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Lexical Features of Cyberbullying on English Social Media Websites

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Abstract

Cyberbullying is a serious problem which has been receiving widespread attention for the last decade. However, whereas the phenomenon is relatively well documented from a sociological and psychological perspective, researchers have only recently shifted their focus towards automatic cyberbullying detection methods (Dadvar, 2014; Dinakar et al., 2012; Kontosthatis, 2013). Hence, technical solutions to cyberbullying detection are still in an early stage of development and not yet (fully) employable. In addition, cyberbullying datasets are scarce, which makes the development of automatic cyberbullying detection systems even more difficult. With a view to improving future data extraction and automatic cyberbullying detection systems, in this paper, 250 instances of cyberbullying are analysed and a list of lexical features indicative of cyberbullying is presented. Some features, namely profanity, pre-modified offensive words, negative concepts, threats and defensive language, are shown to be highly indicative of cyberbullying and may, thus, be used for future data extraction and automatic cyberbullying detection. However, some instances of cyberbullying are subtler and contain no clear features which a computer can easily recognise. In those cases, it might be more useful to take context and common knowledge into account to successfully classify the instances as cyberbullying.

1   Introduction and Research Motivation

The advent of new technologies always implies an enormous change in society and the Internet is certainly not an exception to that rule. The Internet affects almost every aspect of human life and is ever more present in those fields formerly reserved to other means of interaction. Nowadays, people turn to their screens for information retrieval, banking, shopping, entertainment and, most importantly, daily communication: digital devices have transformed the way in which we interact with our friends, colleagues and acquaintances, the majority of human interaction now taking place online instead of in the real world.

As with all new technologies, however, the Internet is highly prone to misuse, in particular due to its inherent intricacies and its lack of rules and regulations. Banks, for instance, increasingly urge their customers to exercise caution when managing online bank accounts or making payments through online payment services, since thieves have been noted to successfully empty online bank accounts. In addition to theft, the World Wide Web is also commonly associated with problems such as hacking and, lamentably, paedophilia. Another example of online misbehaviour is cyberbullying. Not only are people using online services for their daily interactions with friends, colleagues and acquaintances, bullies, too, are developing methods to extend bullying to online environments. Moreover, despite a considerable overlap between traditional bullying and cyberbullying, the possibility of online anonymity seems to have created a new category of bullies and victims. In other words, due to the characteristics of online services, some youth who had previously never been involved in traditional bullying, have been noted to become bullies or victims in online environments.

Of course, bullying is only a problem to the extent that it produces harm. In fact, some researchers, most notably Olweus (2013), have suggested that the extensive media coverage cyberbullying has received in recent years, has encouraged an exaggeration of the phenomenon and that it is unclear whether cyberbullying is the actual cause of the distress victims feel, as most cyberbullying victims are also involved in traditional bullying. Nevertheless, studies show that as many as 20 to 40% of youth report being cyberbullied at some point in their lives (Tokanuga, 2010) and that it can cause considerable distress, mental and even physical health problems and deviant school behaviour, in particular in those cases where the victim is both bullied online and offline (Due et al., 2005; Ybarra et al., 2006). Rates of self-injury and suicide ideation are also significantly higher among those youth who are victimised in online environments and in real life (Hinduja & Patchin, 2010). Furthermore, recent news articles show that, in extreme cases, cyberbullying can eventually lead to suicide. In September 2014, a Belgian teenage girl from Namur hanged herself after repeated exposure to harassment on Ask.fm, a social network site which allows friends and followers to ask each other questions, but often serves to anonymously post hurtful messages. Similarly, in February 2015, a 13-

year old boy from Vlamertinge, Belgium, attempted to commit suicide and died three days later after continuous online bullying. Even if these cases are rather exceptional, in addition to the relatively high prevalence rates of cyberbullying, they do emphasize the seriousness of the phenomenon and the urgent need for effective detection and prevention methods.

One obstacle in combating cyberbullying, however, is its fairly recent appearance. As a matter of fact, Tokanuga (2010), while reviewing the literature, found no articles referencing cyberbullying published before 2004. Consequently, whereas from a sociological and psychological perspective, cyberbullying is now relatively well documented, research into automatic cyberbullying detection has only recently emerged and the technical solutions to cyberbullying detection, albeit promising, remain rudimentary at most. Not only does a lack of sufficient data remain an issue, cyberbullying messages do not always contain clear features which automatic detection software can easily recognise. Hence, this paper will try to provide a description of cyberbullying on the basis of two small corpora containing real cyberbullying instances. The aim of this paper is to provide a list of lexical features which may not only be used for future data extraction, but also for Natural Language Processing and, subsequently, implementation in future detection software to aid cyberbullying detection and prevention. Firstly, it will be ascertained which features, if any, are useful when distinguishing between instances of cyberbullying and those instances which look like cyberbullying, but in fact are not. Secondly, subtler forms of cyberbullying, in which the bullying is not apparent, will be discussed. Again, it will be ascertained whether those instances which do not contain features indicative of cyberbullying can be distinguished from other text types.

After the above introduction, the literature on cyberbullying up to now will be reviewed from a sociological, psychological and technical point of view in the second part of this paper (Chapter 2). In particular, it will be discussed what cyberbullying is (Chapter 2.1), what types of cyberbullying are commonly recognised (Chapter 2.2), to what extent cyberbullying can be seen as an extension of traditional bullying (Chapter 2.3) and how role allocation in cyberbullying differs from traditional bullying (Chapter 2.4). In Chapter 2.5 existent automatic cyberbullying detection methods will be discussed, with particular reference to research by Dinakar et al. (2012) and Dadvar (2014). The third part of this paper will focus on the methodology applied when building the corpora used for this study (Chapter 3), the results obtained from analysing those corpora (Chapter 4) and the conclusion and directions for future work (Chapter 5). Finally, Chapters 6 and 7 will contain the reference list and the appendices, respectively.

2   Literature Review

2.1   Definition

A common point of departure to provide a definition for cyberbullying are definitions of traditional bullying, of which it is often considered a subcategory or even, although less frequently, an extension. Olweus (1993) described bullying as an act of aggression perpetrated by one or several aggressors. In addition, he recognised intentionality, an imbalance of power between the perpetrator and the target, and some repetitiveness as three further defining criteria. As far as cyberbullying is concerned, all definitions contain an act of aggression perpetrated by a bully through the use of an electronic device and with the intention to inflict harm or cause distress (Besley, 2009; Olweus, 2013; Patchin & Hinduja, 2006; Vandebosch et al., 2006; Ybarra & Mitchell, 2004), suggesting considerable overlap between traditional bullying as described by Olweus (1993), and cyberbullying.

A number of authors have, nevertheless, criticised the process of carrying across the concepts of power imbalance and repetitiveness to the cyber domain. Whereas Olweus (1993, 2013) sees power imbalance as an essential aspect of bullying in a face-to-face environment, its relevance in an electronic environment is disputed (Smith et al., 2013; Patchin & Hinduja, 2006). In cyberbullying, the typical characteristics of traditional bully victims, namely, physical weakness, lack of confidence or social support, etc. may not apply. Online power seems to stem from technical know-how and ICT proficiency. Ybarra & Mitchell (2004) showed that students who engaged in online bullying rated themselves higher as internet experts than students who did not. In addition, time spent online has been shown to be an indication of possible cyberbullying behaviour, with bullies spending more time online than other students who are either not involved in bullying or victims (Ybarra & Mitchell, 2004, 2006; Vandebosch et al., 2006). Vandebosch & Van Cleemput (2008) also identified anonymity as a possible contributor to online power imbalance. Students who are targeted by an unknown bully are less likely to respond and often feel more distress because of the bullying (Ybarra & Mitchell, 2007). In contrast, when the victim does know the perpetrator, traditional aspects of power imbalance may come back into play (Smith et al, 2012).

