Human interaction, online identity,

the role of media content,

engaging in cyber-aggression and prosocial behaviour

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Table of Contents

DECLARATION

'I declare that this thesis that I have submitted to Dublin Business School for the award of BA (Hons) Psychology is the result of my own investigations, except where otherwise stated, where it is clearly acknowledged by references. Furthermore, this work has not been submitted for any other degree.'

Signed: NIAMH DUFFY

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Date: 22nd of March 2019

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ABSTRACT

The current study aimed to examine whether exposure to prosocial content predicts prosocial behaviour and if antisocial content predicts cyber-aggression. Therefore, to explore if social learning occurs in an adult population. To investigate whether more hours spent online would create an online identity, that is aggressive or non-aggressive. A quantitative survey design was employed in which 114 participants were recruited. A correlational, cross-sectional design and convenience and snowballing sampling was used. Hours spent online weekly did not significantly predict online social identity. The current study found that prosocial and antisocial media content did not significantly predict their corresponding behaviours of prosocial behaviour and cyber-aggression. Therefore, there was no significant association between content exposure and behaviour in an adult population. It was discovered that younger participants spent more hours online weekly. Displaying an implication for the young people in the Irish population in terms of mental health (Akin, & Iskender, 2011).

Introduction

When the cyber world is discussed in relation to identity, self-identity is no longer about the individual but rather the input of others online into that individual. Identity even at an individual level is a social construction (Gergen, 1985), due to continuous social interactions (Cooley, 1902). Self-identity is acquired through self-awareness and observation of others (Robinson, 2007; Mead, 1934; Bandura, 2003). There is now a platform to enable feedback, an opportunity to observe others on a much larger scale. The cyber world one is a part of has an impact on identity formation and therefore human interaction (Lee & Kim, 2004). The cyber world allows users to engage in many behaviours, the focus in the current study was on cyber-aggression and prosocial behaviour. A major factor in different types of behaviours being performed, is social learning (Den Hamer, Konijn & Keijer, 2014). Initially this took place offline but now it takes place online. The still new internet era, means individuals no longer just learn from those close to them and around them every day but anyone, anywhere can be the role model whom identity is built on. For aggressive behaviours, social platforms add another aspect to an already complicated behaviour with equally complicated effects, linking into social modelling (Zimmerman & Ybarra, 2016). Taking this into consideration, the aim of the current research was to investigate exposure to different types of media content and online behaviour resulting from this exposure and whether this can shape an individual's identity for the worse or for the better. After all social learning can be positive or negative.

Prevalence rates, definition and characteristics

The prevalence rates can vary due to contrasting definitions of cyberbullying (Schultz, Heilman & Hart, 2014). Cyber-aggression is defined as "…intentional harm delivered by the use of electronic means to a person or a group of people irrespective of their age who

perceive(s) such acts as offensive, derogatory, harmful, or unwanted" (Grigg, 2010, p.152). Cyberbullying is now being termed cyber-aggression in much research (Martins, Simão, Freire, Caetano & Matos, 2017; Wright & Li, 2013; Pabian, De Backer & Vandebosch, 2015). Macdonald and Roberts-Pittman (2010) noted that 22% of college students from a sample of 439 stated they had been the victim of cyberbullying. While 8.6% declared they had performed cyberbullying behaviours. Victims of cyberbullying vary between 10% and 40% (Lenhart, 2010; Pontzer, 2010). Cyberbullying comes in many forms, such as harassment, flaming which consists of insulting messages and passing on rumours (Li, 2006). Defamation and trolling are equally included as forms of cyber-aggression. Furthermore, cyberbullying is frequent in adult populations (Balakrishnan, 2015).

Social learning

Charles Cooley's (1902) looking-glass theory, states that the self develops out of society's interactions and perceptions of others. Essentially Cooley used the idea of an individual examining their own reflection to describe how people view themselves. The mirror reflection humans tend to use is other people, that is their remarks. Humans view themselves through the eyes of others to establish their identity. Individuals imagine themselves as others must see them and think of them (Shaffer, 2005). The self is a result of online interaction by how the appraisals of others effect the formation of the self. The self is formed out of the appraisals of others (Cooley, 1902; Goffman, 1959; Mead, 1934). The self develops internally and directs a person's interactions with others. Individuals are influenced by what they imagine the opinions of others are of them (Cooley, 1902). Therefore, self-identity may be formed based on correct or incorrect perceptions. The self tries to portray an identity that will meet the expectations of others, the audience and the situation (Goffman, 1959). When socialising the

self performs both front and backstage selves (Goffman, 1959). Humans play many different roles to put on a show society wants to see. Essentially creating a persona (Robinson, 2007). Philosopher William James stated individuals portray many identities, however contingent on who they are with. He discussed the possibility of many selves (James, 1890). Now feedback is taking place online, which involves a much broader audience.

The Bobo doll experiment (Bandura, 1961) demonstrated that children copy aggression through observational learning. By taking observational learning onto online platforms, evidently complications can arise when people from all around the world are able to offer input into a very personal process – identity. Through socialisation, children learn to aggress by being directly rewarded or by seeing others being rewarded. Learning by direct experience is based on B.F. Skinners operant reinforcement, behaviour is maintained by rewards and punishments. Behaviour which is reinforced tends to be repeated. The current study aims to investigate identity and behaviours being shaped due to media content exposure and if social learning occurs in an adult population. There is now a platform to enable feedback and reinforcement on a larger scale.

The work of Ivan Pavlov, that is Classical conditioning greatly impacted the fields of learning and behaviourism within psychology. When a stimulus frequently comes before another, the first stimulus to occur can begin through associative learning and time indicate that the second stimulus will come next. This can be applied to the cyber environment as associations can form between certain types of behaviour and the outcome that follows. For instance, prosocial behaviour followed by social acceptance or equally cyber-aggression

followed by approval in a friend group or perhaps disapproval. An individual's behaviour becomes contingent on the outcome.

Biddle, Bank and Marlin (1980) indicated that young people may be influenced by peers through their expression of normative standards, which can lead to internalising preferences for behaviour. Normative social influence was defined by Schultz, Tabanico and Rendón (2008, p.386) as the "conformity to a group norm brought by a desire to be liked by the group members". The descriptive norms are driven by a person's perception of what others do in a specific situation, while the injunctive norms, are reliant on what others approve or disapprove of (Lapinski & Rimal, 2005). A study by Reno, Cialdini and Kallgren (1993), displayed that when a confederate in an experimental condition picked up litter that someone else dropped, they would be reminded of societies disapproval of littering. Therefore, making this norm more significant and noticeable to them. Reno et al. (1993) put a leaflet on the participants car and noticed those who saw the confederate pick up the litter were less likely to throw the leaflet on the ground than those in the control group who did not see this occur. Evidently those who did not litter had been reminded of the injunctive norm against littering. Similarly, this can be seen in the cyber world, that is an online bystander defending a victim can remind others of the injunctive norm against cyber-aggression. Conversely, a cyberbully being reinforced with social approval could create the opposite effect. Bastiaensens, et al. (2014) found that the behaviour of friends, rather than acquaintances, had a greater impact on behavioural intentions to join in cyberbullying.

