

# **CYBERBULLYING AND CHARACTER**

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## ABSTRACT

This project focuses on the topic of cyberbullying. It takes the form of an extended literature review. It brings together three main research areas to gain a better understanding of cyberbullying and the methods that can be used to combat it. These three areas are cyberbullying, intellectual virtues, and online information behaviour. Cyberbullying is the main focus of this project. This project looks to uncover ways in which cyberbullying can be combatted. The research explored on cyberbullying focuses on the traits of a cyberbully, cybervictim and a bystander. The identification of these traits helps to give a better understanding of which areas need to be tackled to help combat this issue. Secondly this project explores Baehr's nine intellectual virtues. It explores how these can be used within an educational context to help develop intellectual character. The final area of this project focuses on online information behaviour. It explores how virtuous behaviour can manifest itself in the digital sphere. It also discusses how encouraging positive information seeking behaviour can help to tackle the issue of cyberbullying. These three areas are considered by looking at research within three disciplines. These are; education, psychology, and information science. The literature surrounding each of these issues is considered separately in their own individual literature review chapters before being considered together in the analysis chapter. It considers how these areas of research can be combined to better understand the issue of cyberbullying and the best ways to combat it. The final part of the project discusses how the information that has been gathered can be used to influence future research. Furthermore, it looks to define the role for library and information professional's regarding their place in the prevention of this issue. It also looks at what practical applications these professionals can implement to begin the process of combating cyberbullying.

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## TABLE OF CONTENTS

1. Introduction .....	1
1.1 Background rationale .....	1
1.2 Research questions .....	2
1.3 Research objectives .....	3
1.4 Chapter breakdown .....	3
1.4.1 Methodology.....	3
1.4.2 Literature review.....	3
1.4.3 Analysis .....	4
1.4.4 Recommendations and limitations .....	5
1.4.5 Conclusion.....	5
2. Methodology .....	6
2.1 Writing a literature review.....	6
2.2 Key texts.....	7
2.3 Literature Searching.....	7
2.3.1 Chaining .....	7
2.3.2 Databases.....	9
2.3.3 Search log.....	10
2.4 Analysis .....	11
3. Literature review: Character traits of a cyberbully .....	13
3.1 Definitions of cyberbullying .....	13
3.2 Expansions on definitions .....	15
3.3 Traits of a cyberbully.....	17
3.4 Linking cyberbullying with other societal issues .....	21
4. Literature review: Intellectual Virtues .....	23
4.1 Virtue Ethics .....	23
4.2 Virtue epistemology.....	24
4.3 Intellectual virtues .....	26
4.3.1 Baehr’s nine intellectual virtues.....	27
4.3.2 Intellectual virtues and cyberbullying .....	29
5. Literature review: Online information Behaviour .....	31
5.1 Online information behaviour: A brief history .....	31
5.2 Online information behaviour and intellectual virtues .....	33
5.3 Digital divide .....	34

5.4 Key issues.....	35
5.4.1 Online Anonymity .....	35
5.4.2 Online disinhibition .....	37
5.5 Online Interventions .....	38
6. Analysis .....	41
6.1 Analysis approach .....	41
6.2 Baehr’s intellectual virtues.....	42
6.2.1 Intellectual autonomy and cyberbullying.....	42
6.2.2 Intellectual courage and cyberbullying .....	44
6.2.3 Open mindedness and cyberbullying .....	46
6.3 Heersmink’s online intellectual virtues and vices .....	48
6.3.1 Internet literacy skills .....	48
6.3.2 Epistemic responsibility .....	50
6.3.3 Virtues and selfhood .....	51
6.4 Summary.....	52
7. Recommendations and limitations .....	53
7.1 Limitations of the project.....	53
7.1.1 Timescale .....	53
7.1.2 Purely theoretical.....	53
7.2 Recommendations for future research .....	54
7.2.1 Practical studies looking at cyberbullies regarding intellectual virtues.....	54
7.2.2 Practical studies looking at cyberbullies regarding online information behaviour.....	54
7.2.3 More education classroom based studies.....	55
7.2.4 More research into online training tools.....	55
7.3 Recommendations for library and information science (LIS) professionals .....	55
7.3.1 Create cyberbullying master lists .....	56
7.3.2 Advise on online training tool. ....	56
7.3.3 Provide support and advice on cyberbullying .....	57
8. Conclusion.....	58
8.1 Conclusion from the analysis chapter .....	58
8.1.1 Baehr’s intellectual virtues.....	58
8.1.2 Heersmink’s online intellectual virtues and vices .....	59
8.2 Conclusions on research questions .....	60
8.2.1 What are the most identifiable traits of a cyberbully?.....	60
8.2.2 How can Baehr’s intellectual virtues enhance an understanding of cyberbullying? .....	61
8.2.3 What role can online information behaviour play in cyberbullying? .....	61

8.3 Final thoughts .....	62
9. Bibliography .....	63

# 1. Introduction

This project investigates cyberbullying and character from an interdisciplinary perspective. It brings together three topics: cyberbullying, intellectual virtues, and online information behaviour within three main research areas: education, psychology, and information science.

This introductory chapter looks at the background rationale behind the project, the research questions and objectives, and provides a detailed chapter breakdown for the rest of the thesis.

## 1.1 Background rationale

Cyberbullying is a research area that has increasingly gained interest due to it evolving with the research on the world wide web. Furthermore, the introduction and popularity of social networking sites have also seen a surge of the research on this issue.

The main focus of this project will be cyberbullying, everything else that is discussed within it looks to enhance the knowledge in this area. Cyberbullying is a particular dangerous societal issue as cyberbullying can occur at the speed of thought (Sabella, Patchin and Hinduja, 2013).

What is really driving the research forward is the change in societal perspectives towards this issue. As Anderson and Strum (2007) explain: "Society is moving away from the attitude that bullying is just a part of growing up, to understanding the deep, emotional damage it can cause" (p.24).

There has been a few exploratory studies that have considered the current research surrounding cyberbullying. In one of these studies Olweus and Limber (2018) argue: "Research on cyberbullying is plagued by inconsistent findings and exaggerated claims about prevalence, development over time, and effects" (p.139). Similarly a study by Lowry, Moody and Chatterjee (2017) state that: "There are a limited number of CB studies that build on logical hypothesis development, and much CB research has been conducted in the absence



of theory” (p.865). This shows that much more research and understanding is needed within this field.

The focus within this specific project is to look at the character traits of a cyberbully. The rationale behind this is to look for areas within the research that can be understood and tackled for an information science perspective.

This project will also consider the philosophical idea of intellectual character with regards to how development of such can combat cyberbullying. One of the key inspirations for this project is the work of Jason Baehr especially his book *Cultivating Good Minds* and the nine intellectual virtues that he outlines (Baehr, 2015). These intellectual virtues when successfully achieved can lead to intellectual character. The idea of intellectual virtues and intellectual character provided the inspiration for this project as *Cultivating Good Minds* looks at these issues in an educational context. A problem found in cyberbullying is the lack of educational values surrounding it. Thus, intellectual virtues provides a platform to provide this educational knowledge.

The final area of attention is that of online information behaviour. The field of human information behaviour is one that has been widely researched in the library and information science field. In the current digital age with a saturation of online information, it has become increasingly important to consider information behaviour within the digital sphere.

Despite a thorough investigation into research on cyberbullying there was no found attempt to bring these disciplines together. There was also very limited studies which considered cyberbullying in an educational context. Therefore, while cyberbullying is a widely researched area this project takes a unique approach to the issue.

