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The Dark Side of Social Media - Cyberbullying, Catfishing and Trolling: A Systematic Literature Review

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Abstract

This research aims to identify the factors contributing to the dark side of social media usage by looking explicitly at cyberbullying, catfishing, and trolling. The systematic literature review was performed to better understand the factors contributing to the dark side of social media and provide ways in which these factors can be prevented. The systematic literature review has been performed on numerous articles with the aim of gathering information to help identify factors contributing to the dark side of social media. The systematic literature review found that most factors contributing to dark social media are related to Dark Triad personality types. Unfortunately, this means that there is no way to prevent dark social media usage from taking place. Although psychology theories speculate that these personality types can be helped, there is no way of completely stopping them.

1 Introduction

‘Social media is addictive precisely because it gives us something which the real-world lacks: it gives us immediacy and value as an individual.’ These words were spoken by British author, David Amerland. The aim of this systematic literature review is to explain the dark side of social media with regards to cyberbullying, catfishing, and trolling. Furthermore, the systematic literature review will focus on gaining a better understanding of the people behind the profiles. Studies show that in the US alone, 66% of students, 8 to 18 years of age, have access to social media via mobile technology (Görzig & Frumkin, 2013). That means that 66% of children are exposed to others using fake profiles to manipulate and lie to them. In addition to being able to share details of one’s life on social media, other users can comment on your images and posts. Although this allows friends and family to join in on one’s life, it opens the door to trolls. People who troll on social media sites make comments with the purpose of being provocative and offensive (de la Vega & Ng, 2018). This systematic literature review will analyze the factors leading people to participate in trolling (Bentley & Cowan, 2021) and attempt

to understand why these factors are of importance (Howard, Zolnierek, Critz, Dailey, & Ceballos, 2019). Besides users being vulnerable to trolls, many users are targeted by cyberbullies. Definitions and measurements across dark social media studies are not constant. A meta-analysis shows that 6.5% to 72% of children have experienced cyberbullying and online harassment (Görzig & Frumkin, 2013).

Unfortunately, it can be difficult to locate these trolls and cyberbullies due to them using fake profiles to not be caught. For this reason, the systematic literature review will also focus on catfishing, otherwise known as people using fake or stolen identities to portray themselves as someone different to who they truly are (Krombholz, Merkl, & Weippl, 2012).

Firstly, the systematic literature review will discuss each of the different dark sides of social media as mentioned above. The review will then further look at factors contributing to why these dark sides are being used.

2 Research Method

2.1 Research Question

‘Which factors contribute to the dark side use of social media?’ From the original research question the systematic literature review will focus on three aspects of the dark side use of social media, namely cyberbullying, catfishing and trolling. Furthermore, the review will look at the factors contributing to users using this dark side.

2.2 Search Terms

To identify various sources that could be of use for this systematic literature review, specific search terms were selected. These search terms were combined in various patterns to ensure the most fitting resources could be located. The search terms are:

(Trolling) AND (Cyberbullying), (Trolling) AND (social media), (Catfishing), (Cyberbullying) AND (Social Media), (Fake Profiles OR Catfishing) AND (Social Media), (Dark Social Media*), (Social Media Influencers) AND (Catfishing)

2.3 Selection Criteria

Inclusion criteria

This systematic literature review focuses on the dark side of social media. In the last decade there has been a significant increase in the number of social media users. Due to this increase it can be assumed that the dark side use has also increased during this time leading to more complete and relevant research. Thus, for this systematic literature review only articles published between 2011-2021 will be included.

With regards to language specifications, only articles published in English will be considered as to avoid any mistranslations and misinterpretations. Only articles published in academic journals and included at academic conferences will be included.

With regards to the content of the articles, this systematic literature review will only include articles that depict the perpetrators side of the social media attacks to be discussed. Articles that only focus on the victims’ experiences of social media attacks will not be included.

Exclusion criteria

Any articles published before 2011 will be excluded from the search criteria. Publications where only the abstract’s available will be excluded. Newspaper and magazine articles will be excluded.

Articles only focusing on the victim of dark social media's side are excluded, since this systematic literature review focuses on the factors and perpetrators of the dark side of social media.

2.4 Source Selection

Multiple online databases have been consulted for articles that can be relevant to this systematic literature review. In the end the following online databases that have been consulted are WorldCat, ScienceDirect, Springer Link and Library, Information Science & Technology Abstracts. The various articles referenced in this document have been analyzed comprehensively for completeness and correctness. Articles that are not complete provide only half a story which will not contribute to an accurate conclusion for this systematic literature review.