The Bystander Effect

The bystander effect has received a great deal of attention in the offline environment where witnesses do not help the victim and as the number of witnesses increase, there is a perception of diffused responsibility (Darley & Latané, 1968). Research displays that the same occurs in online chat rooms as more users are added (Markey, 2000). An individual's choice can be affected by the actions or lack of actions by others. The role of others, that is human interaction comes up repeatedly. Accountability starts to become a lost quality. This is no different in the cyber world. The theme that occurs regularly in research is that the role of the bystander is fundamental and is seen as the 'invisible engine in the cycle of bullying' (Twemlow, Fonagy, Sacco, Gies & Hess, 2001). The role of the bystander has appeared in cyberbullying literature too (Twemlow, Fonagy, & Sacco, 2004; Kraft, 2011). According to pervious research when an individual chooses to forward a malicious message, the line between perpetrator and negative bystander becomes a very delicate one (Spears, Slee, Owens, & Johnson, 2009). A bystander who does not take part in the antisocial behaviour online, that is deciding not to forward a malicious message moves in the right direction to combat cyber-aggression as it reduces the circulation of the deviant behaviour getting any further. Twenlow et al. (2001) stated that bullying is no longer between the bully and victim, as a third party is involved that is, the bystander. Bystanders tend to assume they have no part in the problem, even though their behaviour can add to the intimidation (Kraft, 2011). The problem with the cyber environment is human interaction is distorted, there is a lack of facial expressions and proximity (Suler, 2004). Consequently, empathy was greatly decreased online (Sourander et al., 2010). The 'cockpit effect' proposed by Heirman and Walrave (2008) displayed that bystanders do not perceive the actual damage they are doing due to the lack of feedback (Kraft, 2011). By not seeing the impact it shows that sometimes seeing is truly believing. Lenhart and colleagues (2011) found that 88% of young people in America observed online harassment,

15% had been victimised. However, 80% had defended the victim while 21% joined in on the bullying. There was a recreation, acceptance and reinforcement of behaviour but also disapproval. There was an association between the internet and entertainment (Pornari & Wood, 2010). Bystanders overestimated their friend's approval of bullying, which resulted in higher levels of joining in on bullying (Sandstrom, Makover, & Bartini, 2012). Social norms that are internalised from peers have a fundamental part to play in influencing cyberbullying behaviours (Burton, Florell, & Wygant, 2013). Sandstrom and colleagues (2012) discovered inconsistencies between reality and perception. It appeared that bystanders regularly overestimated their friend's approval of traditional bullying, which correlated with a greater amount of joining in on the bullying. Interaction with others, whether that is direct interaction or observing certain behaviours online certainly influences how individuals engage with others.

Identity

The idea of reinforcement comes from B.F. Skinner's (1938;1953) work. It is the idea that when an individual is reinforced by being seen as part of a group for instance due to the behaviours they engage in, due to the group's acceptance and approval of that behaviour. This can be both prosocial or antisocial behaviours. Goffman (1959) indicated that different situations cause different performances from people, in order to adapt. Davis (2012) did research in relation to identity, that is multiplicity or consistency. Davis's (2012) concept of 'spheres of obligation' which consists of the self, interpersonal relationships, online social norms and wide community-level values. For Davis all these factors have a role in limiting the possibility of many selves. Another study demonstrated that participants agreed that gaining feedback online made them more interested in this activity. This maintains the idea that individuals will explore different identities based on the feedback they receive and will either

proceed with a certain identity or not depending on the feedback received (Ganda, 2014). The 'protean self' is the idea that identity tends to change due to mass media (Lifton, 1971). The current research aimed to explore online identity in relation to behaviours formed and incorporated into the self because of media exposure.

Cyberbullying

Four studies highlighted that the online environment where cyberbullying takes place is different from the offline environment where traditional face-to-face bullying takes place. The dangerous feature the online environment offers to users is anonymity (Barlett, Gentile, & Chew, 2016; Udris, 2014; Varjas, Talley, Meyers, Parris, & Cutts, 2010; Wright, 2014). The concept of perceived anonymity has its part in traditional crimes (Lowry, Zhang, Wang & Siponen, 2016). This is defined as the degree to which people believe they are unidentifiable to others (Hite, Voelker & Robertson, 2014). Deindividuation is supported due to anonymity, this is "the loss of one's sense of individuality and personal responsibility" (Valkenburg & Peter, 2011, p.122). It offers a sense of security from repercussions. People may possibly believe they are not responsible for their antisocial behaviours online (Harris & Dumas, 2009). The lines of reality and a virtual world tend to get blurred. It has been found that cyberbullying can result in more psychological harm than traditional face-to-face bullying due to larger volume, scope, scale and number of bystanders (Gillespie, 2006). In the Ralph Espinoza case, it demonstrated the possibility of social learning due to exposure to cyberbullying and interacting with peers who cyberbullied (Pershing Square Law Firm, 2013). Research has showed that individuals will do and say things online they would simply not offline where there is physical interaction as online there is anonymity and therefore deindividuation (Diener, Lusk, DeFour & Flax, 1980). Bandura (2002) stated that moral disengagement can help people

justify their actions and lower cognitive dissonance between their moral attitudes and not so moral actions. Moral disengagement results in a higher probability of engaging in cyberbullying or face-to-face bullying (Bauman & Pero, 2010; Pornari & Wood, 2010). A predictor in cyberbullying was offline bullying perpetration and being cyberbullied (Lee & Shin, 2017). A study looking at prevalence rates of cyberbullying among students found that 21.9% of males reported having been cyberbullied, while 11.4% reported being the bully (MacDonald & Roberts-Pittman, 2010). Correspondingly, females were very similar, 22% reported being victimised online while 7.6% had been the bully (MacDonald & Roberts-Pittman, 2010). Conflicting evidence suggests cyberbullying was more frequent in boys (Dehue, Bolman & Vollink, 2008), while other research indicated girls tend to be more regularly the victims (Smith, Mahdavi, Carvalho, & Tippett, 2006). Another study discovered females participated in more cyberbullying than males (Connell, Schell-Busey, Pearce & Negro, 2014). Therefore, the aim of the current research is to examine differences in males and females in terms of engaging in cyberbullying.

Media content, cyber-aggression and prosocial behaviour

Pervious research displayed how media exposure can be a factor in cyberbullying behaviour. These studies discovered a significant relationship between media violence and bullying (Lee & Kim, 2004; Lam, Cheng & Liu, 2013). It was discovered that there was a relationship between antisocial content and cyberbullying (Den Hamer, Konijn & Keijer, 2014). A meta-analysis carried out by Bushman and Anderson (2002) containing 284 studies reinforced the argument that violent media content predicts and increases the likelihood of aggressive behaviours. Interestingly, a study revealed that by simply listening to aggressive songs compared to neutral songs increasingly evoked aggressive behaviour (Fischer, Greitemeyer,

