g. Phillips, 2015; Bartlett, 2015). Trolling culture has also contributed positively to mainstream online culture in the form of memes for example (Phillips, 2015). Some researchers argue that trolling has the capability of generating valid societal critique and meaningful discourse over important issues, however it might be unintentional (e.g. Phillips, 2015; Higgin, 2013).

4.3   How to Deal with Trolls

Attempts to stop trolls have been rather unsuccessful as trolling is still pervasive online (Sanfilippo et al., 2017a). The most known instruction to deal with trolls is to ignore them, as the known wisdom goes: "don't feed the trolls!" (Shachaf & Hara, 2010; Cambria et al., 2010; Binns, 2012; Pulman & Taylor, 2012). Coles and West (2016a) found, however, that the method of not feeding the troll might lead to other community members problematizing that decision.

Community members often engage trolls even if they are warned not to (Sanfilippo et al., 2017a). There is a risk when confronting a troll as the trolling can escalate and the troll may even resort to other means such as doxxing to defeat their target (Hardaker, 2015). Hardaker (2015) had identified different responses to trolling:

(1) Engaging by responding sincerely;
(2) Ignoring the trolling attempt overtly or covertly;
(3) Exposing the troller to the rest of the group;
(4) Challenging the troller directly or indirectly;
(5) Critiquing the effectiveness, success, or 'quality' of the troller;
(6) Mocking or parodying the trolling attempt; and,
(7) Reciprocating in kind by trolling the troller. (Hardaker, 2015, p. 23)

Even though community members attempt the aforementioned responses, some studies however suggest that there is no effective method for dealing with trolls. According to Sanfilippo et al. (2017a), Dlala et al. (2014) and Cambria et al. (2010) users cannot do much more than ignore, block, doxx the troll or delete their messages in online spaces where it is possible.

Depending on the community, the members can attempt to deal with trolls together. Community members can share information and guidance on how to deal with trolls and even monitor and react together, thus making them more prepared for trolling (Shaw, 2013; Sanfilippo et al., 2017a). As a way to deal with trolls, the community members can also group up against the troll and mock the troll's efforts in hope of driving it away (Hardaker, 2015; Coles & West, 2016a). Community responses can also go too far, as it is shown in the

cases of internet justice where the offender of the community norms can be shamed, made to lose their job and even are threatened to be killed (Fish, 2017).

Getting experience in online discussions and with trolls can help users to call them out when someone is attempting to troll (Shaw, 2013). Some may even take it further. Community members can go after a troll after it has been identified and attempt to troll the troll (Hardaker, 2015; Coles & West, 2016a). This approach however might not be desirable in a longer run as it might encourage a new norm of behavior in a community (Coles & West, 2016a). Trolling the troll might also put the normal member in risk of being moderated along with the troll (Dlala et al., 2014).

One way to respond to trolling is to make the trolls efforts public and share the abusive messages. This response is often used by feminist bloggers and the intention is to get attention to the hate they receive and publicly shame the trolls. (Shaw, 2013; Eckert 2017.) This approach however has proved to be ineffective and it sometimes even causes more abusive attacks, yet the practice persists because the trolling victims feel compelled to share it and not feel victims by being silenced (Shaw, 2013; Eckert, 2017).

In case of public figures being trolled it can get more difficult to deal with as the public opinion has to be kept in mind when attempting to fight off a troll (Sanfilippo et al., 2017a). In cases of ideological trolling it can be hard to stop the trolls as the situation can turn around to deal about the individual's right to troll (Sanfilippo et al., 2017a).

Identifying trolls is not easy, but it is important in order to direct the actions against trolls and not against genuine members (Coles & West, 2016a). There is no guide on how to identify trolls but generally community members consider that they know a troll when they see one (Coles & West, 2016a; Sanfilippo et al., 2018). However, members were found to be cautious of publicly declaring someone a troll, even after identifying it as being one (Coles & West, 2016a). This may have something to do with the inherent uncertainty of identifying trolls. Intentions cannot be known, and the intentions of others can only be hypothesized, making it harder to identify whether someone is being genuine or trolling and this is what the trolls use in their advantage (Hardaker, 2015). Hardaker (2015) also made a point that the most skilled trolls that are covertly trolling may never be identified as trolls. Trolls can keep up their act for months and during that time they might not show any signs of being a troll (Pulman & Taylor, 2012). What makes identifying trolls' also problematic is that someone who appears to be a troll might only be an inexperienced user who is misunderstood due to the shortcomings of computer-mediated communications (Hardaker, 2010). One way to attempt identifying someone as a troll is to observe when they present troll like behavior and see if they continue after being warned (Hardaker, 2010). Zelenkauskaite and Niezgoda (2017) studied "Russian trolls", who were disseminating false information and promoted their agenda with trolling. They found in their study that regular users of Twitter had hard time even recognizing whether some posts were made by bots or humans.

Trolls can also target companies and in these cases the common responses might be difficult to perform as the company has to think of their image and their consumers. Trolling is also problematic to companies because the consumers who visit their social media pages for example, expect the companies to deal with the trolls even if it is the visitors that are the target of the trolling. (Golf-Papez & Veer, 2017.)

4.4 How to Prevent Trolling

Trolling is diverse in behaviors and in experiences of it, which leads to requiring diverse strategies on how to manage and respond to trolling (Sanfilippo et al., 2017c). Golf-Papez and Veer (2017) suggests that attempts to control trolling may in fact lead to more trolling because when control methods are developed without the knowledge of how trolling starts and what fuels them, they can have surprising and negative effects. There are, however, some preventive measures that can be taken and active solutions that prevent trolling.

Moderators are important in attempts of keeping trolls at bay and it is important that moderators go actively after trolls. Some amount of trolling is tolerable, and action is usually taken when trolling goes too far (Coles & West, 2016a.) For groups that are nonmainstream, the moderation of trolls can be difficult as they must balance between free expression and safety for their members (Herring et al., 2002). Pre-moderation of comments has been found effective in some cases but not in all cases and it requires more work (Eckert, 2017). Moderation might not work in all case as it is hoped. Attempts of removing the trolls and fighting back can have an adverse reaction of the trolls engaging more, writing more horrible comments and more frequently (Golf-Papez & Veer, 2017).

Especially younger people can be more vulnerable to trolling as trolls or victims, and therefore educating them about appropriate "netiquette" could be useful when attempting to prevent trolling. Griffith (2014) had worked together with a youth organization to develop a guide for teenagers in order to teach them how to behave online.

In preventing trolling, legal means can help in some cases. One way of trying to stop trolls has been to go after the host of the site that contains the trolls' comments. Some magazines have been threatened by lawsuits because of the content that their online forum users have created (Binns, 2012). Trolls themselves can face lawsuits and criminal justice if the country they reside acknowledges trolling as a punishable crime. According to Synnott et al. (2017), Sean Duffy was one of the first trolls to receive a custodial sentence in 2011 from trolling a deceased girl's tribute pages. There can be a deterring factor when trolling can be met with legal means but as Phillips's (2011) paper showed, trolls can work together and organize attacks to victims of other countries and this way avoid legal consequences.

Using a good platform design can make dealing with trolls easier and prevent them. Allowing volunteers to perform moderation can be a viable option if the community has enough committed users, but it comes with drawbacks if someone decides to misuse it and delete legitimate comments (Binns, 2012). Gamification is a site design that uses tasks or compliance to rules to award points to users for positive behavior. Some systems allow users to accumulate points to gain a higher status upgrade which can determine how high the comments will end up in a thread for example. Trolls will appear lower down the list because of this kind of a system and gives them less attention. (Binns, 2012.) Newspapers and magazines online forums can greatly benefit from having the writers participating in the online conversations. This approach has been successful, and it helps to prevent forums from turning aggressive. (Binns, 2012.) If a forum is especially problematic, then the answer might be to wipe the slate clean and de-register the whole user database and do a site redesign. After opening again, the problem users might have dispersed, and the site has a chance to encourage friendly users by thanking them and setting a new tone for the forum. (Binns, 2012.) Trolls can always create new accounts even if they are efficiently deleted and therefore a drastic measure such as wiping the slate clean could be the answer. Phillips (2011) had given a term "trollercaust" for high rates of profile deletions that happened due to troll raids in Facebook, but even in such cases it the trolls could always come back with a new profile. One way to prevent trolling is to put up a paywall for a blog for example and make the trolls pay if they want to continue. This paywall can be targeted only to affect trolls and it has been found to be effective, even though it has not stopped trolling completely (Eckert, 2017).

Automatic anti-trolling methods mainly consist of blocking fake accounts on the basis of identifying whether some IP address has multiple accounts and show anomalous activity in the form of sending many messages to non-friends and if their friend requests get rejected constantly (Cambria et al., 2010).

One way to prevent trolling is to have stronger verification before users can post messages. Binns (2012) states that the obvious solution is removing anonymity of the users in order to normalize behaviors that have gone to extremes. Even though there are positives outcomes of revealing the names of the posters, there are some users who resist it. Some sites even require their users to maintain their anonymity because of the sensitive topics that are discussed and therefore revealing the identity of the posters would dry up the conversation. (Binns, 2012.)

5   RESEARCH METHOD

Trolls have been proven to be a difficult research topic and many of the studies have had to rely on outsider views or observation. Studies that have deducted results from outsider views leaves room for error as the perceptions vary as shown in the chapter 4.1 How trolling is perceived. Observational studies also suffer from the same issue as the intentions of a troll and even whether a troll is a troll is relying on the researcher's perception. Trolling studies have also suffered from the lack of a generally accepted definition and that has led many studies to choose from many available definitions or to generate their own definition – as it happened with this study as well. Some studies have researched the situations where trolling happens, and others have studied the individuals. This study takes the approach of studying the individuals and from the perspective of the troll. This chapter consists of explaining the chosen research method, how data was collected and how the analysis was conducted.

5.1   Qualitative Research Method

This study uses a qualitative research method to help develop new understanding of the phenomena of trolling and trolls. Qualitative research methods are useful for developing an understanding of how and why some behaviors take place (Sutton & Austin, 2015). According to Hirsjärvi, Remes and Sajavaara (2005) the premise for qualitative research is to allow new and unexpected information to emerge from the study. This is useful for studying trolls as the topic is still insufficiently studied and requires a wealth of new information. Qualitative research also enables to gain insights of the study subjects thinking (Sutton & Austin, 2015), therefore it is the most suited approach for this study.

Research that was conducted for this study relied very little on past studies. Definition of a troll and trolling, and the codebook utilized previous studies but otherwise the research for this study was conducted without following any pre-existing assumptions or hypotheses. This decision to engage the study's

material without a theoretical standpoint was done because the literature review showed some amount of contradicting results and a lack of studies from the trolls' perspective. According to Sutton and Austin (2015), interpretations in qualitative research are in a central role and the theoretical standpoint that a researcher has taken affects the interpretation of the data. Therefore, this approach reduces possible bias that is inherent in qualitative research. It is likely to be impossible to avoid personal biases that a researcher has and in order to reduce biases, it is important to be reflexive before and during the research process to identify the biases and counteract them (Sutton & Austin, 2015).

Internet trolls are a difficult research subject for multiple reasons. First, getting trolls to participate in scientific studies can be a difficult task and so far, only a few have managed to conduct research with trolls as participants (e.g. Phillips, 2011; Bishop, 2013a). Second, their identities are usually hidden under anonymity, making any verification of their story impossible. Third, trolling includes deception and it can be impossible to tell whether they are trolling with their answers when interviewed. Finally, trolling covers a multitude of behaviors and trolling differs between platforms, cultures, and context, making it necessary to represent a wide variety of trolls in order to create any generally valid findings.

Original objective was to find Internet trolls for this study to be interviewed via video chat or with an instant messaging application. Because of the difficulty of finding trolls that are willing to be interviewed more thoroughly, the research plan had to be updated to suit the options that were available. It is common in qualitative research that the research plan changes during research, because of the flexible nature of the method and changing circumstances (Hirsjärvi et al., 2005).

Due to these difficulties, an approach of using multiple data sources was chosen. Using multiple data sources provides better reliability of the findings as well as a possibility of new insights (Fusch & Ness, 2015). When considering a study with trolls, the matter of asking the right questions is problematic, since there is still very little known from the troll's perspective. Using multiple sources as the source of data allows gathering material where many different questions are answered. This makes it possible to find answers that are relevant to the questions raised by this study.

5.2 Data Collection

Data that was collected for this study contains commentary ranging from reliable sources, such as journalists who have confessed of their previous trolling to unreliable sources where the troll's identity and statements are impossible to verify. However, by having commentary from 109 different trolls, some fraudulent statements will not impact the results. Following table (table 2) contains the main sources per troll, but for some trolls there were additional sources that provided more information.

TABLE 2 Main sources for each troll in the data

Main source per troll	Number
News article	34
Reddit post	23
Forum post	9
Survey	9
Online discussion interview	8
Blog entry	7
Comment section post	5
News video	3
Radio program	3
Tv program	3
YouTube blog entry	2
Book	1
College journal article	1
Online magazine article	1

The decision to use multiple sources for data collection was based on the difficulty of finding trolls from multiple platforms to interview. After initial efforts to reach trolls were not successful and the only location where trolls were willing to talk was on 4chan, the plan was changed. Relying only on trolls from 4chan was not sufficient for the purposes of this study and other sources had to be included. Coles and West (2016a) had noted that many previous studies have suffered from using only a single online space as a source where the understanding of trolling can be understood differently than in other online spaces. Therefore, in order to avoid the problem mentioned by Coles and West (2016a), using troll's own statements from multiple online spaces and from different source types was considered to be the best approach for this study. This approach allowed to capture many different trolls, as well as people that have quit trolling. Trolls who had quit were an essential part of the study as it made possible to examine how they end up quitting.

There were three methods used to acquire data: online discussion interviews with trolls on 4chan, a survey that was shared for trolls to fill, and opportunistically collecting data from the internet. For the three methods it was necessary to have certain criteria to ensure that the collected accounts of trolls were relevant for this study. Criteria for the inclusion of material is as follows:

1. **Anonymity**: A troll must be anonymous or pseudonymous in order to reflect actual trolls that go through the trouble of creating trolling accounts to protect their identity or to escape accountability of their actions. A troll was excluded if there was indication that they had used their real name for trolling.
2. **Person**: Subject had to comply with the definition of a troll for this study. People who used trolling for other purposes such as for paid

opinion manipulation, attracting fame for themselves or spreading racist propaganda were excluded.

3. **Behavior**: Activities and behavior presented had to comply with the definition of trolling to avoid the inclusion of flaming, cyberbullying or other behaviors.

4. **Commentary**: The commentary itself had to pass additional Google search in order to verify that it was not copypasta (copypasta is a text, for example a comment or a story, that is copied and pasted over and over again in different online spaces). Also, some points of the stories were searched through Google to verify whether they were true.