2.5 Prisma Flowchart

Since three aspects of the dark side of social media are looked at for this review, the total for each aspect will first be provided, after which the total will be provided.

In section 2.2 Search Terms the key words have been identified for searching articles relevant to this systematic literature review. The initial search for terms produced thirteen articles on Catfishing, 1346 articles on Cyberbullying and 715 articles relating to Trolling. This provides a combined total of 2074 articles. No additional resources were used during this identification phase. After excluding all duplicate articles, the total number decreased to 1852.

During the screening of the records, the inclusion and exclusion criteria were applied to the search results. This reduced the number of search results to seven articles on Catfishing, 560 articles relating to Cyberbullying and 124 articles on Trolling. Thus, a grand total of 691 articles will be included in the Eligibility phase of the Prisma flowchart, thus eliminating 1161 articles as resources.

During the eligibility phase of the resource selection the remaining sources were analyzed and examined. In total 665 articles were excluded because they were classified as unsuitable for the research question at hand. The final number of sources thus selected for the final phase is thirty. Figure 1 depicts the Prisma flowchart indicating the elimination of articles for this systematic literature review.

2.6 Quality Assessment

Papers and articles that have been included in this review have been analyzed to ensure that they are of great quality. Only papers and articles that could answer the following quality declaration questions have been consulted:

1. Does the paper discuss cyberbullying, catfishing, or trolling?
2. Does the paper focus on the perpetrator's perspective?
3. Does the paper provide empirical evidence for their standing?
4. Was the data collected from a heterogeneous (generalizable) sample?

Depending on whether the articles answers "Yes" or "No" to the questions it will receive points. All articles that have been assessed will be able to score a possible five points. Any articles scoring one point and below will be disregarded.

Data Extraction

The data extraction process was done according to the guideline provided by the Prisma flowchart stated in section 2.5. Each article was read to determine its main concept. Each article was furthermore analyzed to determine the criteria, concepts, and dimensions thereof. This criterion identified that has been identified for each article will help sort the articles as well as assist in the discussion of this systematic literature review as the data extraction table can simply be referenced when necessary to determine which articles relate to which topic sections.