## 1.2 Research questions

1. What are the most identifiable traits of a cyberbully?
2. How can Baehr’s intellectual virtues enhance an understanding of cyberbullying?
3. What role can online information behaviour play in cyberbullying?

### 1.3 Research objectives

The project aims to:

- Examine a number of different disciplinary areas of academic research regarding cyberbullying.
- Identify similarities and differences in the character traits of a bully and a cyberbully.
- Examine Baehr's concepts of intellectual virtues and intellectual character and how these can be used to understand how to combat the issue of cyberbullying.
- Explore the area of online information behaviour in relation to cyberbullying.
- Analyse the appropriate academic research to then make recommendations for the role of the information professional regarding cyberbullying.

### 1.4 Chapter breakdown

#### 1.4.1 Methodology

The methodology chapter provides an overview of how the research used within the project was obtained. This includes key texts, databases, and a detailed outlined of the literature searching process.

#### 1.4.2 Literature review

The literature review has been split into three chapters. The decision to structure the topics of the literature review into separate chapters rather than continuous sections of the same thread was to highlight the differences between the topics. This considers the difficulty of bringing them all together under one umbrella.

##### *1.4.2.1 Literature review: chapter 1*

The first chapter of the literature review focuses on the character traits of a cyberbully. It also briefly touches on the character traits of the victims of cyberbullying. The first section of this chapter looks at the range of definitions of cyberbullying and discusses the merit of each one. The second section looks at specific studies on cyberbullying that discuss traits associated with cyberbullies and cybervictims. The focus is on highlighting the number of traits that can be thought to be associated with cyberbullying in some form, to then later show the key themes between them. The final section addresses links in the research

between cyberbullying and other societal issues which helps view the issue in a wider context.

#### *1.4.2.2 Literature review: chapter 2*

The second chapter of the literature review revolves around Baehr's nine intellectual virtues which were the inspiration for the project. However, to gain a better understanding of intellectual virtues the chapter first looks at the theoretical disciplines of virtue ethics and virtue epistemology which intellectual virtues stems from. The chapter then categorises, defines and outlines each of Baehr's nine intellectual virtues. Finally the three intellectual virtues that are thought to be most compatible with helping to understand cyberbullying are briefly outlined. These will be further discussed in the analysis chapter.

#### *1.4.2.3 Literature review: section 3*

The third and final chapter of the literature review looks at online information behaviour. The first section provides a brief overview of the topic of online information behaviour and where it sits within the research. The next section looks at the research conducted by Nichols *et al* and how this early research encompasses a lot of the key areas this project is focusing on. The third section takes an unconventional approach to the digital divide looking at it from the angle of young people. The following section looks at two key issue which link online information behaviour to cyberbullying these are: online anonymity and online disambiguation. The final section of this chapter looks at the concept of online interventions and what considerations have already been made to making an online intervention tool for this subject area.

#### 1.4.3 Analysis

While all three chapters of the literature review highlights the important, noteworthy research in each of the three subject fields, the analysis chapter brings it all together. It considers all three topics in relation to how the information profession can help combat the issue of cyberbullying.

The chapter uses three of Baehr's nine intellectual virtues that are most applicable to the subject of cyberbullying (Baehr, 2015a). The consideration made for each issue are

threefold. First it will consider the intellectual virtue in the context of cyberbullying. Next it will look at the character trait of both the cyberbully and the cybervictim that are most aligned with the intellectual virtue at hand. Finally it will look how the knowledge gained through consideration of the intellectual virtue can be combined with the field of online information behaviour to help combat cyberbullying.

Following this, the chapter uses the Heersmink's online intellectual virtues and vices to continue analysis of the subject areas (Heersmink, 2017). They are used to analyse what skillsets should be the focus areas after intellectual virtues are successfully integrated in an education environment.

#### 1.4.4 Recommendations and limitations

Due to tackling three wide areas of research in one thesis it was not possible to delve into a lot of depth for all areas of every subject. This chapter first outlines the limitations that arose because of this. It then goes on to make recommendations to combat these limitations. It first makes recommendations for future research. It looks at gaps within the research that the project was unable to show due to a number of constraints. It also looks at what practical studies can be done to build upon the research shown within this project. Finally, this chapter makes recommendations for professionals in the library and information science (LIS) field. It looks at what knowledge and expertise LIS professionals can bring to this field. Furthermore, it look at practical solutions that can be implanted by LIS professionals.

#### 1.4.5 Conclusion

This final chapter aims to tie all the previous chapters together. It first looks at the two analysis methods used within the analysis chapter and summarises and concludes on them. It then takes each research question outlined within this introductory chapter and looks at all the research and analysis compiled within this project to answer them.

## 2. Methodology

This theoretical study seeks to explore and understand the research undertaken around cyberbullying, intellectual virtues, and online information behaviour, with a focus on the field of information science. A thorough search process was undertaken to achieve this, an overview of which will be outlined in the following chapter.

### 2.1 Writing a literature review

The project will take the form of an extended literature review. Winchester and Salji (2016) define and outline the critical element of a literature review:

*“A literature review is a critical appraisal of the current collective knowledge on a subject. Rather than just being an exhaustive list of all that has been published, a literature review should be an informative, personal but unbiased synopsis of the information, providing a balanced view that includes conflicting findings and inconsistencies, as well as established and current thinking”* (Winchester and Salji, 2016, p.308)

The principle aim of this project is to be guided by the research, using a number of literature searching techniques with the aim of proving a literature review reflective of the description used by Winchester and Salji (2016).

A literature review is neither a form of qualitative or quantitative research rather an understanding and bringing together of both of these research styles to further understand a subject area (Stewart, 2004; Galvan and Galvan, 2017).

In analysing the research found this project will consult heavily with Galvan and Galvan’s 13 guidelines for analysing qualitative research and 7 guidelines for conducting quantitative research (2017, p.65-87). These guidelines help to break down key research areas undertaken in both of these prominent styles and provide analysis techniques that help the reader to better understand the quality of the research they are looking at.

By first taking the time to understand the key components of a literature review and the best way to understand and analyse both qualitative and quantitative research, it allows for a more considered approach to making a searching strategy.

## 2.2 Key texts

While literature searching, which will be discussed later in this chapter, is the main way the research material was found that shaped the literature review, this project also uses some key texts, authors, and journals. These are materials that inspired this project either from previous undertaken research or from assigned or recommended material from lecturers. The most relevant of these is the texts written by Jason Baehr, especially *Cultivating Good Minds* which became both a source of inspiration for this project and a focal point within it.

## 2.3 Literature Searching

The key aspect of an extended literature review is attaining the best quality literature on the discussed topic to be able to make confident decisions on key themes and conclusions taking place within the research. In order to achieve this, it is important to search relevant subject based academic databases with a range of relevant search terms to retrieve the literature needed to compile the project. The next sections will outline the main searching techniques undertaken.

### 2.3.1 Chaining

The challenge with this particular review is the three main researched issues – cyberbullying, intellectual virtues, and online information behaviour – have different levels of research within them. Due to this problems were encountered trying to manifest a blanket search technique to collect as much important and relevant information as possible.

One way in which the problems encountered were counteracted was by using chaining methods developed by Ellis (1997) to enhance the searching process and ensure the best research material was extracted. Ellis (1997) characterises chaining as “following chains of different forms of referential connection between sources to identify new sources of information” (p.396).

To begin the chaining process it was found to be particularly helpful to start with a strong piece of research. In this instance what is meant by strong is a text which fits all the categories needed for academic merit: peer reviewed, well-research, original and thought-provoking thesis, and a text that provides a lot of relevant information in regard to the project. From this point, chaining could begin. For this project both backwards and forwards chaining techniques were used.