Criteria for inclusion was used to determine usable material but there was additional research done, when possible, to verify whether some trolls fit the criteria. There were many trolls that initially passed the criteria, but after conducting further research on them or on the details that were mentioned, they were excluded. Reliability can still be compromised because no matter how reliable the source, there could still be falsified information present due to the nature of trolls. Therefore, this study will not draw conclusions from single commentaries but from the overall information that the data provides.

Online discussion interviews that were conducted for this study happened in two occasions and were done on 4chan's /bant/ board (International/Random board). /bant/ was chosen because it has more international users and messages sent there did not get lost in the constant stream of new threads as in /b/ board. /b/ is the board that was used in Phillips' (2013) study and contains the vilest content on 4chan – /bant/ is a tamer version of it. Benefits of using an interview for data collection are: being able to get more in-depth information of a topic that is less known, participants can tell their opinions freely and the participants can elaborate their answers further when asked (Hirsjärvi et al., 2005). Theme interview was the chosen method for this study, but it was adapted to fit an online discussion board setting. In a theme interview the topics of discussion are known to the interviewer but the way the questions are answered and in which order are not set beforehand (Hirsjärvi et al., 2005). The goal was to cover certain topics and maintain the trolls interest if they wanted to talk about something else or mention something that was not expected beforehand. Because of the public setting and the possibility of anyone joining and leaving the interview, it should be considered more of a group discussion than an interview. The discussion was also more resembling of a focus group interview in an online discussion board (e.g. Ping & Chee, 2009).

A thread was made with a notification that internet trolls are wanted to participate in an interview for the use of a master's thesis. All trolls who participated in the discussions were completely anonymous and did not disclose any identifying details. Discussions had to be conducted within the thread, because none of the trolls wanted to participate in an interview on any other platform due to security concerns. Considering the nature of the interview medium it was impossible to get the same level of rich discussion that could have been

achieved by conducting private interviews with skype or by instant messaging apps. Trolls also could join in whenever they pleased or leave the discussions. Many trolls attempted to troll the discussions, causing unneeded background activity. This discussion medium allowed trolls to continue from comments made by others thus giving a certain degree of support to certain opinions. Group interviews face the risk of having strong individuals in a group that affects the groups answers and can dictate the direction of the interview (Hirsjärvi et al., 2005). However, this did not happen in the discussions as the participants were able to answer to any part of the discussion that they wanted due to the asynchronous nature of the discussion board.

Due to the drawbacks of conducting the interviews as a discussion in a public forum, a survey was created to see whether the answers would be different due to the removal of the public aspect and if more people would be willing to participate. Benefits of using a survey comes from the ability to collect a large sample of respondents with less effort and ask the questions in a standardized manner (Hirsjärvi, 2005). The survey contained two multiple choice questions and nine open questions (see appendix 1). Survey was designed to contain mostly simple open questions, allowing respondents to express their views the way they wanted. Unfortunately, even after sharing the survey in different forums and multiple times, the willingness to fill in the survey or answer in better detail was very low – only 32 respondents. Two out of three of the filled surveys were purely troll answers and the rest had short comments. This lower willingness to fill in the survey could be accounted to the lack of any response or interaction in the survey. Biggest challenge that comes with interviewing anonymous trolls is the lack of trust that goes both ways. Participants had a hard time trusting that the discussion was in fact for a thesis and from the researcher's point of view there is no way to verify what they say is absolutely true. Trolling after all is an act which consists of insincere behavior. Regarding the nature of the discussion and survey participants, it was chosen for the researcher's identity to remain anonymous and the only details given were that the researcher was doing a master's thesis and was from Finland.

Internet material was collected opportunistically by using a set of search words in Google search, as well as doing searches in Reddit, Twitter and Youtube. Relevant news articles, videos, forum posts etc. that provided links or information about additional troll related information were followed up and researched further. This method provided troll confessions and interviews from multiple different sources. Data was freely available on the internet and it was naturally occurring from this study's perspective. Naturally occurring data or naturalistic records refers to conversation that would have happened even if the researcher did not observe it, therefore the researcher cannot distort or influence the material (Griffin, 2007). Publicly available data is considered ethical when a researcher has not specifically elicited it and thus does not infringe the troll's rights to privacy by disclosing anything new to the public use than is already there to be found (Coles & West, 2016a).

Data saturation is an important part of research and it has an impact on the quality of the research and content validity (Fusch & Ness, 2015). In order to obtain data saturation for this study, the use of multiple data sources and data collection methods was necessary. Application of multiple data sources helps to enhance the reliability of results and to reach data saturation by allowing to explore a phenomenon from different levels and perspectives (Fusch & Ness, 2015). Data that was collected overall was fragmented by content. For example, some interviews and confessions contained information about how trolling started, whereas some others contained more information on how it ended. By having data from 109 different trolls from multiple different sources, it is possible to piece together an overall picture of trolling and find answers to the research questions.

5.3 Analysis

Analysis of the collected data was conducted using thematic analysis. For the analysis, Maxqda 2018 qualitative analysis software was used for coding of the material. Initial codebook was created before coding and it was made by adapting relevant codes from codebooks by Sanfilippo et al. (2017b) and Sanfilippo et al. (2018) and by creating additional codes. The additional codes were created by assessing what was relevant to the research questions of this study and also by looking at what topics were revealed from the initial reading of the collected data. Codes were also added during the coding of the data when it was necessary. Analysis process followed the phases of thematic analysis (table 3).

TABLE 3 Phases of thematic analysis (Braun & Clarke, 2006)

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis

Data was read through multiple times while coding and the final codebook (see appendix 2) was created iteratively. Themes (see appendix 3) emerged from the data during the coding process and were finalized after the analysis was done. Due to the fragmented contents of the data in the 109 troll's accounts, a final step before the writing process was taken. Codes were placed on an excel sheet in an order that corresponded their themes and each troll's answers were placed on the sheet. This made it possible to summarize the data before placing it in a correct place in the sheet and it forced a more detailed inspection of what was in the data. Finally, it was counted which codes contained least amount of answers from the trolls and it also allowed to inspect contents of different codes side by side more efficiently. Decisions of which codes were deemed most informative was possible due to the counting of the amount of answers and thus allowed to concentrate on them. For most of the codes that were used for the results, it was necessary to form themes within the codes. The answers had very different forms and varied from each other so much that it was necessary to identify themes from them in order to analyze them properly.

Trolls were divided into three categories for further inspection of different types. This was done to avoid treating all trolls equally, a mistake that many studies have done. It is not viable to consider trolls who perform harmless acts for humoristic purposes to be in the same group as trolls who attack memorial pages in order to cause genuine distress. The following categorization was done by using harmfulness and the level of intricacy of a troll's behavior as the main variables. As discussed in the 3.1.2 Troll categorization chapter, using specific behaviors or motivations as variables can lead to an infinite number of categories. Categorization by a troll's behavior is also problematic, because even though trolling can be observed to be of certain type, the underlying motivations and intent remains hidden. Due to these reasons trolls for this study were divided into three broad categories according to their harmfulness and how intricate their trolling behaviors are. These two variables allow the placing of a troll into a category with better certainty by outsider observations as both variables can be observed. It must be noted that this categorization was designed to be used for this study and it is meant to roughly distinguish between trolls (table 4).

TABLE 4 Troll categories for this study

Category	Definition	Examples
Damaging trolls	Actions cause real harm to victims and can inflict problems in their offline lives.	R.I.P. trolling, swatting, doxxing, giving dangerous advice, rape or death threats
Common trolls	Actions can be a nuisance, welcomed or cause severe anger, but there is no lasting harm done.	Old school trolling, baiting and aggravating responses, humorous trolling etc.
Entry level trolls	Low quality trolling efforts that are easier to spot and ignore. Can be annoying and juvenile.	Shitposting, copypastas, insults, flooding, etc.

Trolls in all three categories may cause harm but what sets damaging trolls apart from the other two is their capability to cause damage to their victims, whether it is emotional damage, loss of employment or something else. Entry level trolls differ from the other two categories by showing low level of intricacy and are not damaging. Common trolls are neither damaging or perform trolling at a low intricacy level. This categorization does not take into account the intention of the troll and whether it is humorous or malicious, because humor and hurtfulness are relative concepts when regarding trolling. What is humorous to one person, can be hurtful to others and therefore this variable has been left outside of these three categories. Trolls placed in these three categories are not necessarily always acting according to their category. For example, many damaging category trolls may normally be trolling at common troll level but were placed into damaging category if they had performed acts that warrants that level and it means that they have the capability of being damaging.

6   RESULTS

These results are based on the commentary of 109 different trolls and the accompanying additional research. The results cover trolling from start to finish, therefore there was a need to have as many commentaries from trolls, that have quit, as possible. 60 of the trolls were still active and 49 of them had quit trolling. Because of having many trolls for this study, they will be referenced in the results by the number they were assigned in the data to avoid mixed use of real names, pseudonyms and numbers for anonymous trolls. Trolls were divided into three categories in order to avoid treating all trolls as equal. Following table (table 5) contains the number of trolls for each category and shows how many trolls did not provide enough details to make it possible to categorize them.

TABLE 5 Number of trolls by category

Category	Troll categorization	Number of trolls
3	Damaging trolls	24
2	Common trolls	64
1	Entry level trolls	14
	Not categorized	7

6.1   Background Information

Trolls were mostly men, 67 were concluded to be male, seven female, one transgender female and the remaining 34 did not provide details about their gender. Trolls were from a wide range of age, some starting as early as 10 years old and the oldest active troll was 53 years old. Trolls who provided information of their country in this study were from 17 different countries. Countries of 62 trolls were identified, with 35 from United States of America, 11 from United Kingdom and 16 from other countries. The material also provided some information about the education of trolls and whether they had a job. Following

table (table 6) shows the employment and student statuses of trolls, while they were active.

TABLE 6 Employment and student statuses for trolls when active

Status	Number	%	Status	Number	%
Employed	24	22	Student	24	22
Unemployed	4	3,7	Missing data	57	52,3

Out of active and ex-trolls, nine had a college education, seven were in college, three had dropped out of college and 81 trolls did not provide information on whether they went to college. Therefore, any conclusions about how many trolls receive a higher education cannot be made. Even though these conclusions cannot be considered as an accurate indication of trolls' employment and education, they do show that unemployment was mentioned only four times, giving indication that being idle and unemployed is not the main occurrence among active adult trolls.

Trolls provided some information of how they are as people or how they are feeling. Making assumptions of their personalities is beyond this study's reach but these mentions give some insight of how the trolls are as people. There was a wide variety of different mentions among the trolls, but the most mentioned ones are listed in the following table (table 7).

TABLE 7 Factors related to trolls' personality

Personality factor	Times mentioned	Personality factor	Times mentioned
Dissatisfied with life	21	Trolling came naturally	8
Frustration and anger	18	Narcissistic	7
Nice person IRL	15	Addicted to something	7
Need for attention	11	Normal person IRL	6
Socially awkward	11	Shy	6

In addition to these mentions, there were many others and therefore it could be argued that trolls are very different individuals from each other. Most common was the dissatisfaction with their life, showing that many are not happy with themselves or with how life is going.

Personality traits were not the purpose of this study, but some trolls weighed in on the topic. Troll 98 shared his thoughts, when the studies that covered trolls' Dark Tetrad personality traits came up in the online discussions:

> Trolling isn't a personality. It's a pastime that some people choose to annoy people for the laughs. I believe that the majority of people who have trolled at least once in their life aren't narcissistic, a psycho or a sadist. But that doesn't remove the fact that there might be some trolls out there that in fact are just like you described them but in fewer numbers.

Troll 99 had mentioned in the discussions earlier, that in his view, being a troll is more like an exaggeration of a certain personality trait than them being a "troll." He said that he uses trolling as a pastime and as an outlet for his frustra-

tions or as a defense mechanism, but it is not a big part of his life. He also gave his opinion on the same topic that Troll 98 had answered:

> Trolling is much broader than studies make it out to be because it includes so many different people who troll differently
>
> Some of those traits do apply yes, but if you look hard enough you wil find those traits in CEO's , politicians, doctors , the studies findings are a bit sketchy to me like who did they interview , how did they determent these traits by looking at what , the posts that were made , did they ask a troll to fill in a form of a $5 wendies gift card?

He viewed trolling to be partaken by so many different people, that considering all of them as being a group of highly similar people, with similar tendencies, to be incorrect. Earlier in the discussion he presented strong resentment of using the term troll to describe them.

6.2 Beginning

6.2.1 Life Before Trolling

There were 34 trolls that provided information about their life before trolling. Five had traumatic or extremely negative experiences, 16 had something negative in their lives and 13 had not mentioned anything particularly negative to have happened to them before trolling. Common negatives were being bullied in school or conditions at home were not good. One of the trolls had even been sexually molested by his grandfather at the age of five. Out of the 13 that did not mention anything negative to have happened to them, only three referenced their past to be without any mentionable negatives.

Trolls who suffered traumatic or extremely negative events in their past were more often in the category of damaging trolls than the ones that had negative or neutral past experiences. This result suggests that if a troll has experienced something really negative when younger, their probability of participating in more damaging trolling is greater. However, due to the low number of trolls in the traumatic grouping, this result would need more data to be generalized.

Troll 39 had been sexually molested, Trolls 48, 86 and 3 suffered from severe bullying in school and Troll 57 turned into a recluse after his father was murdered. These experiences can have devastating consequences on children, but the trolls in question had not mentioned anything about receiving any help to cope with those problems. Two of the severely bullied trolls explained that they just had to suffer through on their own and finally learn how to fight back. The sexually molested troll had not mentioned anything how he coped later on, but he had severed connections with his parents later in life and had the mentality that his trolling victims should just deal with it, because bad things hap-

pen in life. The troll whose father had been murdered, ended up staying more indoors with his mother in her trailer home and became morbidly obese.

Trolls that had negative experiences in their past mentioned problems with alcohol, problems at home, being bullied in school, masturbation addiction and losing friends. Problems at home was mentioned the most times. Seven had some problems at home, such as losing a parent, parents weren't supportive, parents were divorcing, there was violence at home or just home conditions were mentioned as being bad. These experiences happened to most of them during their youth which also coincides with the time when most of the trolls ended up trolling. With these trolls there was no mention of other means to cope with their negative experiences, except with one who had been placed on antidepressants for a while.

In the neutral past category, as mentioned earlier, only three had a past that was clearly positive, others giving more or less vague mentions of their background or did not mention anything particularly negative or positive that happened to them. Troll 50 referenced to family conditions normally and had mentioned playing sports when in school, being a sports fan and watching games from tv with his dad. Troll 14 mentioned being raised in a nice family and not having to experience much heartbreak or negatives in his life. Troll 56 explained growing up as a good catholic boy, in the deep south (in USA).