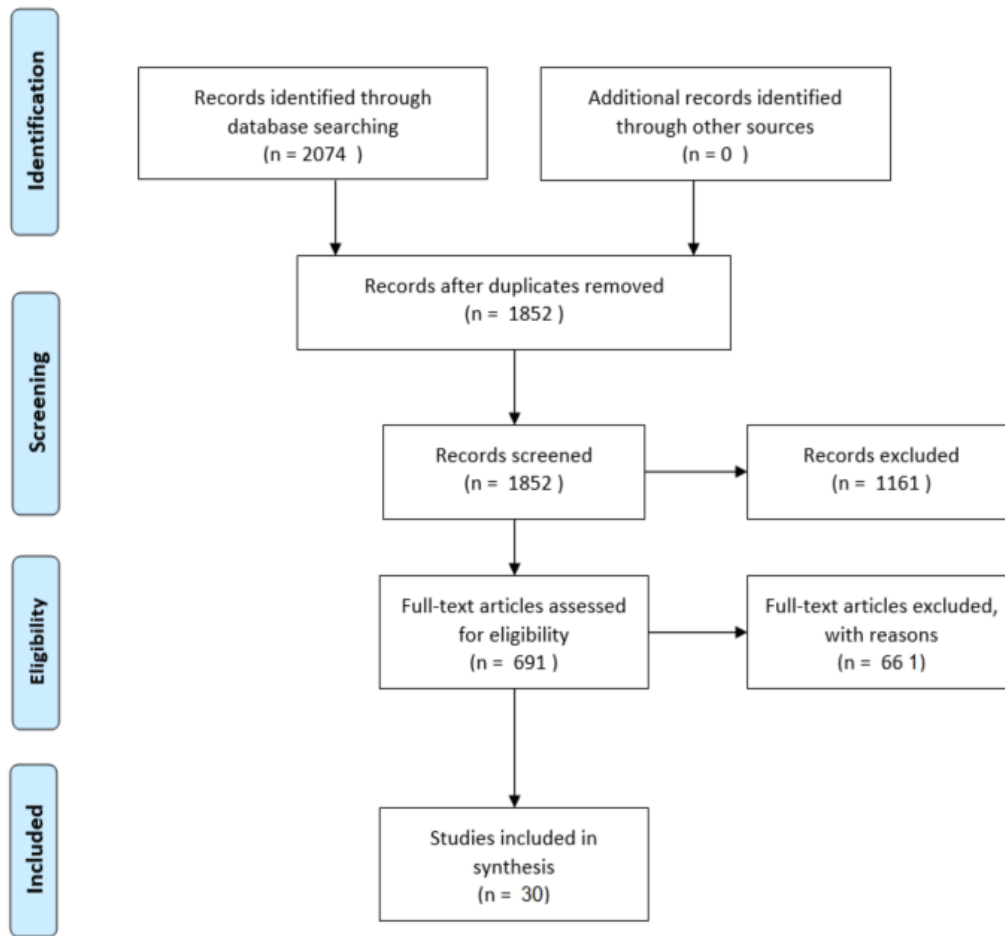


Figure 1: Prisma Flowchart

3 Results

3.1 Search results

A total of thirty articles have been included in the search results. The databases mentioned in Section 1.4 have been used by the same search process. The articles have been analyzed according to publication year. 21% of the articles that are used have been published in 2017. 17.9% of the articles used have been published in both 2018 and 2019 respectively. 32% of articles used have been published in the last 3 years where 71% have been published in the last 5 years. This indicates that the topic of dark social media has gained traction and piqued the interest of many in recent years.

Articles were categorized according to the dark social media discussed, see **Error! Reference source not found.** 50% of the articles used to refer to “Cyberbullying”. It can be concluded that more research has been done with regards to “Cyberbullying” than “Trolling” and “Catfishing”.

Figure 4 indicates the number of articles extracted from each journal used. 21% of articles used are published in “Personality and Individual Differences”. This provides an indication that one of the leading factors for the dark side of social media is potentially connected with personality types and traits. 14% of articles are extracted from the journal “Computers and Human Behavior” further suggesting that human factors are involved with the use of the dark side of social media.

Categories of Articles Used

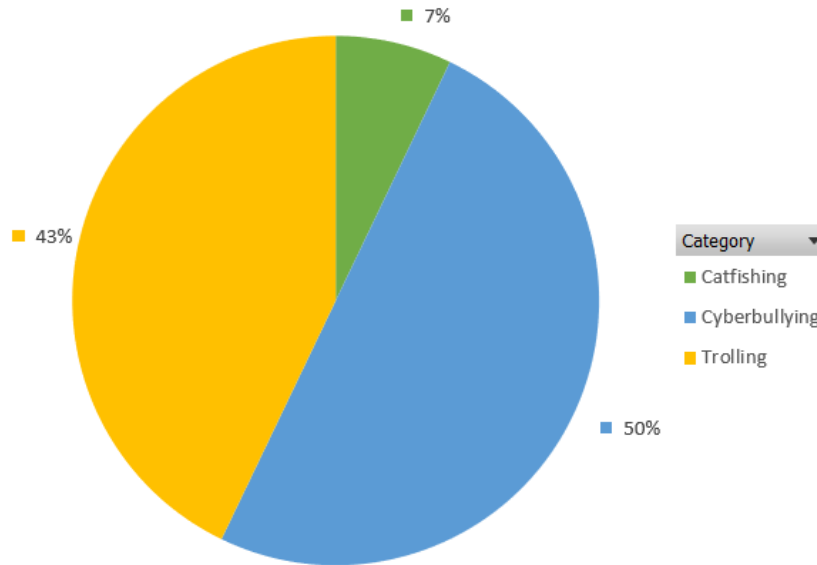


Figure 2: Distribution of Themes

3.2 Quality Evaluation of Articles

For articles to be included in this systematic literature review, it needed to be screened and assessed to confirm that it will add value to this review. Each article was assessed with four questions as mentioned in section **Error! Reference source not found.** If the answer to the question is “Yes”, the article will receive a score of 1 for the question. This applies to if the answer is “No”, the article will receive a score of 0. Articles with a total score of 1 or less will be discarded for the purpose of this systematic literature review.