Repetitiveness was introduced by Olweus (1993) in order for researchers to better distinguish possible bullying from single acts of aggression. In online environments, however, a single hurtful message, or any other act of aggression for that matter, may keep circulating on the web or be forwarded and spark a chain of cyberbullying instances by other perpetrators. A victim may, thus, experience the same act of aggression many times, even if unintended by the original perpetrator (Smith et al, 2012).

The last criterion identified by Olweus (1993) as defining to bullying is intentionality. Even though it is doubtlessly an important aspect of traditional bullying, in online environments intentionality is

arguably less applicable. Online conversations or messages are more prone to misinterpretation as they lack the signals characteristic of face-to-face communication, such as the tone of the conversation or direct eye contact. This way, a receiver may wrongly get the impression that he is being targeted (Vandebosch, et al., 2006). Similarly, a message can be misinterpreted as a joke, although intended as an insult or even a threat.

By and large, and despite the various critiques concerning the different criteria of a possible universally accepted definition, cyberbullying is generally perceived by youth as a deliberate (intentionality) and repetitive (repetitiveness) act of aggression perpetrated by a bully who considers his victim as weaker (power imbalance), at least in the cases where the victim is both bullied in real life and online (see below) (Vandebosch & Van Cleemput, 2008).

The lack of a univocal and clear definition of cyberbullying might seem to be a minor problem. However, by examining the prevalence rates of cyberbullying which have been reported by various researchers, it becomes clear that the opposite is true. In fact, researchers have found prevalence rates ranging from 6% of youth being involved in cyberbullying at some point in their lives (Ybarra & Mitchell, 2004) to as high as 72% (Juvonen & Gross, 2008), whereas actual prevalence rates are estimated at 20-40% (Tokanuga, 2010). According to Tokanuga (2010) these inconsistencies are not so much a consequence of methodological fallacies as of the different conceptualisations researchers use in describing cyberbullying to participants in their studies. Indeed, while Ybarra & Mitchell (2006) used a very narrow description of cyberbullying, stressing repetitiveness and harm, Juvonen & Gross (2008) used a very broad description of cyberbullying, including also those instances in which the presumed bullying was actually not perceived as such.

As a means of solving the problems associated with researchers' lacking a clear and universally accepted definition, Tokanuga (2010) proposes the following definition, combining the at times inconsistent definitions that have appeared in the literature: "Cyberbullying is any behavio[u]r performed through electronic or digital media by individuals or groups that repeatedly communicate hostile or aggressive messages intended to inflict harm or discomfort on others" (p. 278).

2.2   Types of Cyberbullying

Vandebosch et al. (2006) divide cyberbullying instances into direct and indirect cyberbullying, depending on whether the victim is directly or only indirectly involved. Examples of direct cyberbullying include all forms of verbal bullying, such as harassment and threats (flaming), all forms of physical cyberbullying, namely breaking into the computer of the victim, changing passwords, sending viruses and hacking, and excluding youth from social networks. Indirect cyberbullying

corresponds to those cases which involve the perpetrator stealing personal information to make it public (outing) or taking on different or unknown identities to harass online (masquerade).

Harassment and threats (flaming), being the verbal forms of cyberbullying, will be the main concern of the second part of this paper, in which it will be ascertained if there are lexical features indicative of these forms of cyberbullying. Harassment involves hurtful, angry, rude or obscene messages being sent to one or several persons, usually with reference to race, sexuality, disability or appearance (Hinduja & Patchin, 2014). Threats, on the other hand, are those messages that imply or suggest harm to the addressee (Hinduja & Patchin, 2014).

2.3   Cyberbullying as an Extension of Traditional Bullying

There is considerable evidence to support the claim that cyberbullying is in many ways an extension of traditional bullying (Juvonen & Gross, 2008; Olweus, 2013; Wegge, et al., 2014). In general, the majority of students who are involved in cyberbullying, either as a victim or a perpetrator, also report being involved in traditional bullying. Consequently, many of the typical features of face-to-face bullying situations, in particular in terms of role allocation, are applicable to the cyber domain as well. Nevertheless, despite the substantial overlap, some students only report being victimised and/or acting as a bully online (Vandebosch et al., 2006), i.e. online environments seem to have created a new category of bullies and victims, who do not correspond (entirely) to the characteristics usually attributed to them in traditional bullying situations. Those cases in which there is no overlap will be discussed further below.

Olweus (1993) has identified traditional bullies as students who are often aggressive, both towards peers as well as towards adults, have a more positive attitude towards violence and regularly feel the need to dominate others. In addition, they tend to have high self-esteem and little anxiety or insecurity. Crucial in the school yard is that bullies are usually physically stronger than their peers, which might help to explain why they tend to be surrounded by a group of followers, even in spite of their relatively low popularity. In contrast, typical victims suffer from low self-esteem, feel anxious and insecure more often, have a negative attitude towards violence and, in the case of boys, are more likely to be physically weaker. In general, they do not conform to the mainstream ideas that are held by their peers. Victims can be identified fairly easily in the school yard, as they usually walk alone and do not engage into activities with classmates.

Many authors recognise these same patterns in online bullying. Vandebosch et al. (2006) have found that students who are being cyberbullied answer to the general description of victims as given by Olweus (1993). Mostly, youth are targeted for the same reasons as in the school yard, namely physical appearance, physical disability or sexual orientation (Davis et al., 2015) and for their perceived

insecurity and weakness (Olweus, 2013). Moreover, 57.5% of cyberbully victims also report similar experiences in real life and approximately 6 in 10 of online bullies report also bullying their victims in a face-to-face environment (Vandebosch et al., 2006). These findings seem to corroborate that cyberbullying is, indeed, in many cases an extension of traditional bullying, with the electronic devices used merely serving as a tool to extend the bullying outside the school grounds.

2.4   Role Allocation in Cyberbullying

Nevertheless, despite the substantial overlap between cyberbullying and traditional bullying (see above), a considerable minority of youth involved in cyberbullying report never having been victim or perpetrator of bullying in face-to-face environments (Ybarra & Mitchell, 2006). The emergence of cyberbullying seems, thus, to have originated a new group of bullies and victims, which cannot be defined based on traditional standards alone. To explain this phenomenon, one common assumption is that online perpetrators target their offline bullies as a means of taking revenge, the so-called *Revenge of the Nerds* (Vandebosch et al., 2006). No evidence, however, has been found to support this claim (Vandebosch, et al., 2006; Wegge, et al., 2014). As a matter of fact, taking into account the notion of power imbalance, a victim's cyberbullying his offline aggressor could provoke a more severe reaction from the latter. In this respect, it is worth mentioning that victims of offline bullying might well retaliate against their offline aggressors anonymously, as the possibility of hiding one's identity could take away inhibitions.

Another assumption, for which evidence has been found, is that online victims start bullying their online aggressors as a way of retaliating, i.e. *fighting back* (Wegge, et al., 2014). Online perpetrators most commonly target their aggressors, thus initiating a cycle in which bullies become victims and the other way around. This so-called mutual bullying is a characteristic inherent to the cyber domain and typically occurs only between youth who are bullied by strangers or by people they met online.