Backwards chaining involves using the initial source of information to find further, relevant information sources. The most common way of undertaking this technique, and the way that was used for this project is to use the reference list to find further sources. The next step in the process is to browse texts within the reference list until another strong text is found, then begin the process all over again.

Another process that was used on a smaller scale is forward chaining. As before, a strong source is used but rather than look for what other texts are cited, the opposite occurs. So in this instance the search is for material that cites the strong source. This technique is less commonly used due to be more difficult to achieve, however, one source that makes this technique easier to achieve is Google Scholar. When searching for an article on Google Scholar an option for 'cited by' appears underneath, when this is clicked on all articles that have cited this text appear.

Within the chaining process, closure must be found. Whether because the research has run out, moved too far away from the topic to be relevant, or time constraints. All three were a factor at some point of the chaining process however the problem that was most commonly found was the research moving too far away from the topic to be relevant. This was due to the topics explored being so wide that it is easy to get off topic.

Ellis (2011) speaks about chaining as a stage in a wider process and the same is mirrored in this project. The research process was not straight forward but rather a lot of searching techniques were brought together to ensure that relevant research for this topic was found. Chaining was one of these main techniques.

### 2.3.2 Databases

Research, especially qualitative is not based on a singular theoretical theory but instead draws on a number of theoretical backgrounds (Flick, 2007, p.11). Like this, the discussed project will explore the key databases in psychology, education, and information science. These three research disciplines were chosen because they each have an interest in the topic of cyberbullying but explore this issue in different ways. These databases will all be consulted with specific queries and the relevant material found will then be pulled for further consolidation and research. Cyberbullying is being discussed within all these fields and therefore having the key books, articles, and reports compiled on the topic in all these areas is essential for the strength of the product output.

The four databases that were used the most frequently within the searching process are as follows:

- PsycINFO which contains a range of materials in the field of psychology and behavioural science. It automatically searches the contents of its sister databases PsycArticles and PsycBOOKS.
- The British Education Index which provides information on research, policy and practice in education and training in the UK. It covers education from pre-school to university level and includes a thesaurus using UK-specific educational terminology.
- LISA which is the Library & Information Science abstracts. The main subject coverage includes all aspects of librarianship, library users, and information retrieval.
- SUPrimo is the University of Strathclyde's main searching platform. It will mainly be used for philosophy research due to the university not having a specialised database for this subject. However, it is also a good starting point for all queries to get a gauge of the research available.



While database usage was undertaken alongside use of physical library resources due to so much material now being primarily online, they were the main source of research for this project.

### 2.3.3 Search log

This search log was kept during the research process. It was used to help loosely guide the direction of the online database searching. A compressed version of the search log can be viewed below. This contains a snapshot of the search terms that help to form the structure and main themes of the literature review. As the subjects under review are fairly narrowly researched, the search terms were kept broad to extract as much relevant literature as possible. Due to time constraints, the decision was made that for any results where a large amount of results were returned, only the top twenty pieces of literature would be considered.

Database	Search term	Results/Notes
SUPrimo	Cyberbullying AND traits	A lot of good results, search could be narrowed down more.
PsycINFO	Cyberbullying AND traits	A lot of good results - ignore doubles with other databases.
LISA	Cyberbullying AND traits	A lot of good results - ignore doubles with other databases.
British education index	Cyberbullying AND traits	Only two results and they are only loosely related, This is not a good query for this database.
SUPrimo	Digital information consumer	Limited results, all by Nichols et al whose work has already been noted. Will try the same term in a different database.
LISA	Digital information consumer	Different results but still limited and irrelevant.
SUPrimo	(Online information behavio*r) AND cyberbullying	No exact match for online information behaviour. Articles that appeared are not relevant. Worth trying in another database.
LISA	(Online information behavio*r) AND cyberbullying	Again, no exact match. Try searching just online information behavior to see if it is the combination.
LISA	Online information behaviour	A very limited number of exact matches try versions of human information behaviour.

LISA	(Human information behavio*r) AND digital	Small number of exact matches, look useful, will still try one more similar query.
LISA	(Human information behavio*r) AND cyberbullying	Only one relevant match. This range of queries has run its course.
SUPrimo	(Online Anonymity) AND cyberbullying	Good results but the more relevant results are far down the list, consider why this is.
LISA	(Online Anonymity) AND cyberbullying	No relevant results, not the right database for it.
SUPrimo	(Online disinhibition) AND cyberbullying	Good relevant results
SUPrimo	Aristotle AND virtues	Only relevant results are reviews.
LISA	Intellectual virtues OR intellectual character	No relevant results try a different database.
British education index	Intellectual virtues OR intellectual character	Not many exact matches but still a small amount of relevant results.

#### 2.4 Analysis

It became clear very quickly during the search process that difficulties were going to rise from using so many databases. The subject of cyberbullying has been considered by a number of research disciplines. Therefore to get a true sense of what knowledge has already been acquired in this area similar search queries have to be deployed on all relevant databases which does make the process more time consuming.

When researching the cyberbullying chapter the decision was made to try that same broad search term on all four relevant databases. Cyberbullying is a common link that is bringing all these disciplines together for this research project. While some areas of cyberbullying are definitely under researched, as a whole it is an area that has had a lot of attention in recent years, so a lot of material does exist on the topic. As the focus is on traits of a cyberbully and, in part, traits of the victims of cyberbullying then the search terms were crafted in a way to only extracted research that looks at this area of cyberbullying.

When researching the intellectual virtues chapter it became instantly clear that the online databases were not going to be the primary source of research for this chapter. However, the key research being used from Aristotle and Jason Baehr are complex philosophical texts.

Although the majority of the results are just book reviews, these help to shape the understanding of the texts.

While the field of online information behaviour has been heavily researched since the mid-90s, it has not been looked at within the context that I was searching. This chapter more than any other was about understanding the research that has been undertaken in this area and breaking down the key terms to obtain relevant material. By widening the term to go back to the roots of human information behaviour and then narrowing it back down to look at more specific areas of online anonymity and online disinhibition a well-rounded view of this topic and its role in the wider context of this project is achieved.

Overall, coming up with a research strategy for this project was made difficult due to the range of disciplines that cover cyberbullying. This combined with some of the key concepts explored being under researched meant that it was difficult to ensure that all relevant research is acknowledged. However, by having three clear topics, using a small number of key texts and following the results of the research highlighted in the databases the correct information was collected to provide a clear, well-informed literature review.

### 3. Literature review: Character traits of a cyberbully

#### 3.1 Definitions of cyberbullying

In order to be able gain an understanding of the traits of a cyberbully it is essential to first define cyberbullying to gain a better understanding of the act that these individuals participate in. However, this is not an easy task. Despite cyberbullying becoming a part of our everyday vocabulary there is academic disagreement surrounding a clear definition of cyberbullying or what behaviours and experiences constitute cyberbullying (Betts, 2016, p.10).

As explained by Kowalski and Limber (2013): “On one hand, some researchers argue that cyberbullying is a logical extension of traditional bullying and that we can apply our knowledge of traditional bullying to electronic bullying. Others suggest that, although sharing certain features in common, electronic bullying and traditional bullying are somewhat unique types of bullying” (p.S18). While this may seem like a small differential, that is not the case. In a wider context it means whether research on cyberbullying can be seen as an extension on the extensive research undertaken on traditional face-to-face bullying or whether cyberbullying should be seen as a completely unique and separate field.