4 Discussion

In this systematic literature review possible psychological factors that contribute to Cyberbullying, Catfishing, and Trolling will be discussed below

4.1 Cyberbullying

This section of the systematic literature review will focus on the factors contributing to cyberbullying. This section will also discuss possibilities to prevent these factors from occurring to

reduce cyberbullying. Cyberbullying is the intent to cause a person harm via technology by spreading mean, harmful and insulting information about a specific person or group.

Cyberbullying and traditional bullying are often seen as the same activity. The only difference being that the one takes place online whilst the other takes place in “real-life”. Englander, Donnerstein, Kowlski, Lin, & Parti (2017) argues that there are greater differences between the two and that they should not be confused. The characteristics of bullying are intention, repetition, and power imbalance. Although intent is also a characteristic of cyberbullying, it is difficult to measure the other two characteristics. Repetition does occur when an original post/online comment is spread online. A second difference between traditional bullying and cyberbullying is that cyberbullying can easily take place in a home setting, where victims are usually safe from traditional bullying. This difference is possible due to the widespread use and availability of digital devices. The third difference is that cyberbullying causes its own psychological harm (Englander, Donnerstein, Kowlski, Lin, & Parti, 2017). Cyberbullying causes mental and emotional pain to victims but can lead to physical harm. The word ‘cyberbullying’ was accepted in 1999, although there is no consensus on a definition for the word. Cyberbullying is loosely defined as “the use of technology in order to inflict harm repeatedly, or bully” (Englander, Donnerstein, Kowlski, Lin, & Parti, 2017). Studies further show that most cyberbullying perpetrators know their victims.

The Dark Triad personalities are indicators for problematic social media usage. The Dark Personality Triad consists of Psychopathy, Machiavellians, and Narcissists. Psychopathy being the most malicious and Narcissists the least malicious. Machiavellianism is seen as a clear indicator for cyberbullying (Kırcaburun, et al., 2019). Machiavellians are people that denote cunningness and are very manipulative. Machiavellians have a fear of social rejection. This fear can be linked to why they are so good at deception. They deceive people to be liked and socially accepted. Machiavellians prefer online communication since it allows them easier ways to manipulate others. Kırcaburun, et al. (2018) further states that studies show that men are more likely to partake in cyberbullying than women. Women however are associated with Narcissism and cyberstalking. Studies further show that cyberbullying occurs more among school children than adults (Balakrishnan, 2017). This can be a misconception, since university students and adults tend not to report cyberbullying out of fear of being seen as weak.

Psychopathy and everyday sadism are factors contributing to dark side social media usage. Psychopaths and sadists enjoy seeing other people’s pain and suffering (Kırcaburun, Jonason, & Griffiths, Dark Traits & Problematic Social Media Use, 2018). They have a need to fulfil this urge to hurt others. Psychopaths tend to take it a step further. Since cyberbullying can cause victims to have anxiety, stress, and depression, psychopaths will target victims that they know. They will attack their victims online just to see the physical, mental, and emotional state of their victims decrease in person.

There are three main factors that has been identified to significantly predict the intention to cyberbully (Balakrishnan, 2017). Sociocultural, Psychology, and Technology. Sociocultural is an emerging theory in psychology that focuses on the development of individuals as impacted by the contributions of society. Social Acceptance and Social Influence have been proven to be significant factors leading to cyberbullying. People have a desire to belong and to be accepted. Balakrishnan (2017) proved that people who don’t perceive social acceptability tend to partake/ intend to partake in cyberbullying. This individual’s reasoning is along the lines of, “if you cannot accept me, I will make you feel unaccepted”. These individuals aim to make others feel their pain for not being socially accepted by alienating their victims from others. Positive social influence and good support from parents can significantly reduce cyberbullying behaviors. Technology is a factor contributing to all forms of dark social media. Since technology is more accessible. The internet has made it so that

anyone can reach anyone else, if they are both connected to the internet. Technology and the internet provide platforms for cyberbullies, trolls and many darker social media users. Availability is thus a factor contributing to cyberbullying (Lee & Shin, 2017). Psychology is found to have a significant impact on the intention to cyberbully. Studies (Balakrishnan, 2017) have found that cyberbullies find cyberbullying fun and entertaining.