Pollozek, & Frey, 2006) and thoughts (Anderson, Carnagey, & Eubanks, 2003). Therefore, aggression can be acquired in more ways than just visual, it can also be auditory input. Playing antisocial video games has been associated with consequences, like criminal actions (Anderson & Dill, 2000) or physical violence (Gentile, Lynch, Linder, & Walsh, 2004). Bushman and Anderson's (2002) General Aggression Model demonstrates how personal and situational determinants effect people's internal states and influence how they will behave in a certain situation, that is aggressively or non-aggressively. Bushman and Anderson proposed that repeated exposure to violent content can affect cognitions about expectation bias, that is an assumption that others will be aggressive, resulting in the individuals being more aggressive. In contrast, research focusing on online violent gaming found no significant long-term impact on adult behaviour (William & Skoric, 2005). Studies have found no association between game violence and aggression (Graybill, Kirsch, & Esselman, 1985; Cooper & Mackie, 1986; Scott, 1995). Research looking at the relationship between violence exposure in childhood and adolescent antisocial behaviour discovered no direct association (Wilson, Stover & Berkowitz, 2009), indicating many more aspects are involved. Therefore, it is evident that not all research points to a link between content exposure and behaviour. Furthermore, suggesting other factors are involved such as age which William and Skoric's (2005) research indicates as they found no effect in an adult population, suggesting adults are better at separating what they are seeing, whereas research indicates children cannot do this (Linder & Gentile, 2009), showing different age groups are more influential. Research has found that pornography has high levels of aggression both verbal and physical. Overall 304 scenes were investigated, findings displayed that 88.2 % displayed physical aggression. In addition, 48.7% of the scenes showed verbal aggression. The males usually carried out the aggression, while those affected by the aggression were predominantly female (Bridges, Wosnitzer, Scharrer, Sun & Liberman, 2010). Studies have displayed that if pornography shows aggression, this has a negative impact on the viewers

thoughts, attitudes or behaviour (Linz, Donnerstein, & Penrod, 1987). Research suggests males tend to be more aggressive than women (Green, 1990). Research has shown violent video gaming has had a larger impact for men than women (Bartholow & Anderson, 2002). Participants who played a violent video game were more likely to automatically aggress than participants playing a non-violent video game and this difference was statistically significant. Furthermore, there was a gender difference as males were more likely to automatically aggress than females (Uhlmann & Swanson, 2004). Research discovered men with high levels of aggression displayed the strongest link between aggressive behaviour and video gaming (Anderson & Dill, 2000). Gentile et al. (2009) found that there was a relationship between exposure to prosocial video games and helping behaviour. Studies have demonstrated a significant relationship between observing prosocial content and carrying out prosocial acts (Sprafkin & Rubinstein, 1979; Mares & Woodard, 2005; Rosenkoetter, 1999). In addition, Greitemeyer and Osswald (2010) discovered that playing video games with the content being that of a prosocial nature made participants help an experimenter who was being harassed. Anderson and Bushman's (2002) General Aggression Model concludes that media exposure impacts cognition and arousal, producing behaviour. The General Learning Model (Buckley & Anderson, 2006) takes a similar approach, however the General Aggression Model states that there is a correlation between antisocial content and negative effects (Bushman & Anderson, 2002). The General Learning Model indicates that prosocial content can have a positive impact (Greitemeyer & Osswald, 2011). Therefore, different behavioural outcomes are conditional on different types of media exposure and it is no different for positive effects to be evoked than negative effects. It all comes down to the content observed. After all social learning can be positive or negative. Furthermore, since antisocial behaviour can be learnt then more exposure to prosocial content can evoke more learned prosocial behaviour. Children who viewed prosocial content had more positive interactions with others and displayed more altruistic

actions, effects were greatest for young children and declined more in adolescence (Mares & Woodard, 2001), showing different age groups are more influential. It is evident that it is not the device itself but rather the content on it. Evidently media content can have very different effects on human interaction and influences a great deal of what is learned. The current research aimed to examine this learning in an Irish context. That is whether exposure to antisocial content predicts cyber-aggression and if prosocial content predicts prosocial behaviour. In contrast, research indicated that reading a paragraph with the content being of a prosocial nature had no impact. Furthermore, none of the participants reported peer influence as a factor for carrying out prosocial behaviour (Park & Shin, 2017). This research does suggest that there is not always an association between content exposure and behaviour.

Cyber-aggression and internet usage

Gentile et al., (2009) indicated the elements which video games can have effects, that is the amount, context, content, structure and mechanics. The more time spent online means there is a reduction in their interactions offline. This indicates that the more hours spent online means that a great deal of their socialising takes place online (Lenhart, Madden, Smith, Purcell, Zickuhr, & Rainie, 2011). An outcome of this is that the more online interaction increases, the development of identity starts being affected by that environment as that for some may be where most of their time is spent. According to research from the website Switcher.ie in 2015, 36% of Irish people spent more than 20 hours online (Rosney, 2015). The internet has become central to many people's lives. Applying Cooper's (1998) triple "A" engine, to this knowledge demonstrates how complex this new domain can be to be spending an immense amount of time on there. It distinguishes between three factors which can be viewed as desirable for those who engage in cyber-aggression, accessibility, affordability and anonymity. Mixing these online

features with certain types of media content creates a dangerous dynamic. The aim of the current study was to explore media content and whether social learning follows, whether that be prosocial behaviour or cyber-aggression. Therefore, linking into identity formation and human interaction as a result. The feedback individuals obtain from others plays a role in what is incorporated and what is not incorporated into the individual's identity. This can be seen online through experimentation of the self, that is picture sharing, how one behaves online and what a person chooses to say online. A great deal of this is influenced by the feedback from others. The feedback gets incorporated into the 'true self' (Goffman, 1959), therefore shaping identity. Furthermore, certain behaviours, positive or negative can be reinforced or extinguished by means of feedback. Again, it comes down to who individuals encounter along the way. The vast audience of the internet means feedback has got that much more complicated. Research shows there is a correlation between internet use and less mature identity (Mazalin & Moore, 2004). Research has showed that internet addiction correlates with lower self-esteem (Niemz, Griffiths & Banyard, 2005). It has been discovered that self-esteem was a factor in internet addiction and hours spent online (Armstrong, Philips & Saling, 2000). Morahan-Martin and Schumacher (2000) revealed in their research that addictive internet users tended to show more disinhibition, that is saying and doing things online they would not normally say or do offline. In a correlation analysis, internet addiction was positively related to depression, anxiety, and stress. Showing internet addiction has an impact on mental health (Akin, & Iskender, 2011). It was discovered that nearly two thirds of 1,000 people had anxiety in the U.S. (Newman, 2018). Of these findings' millennials were the most anxious. In 2018, the same poll was carried out again. Anxiety had increased by 5 percent (Newman, 2018). Research discovered that problematic Internet use correlated with sleep problems (Lam, 2014). Khang, Woo, and Kim (2011) discovered that anxiety was a factor in phone addiction. Research shows that "positive internet behavior is positively associated with positive daily social behavior and

negative internet behavior is positively associated with negative daily social behavior" (Ma, Li & Pow, 2011, p.123). Patchin and Hinduja (2010) reported that individuals who were either the perpetrator or the victim of cyberbullying had lower self-esteem compared to those without any experience with cyberbullying. The current research aimed to investigate whether greater internet usage forms an online social identity, that is identity either being an aggressive or non-aggressive one.

Gaps in cyberbullying literature and Rationale

It appears the majority of research focuses on adolescents in relation to cyberbullying. Therefore, it was important for the current study to concentrate on the adult population as past research has overlooked adult cyberbullying and most research involves juveniles (Bauman, 2010; Renati, Berrone & Zanetti, 2012). Research focusing on prosocial and antisocial behaviour together is limited in the literature (Radke-Yarrow, Zahn-waxler & Chapman, 1983; Staub, 1984). To fill this gap in the research, the current research aims to investigate the two behaviours together. A large amount of research focuses on adolescents in relation to online identity, instead of the adult population (Stern, 2004; Arnett, 1995; Calvert, 2002). The current research looked at online identity in relation to adults. The rationale for this study was to explore exposure to cyber-aggression and prosocial behaviour, if this influences what a person pursues as their identity as in engaging in cyber-aggression and prosocial behaviour and in turn the impact on human interaction, in an Irish context. This study explored online social identity, exposure to certain media content, levels of prosocial behaviour, evaluating cyberbullying and attitudes concerning how internet usage influences behaviour. The aim of this current research was to explore and develop more understanding of the relationship between types of media content and the behavioural outcomes that result from exposure. Furthermore, to obtain a

greater understanding of the effects of internet usage on a regular basis. The purpose of the current research was to get a greater insight into the online experiences of adults in an Irish context, in relation to online behaviours and exposure online and what is incorporated into the self because of online social learning.