Even though these accounts, of the trolls' life before they engaged in trolling, do mostly portray negative parts and are lacking in happy childhood stories it does not necessarily mean that the rest would have shared similar stories. It must be noted that in many troll's cases their childhood or teenage years could have been left out of their stories if there was nothing worth mentioning that would have had an impact on their future behavior. On the other hand, many of the troll's stories weren't focused on sharing how they started but were more focused on their current behavior or why they decided to quit trolling. One factor, that supports the result of majority of trolls having some negative experiences in their lives, is that the most mentioned personality related factor was being dissatisfied with their life and the second one being frustrated or having anger. It could be argued that many of the people who end up trolling have had negative things happen to them and they have not been able to find the help they needed.

6.2.2 Age to Start Trolling

Next, the age when people start trolling is examined. Most of the trolls did not give an exact age when they started to troll. Many trolls gave either an approximate time, such as high school or they had provided other information that made it possible to deduce their starting age or an approximate age range. The following age graph was comprised with the starting age of 63 trolls. The table shows in percentages how many trolls had started trolling before certain age. This way of showing the data was necessary to include as many trolls as possi-

ble, because 24 of the 63 trolls did not provide accurate enough start time, but the latest time when they started trolling was possible to deduce (table 8).

TABLE 8 Trolls' ages to start by certain age

	Under 15	Under 20	Under 26	Under 30	Under 40	Under 50
Count	12/63	41/63	54/63	56/63	60/63	63/63
%	19	65	86	89	95	100

Some trolls start very young, 10 being the youngest age in the material, but trolling is not limited to young people, as the oldest troll, who was still active at the age of 53, proves. The graph shows that at least 19 percent of the trolls started before turning 15, with the figure possibly even higher if the data would have been more accurate. Most informative figure though is that 86 percent of the trolls started before turning 26, proving that the appeal of trolling is strongest with teenagers and young adults.

The following figure (figure 1) is comprised of 39 trolls whose starting age was more accurately described and therefore possible to place them in certain age groups.
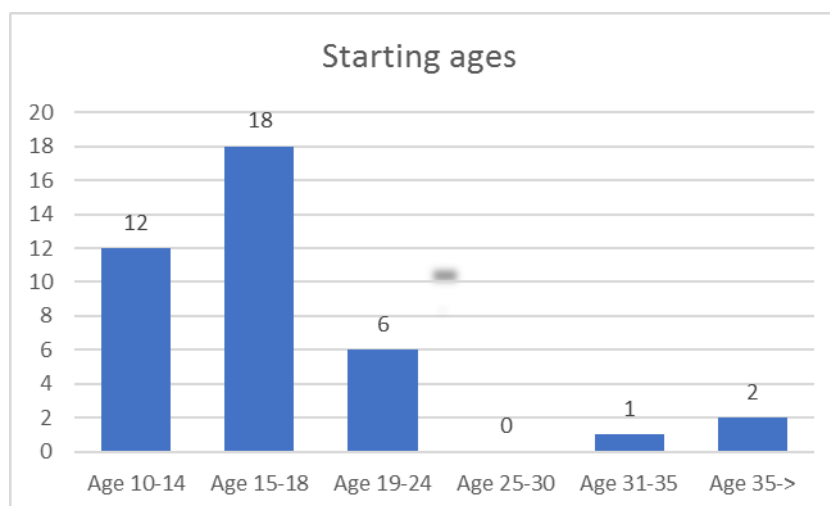
FIGURE 1 Trolls's starting ages

This graph shows that the majority of trolls start within 10 to 18 years of age. Surprisingly many trolls started in the age of 10-14 and some mentioned starting when they got their first computer. Troll 111 pointed this out:

> I was a shitty 12 year old boy who shouldn't be on the internet.

The age of 15-18 proved to be the most common time to start trolling and after that age group the interest to start trolling declined sharply. Surprisingly there wasn't any trolls that mentioned starting between the age of 25-30. There were some trolls that started after the age of 30 but they constitute only about ten

percent of trolls. It could be argued, based on these results, that majority of trolls start in their teenage years.

6.2.3 How Trolling Started

Trolls had varying reasons to start trolling. 59 trolls provided data of why they started and some of these accounts were not very descriptive and that gives room to assume that the decision to start could have been rather uneventful for some. Many trolls gave the impression that they just ended up trolling and there was no premeditated thought put into it. Many of the trolls also described some external factor that led them to trolling. Following table (table 9) shows the different factors that were mentioned by the trolls. Some trolls mentioned more than just one factor and for them it was the combined effect that led them to start trolling.

TABLE 9 Reasons to start trolling

Reason to start	Times mentioned
Natural fascination / tendency for trolling	11
Boredom	10
Frustration	8
Escape from real life / unhappy with life	8
Thought it was funny	7
Being young and dumb	5
Was inspired by someone or something	5
Followed others lead online	5
Wanted attention	5
Stumbled to an opportunity to troll	4
Once they tried it, they wanted to do it more	4
Social life was poor / no friends / lonely	4
Outlet / no outlet in real life, emotional etc.	3
Appeal of doing something bad or dangerous	3
Friends introduced them to trolling	3
Was trolled by others before	2
Lack of concern about consequences	1

Most common factor was the persons natural tendency or fascination toward trolling. By talking about tendency in this case it does not mean, for example, sadism or narcissistic behavior, but for most of the trolls it was more about tending to do pranks in real life, liked naturally being annoying online, found the websites and humor related to trolling fascinating or they just enjoyed de-bating and arguing online. Most of the trolls that levitated naturally towards trolling did not present any malicious intent and some of them just happened to have similar behavior in real life already, thus doing prankish trolling online was a natural continuation for them, as Troll 103 said:

> It's only logical I kept doing the same thing when I started soending more and more time on the internet.

Troll 65 just wanted to argue with religious people but due to receiving death threats, when he used his real identity, he decided to evade any repercussions and make fake accounts. The trolls that naturally ended up trolling had behavior that was natural to them even before they decided to troll. Continuing one's normal behavior online, in the form of trolling, brought problems if the persons behavior was problematic already. Troll 32 operated on Reddit and had a perverted side to him even before he started trolling. His online behavior was closely related to that side by creating subreddits full of barely legal, offensive and perverted material:

> I started off posting lots of porn and mostly soft core porn, you know, pictures of naked girls, that sort of thing. And as I'd find porn of different types, like, if it was a picture of an African-American woman, I created a Reddit called Women of color, if it was, you know, woman with large breasts, I created a Reddit called boobies, I saw it as creating folders to file things in. I created probably 600 reddits, or subforums in the time I was on Reddit, and I just put things, you know, as I came across images, I put them in these categories. There are hot button topics, that you can make a comment about and just enrage people, and sadly for me, I enjoyed doing that, I liked going in and making people really mad over what amounted to meaningless things.

Many trolls had mentioned computers and internet to be an easy source of entertainment and something that they could fall back on if life is not going well or they are bored. Some trolls even mentioned starting trolling right after they got their first computer. Boredom was mentioned ten times and many of them were just looking for something to do. Boredom was mostly mentioned with other factors and boredom alone did not explain why someone started trolling. Also, the trolls that were unhappy with their lives, sought comfort from the internet and found it from trolling. Some of these trolls just wanted attention that they weren't getting from real life or they wanted to escape the situation they had in real life by focusing on other things. Unfortunately, the other things turned out to be trolling and putting others down online in order to feel better about themselves. Troll 57 had turned into an obese recluse, living in his mom's trailer and ended up finding comfort in putting others down. Troll 27 had a similar reason for trolling:

> I feel sorry for those trolls because I know they are chasing a white whale of satisfaction that they aren't getting in life. I know this because thats what made me a troll. Thinking other people were stupid I was smart made me forget what happened outside of the computer.

Troll 52 was not very happy with his life, but his reason to start trolling did not come from the need to put others down. His reason to start trolling was triggered by losing his character, that he had worked hard for, in a game. He was

trolled, and he had reacted too harshly, which led to getting permanently banned with the character. The feeling of losing something he worked hard for, made him take his anger out on everyone by turning into a troll.

Frustration was a factor for eight trolls and with this factor, trolls did not mention being unhappy with their lives, but there was something that caused them frustration and it resulted them to start trolling. Some of them tried to have real discussions online but ended up being frustrated with people. Ken M started writing passive-aggressive fake comments because of being frustrated with the toxicity of discussions. Troll 106 had a similar reason:

> One day I understood that some people don't want to listen to listen to you and it's much easier just to troll them and have fun then reassure them. I started to make provocative statements and understood that I had fun.

Troll 26 liked to debate on political discussion boards but grew tired of not being able to have rational conversations with some people. There were trolls working the boards and he decided to follow their lead and make others mad instead of trying to have rational conversations. Following the lead of other trolls was present with five trolls. It was easier to start trolling when they saw others doing it. Troll 3 tried to be a helpful member at first on a forum and gain a higher status and attention there that way. Disappointed with the results of his efforts, he saw trolls gaining notoriety in the same forum and he decided to become one of them. As these examples show, some try to be normal or helpful members of an online community but end up taking the troll route because it offers an easier way to achieve their goals. Someone setting the example of trolling and showing that you don't have to try so hard, whether it is to debate with others or become noticed, can be appealing. Other trolls that followed the lead of others were in twitter and their stories were relatively same. The following text is the Troll 31's spontaneous jump to trolling as written by the journalist covering his story:

> he began tweeting comments when he was a newcomer to social media exploring topics that were trending on Twitter. "I decided for some stupid reason to join in," he said. Once the retweets and responses began flowing, he felt a strong personal validation and so embarked upon what soon became an ugly trajectory.

These cases raise an interesting question, would have they started trolling if there had not been other trolls to show example? There were many factors and several combinations of factors that made them start trolling. Some just thought that trolling was funny and that was enough, when others decided to try out trolling because of being amused by memes, trolling videos or actions of famous trolls (at least famous in their community). Some trolls just figured that they had started because they were young and were being dumb like other kids their age. With some of the trolls, their friends had introduced them to trolling or they had stumbled, alone or with friends, to a website that they saw as a great opportunity to cause some trouble for their own entertainment. There was

also some amount of rebelliousness and appeal in doing something that they are not supposed to, and that eventually pulled them into trolling. Some of the trolls also mentioned getting a rush from trolling and after they had tried trolling for the first time they were hooked.

Reasons to start varied widely. For some, trolling was just a continuation of their behavior and tendencies, some trolled to feel better about their own situation, others started out of frustration and in many cases, they had more than one or two factors that caused them to start trolling. Trolls who expressed their view of why people generally start trolling were straightforward compared to the many reasons listed here, but they were on similar tracks. Troll 98 expressed his view as follows:

> boredom or mainstream culture. Sometimes people who are dicks IRL (in real-life) can become trolls by nature on the internet

Another troll, Troll 99 saw, as the reason to start, that people who have a "troll side" end up finding an easy outlet for it from trolling, or that if surrounding circumstances pushes people into trolling. Troll 16 views that everyone who grew up with the internet has been on the "troll side" at least once and it's too easy to get carried away with it if an opportunity shows up. Troll 25 viewed the need for attention to be the biggest reason people end up trolling and added that insults draw bigger responses than compliments, thus giving more attention. Boredom and attention are, according to Troll 30, the reasons for trolling and added that if trolls had better things to do in their lives, they would not have time to troll. Even though trolls are most in touch with the trolling world and their assumptions match the results presented here, their views only covered partially the different reasons to start.

There was a noticeable difference between the reasons that led to trolling and what motivated them later on to troll. Motivations for trolling were heavily relying on the entertainment value it gave and in less extent to attention, boredom, anger or getting enjoyment in the form of winning or getting a rush from it. Some trolls also expressed just enjoying being able to manipulate or anger others. Some of these reasons were linked to the reasons that originally led them to trolling, such as boredom, but in most cases, they were not. Therefore, it could be argued that the reasons that causes someone to start trolling are not the same as what drives trolling.

When looking at the reasons by the troll categories, mostly the damaging category trolls followed others lead online and trolls that wanted attention were more leaned to the damaging troll category as well. It is possible that people who start trolling by taking lead from others, also take influence from others more easily, therefore they can end up taking part in more harmful behavior. As one of the trolls mentioned about seeking attention and how that "white whale of satisfaction" can never be reached, it could suggest that they will end up doing more outrageous acts to get more attention. The factors that were more towards entry level trolls, were boredom, being young and dumb, and

thinking it was funny. This would suggest that trolls who start mostly because of these reasons remain more harmless and less committed to trolling.

6.3   Time as an Active Troll

6.3.1 Behavior

Trolls exhibited a wide variety of behaviors ranging from creating a funny situation by acting stupid to abusing family members of deceased people in memorial pages. Some abstained from insults, while others dealt them without hesitation. There were trolls who were committed in trolling someone for long periods of time and ones that would do it out of opportunity for a moment. 20 most frequently occurring behaviors are listed in the following table (table 10). This subsection also covers the results about their time consumption, intentions, behavioral boundaries, do they believe in what they say, trolling persona and fear of getting caught.

TABLE 10 Occurrences of behavioral aspects

Behavior	Number of occurrences
Committed in their trolling efforts	23
Provokes others / posts provoking topics	23
Insults others	22
Pretends to be someone else	21
Offensive language	19
Old school trolling (more in line with older definitions)	16
Likes to argue / debate	14
Winds people up / baiting	13
Shitposting (posting of stupid content or comments)	12
Posts shocking comments and content	11
Goal is to make others look stupid in arguments	10
Posts fake stories	9
Obnoxious annoying behavior	9
RIP trolling	8
Does not insult / not malicious	8
Creates hurtful content or scenarios	7
Tries to make others miserable	6
Treated trolling as a game / trolling for sport	5
Acts like they are really dumb	5
Posts threatening comments	5

Many trolls expressed higher level of commitment in their trolling. Commitment meant putting real effort and time in trolling. Some of the trolls studied

their victims first, did research on certain topics and created blogs, podcasts or even websites to aid in their efforts. Some were persistent with their targets and especially Troll 50 kept trolling the same website for about six years, even after his messages started going automatically to the moderation queue. He frequently posted vulgar and nasty comments that were about the site owner and his girlfriend, but the reason for doing so was surprising:

> Actually, I love the web site. I mean, obviously, I come to the site frequently.
>
> It's not coming from any malice or ill will at all. Again, it was all strictly for my amusement.
>
> it was urged on by the fact that you'd occasionally engage with what I said. If you had just ignored me for a long period of time, I probably would have said, "Fuck it" and that would've been that.