Cyberbullying is often related to relationship problems. As mentioned earlier, most cyberbully victims know their perpetrators. These problems can be break-ups, envy, or intolerance (Lee & Shin, 2017). Other motives for participating in cyberbullying include the seeking of approval or revenge. Social media and the internet can provide people with anonymity. People use this both to their advantage and the disadvantage of others. Social media provides people with 'false courage' to say things they wouldn't normally say in person. People can voice their opinions anonymously, whether good or bad. If these individuals are hurt, due to relationship problems, they will most definitely lash out and attack those that have hurt them. People who have experienced traditional bullying or cyberbullying are prone to participate in cyberbullying as a perpetrator. The reason for this being that people need a way to get rid of the negative feelings and emotions caused by the bullying. People, being people, will want others to suffer as they have suffered to feel better about themselves and give themselves a sense of power.

Cyberbullying can take place in multiple forms. Cyberbullying includes online harassment, the sending of cruel messages to the victim, commenting on the victim's posts, and posting cruel things with the intent to bring harm to the victim (Shim & Shin, 2016). Online harassment takes place on social media and online gaming platforms. With regards to cyber harassment on online gaming profiles, it is usually men stepping up as the perpetrators against female gamers (Marcum, Higgins, Freiburger, & Ricketts, 2013). Often male online gamers harass female online gamers that perform better in online games than them. Studies show that most of these perpetrators are young males, usually around the ages of 13-17 years. Research proves that many of these perpetrators have harassed online female gamers because they thought their reaction would be funny and that their identity would remain anonymous. The majority of the perpetrators proceeded to state that if they had known their comments can be traced back to them, they would not have done it. This supports the 'false courage' claim that comes with anonymity.

Unfortunately, with Dark Triad personality types, there is no way to prevent this factor contributing to cyberbullying. Individuals diagnosed with the dark personality types can be discouraged to behave in certain ways, but there is no 'cure' for these factors. Attachment to society and those that live within it can decrease problematic social media behavior. Studies (Lee & Shin, 2017) show that young adolescents that have strong, positive bonds with their parents and emotional support structures are less likely to participate in dark social media.

4.2 Catfishing

This section of the systematic literature review will focus on the factors contributing to catfishing. This section will also discuss possibilities to prevent these factors from occurring to reduce catfishing. Catfishing is underreported due to people not knowing they have been catfished, or because the catfish don't want to reveal their identity. There are several definitions for catfishing, determining on the platform being researched. The different definitions will also be discussed in this section.

Catfishing in terms of online dating is the intentional misrepresentation of various aspects of a person with the purpose of pursuing an exclusively online relationship (Mosley, Lancaster, Parker, & Campbell, 2020). Characterization of a catfish relationships is a lack of in-person interactions. Online dating is still a new phenomenon that allows users to meet new people online. Users are expected to

provide details such as interests, hobbies, likes, and dislikes. Algorithms then run through the databases containing this information to match people with similar details. 30% of young adults between the ages of 18-24 years of age participate on online dating platforms. Most users do believe that there is a high risk with online dating since one isn't always sure that the other person is being completely honest.

Catfish misrepresent themselves as more desirable and attractive to attract potential partners. Men are more likely to lie about interests, relationship goals, and personal attributes where women are more likely to misrepresent physical appearances. Women are more likely to use technology to maintain relationships, whereas men use technology for meeting new people. To broaden the pool of potential partners, men are likely to misrepresent certain information. Men, in general, are more likely to withhold information about their true identities than women (Mosley, Lancaster, Parker, & Campbell, 2020).

There are several types of attachment that people can develop within their relationships. This is known as the Attachment theory and is used to understand the emotional security and stability that individuals develop throughout their lives (Mosley, Lancaster, Parker, & Campbell, 2020).

People who have attachment anxiety have a very strong fear of abandonment. This fear often leads to them portraying themselves as weak and helpless to receive attention, support, and love from others. People who have been emotionally hurt in the past due to others focusing on their bad qualities are more likely to misrepresent those qualities in the future due to the fear of being rejected again. If a person has been cheated on in a previous relationship due to their partner stating another person was more beautiful, the person can be inclined to misrepresent their physical appearance online to cover their insecurity.

Error! Reference source not found. depicts the different combinations and degrees of anxiety and a avoidance in terms of attachment (Mosley, Lancaster, Parker, & Campbell, 2020). A low degree of both anxiety and avoidance indicates a secure attachment. A high degree of avoidance and low degree of anxiety indicates a preoccupied attachment. A high degree of both anxiety and avoidance indicates a fearful attachment. Low avoidance degree and high anxiety indicates dismissing.