As far as bystanders are concerned, one assumption is that bystanders who witness an instance of cyberbullying and sympathise with the victims, will be more inclined to defend the victim than in a face-to-face environment (Vandebosch et al., 2006), where the common reaction is to walk away or even support the perpetrator (Olweus, 1993). This is attributed to the possibility of posting anonymous messages in support of the person being victimised (Vandebosch et al., 2006). However, Vandebosch et al. (2006) have shown that only one in three students considers helping a victim of cyberbullying, with more than half turning away, which corresponds to typical bystander behaviour in traditional bullying (Olweus, 1993).

A 2012 Belgian report on cyberbullying (IWT, 2012) shows that youth refrain from helping victims mainly because they feel that they should not get involved (30.1%) or out of fear of retaliation from

the perpetrator (18.9%). In addition, almost one in five youth report not knowing how to react, which might be due to cyberbullying presupposing a certain degree of technical savviness. Youth who do choose to support the victim, can either defend the victim by attacking the perpetrator, reporting the cyberbullying to teachers or caretakers, or give the victim emotional support (IWT, 2012). Those youth will most probably be (close) friends of the victim (Wegge et al., 2014). Finally, bystanders who decide to partake in cyberbullying instances, usually identify strongly with the perpetrator (IWT, 2012). Reasons to support the perpetrator include increased popularity, acceptance and the relatively low risk of getting caught (see below). Bystanders can partake by sharing, liking or commenting on instances of cyberbullying (IWT, 2012).

In summary, cyberbullying can be seen both as an extension of traditional bullying (see Chapter 2.3) and as a distinct way for people who would otherwise not engage in bullying to become a victim or bully. Although the different roles recognised in traditional bullying are mostly maintained online, some phenomena are inherent to cyberbullying, such as anonymity, which seems to cause mutual bullying or bullying anonymously, behaviour not seen in face-to-face environments.

2.5   Detecting and Preventing Cyberbullying

As was mentioned in the introduction, cyberbullying has become a serious problem, affecting up to 40% of youth and even leading to suicide in extreme cases. It is, thus, necessary to develop effective methods for the detection and, ultimately, prevention of the phenomenon. Nevertheless, cyberbullying seems harder to detect than traditional bullying. Firstly, parents usually have little control over their children's internet use and are often not as technically advanced as their children (Vandebosch et al., 2006). Youth also feel that dealing with instances of cyberbullying is a necessary skill they need to develop on their own and they often refrain from telling adults out of fear that their online freedom should be curbed (Tokanuga, 2010). Secondly, as cyberbullying extends beyond the physical confines of the school yard, teachers and caretakers are less likely to notice, although traditional bullying, mental and physical health problems, exclusion, deviant school behavior, et cetera, may be indications of a child being bullied (online) (see above). Thirdly, although most social network websites allow users to flag hurtful posts, due to the ever increasing youth presence on social media, moderators are no longer capable of manually filtering and deleting all offensive content.

To overcome those limitations, automatic detection methods seem a logical choice. Automatic solutions to cyberbullying detection, however are still in their early stages. Firstly, obtaining useful data is particularly difficult, as few datasets are readily available and privacy policies sometimes prevent third parties from using content. Consequently, researchers are often obliged to manually scrape social network websites in order to build a well-balanced and representative cyberbullying corpus large enough to be studied. For instance, both Dinakar et al. (2012) and Dadvar (2014), two

eminent researchers in the field of automatic cyberbullying detection, manually scanned the video website *Youtube*[1] to obtain relevant and sufficient data.

Secondly, as far as automatic cyberbullying detection methods are concerned, researchers mainly focus on possible approaches. Dinakar et al. (2012), for instance, have shown that a bag-of-words based system is relatively accurate when analysing instances of apparent cyberbullying, i.e. instances which contain commonly used forms of profanity (see example 1), but less effective when the bullying is less apparent or when background knowledge is required to classify the instance as cyberbullying, like in example 2, in which a concept usually associated with girls (top) is attributed to a boy.

> 1.   *as long as **fags** don't bother me let them do what they want*
> 2.   *they make beautiful **girls**, especially the one in the **green top***

Combining this bag-of-words approach with common sense reasoning has proven to be a successful detection method. The inclusion of common sense knowledge, which involves teaching a computer to make its own semantic deductions, enables a computer to successfully detect subtler instances of cyberbullying, such as example 2, with accuracy rates approaching 80%. Nevertheless, highly context-dependent forms of cyberbullying, such as referrals to gender-specific stereotypes (see example 3) are still often not classified as such (Dinakar et al., 2012).

> 3.   *she will be good at pressing my shirt*

Very recently, in addition to content, Dadvar (2014) has researched the inclusion of user information (gender-specific patterns) to more effectively detect cyberbullying. This approach has not only been shown to improve accuracy when detecting cyberbullying, including information on intentions and personality might also predict possible bullying behaviour and, thus, be used for cyberbullying prevention. Albeit promising, however, this approach, too, is still being researched and not yet employable. In addition, data extraction remains an issue.

Hence, with a view to improving future data extraction and automatic cyberbullying detection methods, the following chapter will try to provide a description of cyberbullying on English social media websites. On the basis of two small corpora containing instances of cyberbullying, both apparent and subtler forms of cyberbullying will be described from a lexical point of view. Subsequently, the results described in this paper, may be used for Natural Language Processing and be implemented in future detection software to aid cyberbullying detection and prevention.

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[1] http://www.youtube.com

3   Methodology

For this work, three corpora were built, two of which containing 125 cyberbullying messages each, the third corpus containing 38 examples of false positives, i.e. messages that look like cyberbullying at first sight, but in fact are not. The initial plan was to build only one corpus containing instances of cyberbullying by manually scanning the social network site *Twitter*[2] on the basis of one-word queries. All query terms referred to appearance, behaviour, sexual orientation, race or intelligence and were taken from Kontosthatis et al. (2013)'s bad word dictionary, a list of 296 one-word query terms[3] classified as offensive by labellers on *Amazon Mechanical Turk*[4]. This approach, however, proved to be extremely time-consuming and neither did it yield the desired results (see examples 4-6 below). Even though the seed terms chosen were doubtlessly words commonly used in cyberbullying contexts, it could be derived from the tweets (*Twitter* messages) that they are equally as applicable to other situations. Users on *Twitter*, for instance, not only use terms such as 'nigger', 'bitch' or 'faggot' to bully other users, they also use them in everyday conversations, either to refer to themselves (see example 4) or to address friends (see examples 5 and 6), as a way to express familiarity with the addressee. Consequently, messages that looked like instances of cyberbullying at first often turned out to be part of a normal conversation between friends or acquaintances.

> 4.   *Help a **nigger** out*
> 5.   *Love you **bitch**, you CRAY CRAY!*
> 6.   *fuck up **faggot** i am your one and only*

In order to overcome the limitations of manually scanning Twitter, a different approach was adopted, using the BootCat[5] toolkit. BootCat is a free software application which enables users to extract corpora directly from the World Wide Web or from a single website/extension. On the basis of a list of query terms, BootCat automatically extracts URLs from the Internet and builds corpora. The query terms or seeds used can consist both of a single word and of phrases or clauses. In addition, the BootCat toolkit allows users to randomly combine queries into tuples, thus increasing the chances of yielding representative data.