Hypotheses

The following hypotheses were proposed:

H1- Greater social media use will be a significant predictor of online social identity

H2- Cyber-aggression and prosocial behaviour will predict significantly with online social identity

H3- There will be a significant sex difference for cyber-aggression

H4- Antisocial media content will significantly predict cyber-aggression

H5- Prosocial media content will significantly predict prosocial behaviour

H6- Prosocial media content will significantly predict online social identity

H7- Antisocial media content will significantly predict online social identity

Methodology

Participants

For the quantitative online survey, 114 individuals were recruited. Convenience and snowball sampling were employed in this study as the survey was posted to social media platforms Facebook and Instagram, gaining participants from friend's networks via sharing. Therefore, all the participants were internet users as the current study looked at the cyber world and that was essentially the target audience. Individuals participation was voluntary, and this was stated on the information sheet at the start of the survey (see appendix A). Participation inclusion criteria was those 18 and over and therefore exclusion criteria were anyone under 18 and an alert box informed the participants of this. The minimum age of participants was 18 and the maximum age was 52. The mean age was 22.42 (SD = 7.93). There was a gender imbalance of 109 females and 5 males.

Design

The overall design was a quantitative survey design. It was a correlational and cross-sectional study using convenience and snowballing sampling. Participants were assessed through the convenience of Facebook and Instagram friends. It was a retrospective study design as the current study investigated past media exposure. A correlational design will suggest if two variables are correlated or not, however this will not indicate that one variable causes a change in another variable. Therefore, correlation will not insinuate causation. A correlational design is measuring the relationship between variables. The current study hypothesised that there will be a correlation between certain types of media content such as antisocial and prosocial, and certain behaviours such as cyber-aggression as a result of antisocial content and prosocial behaviour as a result of prosocial content. Furthermore, the current study hypothesised that there will be a correlation between these behaviours and online social

identity. Hours spent online comes into this correlation too. A cross-sectional design was employed to show the gender differences. A cross-sectional design will test independent groups at one-time point. In this study it was sex differences in relation to cyber-aggression. The predictor variables for the study were hours spent online in relation to online social identity. Cyber-aggression and prosocial behaviour in relation to online social identity. Sex in relation to cyber-aggression. Antisocial media content in relation to cyber-aggression. Prosocial media content in relation to prosocial behaviour. Media content in relation to online social identity. The criterion variables for this study were online social identity, cyber-aggression and prosocial behaviour. The demographic variables were gender, age and hours spent online weekly.

Materials

The materials that were used in this study were an online quantitative questionnaire which was created in Google Forms and included demographic questions and psychometric measures (see Appendix B). Participants were introduced with the information sheet (see Appendix A) which had the function of providing information on the study and offered the right to withdraw before moving any further into the survey. A pilot study was not implemented as standardised measures were used, that have been widely used in research. Self-report measures were used to gather the necessary data. The questionnaire included the following measures: The Online Social Identity measure was designed by James E Cameron (2004) and was used to measure online social identity. It is the mean of three items. It is a measure of social identification composed of cognitive centrality, in-group affect, and in-group ties. The items are, "Being a member of my online social network is an important reflection of who I am" (centrality). "In general, being a member of my online social network is an important part of my self-image" (centrality). "Generally, I feel good when I think about myself as a member of my online social network" (satisfaction). The response options range from completely disagree (1) to completely agree (7). The participants were instructed to "using the scale below,

indicate your level of agreement or disagreement in the space which is next to each statement".

The responses were coded using a seven-point scale. The scales internal reliability was strong

at .90 (Pegg, O'Donnell, Lala, Barber, 2018).

The Cyberbullying Scale (Sticca, Ruggieri, Alsaker, & Perren, 2013), consists of

numerous aggressive behaviours conducted online. These items evaluate cyberbullying which

is six items with an alpha of .62. The participants were instructed to "state how often did you

do the following things since the beginning of the year, using the scale below". Items included

"have you sent mean or threatening messages to anyone" and "have you posted mean or

embarrassing pictures or videos of anyone on the internet". The response options range from

never (1) to almost daily (5). The higher the score on the cyberbullying items that is categorised

as cyberbullies. This scale was scored by averaging all the items. A limitation in the study that

used this measure, is that usage of self-reports possibly could have caused underreporting of

antisocial behaviours and therefore effecting the validity of the study (Brown & Zimmerman,

2004).

The Content-based Media Exposure Scale (C-ME) (Den Hamer, Konijn, Plaisier,

Keijer, Krabbendam, Bushman, 2017), consists of 17 items that measure exposure to antisocial

(8 items) and neutral (9 items) media content. For the current study neutral content is taken as

prosocial media content. This scale measures media exposure, both the content and frequency

of that exposure regardless of what media channel this exposure is on. The antisocial media

content factor was found to have the internal consistency of .89 and the neutral media content

.72 which is strong reliability (Den Hamer et al., 2017). All items are scored using a 5-point

scale ranging from never (1) to very often (5). Items included "how often do you watch people

who fight?" and "how often do you watch people who help someone?". This measure has all

media content, that is prosocial and antisocial. The participants were instructed to "please

report for every question using the scale below, how often you watch this type of content on

TV/internet/movie. This could be clips on YouTube, music videos, quiz shows, television shows, video games, cinema, etc. So, it does not matter where you watch it, but how often you watch it". The article (Den Hamer et al., 2017) that proposed the content-based media exposure measure stated that YouTube videos consist of vast amounts of behaviours, like substance abuse, bullying, sexual harassment and aggressiveness. Therefore, within the measure they included many risky behaviours and not just antisocial behaviour. For predictive and discriminant validity the 2-factor models of sensation seeking, and trait aggressiveness were better than the 1-factor models.

The 'Prosocialness scale for Adults' (Caprara, Steca, Zelli & Capanna, 2005), consists of 16 items which measures the adults rating of their own sharing, helping and feeling empathic towards others. The scale was scored by averaging all the items. The participants were instructed to "please indicate the extent to which you agree with each of the following statements by using the scale below". The response options ranged from never/almost never (1) to almost always/always true (5) and were therefore scored on a 5-point Likert scale. Some of the items include, "I am emphatic with those who are in need" and "I try to console those who are sad". The internal reliability was found to be .90 which is strong (Pimental et al., 2018). The data collection process contained a large sample and therefore offering strength and quality to the results and validity of the study. A debrief sheet (see Appendix C) was attached at the end with support contacts if any difficult feelings emerged.

Procedure

The questionnaire was created on Google docs and formatted so that the information sheet was the first section, then the demographic questions, the measures and lastly the debriefing. The questionnaire was posted to Facebook, where it was shared by friends on that platform. Furthermore, the questionnaire was posted to Instagram stories and a swipe up link

was attached to bring potential participants to the survey. The participants were told that the purpose of the study was to explore content viewed, online behaviour and human interaction. The participants were informed that the survey would take ten minutes to complete, that participation was voluntary and anonymous and required individuals to be 18 and over. The participants were debriefed at the end, where they were thanked and given additional information about the study and support contacts were given such as aware and the Samaritans to ensure support if difficult feelings emerged for people (see appendix C). Furthermore, the researcher's and supervisor's contact information were given if participants had questions about the survey. The responses from participants were recorded in a spreadsheet in Google docs. The data was transferred to SPSS, coded and stored on a password protected anti-virus computer.