The case of Troll 50 shows that the reason for trolling can be different than the target would expect and the reason to continue for extended periods of time can be encouraged by even very little amount of attention. Another persistent troll, Troll 38 has had a blog since 2008 and later has been most active on Twitter, where he shares his opinions on things, touts his anti-authoritarian ideology and attacks public figures. He hid behind a Guy Fawkes mask for years until he was doxed and publicly berated in the media, he received death threats, got bricks thrown through his home windows but still after all that, keeps trolling. Troll 34 was so engaged with his trolling that he even continued while at work and according to him a local newspaper had to shut down their message board for good after a nasty and lengthy exchange he had there. Troll 55 has impersonated as Tom Waits (singer), posting his own songs as Tom's unreleased songs in a website he created for that purpose. He also created a Facebook fan page for Timothy Dalton (actor) and frequently engaged in discussions with fans as him. Some other committed trolls created their fake profiles with great care and had many of them. One troll even claimed to keep a dossier of people that he had doxxed in case he needed to use the information later.

These examples show that the trolls who are committed can go to great lengths and they have put a lot of thought into their trolling. Commitment was in the previously mentioned cases often long-term, but trolls can also exhibit short-term commitment. Trolls who participated in the online discussions automatically assumed that I was a troll and would not completely give up on that belief even after couple hours of discussion. Troll 100 kept reminding me of that:

> You NEED to commit, trolling is not work, its an art and kind of entertainment. You commit, you never give up your point, just like you OP (OP is short for original poster, a term used to indicate the person who started the thread).

When asked if it was normal for trolls to really put this much effort to stay in character just to troll someone. Troll 99 answered that:

> Yes, its part of the joy and art of trolling

> Yes its normal , wouldnt you put in a lot of effort in the things you enjoy also ?

Committed trolls consisted of common and damaging trolls only. None of the entry level trolls expressed commitment, which suggests that the ones who rely on simple trolling and for quick shortcuts to get a reaction are not willing to put much effort for it.

Other behaviors that were mentioned many times were provoking, insulting, pretending to be someone else, using offensive language and so on. These have been identified in other studies many times and are not surprising to see. There were some clear differences between the troll categories and these behaviors though. As it could be expected the trolls who expressed behaviors like RIP trolling, creating hurtful content, posting of threats, posting of shocking stuff and aiming to make others miserable were almost all in the damaging trolls category. Similarly expected result was that trolls who expressed old school trolling, baiting, debating, pretending to be someone else and not using insults were mostly common trolls. Entry level trolls were dominant only in the "shitposting" (act of posting aggressive, ironic and trollish comments of poor quality to derail discussions) behaviors.

Time Spent Trolling
The time they spent on trolling varied, some trolled daily, some trolled periodically and some only trolled when a suitable occasion presented itself. Especially younger trolls might spend many hours throughout the day, but there were older trolls who also did the same, checking discussions while working, and one even got notified by his boss about it. Trolls that had been at it for longer were not as eager to troll daily, as they had often been when younger. According to troll 26 many trolls work in spurts:

> Like many trolls, I work in spurts of activity and often take breaks for weeks or months. Mostly at this point, I decide to troll when there is an event that is important, breaking news to a certain group

Some trolls were able to put a lot of hours weekly, even if they had a job and a normal life. There were also trolls who did not have the patience to troll long at a time. Troll 62 for example got bored after a while and then acted like a normal person again. Troll 64 trolled memorial pages as a part of a group and trolled when they had found a target:

> it happened usually over a single day, it wasn't prolonged. I just made a fake Facebook, I went and did it for like 30 minutes until I got banned or whatever, and then I just say "oh, let everyone else do it" and that was it.

The amount of time trolls spent on trolling varied and was affected by their age, life situations and whether they had started trolling recently or years ago. In

general, younger trolls that were in the early stages of their trolling spent considerable amount of time whereas older trolls who had been trolling for some years were spending less time and not very often. There were big individual differences overall.

Intention

Most common intention for trolling was to get a reaction from the target. Reaction was the goal, but the level of the reaction and the methods to get it varied. RIP trolls were after the most extreme reaction and were willing to use most extreme measures to get it. Even though the victims take it very personally, it was always very impersonal to the troll. They did not know the people or care who they were, but they saw that as an opportunity to get a very intense emotional reaction from them. Troll 45 posted, after a young girl named Amanda Todd committed suicide, a picture of a girl hanging herself with a caption "Todding."

> You want to see their reaction. I didn't do it to spread hate, I did it to get a rise out of people. I guess the difference is the intention. (Troll 45)

Some trolls said their intention was to make their targets think. Troll 24 said she doesn't even want to hurt the feelings of others, even though that happens too, and that she just wants to make people laugh and think. Troll 21 said that his intention was to try and make closeminded people think differently, or at least get them angry from not being able to defend their narrow views.

Trolls also expressed other intentions such as getting the feeling of winning, getting retweets and followers, bringing others down to feel better about themselves and defeating an ideology. These results show that even though most trolls are after a reaction from their target it is however only a part of the bigger intention that the trolls may be after.

Boundary

Trolls expressed having boundaries in their behavior. Troll 26, even though he participates in RIP trolling, sees that almost all trolls have some ethical or moral lines they will not cross and that they avoid topics they are not willing to troll. Troll 54 also saw that everybody draws their own moral line, but it was shown in some cases that the moral lines can be affected by peer pressure or a sudden relapse of judgment caused by mob mentality or alcohol.

Majority of the trolls expressed that actually hurting people is where they draw their line. Some of them were willing to enrage people but not to the extent that it would continue to bother them in their real lives. Trolls who performed more old school and humorous type of trolling stayed more often away from making it personal for their targets and some of them avoided using insults, racist and homophobic language.

Some trolls set their line according to external rules rather than their morals.

Troll 32 obeyed the boundaries set by Reddit, even though he kept pushing them constantly with his content. Another troll, whose behavioral boundaries were set by external rules, was Troll 38:

> I do however believe in the framework of the law. The CPS guidelines are very clear: you cannot threaten the life or liberty of anyone else. So 'I hope you get your throat cut' is fine, just free speech. But 'I'm going to come to your house and cut your throat', that's a threat, just as if somebody said it to you in a dark alley.

Troll 61 also drew the line to threatening people, but had no problem hurting people online with other means. For these individuals the external rules were something that can be played and made to work for their own benefit when avoiding consequences. Troll 39 was also pushing the boundaries of what is legal with his behavior. He responded to a question about where the line is with him: "I don't know, I have to think about it." Troll 65 found his line after getting involved with trolls that singled out people and really picked on them, an activity which he found no thrill in.

The only troll in the material who expressed the line going furthest was Troll 66, who said that his trolling crew, which is involved in RIP trolling, has never pushed anyone toward suicide. Their reason for this was not necessarily a moral one, but a cruel one, because they cannot get amusement from the victim if they are dead. Few other trolls also acknowledged the possibility of victims causing harm to themselves. Troll 98 mentioned that trolling mentally unstable people should not be done, because there is a bigger risk of them killing themselves. Troll 111 also recognized the need for limits because of that, but was less sympathetic about it:

> there are limits you should follow, because if a butthurt idiot kills themselves, you go to jail, and das not gud.

The moral lines that trolls will not cross seem to also change with age. When Troll 100 was younger, he took trolling pretty far and thought it was funny to hear when trolls had ruined someone's life. He is now older and no longer finds that funny, nor takes his trolling too far. Troll 101 has never done anything illegal but also took trolling too far when he was younger:

> RIP trolling is rude and juvenile. I did it when i was younger, before anyone close to me had died.

Even though only 30 trolls out of 109 provided details of their boundaries for trolling, most of the trolls in the material seemed to have limited their behavior to certain trolling behaviors. These results suggest that all trolls have certain boundaries for their behavior and are dictated mostly by their morals. Few cases though, had their boundaries set by practical reasons that were concerned with allowing them to continue their behavior.

Do Trolls Believe in What They Say

Some people tend to take what they hear online seriously, and those people are the ones trolls end up targeting. Many trolls expressed this point with partly showing contempt towards their victims and partly as a warning. People who take the trolls seriously are often most appalled by them, but is being appalled by troll's words worth their time, do the trolls actually hold those beliefs?

Almost all trolls, with few exceptions, who provided an answer to this question expressed that most of the time they do not believe in what they are saying. Some came up with fake stories and identities, some automatically took the contrarian view, and most just assessed the target and said whatever would "push their buttons." Because trolls had expressed certain boundaries in their behavior, it could be said that saying "whatever" means saying whatever they are comfortable saying within their boundaries. For these trolls the topics and what they say are irrelevant to them, they choose what to say according to the target and by trying to find the best comments to push the targets buttons. As troll 72 put it:

> I don't mean any of it. I just want to bait them into arguing and swearing back at me

Some trolls even go against their own beliefs when trolling, proving that some of them really do not incorporate their views when trolling and it is all about what to say to get the best results. Troll 50 said vile and sometimes racist comments to his target, but did not hold those views:

> What I posted, obviously, was very racist stuff. But that doesn't reflect my actual view. I share your view more than I do Joe Johnson's. (The trolls target had interviewed him)

Troll 62 had an interesting view about celebrities who address trolls and mean commenters:

> when I see all these celebrities that are over there, like addressing trolls, and "oh my god, you know this is to my haters blah blah blah", they're not real haters. Who's gonna take time out of their day to do all that for someone they actually hate. They're just bored and they just want to get a rise out of you

She even went as far as to suggest that some of them commenting mean things to celebrities are probably fans and because mostly mean comments get responded back, they have decided to send mean comments in hope of getting a response.

Some trolls however do reflect their own views while trolling, such as Troll 69, who decided to troll his targets because he did not agree with them. Troll 32 created many of his offensive subreddits from sincere interest to the topics. Troll 42 was one of the few trolls who actually stood behind what they said most of the time. His trolling was limited to Georgia football forum, where he genuinely enjoys discussing the sport, being a huge fan, and has often contrarian opinions that are in the minority, therefore easy to troll others with them.

Troll 2 was the only one who said that he believes deeply in many of his comments.

Trolling Persona

As with other aspects with trolling, there were many different ways they presented themselves online. Some created multiple identities, some just remained anonymous or had a cryptic handle and some created just one character that they used. Many pretended to be something they were not, such as pretending to be the opposite sex, living in another country etc.

Committed trolls were more likely to use more effort in creating believable online characters for trolling. They created background stories, skills, personalities and other details for the characters and on Facebook they made an effort in making them look like real profiles.

> for facebook i make very elaborate profiles with work histories and make a lot of normie posts to make the profile seem real. i always make sure to have multiple images of the person to upload over time, and make sure that those images cannot be found with a reverse gis. i'm a very convincing female on the internet, and people rarely question my gender (i am always female when i play games and use fake female accounts to phish information from people for doxxing). (Troll 101)

Sometimes the online characters came randomly for trolls or without putting much thought into it. Troll 50 came up with his character randomly and after it had worked well, decided to stick with it. Troll 32 built his character around his real personality and gave real details of his life to the character. His real personality was already creepy, but he was able to let himself loose with the character. There were other trolls who also expressed that their online persona was related to their real-life persona.

> the real me, an incredibly polite nice guy who liked to use what was essentially a character online to cut loose and get attention. (Troll 12)

> When I connect to an online community it's like I'm an actor playing a better (or worse) version of myself, and I usually think that other people are doing the same. (Troll 19)

There were also trolls who saw their trolling persona being different from theirs. Troll 58 went in his explanation as far as absolving himself from the wrongdoings of his trolling persona:

> It's not really me saying those things anyway, it's another person I become when I go online as Nimrod Severn or whatever name I assume

Troll 61 expressed dissatisfaction for what he had accomplished in life but had respect for his trolling character, which was according to him powerful and capable of destroying people's reputations online He even referenced himself to superheroes and why they need to wear a mask.

Trolls also created characters according to what kind of trolling they were doing or according to their targets. Troll 63 created his profile to mimic his targets dead father in order to really get to her. Troll 56 decided to create a character, that was a clueless and a confused old man with good intentions, so he could create bizarre situations. Troll 89 wanted attention for his online character, so he took effort in planning it to give it some quality to differentiate it from other trolls, adapting John Stamos theme for his character.

Fear of Getting Caught

Trolls operate in the safety of anonymity and some trolls take more care than others in protecting it. Many of the trolls said they have a life outside of trolling, which is why getting caught could cause severe problems or embarrassment for their personal lives. The ones who were most careful about protecting their identity tended to be engaged in activities that would give repercussions legally, compromise their employment or would cause embarrassment. The trolls that did not protect their identity as well as others, either thought that even if they were doxxed, there would not be any real repercussions, or they were participating in such harmless trolling that anonymity was not for their protection, but for being able to pull off their trolling.

Surprisingly the legal ramifications did not seem to have much of a deterrent for trolls. Many expressed that they were exercising freedom of speech, some thought that the punishments were not something to be concerned of and many had the view that they were not really harming anyone and had nothing to fear. It also seemed that trolls had not really given much thought to the possible consequences. Trolls were more concerned of other impacts on their personal lives if they were revealed to be trolls. For Troll 45, it was not the authorities that he was afraid of, he knew that there were people out to get him if his identity would be revealed. This scenario became real for Troll 39, who had to hide for a while after his "Craigslist experiment" where he revealed the information of over 100 men who contacted an ad he made – a woman looking for a "str8 brutal dom muscular male."

The common means, mentioned by the trolls, of how they protected their anonymity were quite basic; they avoided revealing any identifying information and used throwaway email addresses and accounts. Troll 101 explained how he protects his anonymity:

> depends on what i'm doing. Multiple usernames and disposable emails is enough for basic fucking with people on forums and games. If i'm trolling 4chan i use VPN with my phone to evade bans.

> i've never done anything illegal, so i have never gone through the effort of shielding myself from the authorities. tor is slow and a pain in the ass imo. (imo = in my opinion)

It was evident in the online discussions with the trolls that they were worried about doxing, refusing to participate in a more thorough interview even with a

throwaway account. Trolls seemingly had a lot to fear about by getting doxxed, they often got death threats, even the ones who were not abusive, from the people they had trolled, they had legal problems to fear, they feared for their jobs and they wanted to avoid the embarrassment of being revealed as a troll. Trolls also had to fear being doxed by the media, by other trolls and anyone who might be out to get them. Some trolls who knew that their trolling was truly harmless enough, were safe from these fears though.

6.3.2 Progression of Trolling Behavior

How trolling progresses is different with every individual who does trolling. Some of them did the same thing for many years, some started off rather harmless but ended up being very harmful, while others started off being malicious but ended up being harmless. There were also trolls who got invited into trolling groups where their behavior turned more severe due to peer pressure and the group norms. Trolling often started from one online space and then they moved elsewhere, either because of being banned or they wanted to expand their trolling. However, some trolls stayed in the same space throughout their trolling time and some even trolled only with the same character.

Many of the trolls, that provided information on how their trolling progressed, mentioned that when they started trolling they were quite harmless. None of the trolls mentioned jumping straight into harmful activities. Some trolls never got into very harmless activities, but some others ended up later being more malicious or damaging. It was observable that for some trolls there was at first a period of orientation when they were still looking for their way and were more susceptible to influences. During this early time, two of the trolls ended up quitting after realizing that trolling isn't for them, even though they had been very enthusiastic about it initially. Some of the trolls had ended up in communities that had other trolls and they picked up trolling habits from there. Some were invited to join trolling groups where they learned the group norms and behaviors.