As with the Twitter search, one-word query terms were taken from the bad word dictionary (Kontostathis et al., 2013). This time, however, multi-word queries were added to the list. Those queries were obtained by manually scanning user pages on social network sites such as *Ask.fm*[6] and

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Spring.me[7] (previously *Formspring*), hate pages on *Facebook*[8], and viral videos garnering a lot of negative attention and dislikes on *Youtube*[9], as these websites have been noted to be among the most common networks for cyberbullying (Dadvar, 2014). Subsequently, the query terms were introduced into BootCat and combined into tuples of three to five (see figure 1 below). Higher combinations may seem more effective, but they often did not generate any data. Single-seed or two-seed searches, on the other hand, mainly generated noise: the data obtained usually came from dictionary websites or could be classified as false positives.
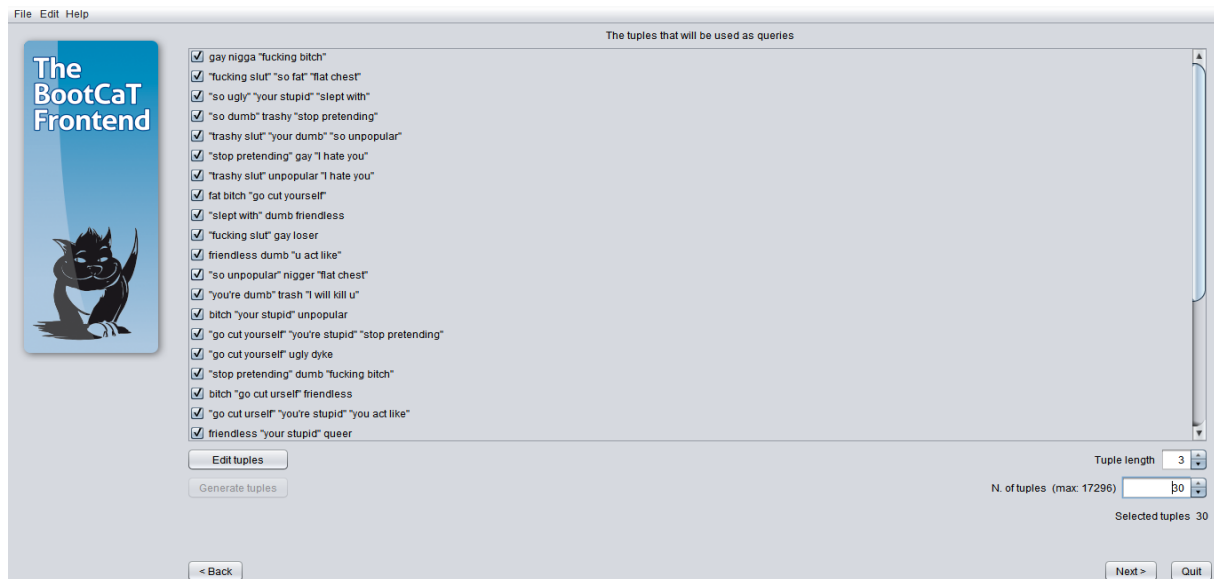

Figure 1: Combinations of seeds into tuples (BootCat interface)

One drawback to a query-based approach is that subtler instances of cyberbullying, not featuring the queries used during the search, are not included in the search. As the aim of this paper also encompasses a description of those instances of cyberbullying which are not apparent, this is a clear disadvantage. Hence, only half of the data was obtained through BootCat. For the remaining data, user pages on *Ask.fm* and *Spring.me* were manually scanned and the messages obtained were grouped into a second corpus. The pages from which the data were extracted were chosen based on name (most popular names in Great-Britain in 2000) and popularity (the amount of interaction on the pages). Albeit slightly more time-consuming, as this search was not query-based, it had the obvious advantage of generating a variety of cyberbullying instances, including subtler forms (see examples 7 and 8).

7.   *Are u pregnant*

8.   *Ur everything I like for in a boy*

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[7] https://www.spring.me
[8] Both hate pages about celebrities, namely Rebecca Black and Justin Bieber, as hate pages about unknown youth were scanned.
[9] *Leave Britney alone, Gingers do have souls* and *Rebecca Black – Friday*

Finally, a small corpus of so-called false positives or socially acceptable instances of cyberbullying was built. These messages have a possibly hurtful content or include words usually associated with cyberbullying, but are not classified as such in their larger context. In order to guarantee that future automatic cyberbullying detection software can distinguish between actual cyberbullying and those messages that look similar to but are not cyberbullying, it is essential to know if there are any (lexical) indications that might reveal the difference. The data for this corpus were obtained by manually scanning *Twitter*, as this social network site had proven to contain many such messages (examples 4-6), and *Ask.fm*.

4   Results

4.1   Offensive or Negative Language (Harassment)

From a lexical point of view, probably the most visible instances of cyberbullying are those which contain profanity or offensive language. Consistent with earlier research into cyberbullying detection (Dinakar et al., 2012; Kontostathis, 2013), instances of cyberbullying often include terms negatively addressing the receiver's physical appearance (fat, fatass, ginger, ugly), behaviour (ADHD, bitch, cliquey, jealous, trashy, whore, conceited), sexual orientation (dike, faggot, gay, lesbian, queer), race (nigger, Asian), intelligence (dumb, stupid) or a combination of categories (see examples 9-14, respectively)[10].

> 9.   *(1) how much do u weigh* **fatass**
> 10.   *(2) Ur so* **conceited** *its fucking annoying*
> 11.   *(1) No like Janam is just* **gay**
> 12.   *(1)* **Nigga** *i just said if you want to. Stay* **fat** *. Some bitch will want you just not me*
> 13.   *(2) You're so* **stupid***. Can't even spell.*
> 14.   *(2) You one of the* **fattest nastiest lookin hoes** *on my IG*

Whereas examples 9-14 all contain at least one word which is clearly indicative of cyberbullying (fatass, slut, gay, nigga, stupid, hoes), instances of cyberbullying such as examples 15 and 16 do not. They can, however, be classified as offensive language, because they describe concepts commonly perceived as negative, or deviating from the prevailing standards. Separately 'flat', 'chest', 'big' and 'chin' are not inherently offensive words. However, when combined, 'flat chest' and 'big chin' represent possibly hurtful concepts. Offensive language is, thus, not only a matter of so-called bad words, but also of combinations of neutral words into negative concepts.

> 15.   *(2) u have a* **flat chest** *and ugly legs*
> 16.   *(2) u have a* **big chin**

Offensive language can also consist of a combination of a positive word or concept and a negation. In example 17, for instance, 'far from gorgeous' corresponds to 'unattractive' and example 18 describes a similar situation to example 15. Likewise, constructions such as 'don't act', 'you act like', 'don't

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[10] NOTE: As all examples discussed in Chapter 4 are grouped into three different corpora, they are preceded by a number referring to the respective corpus from which they were drawn. The examples obtained through BootCat are preceded by (1), the examples obtained by manually scanning social network sites *ask.fm* and *spring.me* are preceded by (2) and the false-positives are preceded by (3).

pretend', 'you pretend that' and 'you think that you are' followed by a positive characteristic (smart, cool) imply an absence of that characteristic in the addressee (see examples 19-21).

17.   *(2) Your **far from gorgeous** and your definitely a bitch to a lot of people...*
18.   *(2) You **have no boobs***
19.   *(2) wow **you think you're so cool**.*
20.   *(2) you're stupid . **Don't act smart** .*
21.   *(2) i feel like **u pretend to be really down to earth & open to getting to know ppl** but then u don't ever try to get to know anyone outside of ur really popular friends*

Perpetrators can also use verbs such as 'to hate' followed by a personal pronoun (who they hate) or a characteristic or feature (what they hate about their victim) (see examples 22 and 23). Nevertheless, in other contexts 'to hate' may not be indicative of cyberbullying (see example 24). Combinations of verbs from the semantic field 'to like' and a negation are very similar to constructions with 'to hate' (see example 25).