Ethics

For the ethical process behind this study, the guidelines that were followed were the DBS ethical guidelines. The research proposal and the DBS Research Ethics Review Application Form was processed and reviewed by the DBS ethics committee and was approved. A meeting was arranged with the thesis supervisor and the questionnaire was reviewed and ready for data collection. The PSI code of ethics was used to support ethical issues within the study (Psychological Society of Ireland, 2011). The first principle 'respect for the rights and dignity of the person', the current study ensured the right to withdraw from the study and that it was anonymous also linking into 'privacy and confidentially' as an ethical code. The right to 'integrity' was followed by stating the purpose of the study in the information sheet and the duration the survey would take to complete. 'Informed consent and freedom of consent' as an ethical code was followed by ensuring there was a consent option to entering the survey and that it was voluntary participation. 'Avoidance of harm' was carried out by ensuring a debrief sheet was provided as the study contained the sensitive subject matter of

cyber-aggression and exposure, support contacts such as aware and the Samaritans were provided in case any difficult feelings emerged. Furthermore, an information sheet stated support contacts would be provided at the end. 'Ethical awareness' was carried out from the start as an ethical review form was completed to address potential concerns of doing the study. The participants were required to be 18 and over to avoid vulnerable groups. The participants were also informed of the storage and destruction of data, that is data would be stored securely on a password protected anti-virus computer. It was made known to participants that the current study is part of a final year project and will be submitted for examination. Details of the contact information of the researcher and thesis supervisor were given in case participants had questions regarding the survey.

Results

This section will include a statistical account of the data for each hypothesis. Specifically, a multiple regression was employed to investigate if cyber-aggression and prosocial behaviour would correlate with online social identity. An independent sample t-test was conducted to see the sex difference for cyber-aggression. Several linear regressions were conducted. Specifically, a linear regression was conducted to examine if a significant number of hours spent online weekly would predict online social identity and if antisocial media content would be a predictor of cyber-aggression. Similarly, a linear regression was conducted to examine if prosocial media content would be a predictor of prosocial behaviour. A linear regression was conducted to examine if prosocial media content would predict online social identity. A linear regression was conducted to examine if antisocial media content would predict online social identity.

Table 1: *Descriptive Statistics for age of participant and hours online weekly*

	Age	Hours spent online weekly
Mean	22.42	31.03
Median	20.00	24.00
SD	7.93	25.83
Skewness	2.70	2.18
Kurtosis	6.42	5.71
Variance	62.90	666.98
Min	18	5
Max	52	150
Range	34	145

The table above displays that the mean for age was 22.42 (SD = 7.93), indicating the average age of participants in this study were aged 22. The age of participants in this study ranged from 18 to 52 which displays a good age range within the study. Hours spent online weekly ranged from 5 hours to 150 hours weekly which is a huge contrast. Displaying that some individuals spent very few hours online while others spent a vast amount of time online weekly.

Table 2: *Descriptive Statistics and Cronbach's Alpha for prosocial behaviour, cyberbullying, online social identity and media content exposure*

	Prosocial behaviour	Cyberbullying	Online social identity	Prosocial Media Content	Antisocial Media Content
Cronbach's alpha	.94	.63	.89	.79	.79
Mean	63.05	7.41	10.36	28.05	18.76
SD	12.08	1.87	4.55	7.36	7.20
Skewness	-1.39	1.60	-.11	.01	.26
Kurtosis	1.95	2.54	-.68	-.37	-.85
Variance	146.05	3.48	20.71	54.19	51.84
Min	25.00	6.00	3.00	9.00	8.00
Max	80.00	15.00	21.00	45.00	35.00
Range	55.00	9.00	18.00	36.00	27.00

The figures above are .94 for the prosocial behaviour measure and .89 for the online social identity measure which demonstrates good internal reliability. Furthermore, the media content exposure measure is .79 which is satisfactory. However, the cyberbullying measure is

.63 which is moderate. The prosocial behaviour (M = 63.05, SD = 12.08), prosocial media content (M = 28.05, SD = 7.36) and antisocial media content (M = 18.76, SD = 7.20) measures displayed the highest mean while the cyberbullying (M = 7.41, SD =1.87) and online social identity (M = 10.36, SD =4.55) measures were slightly lower in comparison.
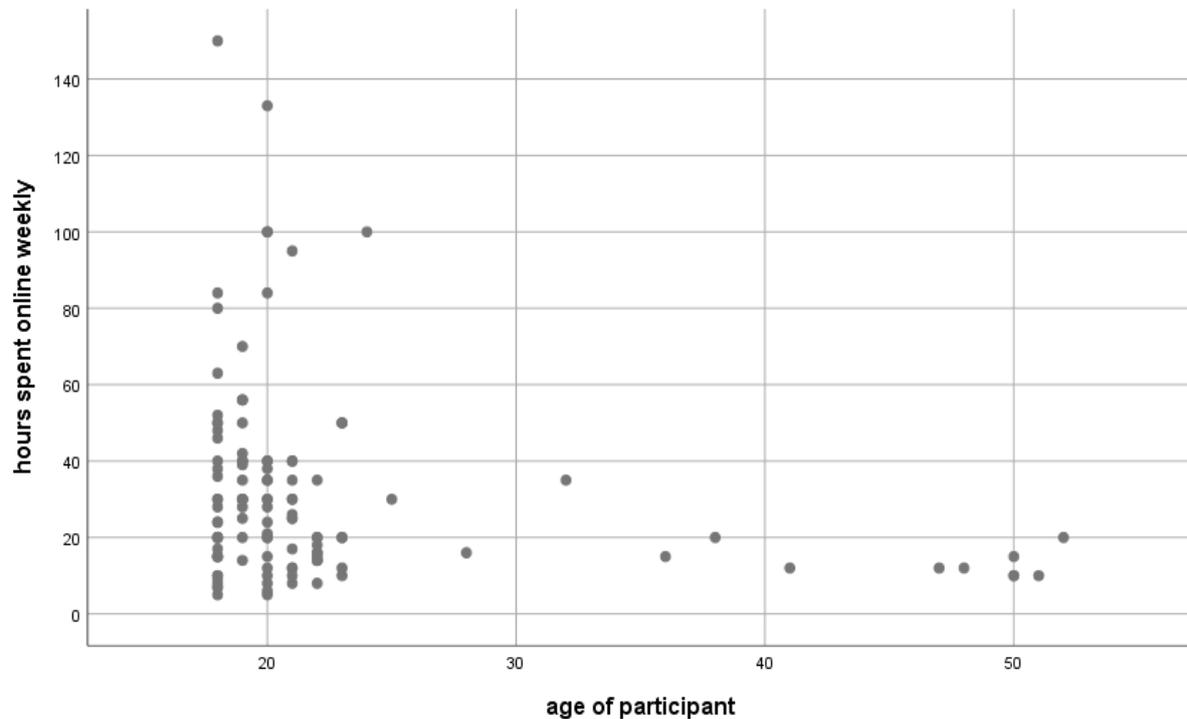

Figure 1: *scatterplot displaying age differences in terms of hours spent online weekly*

This scatterplot highlights that the younger participants spent more hours online weekly than those older than them. However, there is a decline for 20-year olds in comparison to those of the ages 18 and 19. Furthermore, most individuals spent more than 20 hours online weekly. On average 30 to 60 hours were spent online in the younger age groups.