Most of the trolls who had been trolling for longer had cut down the time they used for it and their level of hostility. They either did not have the drive for it anymore or their morals had changed, which led to different trolling behavior. How trolling progressed was different between individuals though, and Troll 101 even decided to get more active after many years of inactivity:

> when i was younger that was pretty much all i did. fuck with people in games and take screenshots, annoy people in chat rooms and forums, and shitpost image macros. its all i really used the internet for. i went through a period of about 5 years (after my friend died) where i tried to be a normie and have friends (i failed) and didn't internet so much at the time, and that sort of knocked the trolling habit out of me. since /bant/ started up and it reminds me of old /b/ and fyad, it has inspired me to be a little more active

Few trolls that did not turn to milder forms of trolling after being a troll for a longer time, tended to go worse. For some trolls it became an obsession or addiction. They felt that they had to go further with their trolling to be satisfied with the reactions. Troll 37 explained this:

> lulz are a bit like a drug: you need bigger and bigger hit to keep the feeling going. Trolling can quickly spiral out of control.

How trolling progressed was also dependent on their life situations. The ones who found other things to do often started spending less time trolling, but the ones who had problems making friends or had remained dissatisfied with themselves and their lives often kept going as before. It seemed that going forward in life did not itself curb trolling behaviors if the underlying problems, that drove someone to it, were not fixed.

There were also few trolls that had their trolling escalate all of the sudden without a good reason. Three trolls who were on Twitter went from being common trolls to damaging trolls by seeing what was trending and then followed what others were doing - in these cases it was hateful comments and rape threats. Troll 93 went all of the sudden from trolling sports topics to making a fake school shooting threat on 4chan, ultimately taking him to prison for two years. He said that his life was a wreck at that point and he was drunk when he posted the threat, but it does not fully explain such a severe escalation. These examples show that trolling does not always progress logically, and some trolls can make thoughtless and illogical decision suddenly.

6.3.3 Targeting

Trolls targeted people or groups with varying reasons and those reasons were influenced by the troll's behavior and boundaries. Some had a reason to target, some did not, some trolled when an opportunity presented itself and some trolled whoever took the bait. There wasn't any clear way to identify who a certain type of troll would target and why. Some correlations existed but even with RIP trolls, there was differences on who they targeted and why.

For some of the most harmful trolls, not many of them though, targeting was purely dictated by who is most vulnerable to it.

> Because if you are a victim of sexual assault, you are open to it. You've already got a weakness to that kind of stuff. (Troll 1)

Trolls that participated in RIP trolling either said that they targeted the "grief tourists", people who are paying respect only because it makes them feel better about themselves, or they just wanted to find the most vulnerable, already emotional, people to troll. Vulnerability was also based on gender for some. According to Troll 1, women are generally weaker and therefore easier targets:

> they are more easily offended and easier to anger and stuff like that.

> I don't actually have any problem with them being a woman. I'm doing it because at that moment in time, I'm going to get a better reaction out of them.

Even though some considered women as easier targets, there were also trolls that sometimes targeted men. For them, men were easier targets, because they provided personal information easily if a troll was pretending to be a woman. Troll 39 doxxed the men who replied to his fake ad, Troll 87 pretended to be an underage girl in Omegle chat and liked to mess with creepy older guys, and one troll just took advantage of being treated differently by the men he trolled as a female. There was a clear difference between targeting men and women. Men were targeted because they were eager to give their information to women online and treated women differently, but women were targeted because they were considered weaker and more vulnerable. As a side note, one of the trolls that targeted men was a woman in real life, while the others were men posing as women.

Political topics and the people who were discussing them were considered by many trolls as good targets, due to people having very strong opinions and thin skins. Troll 44 exploited the charged tensions involved in political or other controversial discussions:

> Any controversial subject with a majority voice is an attractive target. "If there's a Trump thing, I will support Trump.

Some chose their targets according to their own political views and others chose political discussions or topics to find targets regardless of their own political views. Many trolls mentioned enjoying arguing with people who are narrow minded, even if the discussions are only about something mundane. According to some of the trolls, it was easier to find people from political discussions, because there are always certain people who are narrow minded or who tries to justify their beliefs with stupid arguments.

> I typically go to a video of a recent political interview or a part of a show. Then I go to the comments and look for about three different people who are clearly narrow minded. I then look at their comments and see if there are any holes in their argument. (Troll 21)

Public figures and people who have a higher profile and wealth attracted some of the trolls. Troll 61 said that he only targets famous people and denied ever targeting any "civilians", expressing a view in the interview that famous people are not like normal people. Having a view that famous people are different than normal people was also shared by Troll 63. He had targeted Lindy West (an American writer, comedian, and activist), but did not realize that famous people online are also people, until Lindy wrote an article about how much he had hurt her:

> When you included it in your latest Jezebel article, it finally hit me. There is a living, breathing human being who is reading this shit. I'm attacking someone who never harmed me in any way and for no reason whatsoever. (Troll 63) (Lindy interviewed the troll)

Some of the trolls followed what other trolls were doing and targeted who they were targeting. Especially on Twitter this happened easily because users could view what was trending and jump in. Trolls involved in groups did not necessarily have to choose the targets themselves, because they were getting the targets through the group. Troll 28 was a user in /b/ board on 4chan and followed the lead of other trolls into trolling furries (furries are people who dress up as animal characters or are enthusiastic about animal characters that have human characteristics).

> In retrospect, I don't think I fully know why /b/ chose to target the furry community. But I latched on to this dislike and made it my own, even though I'd never felt personally offended by furries. (Troll 28)

Many trolls used baiting as a way to acquire their targets. They did not seek anyone particular but created a comment or posted content that acted as a bait and then they waited for someone to bite. Baiting was used especially by the ones who did more old school trolling. Some were opportunistic about trolling, only engaging when they saw a suitable opportunity, instead of going intentionally looking for targets. Troll 54 acquired some of his targets by using baiting but also chose the targets opportunistically:

> I don't specifically set off to target somebody, they, kind of put their hands up and volunteer you know.

There were also trolls present in the material who used their hate or disagreement toward certain people as a reason to target them. Troll 29 is a liberal and targets mainly right-wingers, white supremacists, racists and bad trolls, because of his deep-rooted disagreement with them. Troll 37 trolls with several groups who target extremists, misogynists and nasty communities. Trolls who used hate or disagreements as a targeting tool also had a slightly higher tendency to being more harmful than others.

Many of the trolls did not choose the targets by hate or disagreement, but more because they were either involved in a community already or they enjoyed certain topics more than others. Troll 50 picked easy targets and even chose to troll the website where he regularly enjoyed visiting and reading its content. Troll 56 trolled mostly dysfunctional news communities but did so out of the most bizarre situations that were possible to create in those communities. Troll 34 said that he trolled anyone about anything.

Some trolls viewed that it was the victims own fault to be targeted. Troll 38 said in one interview that he picks his targets carefully and that they always deserve it, but in another interview, he claimed that he has not targeted anyone and the people who are offended by his tweets chose to read them and be of-

fended. From both explanations it was clear that he was effectively placing the blame on his victims. There was an attitude present with some of the trolls that gave them a sense that the victims had it coming or they were asking for it by behaving in a certain way. Showing emotions online, being overly earnest and taking what they were doing online too seriously were some of the behaviors that warranted them to be targeted.

> They were targeted because they were earnest, stupid, and easy marks, but also because I hate racists (even if I sometimes play one on the internet). (Troll 26) (Talking about trolling members of Ku Klux Klan)

6.3.4 Organized Trolling

15 of the trolls were part of trolling communities or groups that could be considered organized. Organized is used in this case to refer to trolls who take part in a community or a group that shares goals and activities, and exchanges information. There were also six trolls that had done trolling with other trolls, but they were not organized. Five trolls had shared their trolling with their off-line friends. There were some trolls that specifically said doing it alone and most remaining trolls explained trolling behavior that indicated them acting alone.

Organized groups or communities are not all the same and there were big differences with them. 13 trolls were or had been part of trolling groups or communities that had more malicious intents, some groups were more malicious than others and the most harmful groups were mostly for RIP trolling. One troll was part of a group that trolled without malice and were trolling more for humor. Troll 37 was part of a group that attacked only harmful people and groups, such as white supremacists. Troll 65 had previously been in a malicious group but had later switched to an anti-trolling group.

Six trolls admitted participating in trolling with other trolls, but there was no dedicated trolling group or community involved. It was more of a case of spontaneously jumping in with other trolls to attack the same target. Five trolls said they shared screenshots of their trolling with their friends or they had done some trolling with their real-life friends.

Troll 38 was not connected with other trolls necessary, but he had like-minded followers on Twitter who would attack the same targets as he did. This made it possible that if his targets blocked him, then his followers would continue with the attacks. Troll 32 was not in a trolling community or a group, but he was well connected with the staff of Reddit and with the volunteer moderators on the site. He had a lot of support from the community to keep doing what he was doing, and, in a way, he was most organized out of all the other trolls, but his case is a rare exception.

When looking at the troll categories of the trolls who were part of organized trolling, eight of the trolls were placed in the damaging category, one was uncategorized and six were in the common troll category. Four of the trolls in the common category had explained behavior that was close to being damaging.

This shows a higher probability of organized trolls being more harmful than the average troll. This is probably caused by peer pressure and following others lead.

6.3.5 Platforms

The abundance of platforms available to use over the internet gives possibilities for trolls to find a place for whatever type of trolling they wish to conduct. 99 trolls in the material gave information on where they trolled (table 11).

TABLE 11 Platforms used by trolls

Platforms used by trolls	Number of trolls
Internet forums / discussion boards	26
4chan	19
Twitter	17
Videogames	17
Facebook	17
Reddit	11
Blogs	11
Youtube	9
Chatrooms	6
Comment sections of newspapers	3

There were 19 trolls that said they had only trolled in one platform throughout their trolling career. For some of these trolls their careers had not been very long, but some had many years behind them. Internet forums and discussion boards were the most popular places to troll and as expected 4chan, videogames and social media platforms ranked high as well.

Viewing of the troll categories by platforms showed that Twitter and Facebook had more damaging trolls than the other platforms. YouTube and chatrooms had more entry level trolls' presence than the other platforms. These results would suggest that Twitter and Facebook by design allows more damaging trolling to be done with less effort than on the other platforms. The possibility of viewing what is trending on Twitter made it possible for trolls to jump in and start spewing hateful comments, even in the cases where a troll had not been damaging before. Twitter trolls had in common that they were after the retweets and followers, making it necessary to go further with their tweets than others, when targeting someone or some tragic event. Facebook ranked high most likely due to RIP trolling being very much Facebook related behavior. 4chan had an even distribution of damaging, common and entry level trolls. 4chan is an anonymous image board and contrary to the common view not all users are trolls and not all trolls there inhabit the infamous /b/ board. Damaging trolls had been visitors of /b/ but the trolls that stayed away from that board tended to be either common or entry level trolls. Entry level trolling on 4chan is understandable because the anonymous and temporary existence of

threads does not allow sustained or very personal attacks, making it suitable for entry level trolling.

6.4 Ending

6.4.1 Reasons to Quit

There were several different reasons why the trolls stopped. Many of the trolls stopped because they had some level of remorse, many also had an improvement on some aspect of their lives, some were doxxed and some realized trolling to be a problem for them. Decisions to stop were generally dependent on the individual's circumstances and behavior. Some factors that caused one troll to stop had no impact on others and for some it required multiple factors to make them stop.

Out of the 49 trolls that had quit trolling, 42 provided some information on why they had stopped. From their stories 29 different reasons were identified that had been a part of their decision to stop. The following table (table 12) shows the 15 most mentioned reasons. Many trolls listed more than one reason, and their decision was therefore influenced by the combination of different reason.

TABLE 12 Reasons to quit

Reasons to quit trolling	Times mentioned
Grew up / grew out of it	8
Was caught or doxed	6
Felt bad about their behavior	5
Realized it was pointless / stupid	4
Realized how it can affect others	4
Found other interests	4
Did not like what they had become	4
Getting banned	3
Made new friends	3
Got a job	3
Problems with the law, went to prison	3
Trolling started to take too much effort and energy	2
Got bored of it	2
trolling behavior affected IRL	2
Saw trolling from the other side	2

Even though trolls mentioned many different reasons to stop, there were some similarities in the trolls' stories that allowed four main themes to emerge. All

reasons were able to be placed under the themes or main factors, which were: feeling remorse, improved life circumstances, interest faded and negative impacts to life. The following table (table 13) presents these main factors and examples of reasons that were placed under them.

TABLE 13 Main factors for quitting

Main factors	Explanation	Examples of reasons
Feeling remorse	Feeling of remorse either came from realizing how hurtful one's actions had been, or they realized that they did not like what they had become. Realizing the harm of trolling in general.	Felt bad about it, realized the effects, did not like what they had become.
Interest faded	Interest to trolling faded, either by getting bored of it, not finding anything new and exciting to do, or trolling became more difficult, for example, due to being banned from their favorite forums.	Grew out of it, realized it to be pointless, got bored of it, started to take too much effort.
Negative impacts	Negative impacts came from facing the repercussions of their behavior, when trolling started to affect their behavior negatively offline or some other negative impact that caused a troll to leave trolling behind.	Was caught or doxed, went to prison, trolling behavior affected real life.
Improvement of life	Improved life circumstances that replaced the need for trolling. Often when the underlying issues that made them troll were getting better, it resulted in leaving trolling behind. Many times, it was lack of friends, hobbies or other problems like depression and unresolved issues.	Found other interests, made new friends, got employed, overcame personal problems.

Feeling Remorse
Feeling remorse was the strongest reason that made trolls stop and it was present in 21 of the trolls that quit. Whether a troll felt remorse was dependent on their behavior. Trolls that considered their actions as harmless did not experience the feeling of remorse as a factor to stop trolling. With this, it is important to notice it was that they themselves perceived their actions harmless, but it does not guarantee that for their targets it is harmless. Remorse was a strong factor even by itself, resulting in nine trolls quitting and it was also, along with negative impacts, present in seven troll's decisions to quit. Feeling remorse, as a factor to stop, was mostly present in the common trolls.

Troll's remorse, an actual term used by trolls who were familiar with 4chan and Encyclopedia Dramatica, caused some of the trolls to quit.

> 4channers call it "troll's remorse" — the sudden moment of clarity when you realize that being mean to another human being for no adequately explored reason is kind of awful. (Troll 28)

Troll 28 stopped trolling after troll's remorse hit her hard. She was in college at the time and remembered her efforts to troll an autistic man, who was an ongoing target for trolls, when a friend commented of his autistic brother and the stigma he faced in society. Troll 28 realized how awful her behavior had been and quit trolling. Many trolls quit after feeling remorse - some realized how trolling affected people, some started to feel bad about their behavior and some realized that they did not like the person they had become.