To confuse the matters even further in many languages there is no equivalent for the English term of ‘bullying’ so coming up with a definition that works on an international scale is particularly difficult (Sabella, Patchin and Hinduja, 2013). Bullying manifests itself differently all over the world. A lot of what an individual is bullied on is dependent on the context of where they live. For example, you may be less likely to be bullied for being homosexual if you live in area that is more progressive. However, it cannot be denied that cyberbullying is a global issue, made even more so by the fact that the cyberbully and the victim may not even be in the same country. This means when looking at how to define cyberbullying we cannot just consider it in the context of the here and now but rather the wider global context that the issue sits within.

The most common occurrence found through the surveyed literature is those who define cyberbullying as an extension of face-to-face bullying (Wright, Harper and Wachs, 2019;

Olweus and Limber, 2018; Lonigro *et al*, 2014; Casas, Del Rey and Ortega-Ruiz, 2013; Ncube and Dube, 2016). While there is no proven merit to any particular definition, this one does not tell the reader anything about cyberbullying. It also does not seem powerful enough to be a standalone term.

A further example of this is this broadly accepted definition of bullying which has three main characteristics as outlined by Ong (2015): “(i) it must be intentional; (ii) it involves a power imbalance between an aggressor and a victim and (iii) it is repetitive in nature and occurs over time” (p.669). Many researchers believe that cyberbullying merits the same definition with the added characteristic of having to take place on an electronic platform. While this a more detailed definition it still groups bullying and cyberbullying together giving them a very basic distinction from each other.

On the other hand, there are a few very neat definitions of cyberbullying that attempt to define cyberbullying as a term in its own right within the literature with varying degrees of merit.

Barlett *et al* (2018) simply defines cyberbullying perpetration as “Repeatedly harmful behavior via the Internet and text messages” (p.1). Another similarly simplistic definition is defined by Hinduja and Patchin (2010) as “A nontraditional form of peer Aggression” (p.206). While these definitions might be seen to be too simple for such an over-arching term this is not necessarily to their discredit.

Lowry, Moody and Chatterjee (2017) bring together a number of definitions to neatly define cyberbullying as: “Wilful and repeated harm inflicted through the medium of electronic text with outcomes that can be intense, frequent, unsuspecting, and seemingly difficult to stop” (p.864). This is a more cohesive definition that attempts not only to define what cyberbullying is but also the effects it can have.

An early definition that still well cited within the more current literature is by Smith *et al* (2008) who define cyberbullying as “An aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who

cannot easily defend him or herself” (p.376). From the surveyed literature, this was the definition most commonly referred to definition which gives it merit in itself. This is another cohesive definition and seems to have as many similar features with the definition by Lowry, Moddy and Chatterjee as it has differences which indicates that neither paint a complete picture of cyberbullying.

### 3.2 Expansions on definitions

While the following statements from the research are not overarching definitions of cyberbullying, nor do they claim to be, they help to cultivate the concept of cyberbullying and therefore unintentionally become definitions, or at least help to define an important element of cyberbullying.

While not exactly a definition, an interesting addition to the definitions provided is the suggestion that it should only be referred to as cyberbullying when it occurs in children and adolescents. When it occurs in adults it should be termed online antisocial behaviour (McDermott, 2012, p.7). This statement is really important to consider when it comes to highlighting the differences within the research, while some barely separate cyberbullying as its own term others break the concept of cyberbullying down into further sub-topics within the hierarchy. However, the idea that online-bullying is different between children and adults has been apparent within the research and is something that should be considered. In the wider context this may mean that adults are deemed to be less susceptible to cyberbullying. This could be because they are believed to have more power over the situation. However, the negative effects that cyberbullying can have on adults should not be overlooked. While the way that cyberbullying can manifest itself between adults and children may be different, this does not make it less severe.

Expanding on this within the research cyberbullying has been referred to as cyberharassment, cybervictimisation, online harassment and electronicbullying (Foody, Samara and Carlbring, 2015, p.236).

While similarly not a definition another way of looking at the topic is that cyberbullying can be seen as a violation of information ethics (Ncube and Dube, 2016, p.314). While this is an

interesting theory trying to get merit behind the ethical side of things relating to cyberbullying is made difficult due to the lack of structure on the legal side. As Foody, Samara and Carlbring (2015) explain “Ambiguous laws and rapid developments in information and communication technology (ICT) de-vices have let this social risk go largely unnoticed” (p.235). While the legal and ethical issues side of cyberbullying, or perhaps lack off, is almost a topic in itself. However, thinking of cyberbullying in this wider context like with Ncube and Dube provides more information to enrich the understanding of the topic.

Rather than trying to neatly define cyberbullying many researchers have instead gone in the opposite direction and instead tried to break cyberbullying down into all its individual elements, which in its own way actually helps to define the overall concept.

Nocentini *et al* (2010) outlined what they believe to be the four most common activities undertaken by a cyberbully. They are: written-verbal behaviour (emails, text messages, instant messaging); visual behaviour (the sharing of compromising photos); exclusion (purposely not allowing someone to participate in an online social group or activity); and impersonation (stealing someone personal information and using it for personal or malicious means). While not presented as a definition Nocentini inadvertently poses some of the most substantial defining features of cyberbullying by highlighting that many ways it can manifest and how overarching a concept really can be. Therefore, the lack of definition of cyberbullying is further confused by how overarching a term it is.

An even further breakdown of cyberbullying was conducted by Vandebosch and Van Cleemput (2009). They broke down the acts of cyberbullying into psychical and indirect acts of cyberbullying. These acts are as follows:

***Physical:***

*Property (e.g. purposely sending a virus infected file)*

*Verbal (e.g. using the internet or mobile phone to insult or threaten)*

*Non-verbal (e.g. sending threatening or obscene pictures or illustrations)*

*Social (e.g. excluding someone from an online group)*

***Indirect bullying:***

*'Outing' of email entrusted information*

*Masquerading, e.g. deceiving someone by pretending to be someone else*

*Spreading gossip by mobile phone, email or chat*

*Taking part in voting on a defamatory polling website*

*(p.1352).*

To highlight this further Kowalski, Limber and Agatston (2012) discuss the subcategories within cyberbullying which include: flaming, harassment, denigration, impersonation, outing and trickery, exclusion/ostracism, cyberstalking, video recording of assaults, and sexting (p.62-70). While this list is extensive it is not exhaustive.

Thus, while it is important for research to focus on identifying character traits of a cyberbully with the hope of this research contributing to some form of prevention method, doing this faces a major obstacle that stems from the lack of definition associated with the term. Starting with a hazy definition means that trying to then define smaller issues within the wider context becomes more difficult. However, some credible and intriguing research has been done on cyberbully traits and surrounding issues which can actually help us work backwards and understand the wider term better.

### 3.3 Traits of a cyberbully

Ioannou *et al* (2018) made a range of recommendations for future research on cyberbullying based on an extensive literature search. One particular criticism that was highlighted by the authors that was also shown in this literature search was the lack of consistent profile of the three main actors: the cyberbully, the cybervictim and the bystander. As summed up by Ioannou *et al* "A consistent profile of all actors is yet to be presented... findings are sparse and inconsistent, calling for more work in this area" (p.262).

Therefore, it is difficult to distinguish general traits of a cyberbully as their actions come in so many forms. However, while consistent definitions or profiles of these characters have not been set in stone, it would be incorrect to discredit all work in this area. Many researchers rather than attempt to provide an extensive list of characteristics of these actors have



rather focused on only a couple of distinctive traits which have been linked to cyberbullies through in-depth research. So, while some character traits that will be discussed may not apply to all cyberbullying, discussion of general traits and/or behaviours and the issues that are associated with these is still important for the continuation of research of this group.