Hypothesis 1

It was hypothesised that greater social media usage would significantly predict online social identity. Using simple regression, it was found that hours spent online weekly did not

significantly predict online social identity (F (1,112) = .17, p = .684, R^2 = .7%) (hours, beta = .04, p = .684, CI[95%] -.03, .04). The null hypothesis failed to be rejected. Therefore, highlighting that hours spent online weekly has no effect on social identity online.

Hypothesis 2

Multiple regression was used to test whether cyber-aggression and prosocial behaviour were predictors of online social identity. The results of the regression indicated that two predictors explained 1.3% of the variance (R^2 = -.01, F (2,102) = .35, p = .705). It was found that cyber-aggression did not significantly predict online social identity (β = .07, p = .480, CI[95%]= -.32, .67) as did prosocial behaviour (β = .05, p = .622, CI[95%] = -.06, .92). The null hypothesis failed to be rejected. This suggests that behaviour online does not predict an online identity.

Hypothesis 3

An independent samples t-test found that there was no statistically significant sex difference for cyber-aggression. Females (M = 7.39, SD = 1.85) and males (M = 8.00, SD = 2.45) (t (112) = -.72, p = .474, CI[95%] -2.31-> 1.08). Therefore, the null hypothesis failed to be rejected. However, the gender imbalance in this study may have impacted this finding.
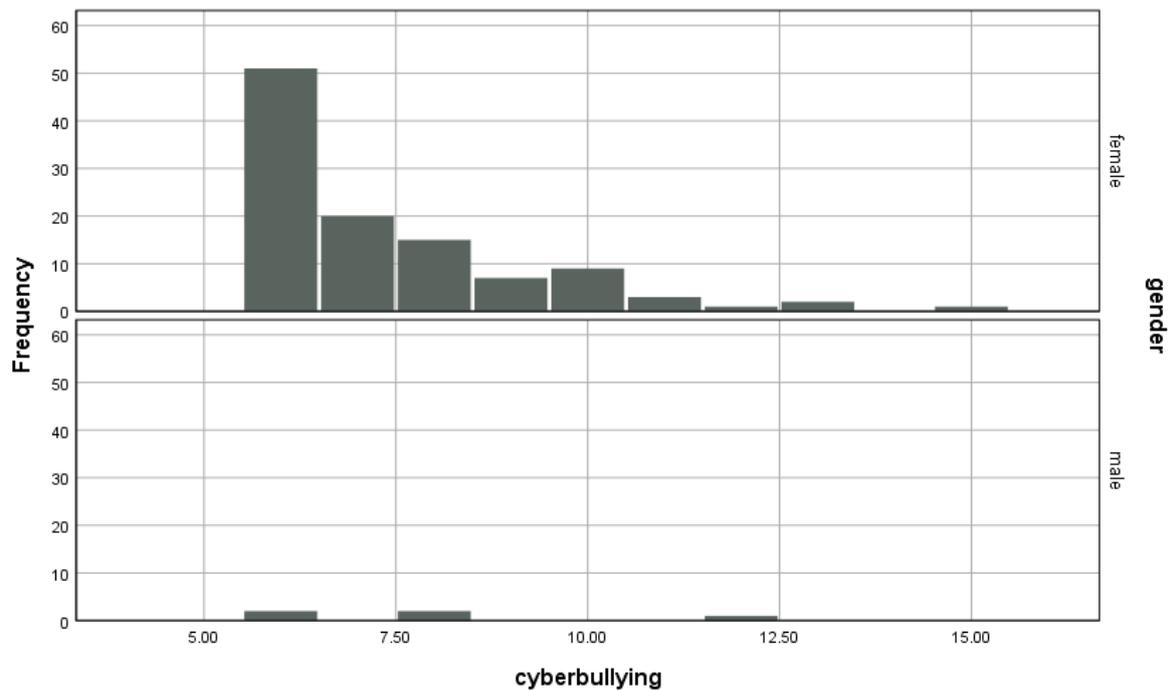
Figure 2: *histogram displaying sex difference for cyberbullying*

This graph displays a visual depiction of the difference and overlap between two distributions. The graph equally displays the gender imbalance as more females participated in the study than males. There was 109 females and 5 males.

Hypothesis 4

Using simple regression, it was found that antisocial media content did not significantly predict cyber-aggression ($F_{(1,111)} = 2.43$, $p = .122$, $R^2 = 1.3\%$) (Antisocial media exposure, beta = .15, $p = .122$, CI[95%] -.01, .09). The null hypothesis failed to be rejected. Therefore, highlighting that exposure to antisocial content online does not have an impact on a person's online behaviour, that is to carry out the same behaviour they observed.

Hypothesis 5

Using simple regression, it was found that prosocial media content did not significantly predict prosocial behaviour ($F_{(1,101)} = .02$, $p = .880$, $R^2 = .01$) (prosocial media content, beta

= -.02, p = .880, CI [95%] -.33, .28). The null hypothesis failed to be rejected. Furthermore, displaying that even if the content exposed to online is prosocial, that this does not affect behaviour online or social/observational learning. Therefore, suggesting cyber-aggression and prosocial behaviour online is not due to the content individuals are exposed to.

Hypothesis 6

Using simple regression, it was found that prosocial media content did not significantly predict online social identity (F (1,104) = .08, p = .785, R^2 = .01) (prosocial content, beta = .03, p = .785, CI[95%] -.06, .08). The null hypothesis failed to be rejected. This indicates that exposure to prosocial content online does not create an online identity that's prosocial.

Hypothesis 7

Using simple regression, it was found that antisocial media content did not significantly predict online social identity (F (1,110) = .06, p = .810, R^2 = .01) (antisocial media exposure, beta = .02, p = .810, CI[95%] -.11, .13). The null hypothesis failed to be rejected. This shows that exposure to antisocial content online does not affect online identity or create an aggressive online presence.

DISCUSSION

The rationale for the current research was to examine whether exposure to prosocial content predicts prosocial behaviour and if antisocial content predicts cyber-aggression, that is the type of identity an individual develops due to what they have been exposed to and the effect this has on human interaction in an Irish context. The study therefore aimed to explore if social learning occurs in an adult population. Furthermore, the current study aimed to fill two gaps in the literature. Online identity was explored in relation to adults as previous research focused on juveniles (Bauman, 2010; Renati, Berrone & Zanetti, 2012). The current study aimed to look at prosocial and antisocial content together as this is limited in the literature (Radke-Yarrow, Zahn-waxler & Chapman, 1983; Staub, 1984). The current research aimed to investigate sex differences in relation to performing cyber-aggression. To examine whether more hours spent online would create an online identity, that is aggressive or non-aggressive. The research aimed to get greater insight into the online experiences of adults and internet usage on a weekly basis in an Irish context and the implications this may have for society.

The results obtained from this quantitative survey are as follows. It was discovered that younger participants spent more hours online weekly in comparison to the older participants in the 30 to 50 age range. Furthermore, there was a decline in hours spent online for those in their 20's in comparison to participants under 20. It was found that most participants spent more than 20 hours online weekly. Therefore, the current findings support Rosney's (2015) findings that 36% of Irish people spent more than 20 hours online. For some hours online escalated into the 40's and 50's weekly and the maximum hours reported was 150, which is an immense amount of time to be spending online.