People who have attachment avoidance are more self-reliant and keep a distance from romantic partners. These people can come across as unattached or uninterested in other people, especially in the emotions of their partner. Attachment avoidance is an independent predictor of catfishing (Mosley, Lancaster, Parker, & Campbell, 2020). These people strive for a relationship that is not intimate and where they don't need to emotionally support their partner. Attachment avoidance is however not a consideration when accounting for attachment anxiety, suggesting that attachment anxiety is a more significant consideration for predicting catfishing.

Adult attachment is a factor contributing to the dark side use of social media in terms of catfishing. Individuals who have a fearful or preoccupied attachment have a significant predictor of being a catfish (Mosley, Lancaster, Parker, & Campbell, 2020). These individuals will misrepresent themselves to be more likeable. Individuals like this have a fear of being abandoned and withdraw when placed under emotional distress. An in-person relationship doesn't appeal to them, but rather an online-only relationship. To find a partner to cater to their relationship needs, these individuals will misrepresent themselves to make connections more easily. Preoccupied attachment is positively correlated to problematic internet use. Although catfishing isn't specifically mentioned, deceptive behaviors, especially online, are considered problematic use.

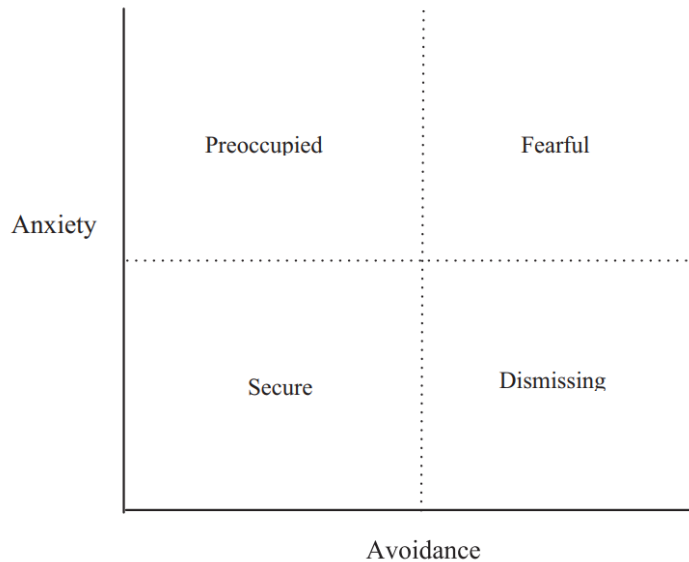


Figure 3: Dimensions and styles of adult attachment

Catfishing can take place on an intimate level, as with online dating. The purpose of catfishing in this context is for both the perpetrator and target to achieve some level of relationship satisfaction. Catfishing can also take place with the purpose of gathering information about users for other purposes. Catfish can create a fake online identity that may refer to real events or places to make their profile more believable (Krombholz, Merkl, & Weippl, 2012). An experiment was done on Facebook where fake Facebook accounts were created. These accounts had information similarities, such as example having lived in the same hometown and attending the same high school. After the experiment was conducted Krombholz, Merkl, & Weippl (2012) travelled to the schools their fake profiles claimed to have attended. They provided students with awareness training and taught them to be careful of just accepting friend requests from anyone. The study showed that the first group of students were friends with at least one of the six fake profiles that were created. When asked if they had ever seen the person in the images before, they replied that they hadn't, but thought it was a real person because of the number of mutual friends they have. Other students answered that they didn't believe that anyone in their school/community could be a threat to them or their personal data.

The purpose of the experiment was to show how easy it is for anyone to create a fake account to extract personal information from social media users. Many companies use this method of data gathering to better target their audiences with their marketing campaigns.

Catfish can be both human and bots depending on their motivation. Catfishing is the creation of a fake persona or misrepresenting information on a social media platform with the intent of gain in the form of finances, compensation or wish fulfilment. Many companies or individuals make use of bots to either extract data from unsuspecting social media users, as mentioned above, or to promote themselves. Social media influencer is a new term describing someone who has established credibility in a specific industry and has access to a huge audience that they can persuade based on their own recommendations (Luima-aho, Pirttimäki, Maity, Munnukka, & Reinikainen, 2019). Many social media influencers get paid/sponsored by companies to promote their products. Unfortunately, many influencers are self-proclaimed and misrepresent themselves to receive free services/products from companies with the promise of providing them with influencer marketing. Social media users claim they are influencers due to their large following on social media platforms such as Instagram or TikTok. Studies however show that many of these social media influencers misrepresent their number of followers (Luima-aho,