22.   *(1) tbr - **I hate your face** it pisses me of*
23.   *(2) UR so ugly **i hate u***
24.   *(3) **Hate answering these**, didn't have enough time*
25.   *(2) i **dont like you** hahahaha*

Even though the offensive words described above might be indicative of cyberbullying, as shown in example 4 to 6, some, if not all of these words can equally well be used in other, non-offensive situations. Without the necessary context or any further indications, like in example 26, it may be difficult to distinguish between those instances which are clearly meant to hurt the addressee and those instances which are part of a normal conversation between friends (see examples 27 and 28).

26.   *(3) thanks **bitch** ❤*
27.   *(3) Then I saw a **gayboy** in a parka and thought it was you*
28.   *(1) musha is a **gay bastard***

From the corpus data, however, it can be derived that offensive words in non-offensive contexts mostly appear unmodified (see examples 26, 29) or positively modified (see example 30), whereas offensive words meant as such are often pre-modified. Verbs and adjectives come accompanied by intensifying adverbs (see example 31), nouns by adjectives which intensify its negative meaning (see example 32) or make explicit an inherent characteristic (see example 33). Sometimes noun phrases become an accumulation of offensive words (see example 34).

29.   *(3) fuck up **faggot** i am your one and only*
30.   *(3) Ur my **favorite trash***
31.   *(1) you're disgusting you **fucking asshole**.*

32.   *(2) your just a **dumb redhead ginger** you have no soul*

33.   *(1) fuck you!!! **ugly pig***

34.   *(1) **Fake ass lesbian redneck cunt.***

4.2   Threats and Curses

Like offensive language, threats are relatively recognizable types of cyberbullying, both form and content being indicative of it. They are mostly introduced by 'I will' or 'I am going to', followed by a description of the harm the addressee will be a victim of if he or she does not heed the sender's warning. Cyberbully victims are often threatened with (extremely) violent behaviour and even death (see example 35).

35.   *(2) Whose the stupid ass fucker talking about my little sister on yik yak because on my life **I will fucking kill you***

Curses are very similar to threats in that they imply some violent act or even death to befall the addressee. Although the sender does not mention him/herself as the future perpetrator of the violent behaviour, it is understood that he/she wants the act to take place. Curses can take the form of imperatives (see example 36) or they can be introduced by 'I hope that' followed by the violent act the sender hopes will befall the addressee (see example 37).

36.   *(1) **killurself** i will buy the rope :)*

37.   *(2) Fuck off **I hope you and your mother are assfucked in an alley and then your penis is torn off with a rusty butterknife and shoved down your throat and then have your belly slit open and your guts pour out whilst you watch your mother being murdered***

As apparent from the examples listed above, threats and curses can also include offensive language. In example 38, for instance, offensive language is used to reinforce the already violent nature of the threat.

38.   *(1) If you don't like my tweets then aye **bitch** that's what an unfollow button is for ?? don't make me slay you*

4.3   Presupposed Questions

As opposed to offensive or negative language (harassment) and threats, many instances of cyberbullying are not easily recognisable from a lexical point of view. Even though they are equally as hurtful and often suggest the same as more obvious cyberbullying messages, the language employed is neither inherently negative nor offensive. They are, thus, similar to those messages in which the separate words do not convey any hurtful meaning (see examples 15-21). However, whereas the

offensive meaning in those messages was carried across through combinations of words into concepts, the examples discussed below are more subtle. In some cases, they could even be classified both as cyberbullying and as part of a normal conversation between friends or acquaintances, depending on the context.

One way to offend a victim in a subtle way is by asking presupposed questions, i.e. questions which imply a certain assumption taken for granted. In cyberbullying, questions are not employed to solicit information from the addressee, but to carry across a concept concealed as a question. In examples 7, 39, 40, 41 and 42, the sender does no want to know if the addressee is pregnant, when the addressee will start to lose weight, whether the addressee likes being unattractive, how many guys she has slept with or how her illness is progressing. In stead, the sender uses questions as a subtle, although not less pervasive, way to imply that his or her victim is overweight, unattractive or promiscuous.

> 39. *(2) When are you going reduce your waist?*
> 40. *(2) Do you like making your self look unattractive?*
> 41. *(2) How many guys have you slept with now?*
> 42. *(2) hows your herpes going*

While the above examples are not very likely to appear outside cyberbullying situations, some presupposed questions can only be classified as cyberbullying because of the context they appear in. Example 43, for instance, could just as well be a question someone asks to a pregnant friend, inquiring about her baby's gender.

> 43. *(2) he or a she??*

4.4 Defensive Language

While manually scanning user pages on *ask.fm* and *spring.me*, messages frequently contained instances of defensive language, i.e. messages posted in defence of the cyberbully victim, either by the victim or a bystander. Whereas these messages are not examples of cyberbullying proper, they are highly indicative of cyberbullying, since they always appear as a response to bullying. Defensive language can be employed to refute offensive posts (see example 44), support the victim (see example 45) or even directly address/attack the bully (see example 46).

> 44. *(2) HOOT IS NOT A FUCKING LESBIAN*
> 45. *(2) I think you're very handsome Dave, don't let anyone tell you different :)*
> 46. *(2) Guys stop harassing Olivia about her past and present boyfriends it's her choice and no one cares if you don't agree with it*

5   Conclusion and Future Work

As recent news paper stories on increasing cyberbullying prevalence rates attest, cyberbullying is becoming a serious problem which warrants due attention. Not only does it affect up to 40% of youth, the possibilities of the online environment seem to have originated a new category of bullies and victims, with students previously uninvolved in bullying instances, now becoming involved. In addition, cyberbullying has been shown to cause considerable distress among those affected, even leading to suicide in extreme cases.

As a consequence of the high prevalence rates and the at times disastrous consequences of cyberbullying, it is not surprising that in recent years the focus of researchers has shifted from psychological and sociological studies towards cyberbullying detection and prevention. In particular, given the intricacies of online environments, technical solutions to cyberbullying detection are being researched. However, automatic cyberbullying detection systems are still in their early stages of development and are not yet (fully) employable. This is mainly due to a lack of representative cyberbullying data: at the moment, researchers are having great difficulties in teaching a computer to successfully detect cyberbullying instances, as they do not have sufficient data to analyse and implement in Natural Language Processing Systems.

With a view to overcoming the aforementioned limitations, namely insufficient data and the limited operational capability of existent automatic cyberbullying detection systems, this paper presents a list of features inherent to or indicative of cyberbullying. The purpose of this paper is, thus, twofold. For one, when extracting data to build large(r) cyberbullying datasets, researchers could incorporate the features discussed in Chapter 4. Up to now, researchers have mainly focused on one-word queries and profanity in their automated searches (Dadvar, 2014; Dinakar, 2012; Kontosthatis, 2013), but it may be interesting to also incorporate multi-word queries: offensive words are often pre-modified or intensified and, at times, offensive language is carried across through combinations of inherently neutral words into hurtful concepts. In addition, standardised phrases such as 'I hate (that)', 'You act like', 'I will' and 'I hope that' are indicative of offensive language, threats and curses respectively. When entered into the BootCat interface, these multi-word queries considerably helped to reduce noise and yielded more useful data than single-word queries.

More importantly, the findings described in Chapter 4 could be implemented in automatic cyberbullying detection software, for the very same reasons stated in the paragraph above. Again, it is advisable to teach a computer not only to recognise offensive words separately, but also to detect noun phrases which carry across offensive concepts or even the standardised patterns seen in examples 17-25 and 35-38. For future research it might also be interesting to analyse a corpus of so-called defensive

messages. Although these messages are not examples of cyberbullying proper, they almost exclusively appear as a response to a bullying instance and are, thus, highly indicative of cyberbullying.