Previous research found the cyber world one is a part of has an impact on the formation of identity (Lee & Kim, 2004). However, the current findings do not support this argument as

it was found that hours spent online weekly did not significantly predict online social identity. This suggests that there are other factors involved in online identity formation other than hours online. Therefore, this could be a direction for future research to take. In addition, it was discovered that cyber-aggression did not significantly predict online social identity. This suggests that behaviour performed online does not predict an online identity. Due to previous research looking at feedback shaping the 'true self' and identity (Goffman,1959), future research should incorporate feedback in relation to online behaviour and online identity in an Irish context. Previous research found that being an offline bully was a predictor of cyberbullying. Therefore, indicating that an offline identity consisting of aggressive behaviours is required in order for that same identity to be an online identity. Furthermore, suggesting that the current findings show that within this study individuals did not have an online or offline aggressive presence/identity. This shows human interaction within these age groups in an Irish society.

The current findings found no statistically significant sex difference for cyber-aggression. However, there was a gender imbalance as 109 females participated in comparison to 5 males. Due to very few males present in the data this finding is not very representative. Therefore, before considering the current findings it is important to note what previous research discovered. Research found cyberbullying was more recurrent in males (Dehue, Bolman & Vollink, 2008), while other findings suggested girls were more inclined to be the victim of such behaviour (Smith, Mahdavi, Carvalho & Tippett, 2006). Then research on pornography which is another form of media exposure, the females were typically affected by the aggression, while the males were the ones performing this aggression (Bridges, Wosnitzer, Scharrer, Sun & Liberman, 2010). Furthermore, males have been found to be more likely to automatically aggress than females (Uhlmann & Swanson, 2004). Therefore, due to there being more females than males in the current research, the message of males having more of a tendency to aggress

than females which previous research has portrayed, could not be seen nor could it be confirmed or denied in an Irish context as the finding was not representative due to the gender imbalance.

Previous research found a significant relationship between bullying and observing media violence (Lee & Kim, 2004; Lam, Cheng & Liu, 2013). However, the current study did not support this research. The current study found that antisocial media content did not significantly predict cyber-aggression. In addition, it was found that prosocial media content did not significantly predict online prosocial behaviour either. According to other research online violent gaming had no significant long-term effect on adult behaviour (William & Skoric, 2005). Research indicated no link between aggression and game violence (Graybill, Kirsch & Esselman, 1985; Cooper & Mackie, 1986; Scott, 1995). Previous research discovered no direct link between exposure to violence in childhood and antisocial behaviour later as an adolescent (Wilson, Stover & Berkowitz, 2009). This suggests other factors came into play in antisocial behaviour, that it is not always exposure that has the greatest impact on behaviour. Age could be a factor as William and Skoric's (2005) findings displayed no impact on an adult population, suggesting adults can separate what they are seeing, while children have not mastered this art (Linder & Gentile, 2009). This brings to light that different age groups can be more influenced by what they are exposed to. The current study supports these findings, suggesting there is not always an association between behaviour and content observed, especially for individuals in the older age bracket. Furthermore, this displays the vulnerability of young age groups presence online and how social learning evidently declines as individuals grow older.

Similarly, when focusing on prosocial behaviour previous research found a significant relationship between prosocial actions and exposure to prosocial content (Sprafkin & Rubinstein, 1979; Mares & Woodard, 2005; Rosenkaetter, 1999). However, the current

findings do not support this and instead states there is no significant relationship between prosocial media content and prosocial behaviour. Previous research found reading a paragraph that was prosocial in its content had no effect (Park & Shin, 2017). The current findings supported this, that there is not always a link between content exposure and carrying out the same behaviour observed. Strength is given to this argument as both prosocial and antisocial, that is cyber-aggression creates this effect. This is evident from the mounting body of evidence already mentioned with the contribution of the current findings adding to this evidence. Interestingly children who observed prosocial content displayed more altruistic behaviour, while this effect decreased in adolescence (Mares & Woodard, 2001). Additionally, supporting the vulnerability of younger people online as it appears from previous research and the current findings as age increases influence decreases.

Strengths and limitations

A strength of the current study is there was a good age range collected of 18 to 52. Therefore, showing the findings can be generalised and discussed across several age ranges. The current study focused on investigating an adult population as previous research focused on juveniles in terms of cyberbullying (Bauman, 2010; Renati, Berrone & Zanetti, 2012) and previous research focused on adolescents instead of adults in terms of online identity (Stern, 2004; Arnett, 1995; Calvert, 2002). The use of an online questionnaire as a method of data collection provides anonymity for participants and therefore the probability of experimenter bias is low. Anonymity links into privacy and confidentially which is one of the ethical codes within psychology research (Psychological Society of Ireland, 2011). Furthermore, anonymity ensures responses are more likely to be an accurate reflection. The contribution the current study brings to research in cyber-aggression, media exposure and the cyber environment is both prosocial and antisocial media content were looked at together as this is limited (Radke-

Yarrow, Zahn-waxler & Chapman, 1983; Staub, 1984). Therefore, the current research adds to this area to develop it further. Google forms was used to create the survey which was free and therefore was cost effective. The study utilised standardised measures that have been used widely in research, ensuring the findings were reliable. Although the current study contributed to the literature, it is important to note the limitations of the study. The relatively small (N = 114) sample size may have impacted on the results. Therefore, making the study not as representative of the overall population. Furthermore, there was a gender imbalance of 109 females and 5 males, which is not very representative in terms of gender differences. Although standardised measures were used they were all self-report. Socially desirable responding (SDR) is the likelihood individuals will give positive self-descriptions. This may have impacted the findings. Due to varying definitions of cyberbullying different studies use different questions to access cyberbullying and differences in the number of times the behaviour occurs, making findings harder to compare. Although there was a good age range an addition of a younger age group may have displayed different results in terms of being at a more influential age while viewing different types of media content (Linder & Gentile, 2009; Mares & Woodard, 2001). Future research could take this into consideration.

Future research

The study may benefit from obtaining a larger sample size to be able to generalise from the sample to the overall population, which would decrease the probability of gender imbalance as males and females aggress differently (Uhlmann & Swanson, 2004), which was an issue in the current study. Therefore, being more representative of the overall population and giving greater insight into the gender differences in terms of cyber-aggression. Future research could benefit from exploring younger age groups in the sample to test social learning in an Irish context. As previous research shows children produce the greatest effects in relation to social learning and modelling what is observed (Mares & Woodard, 2001). Factors other than content

exposure should be investigated in the future while focusing on the adult population as the current study found no significant association between content viewed and performing the behaviour observed. Additional influences could be offline bullying, as research displays that offline bullying is a predictor for online bullying. Future research should incorporate this factor while investigating online behaviour to get a better understanding of the online interactions Irish people are having.

Implications and applications

The application of this research is to utilise it for future Irish laws and online protection, that is a law for online age restrictions. While the current study found no link between content exposure and behaviour in an adult population. Previous research indicates the vulnerability of the younger audience online in relation to influence and social learning (Mares & Woodard, 2001). The current study shows that being online from the age of 18 and onwards is a good age to be online as results confirm these age groups have moved away from the age of influence and social learning and a conclusion that could be drawn from this is that their identity is fully formed as they no longer are influenced by their surroundings. However, this is a task for future research to verify.