Pirttimäki, Maity, Munnukka, & Reinikainen, 2019). Bots are created with 1-2 posted images. These bots then “follow” the self-proclaimed social media influencer boosting their follower count. Other social media influencers misrepresent their lifestyles. Many social media influencers present their lifestyles as one of luxury, adventure, and pleasure. This is not always the case (Audrezet, et al., 2020). Examples of lifestyles being enhanced are influencers taking pictures in first class on airplanes whilst they are flying coaches. Although this can be seen as a smart way to save money on trips, it doesn’t need to be lied about.

Most catfish are not caught out. People who misrepresent themselves online due to insecurities cannot necessarily be prevented from doing so. Society can motivate and encourage people to love themselves and forgive their insecurities. Unfortunately, human nature prevents them from being completely satisfied, which is both positive and negative. With regards to online profiles, users should be motivated to provide their correct details by law. Social media companies need laws and procedures in place to confirm whether information provided is correct. Furthermore, companies should only be allowed to have a company profile and not be allowed to create fake profiles for data mining. Bots should be banned from social media platforms entirely.

4.3 Trolling

This section of the systematic literature review will focus on the factors contributing to trolling. This section will also discuss possibilities to prevent these factors from occurring to reduce trolling. Trolling can take place on multiple platforms and trolls can also be individuals or groups.

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” (Lopes & Yu, 2017). The criteria that a message needs to meet to classify as trolling according to Sanfilippo, Fichman, & Yang (2018) are:

- From a sender who appears outwardly sincere
- Designed to attract predictable responses or chaos
- Waste a groups time by provoking futile argument

Trolling can take place on different types of social media platforms such as YouTube or Instagram. On certain platforms like Twitter, the victim doesn’t even need to post anything, and they can be trolled. Victims of trolling range from celebrities, companies, or everyday people. Most people involved in trolling use fake identities (Krombholz, Merkl, & Weippl, 2012) making it hard to prosecute them. Although their accounts can be blocked or deleted, they can just create a new one and proceed with the trolling.

There are 4 trolling behavioral types (Sanfilippo, Fichman, & Yang, 2018). The first of this behavioral type is serious trolling. Serious trolling is ideologically motivated since it is viewed as more accepting. The reasons that it is more accepted is that people believe that others have the freedom of speech and beliefs and are allowed to voice them. The other reason is that people usually believe that if an account posts an ideologically motivated comment that their account has been hacked to achieve certain social and political goals. The second behavioral type is humorous trolling. These trolls are provocative and intentional but come across mostly as annoying. The third behavioral type is humorous non-trolling. Humorous non-trolling posts are general repetitive and satirical and can often be provocative. Humorous non-trolling posts are not pseudo-sincere, whereas the previous two behavioral types are pseudo-sincere. The final behavioral type is serious non-trolling. These posts reflect a public opinion and are intentional.

A factor contributing to the dark side use of social media in terms of trolling is the Dark Personality Triad (Lopes & Yu, 2017). Masui (2019) states that there is a fourth personality trait

missing from the Dark Personality Triad, everyday sadism. According to Lopes & Yu (2017) Psychopaths prefer to target more liked profiles rather than profiles of perceived weaker personalities. Psychopaths enjoy causing havoc and will troll profiles to either get a reaction or just for the fun. Psychopathy is considered a significant indicator for trolling. Machiavellians lack sincerity and ethical concern. They are characterized by manipulating and exploiting other people. Narcissists tend to have an exaggerated sense of self-worth and have an excessive need for admiration. Narcissists don't tend to partake in trolling, since they don't want to present themselves in negative views. Narcissism is thus not a significant indicator of trolling (Lopes & Yu, 2017). People identified with everyday sadism tend to enjoy the pain and suffering of other people. People with personality disorders categorized as the Dark Triad of personalities tend to partake in cyber-aggression (Masui, 2019). Psychopathy and everyday sadism being the leading personality types associated with trolling.

Loneliness can be considered a factor that leads to aggressive responses. Loneliness is a condition, no one is born with it, that is caused by the need for belonging that is not fulfilled. People who are lonely feel social rejection. Bullying and teasing from peers can increase the feeling of loneliness. If a person identifies with one of the Dark Triad personalities, loneliness can have a strong impact on their aggressive behavior, both online and offline. Narcissism, although not an indicator for trolling, can cause people to act aggressively to innocent others when suffering from loneliness. Although loneliness isn't directly relevant to trolling, it is considered a factor since its impact on Dark Triad personalities can lead to trolling (Masui, 2019).