Two trolls that had to see trolling from the perspective of the receiving end, were quick to change their views about trolling. Troll 11 stopped because trolling behavior had started to manifest in his real life, he realized that he was becoming irrelevant in discussions, he realized the effects trolling can have on people and he finally was coming to terms of being gay, thus realizing that others like him are often viciously trolled.

> I saw a news item about a man who left a white supremacist group and changed his tune when he realized the group's list of "undesirables to be euthanized" included his own mentally disabled sone. It wasn't until the hate affected him personally that he realized he was on the wrong side. Same here. (Troll 11)

Another troll that witnessed the other side was Troll 14, who trolled in videogames but stopped partly because he got a job for one of the games as a support representative, but mostly because he saw the other side of trolling through his work. Troll 8 trolled to get reputation points in Sega forums and his chase for the points ended up making him feel bad about himself and what he had done.

Interest Faded

Interest faded, was a factor to stop for 14 trolls and it was the sole factor for eight of them. Trolls, who mentioned that their interest to trolling faded along with another factor, were more often common and entry level trolls. Trolls who stopped only because of their interest had faded were proportionally more entry level trolls and none of them were damaging trolls. This result suggests that the most harmful trolls are less likely to stop due to loss of interest and will continue even if they have gotten somewhat bored of it. Entry level trolls however will stop more easily when they lose interest.

Growing up, as a reason to stop trolling was expressed by eight trolls and the trolls that mentioned growing up directly were more leaned towards being entry level trolls. Growing up was a rather vague reason and meant either feeling too old to troll, being more mature, realizing trolling to be stupid or that their urge to troll had ran its course. As entry level trolls were more likely to start without a good reason they possibly also gave up on trolling without needing a good reason. Even though growing up was mentioned the most times, only some of the trolls were susceptible to it. Many trolls continued even though they were getting older, had a job or they understood what they were doing was juvenile and stupid but did it anyway. One of the active trolls that

had continued for at least 17 years, Troll 101, explained his view on why he or someone would stop trolling:

> i think it's mostly growing out of it. even though i still do it, i realize it's a pretty juvenile thing to do. but fuck it, im a single loser with nothing better to do. having a gf or friends to socialize with irl would stop me completely

Boredom was mentioned often by trolls as a reason to start trolling and by active trolls as a reason to stop trolling. Troll 1: "until I get sick of it. If that happens." Troll 98: "like any pastime, boredom could stop me from trolling." It was surprising however that even though active trolls thought that boredom would make them stop, it was directly mentioned only by two of the trolls that had quit.

> I wish I could say I stopped because I grew as a person, but instead I stopped because, mostly, I got bored of it (Troll 9)

Negative Impacts

Negative impacts to trolls' life was a factor for 13 trolls and five of them stopped only because of it. The ones that stopped only because of the negative impacts were, all but one, caught or doxxed and they were mostly in the category of damaging trolls. For all trolls that had negative impacts, their category was proportionally more towards damaging trolls, which suggests that trolls that participate in more harmful forms of trolling are more likely to experience negative impacts from trolling. This could be from taking their trolling further than other trolls, which sometimes crosses the legal limits, or it starts to affect their behavior in real life. All damaging trolls, except one, had only two factors that affected why they quit, negative impacts and feeling remorse. This result suggests that damaging trolls will need a negative impact, a case of remorse or both before they stop.

Some trolls developed behavior that was almost like addiction, where they had a need to constantly check discussions or go further with their trolling to be satisfied. Troll 19 was one the trolls that had problems staying away from trolling and after realizing that, he decided to quit:

> They say you know you're an alcoholic when you try to go a week without drinking just to prove you can. When I caught myself doing the same thing with the Internet, I knew it was time to quit.

For some trolls it was harder to keep their trolling persona separated from their offline persona. Troll 34 started losing friends when his trolling behavior started to affect his normal behavior and he had to get help from a therapist to end it.

For six of the trolls, being caught or doxxed meant other repercussions that ended their trolling. Troll 13 was not satisfied with just trolling strangers and was trolling even his friends and family with fake profiles. His relationship with his family members and friends deteriorated after they figured out it was him - causing him to realize that the feeling of power he got from trolling was

not worth it to ruin his life. Three of the trolls ended up in prison, which seemed to work as an efficient reminder for them not to pick up trolling again. Troll 93 had trolled on 4chan and even gave up using the site after ending up in prison:

> I have sworn off the website. It hasn't even touched my address bar. It's like a PTSD thing for me now.

Being doxxed or prisoned however will not always work. Troll 38 was doxxed by the media, which led him and his family receiving death threats, people had pizza sent to him and bricks thrown through his windows, but he decided to continue what he was doing. Troll 60 went to prison after targeting family members of a missing person in Facebook, pretending to be his murderer. Troll 60 did not stop after his prison sentence, but seemed to get worse with his behavior, targeting his ex-girlfriend with an abusive campaign online and ending up in prison again. He had crossed from damaging trolling to actual harassment and cyberbullying after his first sentence and continued that behavior even after his second sentence.

Improvement of Life

Improvement of life was present 12 times and for five of them it was the only factor to stop. Trolls that had this factor in their decision to stop were mostly common trolls and only one of them had expressed commitment in their behavior. This suggests that trolls that are not very committed in their behavior and do not take trolling too far are more likely to stop once there is an improvement in their life situation.

Many trolls decided to quit, or they gradually stopped, when they found other interests, made new friends or their life turned better some other way. Troll 3 had several factors that made him stop. He decided to quit trolling around the time of graduating from college and there were other factors that helped him with that decision. He had, at that point, been banned from all of the forums he wanted to post, he had a revelation that trolling accomplishes nothing and he had started to take interest in writing, which filled the need for validation that trolling previously did. Troll 12 quit because he was at a point in life where he knew what he wanted to do next, go in college and become a teacher, and felt like he was too old to be trolling, he also had made friends at that point and did not like what he was online. Troll 18 left trolling behind when his social situation got better:

> That winter I would finally find some proper friends and some approximation of a girlfriend. Without ever quite deciding to leave, I realized a year later that I hadn't ruined anybody lately and I hadn't checked Encyclopedia Dramatica and I wasn't really a troll anymore. Thank God.

Two trolls stopped because they got help from the people they had tried to troll. Troll 57 was obese and had been trolling people in a bodybuilding forum when

one day he was given a choice by an administrator to add a picture of himself, instead of an avatar, to his profile or get banned. He chose to add his real picture and tried to troll the community with his pictures, but the members decided to help and give him support for losing weight – which he eventually did and that changed his life.

> I needed someone to believe in me, long before I was ready to believe in myself. And I think without that, I wouldn't have been able to be where I am today. (Troll 57)

These main factors alone were not enough for 15 trolls to stop and it took at least one other factor to be involved. Even though the feeling of remorse was the strongest factor, it will affect some trolls differently, making other factors needed to make them stop. There was also the impact of the troll's boundaries at play with remorse. Not all trolls decided to stop when they realized how awful their behaviors were, they just toned it down to stay within their newly formed boundaries. One active troll had experienced negative impacts from trolling but toned down his behavior to avoid similar impacts in the future. These examples show that some trolls can overcome feelings of remorse and negative impacts by adjusting their boundary.

Some trolls need more factors present than others before they are willing to stop. There were active trolls who were not satisfied with their lives and were fully aware of how hurtful their behavior can be, but still had not stopped or even adjusted their behavior. Even for trolls that had their trolling interest fade there were other factors linked to it. Some kept trolling even if they did not enjoy it very much anymore and only when something else influenced them, they decided to quit. Trolling might not always stay in the past after someone has stopped. There were trolls who mentioned still having a small urge to troll after they had quit but stayed away because they have better things to do or they are determined to stay away from their previous behavior.

6.4.2 Length of Time as a Troll

Length of time spent as a troll varied individually. The troll's themselves, their behavior, their reasons for trolling and their circumstances were different. Because of the individual differences some trolls quit within their first year, while others continued for over a decade. Longest times as a troll lasted at least 17 years. Following figure (figure 2) presents the lengths of 46 trolls time they spent as trolls and has the responses of trolls that have ended trolling marked separately.
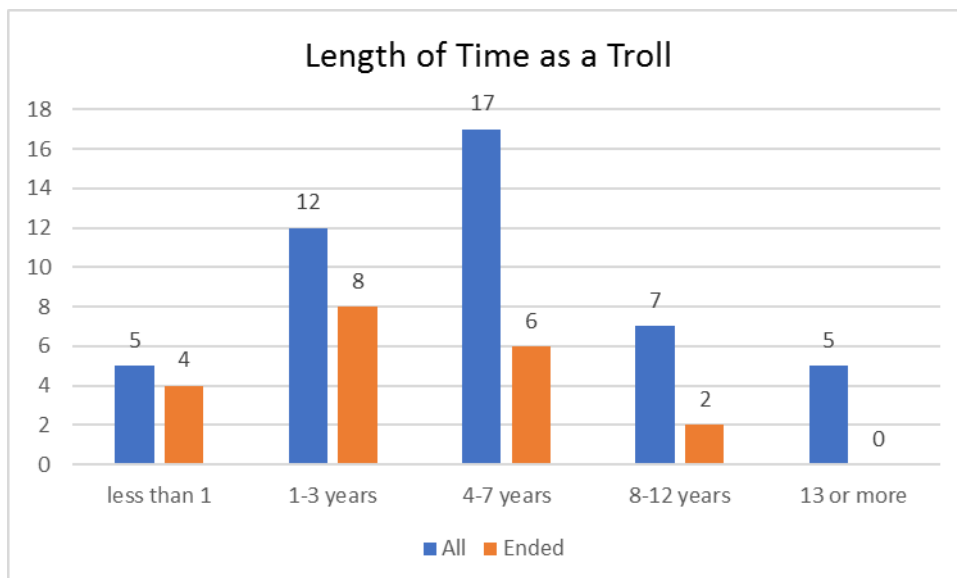
FIGURE 2 Length of time as a troll

The figure showed a peak of trolls quitting in 1-3 years when looking at the ones that had ended their trolling activities, but when counting together trolls that are still active and trolls that had quit, the peak is in 4-7 years. One possible explanation for these differences could be that trolls currently continue trolling longer than before.

Number of damaging trolls increased with trolls that continued longer than seven years. This would be supported by the notion that trolls need to go further with their trolling to achieve the satisfaction they seek as their trolling progresses. However, there was no clear trend in the material whether entry level trolls quit earlier than common or damaging trolls. A notion that supports that the length of time as a troll is not related to harmfulness of trolls is that some trolls ended up reaching the level of damaging troll category quite soon after they had started trolling. There were also trolls that had reached their peak as damaging trolls at some point and then continued for years as common trolls.

7   DISCUSSION

This thesis attempted to answer three questions. 1. What is the life-cycle of trolls, 2. are the current definitions of trolling adequate and 3. how well has the past research understood why trolls start, their behaviors and how they could be stopped?

First question, the life-cycle of trolls was examined in the results and the life-cycle is presented in the section 7.1 Life-cycle of internet trolls. Second question, the definition of trolling was examined in the chapter 2 and the definition of a troll and trolling for this study was created in the section 2.5. To conclude, the current definitions are inadequate as they cannot encompass the wide aspects of trolling (e.g. Binns, 2012; Hardaker, 2013; Sanfilippo et al., 2017a) and they treat people who participate in trolling as trolls. This creates a problem of having to include a wide variety of people as trolls and as Sanfilippo et al. (2017c) showed, there is a need to treat trolls as different from trolling. This study followed that approach and different definitions were created for trolls and for trolling. Third question, the evaluation of past research and comparison with this study's results will be answered in the section 7.2 Research implications. Finally, this chapter will also discuss the practical implications, limitations of this study and future topics.

7.1   Life-cycle of Internet Trolls

Trolls are not born trolls, it is not something that they are destined to do, and they are not a homogenous group of people. Results from this study suggest that trolls can be of any background and it might not show on the outside whether a person is a troll. Media has painted an image of a certain type of person that lives in his mom's basement, tormenting innocent people for sadistic pleasure and having no other purpose in life. This depiction of a troll is purely fictional as the results show and it is more likely that when you meet a troll, you would not even guess that they are involved in trolling. Trolls are not all equal

either, some take part in vicious and despicable acts, but others are harmless and even celebrated online.

Next the life-cycle of trolls will be explained and the following figure (figure 3) presents the life-cycle in its basic form. The life-cycle is meant to describe general results from this study and therefore it cannot encompass every trolls journey into trolling as they are all different individuals.
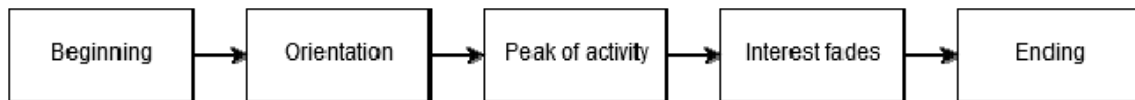

FIGURE 3 Life-cycle of trolls

Beginning

Before someone becomes a troll, they have most likely had something negative happen to them or they are dealing with some issues such as lack of friends or problems at home. Trolls most often start while they are teenagers, which are the years of a person's life that are already full of emotional turmoil, therefore it is not surprising that someone may find an outlet for their emotions online. There were many reasons that led to trolling. Trolling often starts because someone needs an outlet that they don't have in real life, they are bored, frustrated or have either a prankish sense of humor or are fascinated about doing something slightly "dangerous" and forbidden from the safety of their home. The reasons varied greatly, and the reasons were often tied to their life situation. Once the person starts trolling, the first successful time can be a rush and that rush keeps them coming back.

Orientation

New trolls are first in a stage of orientation where they start to experiment with their trolling and gradually find their preferred behavior and platform. They can also take influence from other trolls and are susceptible to following other trolls. Some even end up in trolling groups. Few trolls, even though they might be as enthusiastic as the others, will stop within the first year. They stop because they can see the negative aspects that comes with trolling, they have better things to do or trolling just is not for them. The ones that do not see the negatives, or ignore them, are the ones that need the positive effects of trolling the most. When speaking about positive effects, they are purely positive for the troll in the form of having an outlet to seek something that they are missing in their lives.

Peak of Activity

At this point trolls have found their preferred trolling activities and they are most active. For some trolls this stage can be dangerous as they might push their activities too far, which can lead to having negative impacts from trolling to their real lives or they end up doing something that makes them feel remorse. These can cause trolls to quit suddenly or to adjust their behavior to avoid neg-

ative impacts in the future. Trolls who are not malicious and do not go too far will not face those problems but even them can realize that there could be better things to do at this point.