Two key character traits outlined by Almeida *et al* (2012) in a study in Portugal were moral disengagement and lack of emotional empathy (p.228). Both are linked to the same idea that the cyberbully themselves do not have the cognitive ability to distinguish between right and wrong or feel bad about their actions. Thus, one that has a higher level of cognitive ability is less likely to cyberbully. Expanding on this, it is important to note that an individual who is thought to have a higher level of cognitive ability can also be seen to be intellectually virtuous and, in turn, possess intellectual character. This relationship will be discussed further in the following chapter.

More studies have been done that expand on this concept. One of these is by Wright, Harper, Wachs (2019) who found a link between callous-unemotional traits - including lack of empathy, remorse, and guilt and little concern for the feelings of others – and the act of cyberbullying. Prior to this a 2014 study by Ciucci and Baroncelli also discussed callous-unemotional traits arguing that the callous dimension: “capturing a lack of empathy, guilt, and remorse for misdeeds, as well as a callous use of others for one’s own gain” and the uncaring dimension “capturing a lack of concern about performance in important activities or about other people’s feelings” were strongly related to cyberbullying (p.584).

A study discussing the characteristics of cyberbullies was undertaken by Görzig and Ólafsson (2012). The study was conducted using groups of individuals from twenty five European countries with the aim of disseminating contradictory information provided by previous studies regarding specific cyberbullying characteristics. They concluded that cyberbullies were four times more likely to be involved in further risky internet behaviour. The gender differences in cyberbullying are far less clear than traditional bullying (which are far more likely to be male), in some contexts females were shown to be more likely to be cyberbullies but mostly it was shown to be fairly even. Finally, technological ability and age correlate into

cyberbullying. For example, older children are more likely to become cyberbullies due to their further technological knowledge.

Naturally a lot of the studies have been comparing the character traits of a bully with the character traits of a cyberbully whether highlighting the similarities or the differences between them. While the debate over whether bullying and cyberbullying should be seen as issues in their own right is a legitimate one, it cannot be denied that the research conducted on bullying can help when it comes to understanding cyberbullying. Therefore, it is important to use these studies to better understand both the act of cyberbullying and of course the cyberbully.

An Austrian study by Gradinger, Strohmeier and Spiel (2012) identified reactive and instrumental aggression as two of the main motive systems for aggressive behaviour. Reactive aggression is based on frustration-anger theory and is the idea that causing harm to someone else is a 'reaction' of the bully to a perceived threat. In contrast, instrumental aggression is based on social learning theory and is the idea that to harm someone else is a calculated behaviour that the bully uses as an 'instrument' to reach their particular goals. Their research also identified four key underlying motivations depending on the traits that were driving the aggressive actions. These were: power, affiliation, fun, and anger. Within their study they look at participants who they refer to as a 'combined bully': an individual who is aggressive towards others both in person and online. Their results found that the above traits are shown more prominently in these individual than those who claim just to be bullies or cyberbullies.

A key similarity between traditional face-to-face bullying and cyberbullying is that while the way the bullying is done is very different the key factors that make people a target and that they are bullied for is the same across bullying in general. An extensive list of these key traits was made by Anderson and Strum (2007) which includes: "appearance, sexual promiscuity, poverty, grades, diseases, or disabilities...gender, race/ethnicity, color, religion, ancestry, sexual orientation or ability level" (p.24).

A study by Brewer and Kerslake (2015) attempted to widen the differentiating factors between bullies and cyberbullies. They identified three key traits that they found to be more applicable to those that partook in cyberbullying rather than traditional face-to-face bullying. These traits are loneliness, lack of empathy and lack of self-esteem. In this case lack of empathy is not the strongest example, from research conducted many references face-to-face bullies having a lack of empathy have been found. Lack of self-esteem and loneliness are ambiguous terms because depending how you spin them an argument can be made that they in fact could apply to both face-to-face and cyberbullies. However, it can also be seen from the point of view that the argument created here is that the qualities traditionally associated with the victims of face-to-face victims are in fact also the qualities of the perpetrators of cyberbullying.

A key difference between traditional face-to-face bullying and cyberbullying is the strength attached to it. While one of the main characteristics of face-to-face bullying is stereotypically characterised as a physical strength for cyberbullies it is the ability to be technically savvy (Aboujaoude *et al*, 2015; Barlett *et al*, 2019). The fear for cybervictims is different than those of traditional face-to-face bullying. The fear is created through not being able to see the person, not knowing who they are, and not being able to anticipate what their next action is going to be. Therefore, cyberbullying is both different in the way the cyberbully acts and the effect this has on the cybervictim.

One final point that is important to note is that while the characteristics of the cyberbully can be difficult to define the same can be said for the victims. A study by Zalaquett and Chatters (2004) looked into whether cyberbullying continues into college and what the main characteristic the victims were bullied for. 30% claimed it was due to their sexuality, 10% was based on race/ethnicity and 8% was based on gender. However, the remaining 62% choose the 'other' category. This shows that while the research struggles to define a cyberbully the same can be said for the victims. This further complicated matters: how can educational or informational professional help a bully or a victim if we cannot pinpoint who they are? Unless they seek the help themselves research points to the best chance we have being found within education (whether at or out with the school environment).

### 3.4 Linking cyberbullying with other societal issues

Some academics have linked cyberbullying with other pressing societal issues. While these links are not particularly prominent in the research, they are an interesting element of it that should be addressed to get a full understanding of the research being conducted on cyberbullying.

Casas, Del Rey and Ortega-Ruiz (2013) discuss a possible link between cyberbullying and internet addiction. Internet addiction, as with any addiction, has a number of problems that exist alongside it. The reason for the act of cyberbullying being one of these problem is as explained as happening as internet addiction: “seriously affects an individual’s moods and irritability, induces violent, aggressive behavior that makes it impossible to disconnect and increases the user’s own social isolation and the destruction of their own closest relationships” (p.581). This is one of the more obvious links that has been made within the research.

A more extreme link is that made by McDermott (2012) who links the characteristics of trolls to the characteristics of psychopaths. She argues:

*“The behavior of the troll is not normal. There are men (and a few women) who take delight in disrupting the social norms of the community. They seem to do it compulsively, returning repeatedly to torment anyone who responds to their insults or pranks with anger or hurt feelings. They do it without regret. Indeed, if they acknowledge their damage at all, they always blame their victims for it. In this way, flammers and trolls share many traits with criminal psychopaths” (p.9).*

While this may perhaps seem an extreme link for some, it is a link that should be considered nonetheless. While this link might not encompass all cyberbullying, or perhaps even the majority, if it even describes a small amount of cyberbullies it should at least be acknowledged.

It is particularly important to acknowledge the link between cyberbullying and suicide due to how pressing an issue it is in today’s society. Suicide is a difficult research topic, not only

because of the distressing nature of the subject, but also due to difficulty to find a correlation between a particular issue and the causation of suicide. Bullying, and more recently cyberbullying, have always been linked with suicide and as the media began to bring these issues more into the limelight, the research has followed.

A lot of research on the subject has been met with critique due to over-emphasizing this link or on the other hand trying to play down the link. However, the focus should not be on how strong the correlation is but rather that there is one. As Hinduja and Patchin (2010) argue: "It is... essential that researchers work to identify the causes and correlates of these outcomes among this vulnerable population" (p.206).

An interesting factor on the study undertaken by Hinduja and Patchin (2010) the suicide-cyberbullying correlation is that it is not just the victims, who are usually the target of the research, that experience suicide ideation and, in extreme cases, undertake the act. They identified the offenders as also being high risk. This almost opposes earlier points made about the cyberbullies being unemotional and malicious. However, this is not necessarily a bad thing, understanding how complex it is to put offender into a box runs in correlation to how complex it is to combat the issue of cyberbullying.