Masui (2019) states that offline bullying can lead to aggressive online behavior. Nobody likes to be bullied and oftentimes the victims of bullying feel like they have no one to turn to. This results in cooped up, negative feelings. If these people don't have a way of releasing this negativity, it can cause them to lash out aggressively. The main targets of this type of aggression are people with completely opposite lives. The easiest way to get rid of these feelings, in a manner that has little to no consequences, is turning to the internet and social media. Since the law still provides little protection against dark social media, most trolling and cyberbullying attacks are not punished, and perpetrators roam free. Many social media sites have their own rules and ban/delete troublesome accounts. People who are bullied want to get rid of their hurt or make others feel as they do. They then turn to trolling and cyberbullying (Masui, 2019).

Cruel behavior is enabled by ignoring consequences and obstructing empathy (Buckels, Trapnell, Andjelovic, & Paulhus, 2018). In recent years there has been an increase in internet access. 11.01% of the world's internet users access Instagram daily (Bentley & Cowan, 2021). With the number of users on social media it is easy for everyday sadists to indulge their need for cruelty as they have a large variety of victims to choose from. A factor contributing to trolling is the easy access to social media and victims.

Buckels, Trapnell, Andjelovic, & Paulhus (2018) performed an experiment with the aim of characterizing online trolls. According to their younger participants had higher trolling scores than older participants. Men also had a higher trolling score than women. Male trolls are viewed more negatively than female trolls who are often interpreted as being confused (Sanfilippo, Fichman, & Yang, 2018). It is possible that the access to internet, social media, and violent online games that younger participants have access to may lead to them participating in trolling. Younger internet users are more impressionable, and it is possible that the violent online games they have access to give the impression that they can do as they please without repercussion. Many online games provide chat rooms where gamers can communicate. Online gamers that get frustrated with others troll their opponents on these chatrooms. Other online gamers that are particularly good at an online game might troll others that cannot compete against them.

Unfortunately, Dark Triad personalities cannot be prevented. Indirect factors that cause an increase in trolling when paired with Dark Triad personalities can be prevented in an ideal world. Social media companies can provide stricter rules with regards to trolling to attempt prevention

5 Conclusion

There are multiple factors contributing to the dark side of social media, especially when it comes to cyberbullying, trolling, and catfishing. A main factor leading to the problematic use of social media are dark triad personalities. These personalities are Psychopathy, Narcissism, Machiavellianism, and everyday sadism. Psychopathy and everyday sadism are strong factors leading to trolling on online platforms. Machiavellianism is a significant indicator for cyberbullying. Narcissism, according to studies, is not a factor contributing to cyberbullying or trolling by itself. Other indirect factors coupled with narcissism lead to problematic social media usage.

Dark Triad personalities are not however indicators of catfishing. Factors contributing to catfishing are attachment types. People who have specific relationship needs that are not being met, tend to turn to catfishing to come across as more appealing. Besides attachment types, another factor contributing to catfishing is the need for social acceptance and fame. “Social media influencer” is becoming a popular word. Many social media influencers are however self-proclaimed with bots following their social media accounts to boost their follower count. Some social media influencers further misrepresent their lifestyles to keep up an appearance of luxury. Overall, factors contributing to catfishing are not intended to harm victims thereof, but to boost perpetrators.

This systematic literature review is in line with previously published research. The review agrees with most of the other published research that personality disorders are the main factor contributing to the dark side use of social media.

This systematic literature review is limited by the number of articles available on the factors contributing to the dark side of social media. The review is further limited by the knowledge on personality disorders. Factors leading to the dark side of social media are strongly influenced by dark triad personalities. Personality types however takes years to identify and for proper research to be done, a personality test needs to be performed on each participant. The systematic literature review is limited in providing feedback on how to prevent these factors leading to the problematic use of social media. The systematic literature review focused on psychological factors that lead to the use of dark social media such as Cyberbullying, Trolling, and Catfishing. Further research can be conducted to determine if factors such as cultural, economic, or environmental influences contribute to the dark side of social media usage in terms of cyberbullying, trolling, and catfishing.

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