Interest Fades
This stage usually comes with growing up, when trolls have been active for a longer period of time or they have new interests in their lives. Thus, interest towards trolling fades. Many trolls quit at this point as it does not offer them anything they need from it anymore. Some trolls though, do not stop even after they have lost most of the interest to trolling. These trolls have a habit of trolling or they still are missing something in their lives that would make trolling completely unnecessary for them. These trolls have also at this point changed their trolling behaviors and spend less time trolling. They may be ready to quit trolling but need some other factor to do so.

Ending
Trolls who reach to the end of the life-cycle usually have more than one factors that makes them stop. They have already gone through losing some interest in trolling at this point and if they feel remorse, get negative impacts from trolling or their life improves enough they will quit. They may even get bored enough eventually and just stop because of that. Trolls usually quit between one to seven years of trolling, but some claimed to continue for over 17 years. This shows that it depends on the individuals on how long it will take to go through the life-cycle, or even the stages within it.

7.2   Research Implications

For this section the results of this study will be compared with the current scientific literature. This study brings new information to the research field of internet trolls from nearly all parts of the results.

Age
Scientific studies have not identified starting ages or addressed through studies what are the ages for trolls. Phillips (2013) estimated trolls being between 18-30 years of age based on the cultural references they used. Bishop (2014b) had his assumption in line with media accounts that have claimed trolls as being young people. This study verifies the assumption that trolls are mostly teenagers and young adults as the starting ages for most were between 10 and 18. Results from this study also showed that the most common time to continue trolling was between 4-7 years, roughly placing vast majority of active trolls between 10-30 years of age. Older trolls were not uncommon either, which shows that trolling can be an activity for a wide range of ages.

Ages to start trolling could also be understood through school levels and working life. Many trolls started in the middle school age of 10-14, when chil-

dren start to get more unmonitored access to computers or receive their first computer. High school age of 15-18 proved to be the most common time to start trolling and this could be explained partly by the rebelliousness of teenagers, being socially awkward at that age or hearing about trolling from friends. College age proved to show a decline in new trolls, possibly the reason for this could be from maturing, being busy with studies, or getting new friends and interests. It was surprising from the results that none of the trolls had expressed starting between the age of 25-30, which is the time when many people have started working or are looking for work. New trolls started to appear after the age of 30, even though in very low numbers. Later age interest to trolling could possibly be a result of frustration toward something. Another possible reason is dissatisfaction in their lives, which was among the most mentioned factors related to troll's personalities.

Trolls as People
Many studies have emphasized the negative personality traits of trolls, especially sadism and psychopathy (e.g. Buckels et al., 2014; Sest & March, 2017), but these studies were conducted with surveys and not by interviewing trolls. Phillips (2011), who had collaborated extensively with trolls had not made claims of them being psychopaths or sadists. She referenced to one troll as a pleasant and a normal guy who happened to be a troll. What the trolls in this study said were more in line with how Phillips (2011) had described a troll. Troll 98 had made a point to explain that trolling is not a personality and it is just an activity that someone picks up for various reasons. It must be noted that even though many trolls had described themselves as normal or nice people in real life and there were more of an indication that trolls considered trolling as a pastime than a compulsion, this study will not suggest that the studies that found sadist or psychopathic traits in trolls to be wrong. This study is not equipped to answer those questions but what this study suggests is that most likely psychopathy and sadism are not defining personalities for trolls. As trolls are very different from each other and there is also humorous trolling and not just damaging trolling, it would be highly unlikely that most would have those personality traits. The results from this study also showed more support to results that Craker and March (2016) had suggested. They had suggested that it might be social motivations and not the personality that could be the best predictor of trolling. Also, the view from Seigfried-Spellar and Chowdhury (2017) which suggested that there are personality and moral differences among trolls, is supported by the results of this study.

How Trolling Begins
It could be argued that this study is the first to present results of how trolling begins. The age when trolls start, what possibly affecting situations were in their lives before starting and what were the reasons that led them to begin trolling has never been studied before. Many studies have however identified motivations for trolling but as this study shows, there are differences between the reasons to start and what motivates them when they are trolling. There was

one study that discussed spontaneous engagement to trolling in an online community, but it did not address actual trolls and how they start. Cheng et al. (2017) had studied what effect of mood and witnessing trolling has on the probability of someone engaging in trolling. However, those results were about how someone might spontaneously engage in trolling and the study had a fundamental flaw of automatically identifying comments as trolling if the language was negative. Cheng et al.'s (2017) study more likely identified angry commenters in most cases than actual trolls or trolling. Regardless of the problems present in their way of identifying trolls, their finding that trolling can lead to more trolling was supported by this study. Frustration of not being able to discuss with other people reasonably online, following other trolls lead and being trolled themselves were among the reasons to start trolling in this study.

Behavior

Studies have recently come to understand that trolls exhibit a wide variety of behaviors (e.g. Sanfilippo et al., 2017c), which was evident in this study as well. Many of the behaviors and behavioral aspects that emerged from this study have been identified before. Deception, manipulation, and aggression (Hardaker, 2013), provocation to abuse (Binns, 2012), pretending to be someone else (Phillips, 2011), masking their intent (Synnott et al., 2017), creation of fraudulent websites (Kopecký, 2016), posting of inflammatory and outrageous messages (Cambria et al., 2010), posting of nonsensical messages and using vitriolic language (Synnott et al., 2017) etc. were also present in this study. This suggests that most of the studies mentioned in the section 3.2 Behaviors, were correct but had identified only parts of the overall behaviors. Results from this study shows support to Sanfilippo et al.'s (2017c) statement that "Trolling behaviors are more complex and diverse than dominant scholarly and media narratives often recognize."

Some views on the other hand did not match the results from this study. According to Phillips (2013) trolls are after lulz and they subculturally identify as trolls, but in this study lulz was rarely mentioned and most trolls that participated in the online discussions for this study shunned the notion of being called trolls. This suggests that the trolls that Phillips (2013) speaks of, are heavily tied to 4chan's /b/ board and the findings are more related to trolls of that environment. Phillips (2011) wrote that trolls do not take principled stands on issues, whereas some trolls in this study took heavy stands and even based their trolling on it. This study had trolls that were from multiple different online spaces thus it is not surprising that some concepts that are more related to trolls in certain online spaces are not relevant in others.

There was one behavioral aspect that had not been taken into account with previous studies and that was the commitment in trolling efforts. There have been some mentions of committed trolls in previous studies (e.g. Binns, 2012; Phillips, 2011), but it has not been lifted as an important behavioral aspect nor addressed in better detail. Commitment to trolling efforts was present the most times, along with provoking others, in this study as a behavioral aspect in the subsection 6.3.1 Behavior. Therefore, its high occurrence suggests that it is an

important behavioral aspect. Not all trolls exhibited commitment, but it was present especially with the ones that end up being in trolling groups or who do the most damage but was not limited to them. Commitment to trolling efforts is an important aspect because in some cases it makes trolling harder to distinguish from cyberbullying. Committed trolls are harder to identify and deal with, because they can make convincing troll profiles, do extensive research on their target and even troll the same target for years.

Results from this study also provided novel information about how much time trolls use on trolling. This has not been addressed in previous studies, but assumptions about trolls have been made according to their posting activity during the day. Synnott et al. (2017) concluded that the trolls they observed were privileged, because some of them were able to spend a lot of time posting even during working hours. This study had trolls that expressed being very active even when they were at work, which shows that it is important to understand the different time consumption habits of trolls in some cases. Also, the information from this study might help future studies to assess if observed trolls are in the earlier or later stages of their life-cycle.

Intentions were also presented in the results of this study and the generally viewed intention of eliciting a reaction from a target was supported. Trolls also expressed some other intentions that have not been considered previously. Some trolls claimed that their intention was to make others think and be less narrowminded. Some had only intentions of getting retweets on Twitter, some wanted to feel better about themselves and some had an intention of furthering some ideology or defeating one. These different intentions show that trolls are not always after the reaction but might be after something bigger that takes time to achieve. If a troll is fighting an ideology in their mind, then the short-term reward of getting a reaction is not as important to them. This brings new levels to the management of trolling as depriving them from a reaction might not be enough to curb their behavior.

This study also identified behavioral boundaries which have not been discussed in previous studies very much. Coleman (2012) has been the only one so far to mention moral restraints in trolls' behavior but did so briefly and regarding online wisdom of keeping one's trolling in online spaces. It could be argued that behavioral boundaries that the trolls exhibited could be an important topic to research further as it was shown that their boundaries determine how far they will go with their trolling. Boundaries changed over time for trolls, which suggests that there might be a way to influence them.

Trolls are known to be deceptive but how much of the things they say are their own views, has some contradicting views in the research literature. Some studies take the perceptions of trolling behaviors as a definite answer, some suggest that trolls are never serious, and some have identified that it can be difficult to distinguish whether trolls are presenting their own views. The results from this study shows that trolls can reflect their own ideas when trolling but many do not. The trolls that Phillips (2015) had dealt with, often claimed doing it just for the lulz, which was shown to be correct for many trolls, but it was not

always the case. Others like Sanfilippo et al. (2017a) have suggested that some trolls are driven by an ideology, which was supported by this study, as some of the trolls did base their trolling for their ideology. However, it can be hard to observe when a troll is truly motivated by an ideology and when they are just using it for trolling, because both cases were present in this study. Phillips (2015) for example also acknowledged the possibility of trolls using ideology as a front for their trolling. This study supports the views that it can be hard to identify whether someone is being genuine or trolling (Hardaker, 2015) and whether a troll is genuinely expressing their views or just trying to get a rise (Milner, 2013). It could be suggested that studies that have to rely on observations of trolls are in risk of interpreting trolls incorrectly, even if great care is taken. Another consideration for future studies is that sometimes trolls do believe what they are saying and thus brushing off all trolling as them merely saying things to get a rise can be harmful. It can make combating abusive forms of trolling or other online harassment harder if the perpetrator is merely considered as trying to get a rise. Extending the excuse of just doing it for the sake of trolling to abusive behaviors can cause them to be taken less seriously than they should be.

Trolls and their trolling personas have had few mentions in past studies. Mainly in a study by Phillips (2011) where profile creation was discussed and how trolls tended to speak of their trolling personas as if they were a different person. The results from this study extends the knowledge on how far trolls may go with their trolling personas. Particularly interesting was the result that showed some trolls being very fond of the trolling personas that they have created. In some cases, when these trolls were banned from their favorite places they had no interest in starting all over again with a new profile. There was some level of seeking fame with their profiles and their whole trolling culminated to that one character. This result may be helpful information as it is encouraging to know that some trolls can be stopped merely by preventing them from using the character they've been building online for a while. Trolls also expressed that they can put a lot of effort in creating believable characters on social media sites. This is useful Information for people that may encounter trolls on Facebook and assume them to be real people. This can also be harmful to know, for it can encourage treating normal people as trolls more often too.

This study also provided some new information about what fears trolls have about being doxxed or caught by the authorities. Previous studies have not mentioned much about this topic. Some studies have looked into the legal ways to deter trolls and there has been cases where a judge has tried to make an example of a troll and create a deterrence with that (e.g. Bishop, 2012b). This however according to the results from this study is not an effective approach. Trolls were not very concerned with legal ramifications but more with the other problems that might come to their normal lives from being doxxed. Many trolls considered their actions to be within legal limits and had no concerns because of that, regardless of whether they interpreted the legal limits correctly or not.

Progression of trolling is another part of this study that offers new information. There has not been studies so far that would have been able to assess

how trolling progresses. This study shows that trolling behaviors are not constant from beginning to end. People's lives change during the years they participate in trolling and their experiences and situations affect how they troll. There was an obvious curve to be noticed and it was explained more thoroughly in the life-cycle of trolls' section.

Targeting

Previous studies have addressed who are targeted by trolls and why, but they have been mostly focused on the minorities (e.g. Herring et al., 2002), women (e.g. Mantilla, 2013), victims of RIP trolling (e.g. Phillips, 2011) and how media affects who they target (e.g. Phillips, 2011). It has been suggested that trolls target stigmatized groups out of hate because they are different from them (e.g. Herring et al., 2002), which was not supported by this study. The ones that targeted because of hate or disagreement were either targeting people of different political ideology or racists. There was one troll who expressed feeling threatened by women and targeted a woman, but in that case, it was not the main reason to target his victim. His main reason was his own unhappiness with his weight and life situation, which he took out on the woman. Thus, sometimes there were more than one reasons to target someone. This study therefore suggests that hate is not a strong motivator for trolling or on how they target. Many trolls expressed entertaining themselves with trolling and possibly because of that these trolls did not target people because of hate. Therefore, future studies could benefit from assessing more carefully whether an observed troll that is involved in hateful activities is even a troll. This can be difficult though because some trolls used very hateful language in their trolling and did not really hold those views.

Trolls have been said to target controversial and taboo topics because of the greater emotional response (e.g. Kopecký, 2016). This study's findings support that, as some trolls had mentioned going after the most vulnerable targets that already have a predisposed vulnerability because of being raped in the past or if they are grieving a family member on a memorial page. There weren't many trolls though that used this as their primary targeting tool. Many trolls considered political topics that had controversy as excellent targets to elicit strong reactions, as people partaking in those discussions had thin skins and strong opinions.

Trolls enjoyed arguing and annoying the very people they would be infuriated to debate in a genuine conversation. Some trolls even decided to start trolling because of the inability to have rational conversations with others online. Studies that address the antisocial behaviors of trolls could benefit from considering the toxicity of discussions in general as being part of the problem and not just trolls.

There was an opportunistic approach for targeting present in this study as well. Phillips (2015) had described trolls taking use of good trolling opportunities and her findings were supported by this study. Some of the trolls in this study however described also a less active opportunistic approach. These trolls

did not go looking for targets or attempted to bait anyone, but they were behaving normally and only trolled when a suitable opportunity presented itself.

Another way some trolls found their targets came from their interest in the community already. Shachaf and Hara (2010) had suggested that the trolls had interest toward the community but ended up having a destructive involvement in it. Their view was supported by some of the trolls in this study, but the destructive involvement part was not present for all of them. One of the trolls in this study did have a more destructive involvement but he also used the site regularly as a normal user and not just for trolling purposes. Another example was a troll that did not contribute destructively but was actually a liked member because of the type of humorous trolling he performed.

This study also identified targeting by following others lead. Some trolls had targeted by following other trolls – a point missing from other studies. These trolls tended to end up being damaging trolls and they took influence from others. Future studies would benefit from considering how the visible examples set by successful trolls can influence the behavior of other trolls or even encourage normal users to troll. This information would be useful for designing troll prevention methods.