Overall, cyberbullying is a complex topic which had led to a lot of research on the subject matter with little consistency. However, this does not mean that the research is not good, the majority is quality academic research and having so much of it on such an important topic can only be a good thing. Therefore, it is essential that the time is taken to break down and then group together definitions, character traits, and societal links with cyberbullying. Without a clear understand of cyberbullying it is unlikely that successful intervention platforms can be formed.

## 4. Literature review: Intellectual Virtues

Intellectual virtues are the context within which cyberbullying will be considered for this project. Therefore, it is important to develop an understanding of intellectual virtues and also consider some of the main philosophical theories that lead to its development, in particular virtue ethics and virtue epistemology.

### 4.1 Virtue Ethics

Aristotle is the philosopher that is most associated with virtue ethics and the modern research conducted in this area stems from his founding ideas. Despite virtue ethics being a theoretical, philosophical discipline that is not what Aristotle intended. Aristotle believed that ethics is not a theoretical discipline but rather the starting point to gain the knowledge to help human beings live better lives (Kraut, 2018, p.5).

Aristotle believed that virtues were essential to human flourishing and that they are the mean of two extremes (Tiberius, 2015, p.109). Aristotle called this “condition intermediate” or as it has become more popularly known a “golden mean” the midway point between excess and deficiency (Kraut, 2018, p.14).

The golden mean is an important part of virtue ethics, but this is only a small part of gaining ethical virtue according to Aristotle’s theories. As Kraut (2018) explains: Aristotle believed that: “Ethical virtue is fully developed only when it is combined with practical wisdom” (p.12). This combination of emotion and understanding existing cohesively is essential for virtues to manifest (Tiberius, 2015, p.110-111).

In the often cited text of *Nicomachean Ethics*, Aristotle explored the idea of the cultivation of the virtuous citizen with an emphasis on human virtues (McMenemy and Buchanan, 2018, p.75).

There is mention of intellectual virtues within virtue ethics. Aristotle discusses two key terms: theoretical wisdom and practical wisdom. Kraut (2018): “He says that theoretical

wisdom produces happiness by being a part of virtue, and that practical wisdom looks to the development of theoretical wisdom, and issues commands for its sake” (p.23).

Virtue ethics links virtues and character traits. Hursthouse (2013) argued that: “Virtues are character traits, and they are supposed to be deeply entrenched in the person who has them, not fickle or wavering” (Tiberius, 2015, p.109). While an individual can become virtuous it is not a quick or easy process and that is an important factor in the theory of virtues ethics.

Virtue ethics provide the foundations of the philosophical idea of being a virtuous person. The theory has layers of complexity, disambiguating which would be a project alone. While the link between virtue ethics and intellectual virtues is not startlingly obvious, reflection can be seen in the complexity in the acquired knowledge and character traits Aristotle theorised was necessary for an individual to be intellectually virtuous.

The next section of the chapter will look at virtue epistemology provides the bridge between virtue ethics and intellectual virtues

#### 4.2 Virtue epistemology

Virtue epistemology is a field of research that came out of virtues ethics. There is a crossover between virtue ethics and virtue epistemology as a lot of the theory that forms virtue epistemology is borrowed from virtue ethics (Fairweather, 2014, p.1).

When describing the link between virtue ethics and virtue epistemology, Van Dongen and Paul (2017) explain: “virtue epistemology is a recent philosophical movement, committed to reviving the Aristotelian insight that obtaining knowledge requires exercise of intellectual virtues” (p.1).

Epistemic virtues are thought to be literal, not metaphorical; they require some form of conscious moulding of a persons character to be rightfully called virtues (Van Dongen and Paul, 2017, p.2). This idea links to Baehr’s educational aim behind intellectual virtues. Virtue epistemology is not of the belief these traits are naturally developed but rather they are

learned, understood, and implemented until the point they become a part of a person's character.

One key motivation of virtue epistemology is to show that not all reliable processes yield knowledge but rather that knowledge only arises from a proper subset of reliable processes. Intellectual virtue is used by academics as the standard term for these knowledge-generating processes (Fairweather, 2014, p.33).

Battaly (2008) "Virtue epistemologists all agree that the intellectual virtues are cognitive excellences, but disagree about what sort of cognitive excellences they are" (p.644). While virtue epistemology sits as a top-tier theory there is many sub theories within it.

In the simplest terms there are two main distinguishing types of virtues epistemology which are outlined by Heersmink (2017) these are virtue reliabilism and virtue responsibilism. Virtue reliabilism characterises intellectual virtues as "more or less stable cognitive faculties" whereas virtue responsibilism characterises intellectual virtues as "acquired or learned cognitive character traits" (p.2). While it is not to be said that one has greater merit than the other each have different theoretical ideas that have stemmed from them.

Baehr's nine intellectual virtues are a driving force for this project and therefore the focus is on the responsibilist approach to virtue epistemology. In explaining the traits associated with this approach Baehr (2016) explains: "One way of thinking about these traits, they are the deep personal qualities or character traits of a good thinker or learner" (p.117). Due to this there has been a link shown between educational practice and responsibilist virtue epistemology.

Baehr's nine intellectual virtues stem for the field of virtue epistemology. In the first few pages of his book "The Inquiring Mind" Baehr (2011) defines the philosophy behind virtue epistemology. He also touches on how this relates to the topic of intellectual virtues:

*"Personal character is not exhausted by moral character. It also has an epistemic or intellectual dimension: a fully or broadly virtuous person can also be counted on to care*



*deeply about ends like truth, knowledge, evidence, rationality, and understanding; and out of this fundamental concern will emerge other traits like inquisitiveness, attentiveness, carefulness and thoroughness in inquiry, fair-mindedness, open-mindedness, and intellectual patience, honesty, courage, humility, and rigor” (p.2).*

Virtue epistemology is a vast discipline with many credible, theoretical ideas stemming from it. Baehr’s nine intellectual virtues is one of these, he has taken this idea of virtuous characters traits being learned or acquired and looked at it from an educational standpoint.

However, before jumping ahead to the Baehr’s nine intellectual virtues the top level idea of intellectual virtues should be considered to enhance the overall understanding.

#### 4.3 Intellectual virtues

For Baehr intellectual virtues is the coming together of three disciplines: virtue epistemology, educational psychology and educational theory, and his own work on intellectual character (Baehr, 2015b).

The idea of bringing three disciplines together is mirrored within this project which also brings together three subject areas. Combining educational research with virtue theories allowed the creation of intellectual virtues. Different disciplines look at ideas from different standpoint which allows the creation of theories, such as Baehr’s nine intellectual virtues, that take the best research from a number of disciplines.

In an attempt to further clarify intellectual virtues and their place in the current research Baehr uses the following example: “moral virtues are the character traits of a good neighbor; civic virtues are the character traits of a good citizen; intellectual virtues are the character traits of a good thinker or learner” (Baehr, 2015c, p.1). While there is overlap between the three terms they each need to be understood and academically appreciated in their own right.

As intellectual virtues are associated with thinking and learning the next logical stage is to think about creating these virtues in an educational context which is what Baehr’s nine

intellectual virtues aim to do. Moral virtues and civic virtues are more embedded whereas intellectual virtues are learned and built upon through knowledge and understanding.

#### 4.3.1 Baehr's nine intellectual virtues

Baehr believed that intellectual virtues should be an educational aim. While he has provided more than one key piece of research material on the subject his online book *Cultivating Good Minds* has been a key resource for this project. Baehr (2015a) has coined nine core intellectual virtues and further discussed how to use them as key educational tools. These will shape the context of some of the more in depth themes that will be explored within the final project. These are: curiosity; intellectual autonomy; intellectual humility; attentiveness; intellectual carefulness; intellectual thoroughness; open-mindedness; intellectual courage; intellectual tenacity.