Since cyberbullying is not always as apparent as in the examples described in Chapters 4.1 and 4.2, Natural Language Processing systems also need to be capable to recognise subtler instances of cyberbullying. Nevertheless, from the corpus analysis it appears that those instances of cyberbullying which contain no clear indications of cyberbullying are very hard to describe lexically. Moreover, apart from the presupposed questions described in Chapter 4.3, neither are there any clear-cut categories to which subtler forms of cyberbullying can be assigned.

This does not mean, however, that those cases in which the bullying is not apparent are impossible to detect and combat, but that a different approach needs to be adopted. One logical option would to be to take contextual features into account. Dadvar (2014), for instance, has shown that incorporating gender and profile information of bullies significantly increases the accuracy of cyberbullying detection and can even help predict possible future bullying behaviour. For the same reason, in future research projects, it might be interesting to study including information about the victim. For instance, a computer might be able to recognise example 8 (see page 10) as an instance of cyberbullying if it has information about the addressee's gender. Likewise, example 43 (see page 15) can only be correctly classified with sufficient information about the addressee ((a family member of) a pregnant woman or an androgynous boy/girl). In addition, for automatic cyberbullying detection systems to successfully recognise examples 8 and 43 as instances of cyberbullying, it would need access to common knowledge. Only that way, it would be capable of assessing the appropriateness of certain content in a certain context.

In summary, there are some features which are highly indicative of cyberbullying and which could, thus, both be used for future data extraction and be incorporated into Natural Language Processing systems to aid automatic cyberbullying detection. To successfully detect subtler instances of cyberbullying, it might be more effective to include contextual information and common knowledge in stead of only focusing on textual features.

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7   Appendices

7.1   BootCat Corpus (1)

stop trying to sounf smart

you aren't even popular

Your actually disgusting! You tell girls there sluts have you looked at your self..?!?

u smell

I can't believe you've hooked up with 11 guys! Aren't you only like 13??? You should still be having sleepovers with girls. Not getting drunk and hooking up with 11 guys!!!!!! Omgggg!!!! What will you be like in 2 years time! Holy shit!

i would bash that little piggy emo within inches of her life

This is the reason why Whitney died... You stupid chick!!

is it me or dos she look like a fish by the way she should go burn herself in oil

Oh my goodness! Does she have tourettes?!

is it me or dos she look like a fish

No like Janam is just gay

Fucking nerdy ass mf

Lmao your a dumb shit and I thought you were clever. Before judging others look at you-.-

tbr - I hate your face it pisses me of

hot or not: nott*.*

If you don't like my tweets then aye bitch that's what an unfollow button is for ?? don't make me slay you

Tara looks like a dike w/ the short hair

What a complete german fag

I would like to sadly inform everyone that Dave Thomas is still alive

YOU UGLY MUSTY ASS BITCH DIE SO YOU CAN BE DEADER THAN YOUR SHIP! LOUIS HATES YOU RAT HOE!

UURRGHH DIE YOU BITCH.

Hoot is a lesbian

What the fuck did you just fucking say about me, you little bitch?

No friends?...

Ur stupid. JK ur dumb. JK ur ugly. JK ur fat. JK LOLLOOOOLLLLLOLOLLL

fuck you!!! ugly pig

killurself i will buy the rope :)

And stop being so annoying all the fucking time sit the fuck down. You act like you have ADHD

You are really trash bitch you couldn't get your hair done for your birthday LMFAOOO brokey

Lauren I hate you

your a fucking bitch ass nigga slut go suck your spic boy freinds dick and stop fucking talking to me you sluty fucking whore bitch ass cunt

ok i dont want that slut i rather die

learn to spell before you talk to me like its not like im talking shit you are literally a slut your going out with some one like 3 years older than you you whore

Selfish much? Conceited much? Self absorbed? Stuck up? Just stop trying to show off. Your not better than anyone else so why don't you do us all a favor and stop thinking that thanks bye.

Selfish much? Conceited much? Self absorbed? Stuck up? Just stop trying to show off. Your not better than anyone else so why don't you do us all a favor and stop thinking that thanks bye.

LLS, BYE BITCH! HOPE YOU GO TO HELL AND BURN TO DEATH HOE!

SOME ON WILL BUST UR FAKE AS SELF

YOUR A FUCKING FAKE.

your a fucking slut ass bitch fucking hoe get off fucking Anonomys and stop Rappin oh you can't Thats what i thought so shut upp and get out of my face

being bisexual or lesbian is gross

she's fucking annoying and hideous

Nigga i just said if you want to. Stay fat . Some bitch will want you just not me

suck my d*ck, you faggot

KILL YOURSELF FAGGOT

kill yourself bitch

Faggot go kill yourself

go jump off a good high building

TIS FAG OH MY GAWD THIS KID IS GAY HE FUCKS DICK

lol kill your self no one cares

Hey Tiny, you so daym UGLY!!!

Fat people trying to act like they're in any way oppressed and comparing their situation to homosexuals or minorities. you can fucking burn that weight off, you can't burn your sexuality or skin color away and acting like your issues are just as important as theirs is demeaning and disgusting.

If I ever see you again, I will kill you

Chloe, don't worry, it's just God punishing you 'cause you're a ginger

YOUR MOTHER FUCKING ASS-SHIT SITE AND YOUR GOD DAMN FACE SUCKS LIKE FUCKING SHIT! YOU JEALOUS PRICK! I WILL DESTROY YOUR FUCKING ASS AND GOD WILL PUNISH YOU! YOU SORRY PIECE OF SHIT! I HATE YOUR COCKED UP BLOODY GUTS! YOU BLOODY BASTARD!!! FUCK YOUR ASS! HOW DARE YOUR DIRTY FUCKING MOUTH SAY THAT KANGAROO COCK-SHIT ABOUT THE BEATLES! YOU BLOODY COCK-SUCKING GOAT-FUCKER! I WILL MAKE YOU KICK AND LICK YOUR OWN KISS-ASS! YOU COCK N' VERGINA SUCKING BLOODY BITCH-ASS! I WILL FUCK YOUR DIRTY ASS UP AND STAB YOUR DICK WITH MY POCKET KNIFE! YOU COLD LIKE BLOODY SHIT ASSHOLE! YOU ARE JUST BADGER SHIT! GOD DAMN YOUR ASS YOU FUCK UP!!!!! IF YOU SAY ANYMORE FUCKING GOD DAMN SHIT ABOUT THE BEATLES I WILL DAMN YOUR GOD DAMN MOTHER FUCKING BLOODY ASS UP! MOTHER FUCKING BITCH-ASS DICK-SHIT-FUCKER!

YOUR FUCKIN SITE SUCKS I HATE YOUR GUTS. THEY ARE THE BEST BAND OF ALL TIME YOU JEALOUS PRICK. BURN IN HELL BASTARD. IM GONNA FIND WHERE YOU LIVE CUT OFF YOUR HEAD AND MAKE YOU LICK YOUR OWN ASS. THE BEATLES RULE AND YOU EAT FUCKING SHIT. I HATE YOU ESPECIALLY FOR WHAT YOU SAID ABOUT JOHN LENNON. GOD WILL PUNISH YOU. yOU LONELY FRIENDLESS UGLY PATHETIC SHIT WHO HAS NOTHING BETTER TO DO THAN MAKE FUN OF THE GREATEST BAND OF ALL TIME. yOUR A SORRY PIECE OF SHIT! YOU WILL PAY!