Organized Trolling

Organized trolling has been addressed in previous studies (e.g. Phillips, 2015; Wi & Lee, 2014). Trolls in this study also expressed being part of raids (e.g. Phillips, 2015), RIP trolling (e.g. Phillips, 2011), competing with each other with trolling (e.g. Bartlett, 2015) and being part of trolling groups (e.g. Synnott et al., 2017; Holmes, 2013). Some studies that have addressed trolling efforts being coordinated (e.g. Mantilla, 2013) had expressed it from the victim's point of view. This study showed that in some cases trolls, even though they may appear being coordinated, did so individually. Some had joined a larger attack without any cooperation involved. This was especially present on Twitter because a certain topic that is trending can attract multiple trolls to attack. This kind of a spontaneous group attack is harmful as trolls attempt to be more outrageous than others and the language they use can get damaging. These attacks are also problematic because some attackers may not be trolls. Legitimate threats might be alongside with threats made by trolls, making it difficult to react to the actually dangerous individuals. Trolls were often after retweets on Twitter which causes them to go further than others in order to stand out from the crowd. There is no hard evidence from previous studies about how many trolls work alone and how many participate in trolling groups. This study had 15 trolls that were organized out of the 109 trolls, which indicates that majority of trolls work alone. This supports the assumption from Shachaf and Hara (2010) where they suggested that trolls operate mostly individually.

Platforms

Trolling occurs in many different platforms and many studies have studied all of the major platforms such as Facebook, Twitter, 4chan and online forums that were also present in this study. This study however was able to identify which

platforms have more damaging trolls. Twitter and Facebook had more damaging trolls than the other platforms that were mentioned. There haven't been studies addressing platforms in a way that would determine which of them attract the worst trolls or make the worst trolling possible. In the case of RIP trolls, Facebook has been acknowledged previously as being a place that has made such trolling possible (Phillips, 2011). Therefore, studies have identified that the platform design can affect trolling behaviors. This study's result however is important because it means that these platforms need more effort in combating the harmful aspects of trolling than others.

Ending
It could be argued that this study is the first one to present findings related to how trolls quit trolling. It is an important aspect of how to ultimately defeat trolling because when you know what factors lead trolls into quitting there can be more efficient methods developed to encourage trolls into quitting. Future studies could benefit from these results by identifying better management methods that can take advantage of those factors, whether it's design of platform or moderation strategies. There can be more success in curbing trolling when administrators and systems designers know what factors will promote the quitting of trolling and what approaches would be inefficient.

Trolls had continued trolling for several years before quitting and some trolls even were active after 17 years. Trolling clearly can be an activity that continues for many years if the person's trolling behavior, life situation and personality allows it. Some of the trolls that continued for many years had become rather harmless and partly because of that were able to continue. Some trolls had remained relatively harmless since they started or were even celebrated members of online communities. This result supports the findings from Coles and West (2016a) where they identified "acceptable trolling" that did not need to be eradicated. Therefore, this study suggests that future studies should take an approach that focuses their studies and results more accurately to trolling that is causing the most harm online and does not extend results for all trolls.

7.3 Practical Implications

There are some practical implications with the results from this study. It could be argued that trolling is as much caused by the online environment as it is caused by the persons attributes or life situation. The information from this study can be used to design new solutions in the online spaces to promote a change in the environments where possible future trolls visit. These solutions would have to impact the general population as well because toxic discussion cultures create more toxicity. One possible solution that would be easy to implement is a mandatory instructional video that needs to be watched before a new profile is created. This would force teenagers to get information on proper netiquette and give the novice users information on how to not behave. Young

people that trolled had often the impression that their words and actions cannot hurt others online. It was shown that seeing other trolls also had an impact on some people and encouraged them to start trolling. They also took influence from the other trolls. Online platforms should take into account how visible trolling is and attempt to diminish visibility for trolling. This could be done by implementing ways to report trolling or automatically detect certain aspects of trolls' profiles and behaviors to determine at risk profiles. If the platforms would undervalue the visibility of these profiles until they are proven to be non-malicious, it could have an effect for some people to not even begin trolling.

Education about correct internet use could even be implemented more in schools in order to raise responsible online citizens. The results showed that remorse had an impact for trolls to quit, therefore it would be smart to instill the idea to school kids that trolling is hurtful to others, promoting the feeling of remorse early on for trolls.

The results from this study helps to give new understanding into the lives of trolls and this information could be used to point future research towards the right direction on the matters that were discussed here. Studying trolls is difficult and the information that was gained from this study was from the most part new information. As it turned out from the literature, there are still some basic problems that have been present in the research of this topic. Whether these problems were related to the confusion of definitions or to the lack of some basic understanding about trolls, these results can give some bearing on where to focus research efforts. This study also attempted to make a clear distinction on what trolling is compared to cyberbullying and bring a more easily approachable overview of trolling. In the beginning of making this study it was difficult to grasp what the reality of trolling is, because media and literature accounts gave many different views.

7.4   Limitations and Future Topics

This study had some limitations and they are related to the data that was used. Even though there were measures taken to make sure that the accounts of trolls that were included here were real trolls, there is a possibility of some of them not fitting the criteria completely. This in itself does not compromise the study though, because conclusions were drawn from the commentaries of multiple trolls.

Biggest limitations are regarding to the reliability of what the trolls had said. There are obviously some attempts on the trolls' part to play up the villainous persona they were playing when interviewed (e.g. Phillips, 2011). Also, some trolls who had been caught most likely attempted to downplay their behavior in order to get some mercy in the public eye. Most reliable accounts were most likely from the trolls that had quit years ago as there is less of a need to play up or downplay their behaviors. With these trolls there is still the possibil-

ity of them remembering things in a different light or exaggerating some aspects more to make their story more interesting.

Online discussion interviews had limitations in that the participation of the trolls relied on their interest towards it. Some of them jumped in when they pleased and jumped out when they lost interest. There were also many trolls attempting to disrupt the conversation. Their commentary was also impossible to verify and what they said had to be accepted as it was.

Online survey that was used had some limitations. First, it is impossible to know whether the respondents trolled the survey and gave false information (e.g. Craker & March, 2016). Second, the questions were not completely understood correctly, or the trolls filled the survey with such a hurry that they responded little off-topic. Third, there were only a small number of real answers and the rest had insults, racist language and such. Fortunately, the problems of the survey did not weigh in heavily on the overall research as it was only one of the three data collection methods that were used.

Collection of data from the internet had limitations in having to rely on the journalists that reported the interviews and that they had not left out any important parts. Commentary from forums had bigger limitations though as there was more of a risk that trolls were publicly sharing a fraudulent account of their behaviors.

These limitations were mitigated by having many different troll's commentaries and therefore the overall picture is likely close to reality. Data that was collected was also inconsistent with each other as the commentaries were all different. This made the analysis more difficult because it relied more on interpretations to make the data comparable, leaving room for human errors. One limitation regarding the results of this study is that much of the results are new information and there weren't enough prior studies that would have helped in confirming them. Regardless of the limitations the results were carefully constructed, and uncertain pieces of data were often left out.

There are many possible future topics. How trolling starts, and ends are both topics that require further studies because it would be beneficial to be able to stop people from even becoming trolls and make the ones who are currently trolling stop as well. Future research could also investigate how to actually distinguish trolls from other abusive behaviors in order to focus research and prevention methods correctly. Trolls behavioral boundaries would be an interesting research avenue for future studies. How their boundaries form could bring new ways to promote trolling that does not go too far. Other future topic could be about education and how children that are about to start using internet independently should be educated for using it. Another topic could be to study the connection of young trolls and their wellbeing. How many of the trolls could have stayed away if there was help available or if they had some other emotional outlet. One last future topic worth mentioning is that how much of the antisocial and toxic discourse online actually impacts in the decision to troll. This topic could help convince the online platforms to take a more active approach to cleaning up the environments and ultimately lessen trolling.

8   CONCLUSION

This study attempted to find answers to why someone starts trolling, what happens during their time of being a troll and why do they quit. For the research data, commentaries of 109 different trolls were used, allowing to capture a wide range of behaviors and reasons. There were three data collection methods that helped in getting a sample size as large as possible from multiple sources. Previous studies have suffered from using a limited number of sources for data and that risks only capturing results that are relevant to those sources. The qualitative research method and thematic analysis that were used in this study, allowed the why and how answers to emerge from the data. As with trolling studies in general, there is always some level of uncertainty involved regarding the truthfulness of the trolls' statements. This study had three research questions: what is a troll's life-cycle like, are trolling definitions adequate and has the past research addressed the topics that are related to the life-cycle adequately.

Literature review revealed that even though there are many studies about internet trolls it has still not been studied sufficiently. Many other studies have made this point as well. Trolling research is lacking in studies that have taken input from trolls and therefore the topics that were studied in this thesis were largely left untouched. The beginning and ending of trolling has not been answered before and therefore this study brings valuable insight into the research field of trolling. The active part of trolls' career has been studied in better detail but there was some new information that emerged from this study as well.

The life-cycle of trolls, that was constructed from the results, show that there are similarities in how trolling progresses and there were some points where different factors affect their decisions to quit trolling. The trolls however expressed a wide variety of differences in their behaviors and it could be argued that for each troll, the life-cycle is slightly different, and many do not even reach to the end as some events can bring trolling to an abrupt stop.

This study constructed its own definitions for "trolling" and for a "troll" out of necessity. It was necessary to have clear definitions to focus the research to actual trolls and the current definitions were not able to provide that focus.

The lack of an adequate definition has been a strain for trolling research and there should be more work done to improve the definitions and have all of the future research follow the same definitions.

Trolling has been understood too narrowly, even by the trolls as it turned out in this study, because the wide range of different people that were involved in trolling shows that trolls should not be considered as a group of similar people. The picture that was revealed during the making of this thesis was very different than the one presented in the media and some studies was. The damaging trolls from this study mostly resembled that picture. There were some very bad people but also good people among the trolls, which gives more reasons to start treating trolls differently. The results even showed that what made common trolls or entry level trolls stop did not work for the damaging trolls.

The issue of trolls is extremely complex and some of the more recent studies have come to this same conclusion. The research field is gradually getting a better understanding of trolls but there is still much to research. The benefits of trolling studies getting a good understanding of the phenomena could even help other research topics as well. Identifying trolls correctly from other abusive online behaviors could allow more efficient action towards them, because when the label of a troll is not extended to them anymore, they can be seen more clearly as what they are.

Trolling is an activity that does not seem to be going anywhere in the near future and therefore the biggest efforts should be focused on stopping the trolls that need to be stopped. This means trolls who are damaging to their victims. Some of the trolls in their behaviors were not much more harmful than some of the angriest non-troll users of different online spaces. Efforts towards common trolls could be more focused on influencing their behavioral boundaries, thus making them less harmful. Online discussions have turned more toxic in the recent years and that has been accounted for being because of the trolls, but it might be that people in general have gotten more problematic with their online behaviors. It was shown in the results that some even started to troll because of not being able to have rational conversations online anymore. It could be suggested that in order to make online spaces safer, there needs to be a greater level of involvement from the platforms themselves and a cultural shift towards more civil behaviors online. On the other hand, the problem is so complicated that it may take a lot more research before the answer is found.

This study covered a large area by studying the life-cycle of trolls and provided new information that was missing from previous studies. Therefore, the contributions of this study could be seen more as pointing the way for future studies by giving initial insights that are a good starting point. Within one study it is not possible to get the necessary level of detail for each topic that was covered here but it is a start.

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APPENDIX 1 INTERNET SURVEY

Question	Reasoning for the question
Do you identify as an internet troll?	Even though trolls were specifically asked to fill in the survey, this question was asked to find out whether they identify as trolls as Phillips (2011) suggested.
How long have you trolled?	Important for determining how long trolls stay active.
Describe how you started trolling? (Why and how)	Important to know how they started and why.
Describe how your trolling continued? (activities, time spent trolling, platforms etc.)	Important to know how trolling progresses.
Describe what would make you stop trolling or if you have stopped, then why did you stop trolling?	All respondents were active trolls. Hypothetical question for the active trolls to find what they think would make them stop. Useful for comparing how trolls who are active think about quitting and what the reasons given by trolls that had quit were.
What is/was your motivation for trolling?	To know what the motivation was. Whether they showed other motivations than entertainment, which has been said to be the main motivator.
Describe yourself as a person? (offline vs online, personality etc.)	This was asked to see how they view themselves. Many studies and media accounts emphasize trolls being bad people – this was asked to see if they view the same way.
Describe internet trolling as you see it?	This was asked to see how they describe it. Useful for comparing with the scientific definitions.
Your age?	Age was asked in order to determine how old trolls are.
Gender (in real life)	Gender was asked to see if trolling is male dominated as studies suggest
Where are you from?	This was asked to see if there are any differences with trolls from different countries.
Feel free to leave additional comments	Option for trolls to leave any comments and express something else if they wanted to.

First one was a multiple-choice question and had the following options:

1. Yes
2. No
3. Not sure
4. Just a "shitposter"
5. Other: (open question)

Gender question was the other multiple-choice question with options of male, female and other as an open question. Rest of the questions were open questions.

APPENDIX 2 CODETABLE

Code	Definition
Demographics	Who are the trolls and what are their characteristics.
Life before trolling	Information about the person's life situation before engaging in trolling.
How trolling starts	Reasons to start trolling and how it happened.
Boredom	What part does boredom play in trolling.
How trolling feels	What are the feelings that come when trolling.
Motivation	Different motivations and reasons for trolling.
Entertainment	Entertainment as motivation and as the purpose of trolling.
Intention	What are the intentions of trolls, what they hope to achieve.
Behavior	Different activities trolls take part in and what tactics they use.
Boundary	What are the boundaries of troll's behaviors.
Platforms	What platforms trolls use and how platforms shape the trolling behaviors.
Deception	Do trolls believe in what they are saying or what they represent when trolling.
Targeting	Who do the trolls target and why.
Progression	How trolling progressed.
Time consumption	How much time is used on trolling.
Trolling persona	What is their trolling persona, how they present themselves while trolling. How does the trolling persona match their real personality
Consequence	How trolling has affected their personality or offline life and what consequences came from trolling.
Organized trolling	Organized trolling or trolling that involved others.
How trolling ends	Reasons that lead to the ending of trolling and how it happened. What active trolls view as possible reasons for them to quit.
Remorse	Feelings of remorse about trolling or lack of remorse.
Length of trolling	How long has the troll been trolling.
Fear of getting caught	How trolls view the danger of getting doxxed or caught by authorities and how they protect themselves.
Personality	What is the personality of the troll in real life and what psychological factors makes them troll.

APPENDIX 3 THEMES

Theme	Codes
Beginning	Life before trolling; How trolling starts; Motivation;
Active trolling time	How trolling feels; Intention; Behavior; Boundary; Platforms; Targeting; Time consumption; Organized trolling; Progression; Trolling persona; Fear of getting caught; Deception; Boredom; Entertainment;
Ending	How trolling ends; Remorse; Length of trolling; Consequence
Who are the trolls	Demographics; Personality;