Baehr splits his nine intellectual virtue into three key groups:

The first grouping identifies intellectual character virtues required for initiation of knowledge and keeping the learning process on track (Baehr, 2015a):

*Curiosity: Asking good questions* – Curiosity is described by Baehr as the “motivating virtue” (p.59). Curiosity is a principle stage of acquiring the knowledge required to start building knowledge and understanding as those who are curious are “more driven to explore and expand their minds” (p.59). Due to the fact a curious person is “disposed to wonder, ponder and ask why” due to a want to “know how or why things are the way they are” they are more likely to be intellectually virtuous (p.60).

*Intellectual autonomy: Thinking for yourself* - According to Baehr a key aspect of an intellectually autonomous individual would be that they have “an active, thoughtful, and discriminating intellectual orientation to the world around [them]” (p.72). Furthermore, an individual with these intellectual virtues will be aware of their “intellectual limitations and deficiencies” and “give due respect to genuine intellectual experts and authorities” (p.72).

*Intellectual humility: Admitting your limitations* – A person who is intellectually humble is not “oblivious to or ignorant of her intellectual limitations” (p.80). A common misconception of this virtue is that to have intellectual humility is to avoid topics out with your intellectual limitations, which is not the case. Rather when faced with a conversation that fall into this category one should “seek to replace it with knowledge or understanding” (p.81).

The second group identifies virtues required for continued learning process with a particular focus on keeping learning of the right track (Baehr, 2015a):

*Attentiveness: Looking and listening* – Baehr outlines three steps which must be followed in order for one to achieve the virtue of attentiveness. These are that the individual is: intellectually present, listens carefully and openly, and gives sustained attention to important details (p.94-95). Attentiveness acts as a companion to many of the other virtues which means that if an individual does not possess the virtue of attentiveness, they would be unable to develop many of the other virtues.

*Intellectual carefulness: Avoiding errors* – At the base level an intellectually careful person “takes pains to avoid making intellectual mistakes” (p.105). Expanding on this an intellectually careful person also has a comprehensive understanding of the rules and an awareness that comes into play when they are in danger of violating these rules (p.105). Furthermore it is a misconception to think that intellectual carefulness is just to combat intellectual error but rather as “we act and live on the basis of what we think and believe” it can also have practical effects (p.105).

*Intellectual thoroughness: Going deep* – Those that have intellectual thoroughness are unsatisfied with simple, easy answers. Rather an intellectual thorough person is “disposed to probe for deeper meaning and understand” (p.117). A further defining quality of someone who is in possession of intellectual thoroughness is that they are unsatisfied until they have a well-rounded understanding of what they have learned and can provide more than a superficial answer on the topic (p.118).

The third and final group identifies virtues for overcoming obstacles (Baehr, 2015a):

*Open mindedness: Thinking outside of the box* - In discussing the benefit of open mindedness Baehr explains that “open-mindedness is a way of benefiting from the multiplicity of standpoints and sources that proliferate around us. It is crucial to forming the best, most reasonable, and most accurate beliefs we can” (p.126).

*Intellectual Courage: Taking intellectual risks* – While the definition of courage is one that is commonly known the difference with intellectual courage is “We show intellectual courage when we subject ourselves to a potential loss or harm in the context of a distinctively intellectual pursuit like learning or inquiring after the truth” (p.139).

*Intellectual tenacity: Embracing struggle* – The key quality of an intellectually tenacious person is that they do not accept failure. A person who possesses the virtue of intellectual tenacity does not give up when they struggle to understand something and does not treat failure as a defeat or final judgement. Instead they rethink their approach and try again (p.151).

While all nine intellectual virtues have their place in an educational context three in particular lend themselves to help to tackle cyberbullying: intellectual autonomy, open mindedness, and intellectual courage. While the next section will give a brief, top-level overview of these links, a detailed breakdown will be given within the analysis chapter.

#### 4.3.2 Intellectual virtues and cyberbullying

*Intellectual autonomy and cyberbullying* – The main link between intellectual autonomy and cyberbullying is through understanding a respect towards authority. As those who possess this trait are more likely to follow the rules outlined to them by an authoritative figure they are less likely to undertake action that go against these rules. As long as it is outlined to them that cyberbullying is not a virtuous act then those who are intellectually autonomous will not participate in it (Baehr, 2015a).

*Open mindedness and cyberbullying* – When one is open minded it is hoped that they can consider all the information given to them and make the decision on what the most

intellectually virtuous action would be. This is particularly important within the digital age where people are overloaded with information, a lot of which is negative. A person who possesses the virtuous trait of open mindedness understands the negative behaviour and understands it is not to be reciprocated (Baehr, 2015a)

*Intellectual courage and cyberbullying* – In this instance intellectual courage is not just focused on ensuring that people do not take up the act of cyberbullying but also the victims or the watchers help to combat this issue. Those who are intellectually courageous allow themselves to occur some form of loss to do what is intellectually virtuous. This could cover a victim or a watcher speaking out about a cyberbully or even a cyberbully realising the error of their ways and taking steps to stop their actions (Baehr, 2015 a).

Intellectual virtues are acquired through repetition and practice of virtuous actions. The initial creation of these virtues should be thought of as a nurturing and educational process. This virtuous behaviour should occur both in the real world and the digital sphere. A person that has acquired intellectual character should not cyberbully. To ensure this is the case steps should be taken to make sure an individual has also acquired positive information seeking behaviour.

The next section will look more in depth at where online information behaviour stands within the context of cyberbullying and how it can be used as a tool to combat it.

## 5. Literature review: Online information Behaviour

Constantly changing and advancing technology means that the way people seek information is also changing at a rapid speed, and it is important the research reflects this. Burford and Park (2014) have argued for more research to be done in the human information behaviour field regarding online behaviour due to the increased popularity of the mobile tablet device claiming that unlike a mobile found it provided an “ideal interface for seeking and reading digital information” (p.635). Therefore, the individual was yet again seeking in a different way from every before. Since then even more technological changes have continued to disrupt the way people seek information.

However, that is not to say that this is not a strong research field. There has been a lot of research around online information behaviour and educating young people in online living since the mid-90s.

### 5.1 Online information behaviour: A brief history

Nichols *et al* have produced years of notable research in this field. They have taken the time to consider how technology has evolved and attempted to predict where it will go next and the implications it will have. This has always reflected in their research. They coined the term *the digital information consumer* in their early research and this term is still finding its way into notable modern day research.

They published an article in 2003 that was critical of the work being done in the information behaviour field. They had two main critiques. Firstly, that researchers were “obsessed” with using students in higher education and academics as their research group, choosing ease of access over tackling the pressing issues in the field. Secondly, that researchers were justifying their research by using “unrepresentative, old, and dangerously obsolescent models” of information behaviour (Nichols *et al*, 2003, p.24). This expands on the point made previously, although perhaps more harshly, that the same model that work for human information behaviour do not necessarily lend themselves to online human information behaviour and should not be forced to.

Expanding on this, in 2006 Nichols *et al* wrote a book chapter where they discussed how they believed the study of human information behaviour needed to pay more attention to the effects of the digital age and the difference in people's online information behaviour. While the area has been more widely researched since this was published it still remains an extremely underpopulated area instead in term of research and there has been more recent calls for more research as was seen earlier from Burford and Park (2014). It can be argued that the reason this is a reoccurring issue is that the research cannot keep up with the rapid pace that technology is moving at.