I have alist on my computer that tells me the adresses of all site I go on. So no now I'm going to go to your place and cut your little balls off and shoot you with my shotgun. P.S. FUCK YOU!!! And have a horrible day!

YOU'LL BE SORRY FOR THIS MOTHER FUCKER

You must die

DONKEY DICK SUCKING QUEER

I'm speechless. Are there actually people in this world THIS stupid?

It must be a hard reality for you to face waking up every day and still being a big fat loser.

Listen 2 asprins on ironing board I hope your not refering to me u fucked up bitch cos if your not careful Im gonna hammer ur tits with a baseball bat so they are smaller than they already are!!!!!!!!!!

You're so ugly, you could model for death threats.

you are so stupid

Aweh you have to correct my grammar because you have nothing else to say

You must dont no I will beat the shit out of you and juice

I'm a bitch ? no you're a bitch . your mom's a bitch for having a bitch . your dad's a bitch for fucking a bitch . now who's the bitch, bitch ? ;* :)

everyone's better than u lol

more like fuck you bc you let Chad fuck you Hahahahha

musha is a gay bastard

caragh martin is so stupid GS with matthew the ugly bastard!!!!

You fucked like 4 niggazz

That's not funny, you should be classy not trashy

Well you are doing a good job in the elena thing ..to lose your virginity at 13 that's beyond sluts ...and she looks like a fucked whore zombie ...you look beautiful ...keep it up ..they aren't followers ..they are blinded , misleaded pieces of shitty trash ..rise and shine baby ...and don't care f

how much do u weigh fatass

fat hoe

fuck off you fuckin muppet

Clearly not you by the look of it you jealous bitch haha

You and Kyle are the ugliest couple. No joke.

fuck off dickhead

Your one ugly ass dike

raphael is an annoying brat who thinks hes funny, BUT REALLY HES NOT! he talks back to teachers and probably has ADHD.

Wow. Never heard of a guy whose mom comes to pick him up at school and he doesn't have facebook or a phone. wow. o_o haha faggots these days

Soomin kaylee kayleigh is ugly

I hope u get in a car accident & die u fuking dick head

Why are you being such a fuckin dickhead?? Whaat did she ever do to you?!

Are you gay?

No you dumb shit if you are gonna ask questions like that ask them without being hidden

stfu

why are you so asian?

Well i think your a dumbass and your not good. Lmfao.

lmao shut up bitch and leave. Simple as that

Bitch make up your damn mind

you're disgusting you fucking asshole.

I'm saying she is the ugliest girl on this fucking world.Did you not understand.she is so fucking ugly and that she will probably get no guy and she should just die because she fucking ugly. Sorry that I had to say the truth.You can post any selfie or pic of her but she's ugly it's unbelievable!!!!!

Do you like making your self look unattractive?

 I'm saying maybe you should stop being such a bitch and you'd have friends

No need to be jealous of an ugly ass fake bitch

Stop trying so hard. You're not that cute. It's like embarrassing. Think you're all that. Thinking you're better than everyone else! You have nothing going for you. All you know how to do is take pictures, make your face look like a cake, and edit pictures. You suck at school, sports, etc.

You're honestly disgusting.

You look like an ugly ass potatoe

In gald you left Boody. You where mad FUCKING annoying I swear. Fat ass annoying ass always serious & acting like a STRAIGHT bitch . Like ew.

nigga likes a phone that he can't even afford, S4 these nuts nigga, you black

u have scars and ur afraid

you did cut last year though

ur profile pic for this is ugly sorry js

Youre Gayyuyyuuyyhhhhhhhyyyyyyyyyyygy

You wonder why people hate you, your a snake.

u r sick

dumbfuck

How do you even live with yourself right ? Like you have some serious problems

you're an alcoholic you drink way to often

Fake ass lesbian redneck cunt.

okay then delete your acc you "dumb shit" because you clearly are defeating the purpose of this entire thing-- aka answering questions to anons and people off anon.

Your too skinny

I hate Tracy and LG soo much

Truth is you're soo rude to me and I hate you for that. And you tell me to not talk to you but you like my ttruth is you're bogus. I hate u

sluttttt go have another root by ur bf alex

aw, did daddy hit you? good, it's about time you got what you deserved.

U are a dike and ugly

she is so pretty but the most dead set stuck up bitch who wears bras that are so padded its a miracle how she can fucking breathe. She changes around guys so funny omg, she goes in about smoking weed then when the bongs in her hand she is like oh fuck, I did a silly mistake and she calls me a cunt and says I can't keep my legs closed. HAHHA love you

Am I the only one that hates that paki slut â€Ž@ zinahamed69 like if you hate that paki as much as I do

I hate Becky g too!! She's so ugly and annoying!! Lol

niggah fuck yo ass , this is ask.fm and I asked u what a parody account is and ur cunt ass won't answer the question

Cunt slut cake face bitch fucker fag

7.2   Manual Corpus (2)

I think you're blind. She is ugly as fuck, and looks like a beached whale. If you were trolling, then congrats to you

kill yourself

Oooo Brittany I hate her she is a fatty fat fat so shut you fat old whine and shut your mouth!!!

And don't call us names bitch

Is this a man or a woman?

He's so fucking gay

You look like a whore.

Was this thing drunk when it recorded it?

faggot

your just a dumb redhead ginger you have no soul

fat ginger

lol what the fuck is wrong with your head

you dont have a soul

fucking ginger

kill yourself

you're right. Some things are positive and some are negative. Just like some people are intelligent, and then, some people are like you. What deeply saddens me and my hope for the future is that out of your father's 30 million sperm, you are the one that made it to the egg

Fuck off I hope you and your mother are assfucked in an alley and then your penis is torn off with a rusty butterknife and shoved down your throat and then have your belly slit open and your guts pour out whilst you watch your mother being murdered

No I might cut you ... CUT YOUR FUCKING THROAT BITCH

You need to take that hair out your hair

You a jealous hating ass girl

you so dumb

you mad hoe

people sleep on u, you been bumping since the field

You work at taco bell doe u help your mom pay bills with that or u still taking care of tre

Why u so mean?

nobody w/o major issues would edit pics that much & give a shit about others opinions plus ur in stupid classes at school soo obviously there's an issue there too

ur really cliquey but u pretend not to be which just makes you worse

You seem like a really nice person most of the time, then out of nowhere you do the bitchiest thing and I get confused. Is she this really nice person? Or is she a total bitch? Sorry if this is mean I've just felt this for a while and had to get it off my chest.

i feel like u pretend to be really down to earth & open to getting to know ppl but then u don't ever try to get to know anyone outside of ur really popular friends

When did you lose it to Owen? I thought he was Hayley's guy. Way to be a great friend...

sry but ur body is shit and youre a dumb white girl who thinks shes really cool because she drinks with the same 2 people every weekend and photoshops all her pictures.

Why are you being such a bad friend?

funny cause ur friends are hella popular but u arent

Glad you chose to not do a pap. No one wants to see ur acne.

Learn from ur parents mistakes. Use birth control

You have no boobs

if you stopped talking do you think anyone would realize?

Cut down on the food man. It's starting to show.

You should try eating less food.

Atleast I don't cut.

You're so stupid. Can't even spell.

Ur 1 of those disgusting ugly tramps btw(; u and ur little "squad"

What? Nothing wrong with you liking the pain.

you need to change your name to queen loser

loser

are you straight?

selfharm advice?

You r so unpopular now HAHAHHAHAHAHAHAHHAHAHAHAHAHAHHAHAHAHAHHAHAHAHAHAHAHHAHAHA HA

u have a big chin

Are you depressed?