An implication of the findings is the vast amount of time the young people in this study spent online especially the under 20's. Previous research has shown that internet addiction has a direct impact on an individual's mental health, including depression, anxiety and stress (Akin, & Iskender, 2011). Furthermore, research has displayed problematic use of the internet was linked with sleep issues (Lam, 2014). This could create a further problem in terms of education of young people, leading to poor school and college performance.

Due to Wi-Fi being unlimited, the cyber world becomes a place impossible to get away from. It was found that two thirds of 1,000 people in the U.S. had anxiety (Newman, 2018). By

2018 anxiety increased by 5 percent. There has never been so much freedom and anxiety rates have never been higher as they are today. This is certainly not a coincidence as Khang, Woo and Kim (2011) found an association between phone addiction and anxiety.

Conclusion

In conclusion, the current findings are younger participants had a greater online presence weekly. Due to previous research stating the link between anxiety and phone addiction (Khang, Woo and Kim, 2011), these are striking findings for the younger Irish population. However, the study found individuals did not have an online or offline aggressive presence/identity, which is a good finding for human interaction in an Irish context. The current research found that both antisocial and prosocial media content did not significantly predict their corresponding behaviours of cyber-aggression and prosocial behaviour. This shows there is no direct significant link between content exposure and behaviour in an adult population and that social learning does not occur in an adult population. Furthermore, indicating identity has fully developed and they are no longer influenced by their environment. However, previous research showed this not to be the case for young children (Mares & Woodard, 2001). Therefore, displaying a future implication for Irish laws around online age restriction. The current research has shown the age groups that are not affected by social learning. It is evident there is a right and wrong age to have an online presence.

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APPENDIX A

Information sheet and copy of questionnaire

Exploring online behaviour and human interaction

Information sheet

My name is Niamh Duffy and I am conducting research in the Department of Psychology that explores content viewed, online behaviour and human interaction. This research is being conducted as part of my studies and will be submitted for examination.

You are invited to take part in this study and participation involves completing and submitting the anonymous survey. While the survey asks some questions that might cause some minor negative feelings, it has been used widely in research. If any of the questions do raise difficult feelings for you, contact information for support services are included on the final page.

Participation is completely voluntary and so you are not obliged to take part. However, you must be over 18 to take part in this study.

Participation is anonymous and confidential. Thus, responses cannot be attributed to any one participant. For this reason, it will not be possible to withdraw from participation after the questionnaire has been submitted.

The questionnaires will be securely stored and data from the questionnaires will be recorded in an electronic format and stored on a password protected anti-virus computer, until after the examination process and may be kept for a year after and the findings will be displayed for presentation.

It is important that you understand that by completing and submitting the questionnaire that you are consenting to participate in the study.

Should you require any further information about the research, please contact
Niamh Duffy, xxxxxxxx. My supervisor Dr. Pauline Hyland can be contacted at xxxxxxxx

Thank you for taking the time to complete this survey.

* Required

Do you consent to participate in this research? *
Yes or no?
Yes
No

Demographic questions

What sex are you?
Female
Male

What age are you? *

Your answer

How many hours do you spend online weekly?

Your answer

APPENDIX B

Measures

Table 1. *The sixteen items of the Prosocialness Scale for Adults.*

Instructions: Please indicate the extent to which you agree with each of the following statements by using the scale below

1 (Never/almost never)

2 (occasionally true)

3 (sometimes true)

4 (often true)

5 (almost always/always true)

Items	Responses
1. I am pleased to help my friends/colleagues in their activities	
2. I share the things that I have with my friends	
3. I try to help others	
4. I am available for volunteer activities to help those who are in need	
5. I am emphatic with those who are in need	
6. I help immediately those who are in need	
7. I do what I can to help others avoid getting into trouble	
8. I intensely feel what others feel	
9. I am willing to make my knowledge and abilities available to others	
10. I try to console those who are sad	
11. I easily lend money or other things	
12. I easily put myself in the shoes of those who are in discomfort	
13. I try to be close to and take care of those who are in need	
14. I easily share with friends any good opportunity that comes to me	
15. I spend time with those friends who feel lonely	
16. I immediately sense my friends' discomfort even when it is not directly communicated to me	

Table 2. *Cyberbullying scale*

Instructions: State how often did you do the following things since the beginning of the year, using the scale below

1 (Never)

2 (1-2 times)

3 (1x/month)

4 (1x/week)

5 (Almost daily)

Items	Responses
Have you sent mean or threatening messages to anyone (text messages, Facebook, etc.)	
Have you sent mean or threatening pictures or videos to anyone (picture messages, Facebook, etc.)?	
Have you sent mean or embarrassing messages or spread rumours about anyone to your friends (text messages, Facebook, etc.)?	
Have you sent mean or embarrassing pictures or videos of anyone to your friends (picture messages, Facebook, etc.)?	
Have you posted mean or embarrassing messages or spread rumours about anyone on the Internet (Facebook, YouTube, etc.)?	
Have you posted mean or embarrassing pictures or videos of anyone on the Internet (Facebook, YouTube, etc.)?	

Table 3. *online social identity*

Instructions: Using the scale below, indicate your level of agreement or disagreement in the space which is next to each statement.

1(Completely disagree)

2(Strongly disagree)

3(Disagree)

4(Neither agree nor disagree)

5(Agree)

6(Strongly agree)

7(completely agree)

Items	Responses
'Being a member of my on-line social network is an important reflection of who I am''	
''In general, being a member of my on-line social network is an important part of my self-image''	
''Generally, I feel good when I think about myself as a member of my on-line social network''	

Table 4. *the Content-based Media Exposure Scale (C-ME)*

Instructions: Please report for every question using the scale below, how often you watch this type of content on TV/Internet/DVD. This could be clips on You Tube, music videos, quiz shows, television shows, video games, cinema, etc. So, it does not matter where you watch it, but how often you watch it.

1(Never)

2(Hardly ever)

3(Sometimes)

4(Often)

5(Very often)

Items- How often do you watch (on the Internet/TV/games/mobile phone/DVD)...	Response
1 ... people who fight?	
2 ... people who openly talk about sex?	
3 ... people who use drugs?	
4 ... people who destroy someone else's belongings?	
5 ... people who shoot at another person?	
6 ... people who drink a lot of alcohol?	
7 ... people who are having sex?	

8 ... people who steal?	
9 ... people who help someone?	
10 ... people who stand up for someone?	
11 … a quiz?	
12 … talk shows?	
13 ... shows where houses or cars get a makeover?	
14 … shows about nature or animals?	
15 … shows about travelling?	
16 … cooking shows?	
17 … the news?	

APPENDIX C

Debrief Sheet

Thank you for your answers. Your response has been recorded.

This study is exploring online social identity, exposure to certain media content, levels of prosocial behaviour, evaluating cyberbullying and cybervictimisation and attitudes concerning how internet usage influences behaviour.

If you feel that answering this survey has raised some issues for you, please consider contacting some of the support services listed below, or speak to a friend, family member or professional.

Aware:

The Aware Support Line 1890 303 302

Available Monday – Sunday, 10am to 10pm.

Email for support at: supportmail@aware.ie

Samaritans

Call on: 116 123

Available 24hrs a day, 365 days a year. Free to call.

Email: jo@samaritans.org

should you require any further information about the research, please contact

Niamh Duffy xxxxxxxx. My supervisor Dr. Pauline Hyland can be contacted at xxxxxxxx