Why do you act all depressed all the time

You are so fake and annoying

u have a flat chest and ugly legs

i would bash that little piggy emo within inches of her life

U look pregnant

Are u pregnant

Ur everything I like for in a boy

you're stupid . Don't act smart .

"@Mar_Butta: Im tellin my boyfriend on yall 😊😊" what she a dike ? or she got the procedure?? LMAOOOOOOOOO RT @SSPB_: @RyanLindley14 hope you go hole and commit suicide little faggot ass fucker bitch

@polaroidpayno why are you laughing? thats rude, bye bitch ✌ ☐ find your chill and when you do, STICK IT UP YOUR ASS FUCKER ✌ ☐

UR so ugly i hate u

@TBTDerek HEY YOU DONT YOU FUCKIN DARE RETWEET ME!! YOU TALK SHIT ON ALTOONA YOU TALK SHIT ON ME!! ILL EAT YOUR ASS FUCKER!!!

STOP RTING PROMO YOU THIRSTY ASS FUCKER

My sister is a fcking piece of trash cunt dumb ass fucker she needs to choke

Dude, fuck i don't need a friend like you. If you're gonna be a fake ass fucker infront of me then leave man, i have my other boys with me.

Whose the stupid ass fucker talking about my little sister on yik yak because on my life I will fucking kill you

@DomingueColby yeah you have no swag you fucking loser idiot bitch ass fucker head

what the fuck @TrAiDoS_ I didn't consent to this I'm gonna sue your ass fucker

its funny that u think we all actually like u... ur the biggest slut in elizabeth! sweet party tho, thanks for the booze ;)

How many guys have you slept with now?

you kinda seem like a hoe

ahahahahahah "you are the only exception" are lyrics from song, retard...

Your 16 or 17 or whatever...stop answering questions like a whore.

I am embarrassed for you.....unfollow

wow you think you're so cool.

youz a trashy hoe :O

gonnaa shoot myself

anything but listening to the dying cow

Wow rebeca we all hate u i so wanna shoot u with mah gun...

she so fat. subways behind her

I dont know why, but I dont like her mouth and wanna punch her.

What a fuckin bellend this guy is he should have his own magazine called twat mag

1st u liked Matthew then Vincent then Brian then Matthew again now Moses hoe

sorry but I am following you on here and I really don't know how Natalie is in a "Thot squad" she never slept with you or anyone.she is not a whore unlike you.The only reason why your saying that is because your want to hurt her into a million pieces. So get the fuck out and mind your own business.

anyone as long as it's not thalia

You one of the fattest nastiest lookin hoes on my IG

Why is you so fucking big i mean damn girl stop fucking eating

Why you smell like fish

When are you going reduce your waist?

Twinkle Twinkle, little whore Close your legs, you're not a door

Does your mom know you're a whore?

Apparntley it's this girl @abbeyfarmer92 but she's deleted her twitter. Dirty dog abusing whore 😵

you a faggot bruh @mooney_steve99

did he die?

he or a she??

do u sleep? You have a lot of bags under your eyes. Like a lot.

you hav a flat chest

You're a complete joke, why are you leading so many girls on? no offence or anything..

Lols done with your crap, bye

You're definitely an emotional wreck.

You dated Jared. William would never get with you.

Why are you always naked

Try to hide the fact that you photoshopped your profile picture

hows your herpes going

ugly af hhahahaha

silly slut :// hell hot tho

you're face is ugly, you're hair is ugly, you're fashion sense is ugly, you're personality is ugly, you're figure is ugly, your just so ugly..everything about you.. ugly

in my opinion you're the ugliest meanest bitch i have ever come across in my whole life

I'm glad u don't have your phone during weekdays because you are ANNOYING AS FUCK !!

why are u a bitch lol

Fuck you, ice witch.

Your far from gorgeous and your definitely a bitch to a lot of people...

i dont like you hahahaha

Ur so conceited its fucking annoying

You dumbshit, Robert doesn't even have CS GO, you know why, it's cause he's poor and he drives a 2001 Toyota Camry Touring Edition, do you really expect him to be able to purchase CS GO if he drives such an obnoxious car?

You wear the same outfit to school everyday wtf

hahah you are so funny on here...fuck dem haters!! straight up

HOOT IS NOT A FUCKING LESBIAN

chill stop sending hate you probably don't even know him

Anon is stupid, your not dark lol. Anon get some glasses

You don't need to feel insecure you are a stunner and seem like a gorgeous girl , ignore the haters there just jealous x

Anon could you kindly fuck off xo

Anon fuck off any guy would be lucky to have Liv, she's amazing and the nicest and most caring person ever!!! It's not her fault most boys are stupid so could you kindly fuck off anon xo

Guys stop harassing Olivia about her past and present boyfriends it's her choice and no one cares if you don't agree with it

I think you're very handsome Dave, don't let anyone tell you different :)

ew ignore that shithead...i dont even know you that well but from what i know everyone thinks your cool and nice and pretty too and who the fuck is that person they prob dont even know you and are jealous cause youre awesomeee

7.3   False positives (3)

The way the scots say "whore" is hands down the most wonderful thing I've ever heard. #Outlander

AHAHAHA I HATE YOU OK

I hate you too <3

Ur my favorite trash

thanks bitch ❤□

I don't even know how to take this. A compliment? Do I normally look like a dirty crack whore?

I've been switching lanes a lot lately I'm such a whore what do i do

paybacks a bitch

she killed that bitch 😵😆

McDonald's employees always wanna roll their eyes when you pay with change like bitch you broke af too fuck you givin me attitude for

I wouldn't mind if my bitch made mre money than me fuck it motivate each other

karma's a bitch.

god I am such a faggot

Help a nigger out

Love you bitch, you CRAY CRAY!

fuck up faggot i am your one and only

Ure my fatass bitch who sells weed xD JK u be so pwetty :(u have such awsum hair

became friends what early this year, funniest cunt out

Can a stupid person be a smart-ass?

Then I saw a gayboy in a parka and thought it was you

I hate french

Hate answering these, didn't have enough time

omg you're a fucking faggot but ily xxxxx

Do you hate anyone so much that you could kill them??

Yehh like it bitches

truth is.. you're an idiot...(:

OMG HELLO DEBBYDONKA TBH i miss all the stupid shit u did in class and how we alw insult one another during night study etc (omg the mugging sessions in night study)!!! thank u for being such an awesome friend & classmate the past four years all tha best in JC okai #HLMEpower manâ€ŽÂ Â jia

Shut up fagget ill bang you out ahahaha

NIGGER HEAVEN! I gotta go!

you're cute asf tbh

fuck you umar you little faggot bastard. i hate you. your's-amy

i hate doing tbhs but then I feel bad saying no to the person

I'm in this bitch I'm getting $$$

GOOGLE IT BITCH .

What's one thing you hate sharing?

Does my nigga eat your booty

love has no color nigga

hey fatty. youre real nice, fat, ugly, greasy, fit, good at hockey, supportive, funny, chill, annoying, faggot, homo, turd, overweight and gay. but besides all the bad shit, youre a good cunt ay. always there for me, helping me with my lady issues ;) haha but youre real nice and real funny actually. you can always manage to get a smile on my face :) i ove how i can just have a joke around with you and insult you allday without you taking it to heart. not many chicks can handle the lang but i guess you put up with all my shit ay haha. ive known you for like three months and were already aquaintances <3 na but can always rely on you just to have a nice chit chat or a small skype session. love you georgie pie <3 xoxo