In a later article Herman and Nichols (2010) introduce two more terms to describe the key issues with the digital information consumer. The first is disintermediation which is loosely defined as "cutting out the middle man" (p.246). It is the idea that everyone now sorts out their own information needs, in other words everyone is a librarian.

The second is the idea of the new digital information consumers being "bouncers" (p.247). This is similar to the idea of channel hopping. They are faced with a huge digital choice combined with a shortage of time that usually ends up in the consumer only viewing a small number of webpages from the large amount offered. This results in the natural choice being the fastest information rather than the most accurate or most representative information. This ends in the digital information consumer having what Harman and Nichols have called: "information malnutrition in an information saturated world" (p.250).

Both these problems are difficult to address on their own but together they become an overwhelming issue. When looking at the problems as one, they seem to make a bigger problem for each other: people are taking charge of their own information seeking but due to being overpopulated by webpages they do not know where to get this information from.

If people are taking their online information seeking needs into their own hands without any prior education on how to look for information online, or understand the information gained then there is an increased likelihood they are going to run into issues.

## 5.2 Online information behaviour and intellectual virtues

An important factor for this project is the relationship between intellectual virtues and online information behaviour. Baehr's nine intellectual virtues are heavily discussed within a traditional physical classroom environment. However, this is not to say that they have no place within the digital sphere.

Jason Ohler (2011) discusses the 'two lives' or 'one life' approach to education. The two lives approach assumes the separation of students within the classroom and in the digital sphere. Whereas, the one life approach assume the opposite. The one life approach believes that educators have a responsibility to make students understand their digital responsibility, and furthermore, global responsibility within the classroom environment.

This project focuses on the one life approach as it looks at how intellectual virtues taught within an educational environment can impact negative online information behaviour such as cyberbullying.

Another relevant piece of research on this topic is by Heersmink (2017) who discusses the internet regarding both virtue epistemology and intellectual virtues. He outlines three online intellectual virtues and vices. These outlined how virtuous behaviours can affect a person's online information behaviour.

*Internet literacy skills* – Heersmink (2017) explains how access to the internet is of little use if one does not have the internet literacy skills to navigate the value of information (p.6/7). He further explains how virtuous behaviour can help individuals to review the information they find online to a greater extent (p.7/8).

*Epistemic responsibility* – Heersmink (2017) discusses the importance of responsibility and that as digital citizens "we have a responsibility to use the Internet in an epistemically virtuous way" (p.8). He explains that this responsibility should manifest itself in two ways. Firstly, individuals have responsibility to provide true and accurate information. Secondly, individuals have a responsibility to act in an intellectually virtuous way as "knower" to the "inaccurate, outdated or plain false information on the Internet" (p.8).



*Virtues and selfhood* – Heersmink (2017) believes that “our identities are deeply tied up with our cognitive skills” (p.9). He believes that as an individual’s intellectual virtues can affect our online information behaviour, positive online information behaviour can help one develop a more virtuous selfhood overall (p.9).

The connection between intellectual virtues and online information behaviour plus the idea of classroom and the digital sphere being one life or two lives are important considerations for the project.

### 5.3 Digital divide

Cyberbullying sits among a multitude of online issues, but it is arguably one of the most severe. How an individual is affected by cyberbullying can vary depending on their online information behaviour. When discussing this in the context of the younger generation Chadwick (2016) explains:

*“Young people’s capabilities within their online environment varies. Some young people have sound knowledge and skills which enable them to make good decisions regarding their online behaviour; some are more naïve and need education; some are more vulnerable and lack the social skills and resilience to cope with inappropriate encounters” (p.12)*

The research has shown that cyberbullying occurs more commonly in the younger population, due to still being at an age where they are still developing information seeking behaviour.

The digital divide has been a prominent research topic since the 1990s. A common misconception in this topic is that today’s youth do not fall into this category. However, access to computers, networks and the internet (which again is not a given) does not mean online information literacy (Chowdhury, 2004).

Simply and neatly summed up by Gunter (2003) the digital divide is “A division in society between people who have access and the ability to use new information communication technologies (ICTs) and those who do not (p.43).

The digital divide is most often used to describe how geography and income can have an effect on an individual’s access to technology. It can also be used to describe the older generation with the younger generations often dubbed as ‘digital natives’. Because of this little research has been conducted to address the problem of the digital divide in young people (Badran, 2014). Badran (2014) argues that perhaps the term ‘divide’ is the problem because it indicates a group that can do something and a group who cannot. This is not the case. The issue of access is another problem which is addressed by the digital divide but is not solely what the term stands for. Therefore, to avoid confusion Badran suggest that the term ‘digital gap’ or ‘digital inequality’ would better summarise the problem more commonly found in young people.

Understanding how to safely navigate the world wide web and be able to evaluate the resources they find is often an area of knowledge that is lacking. Thus, training people to have better online information behaviour is crucial, especially when it comes to tackling issues such as cyberbullying.

#### 5.4 Key issues

The next section will focus in on some of the key issues shown in the research that could be combatted by more information being provided to people on both online information behaviour and how to get the best results for their information seeking needs.

##### 5.4.1 Online Anonymity

Anonymity is referred to by some researchers as unidentifiability. With the thought process being that when online, people may use elements of their real selves within their online profile they still cannot be identified (Lapidot-Lefler and Barak, 2012). Because of this, it is a technique commonly adopted by cyberbullies.

The key factor that links online information behaviour and cyberbullying is the idea of online anonymity. The most obvious reason for this is that it is easier to attack someone online anonymously and many chose this approach, hiding their identity through fake usernames and 'catfish' profiles (Aboujaoude *et al*, 2015, p.16).

Moore *et al* (2012) outline a number of reasons that cyberbullies use anonymity. This includes avoiding legal punishment, it increases fear in the victim, and it gives the victim less chance of getting help due to not knowing who their perpetrator is. Expanding on this Sticca and Perren (2013) argue that anonymity "increases the level of frustration, insecurity, fear, and powerlessness" within the victim (p.741).

A study conducted by Sticca and Perren (2013) found that anonymous cyberbullying was perceived to be worse than both traditional bullying and cyberbullying where the perpetrator was known. The main reason was shown to be that a loss of control by the victim further increased the fear surrounding the situation.

Ioannou, *et al* (2018) discuss the importance of anonymity to the 'power' related to cyberbullying. This includes: the idea you can be someone else online, not being around parents or other authority figures, and not having to face the person. Furthermore, they found the research to suggest that if cyberbullying was no longer an option the majority of perpetrators would still not engage in traditional face-to-face bullying.

The common factor that has appeared in the majority of the research on online anonymity is the powerlessness that is felt by the victim of the cyberbullying attacks. By understanding how to avoid, block, and report anonymous user, plus an understanding of how to know if a message or a file is coming from a safe, reliable source, so many of these issues could be combated.

Following their research on online anonymity Barlett *et al* (2019) recommended that an online intervention tool should be made to highlight to cyberbullies that they are in fact not anonymous online. As part of their study they made a prototype that consisted of a number of videos aimed at college-aged individuals that explained how anonymous posting can be

tracked. This was watched by a number of participants in a controlled environment. The prototype was claimed to be successful due to a drop of in anonymity tactics used by participants online.

While it is important to educate victims on how they can combat cyberbullying that is being done to them using anonymity, it is equally important to educate the cyberbullies. Many individuals that chose to partake in cyberbullying may be technically savvy however it is important to get across to them that this does not make them indestructible. If a tool is made where the severity of their actions are highlighted to them alongside an explanation of how they can get caught then the results of the study shown above by Barlett *et al* (2019) should be mirrored and cyberbullying rates could decrease.

#### 5.4.2 Online disinhibition

Closely linked with the theory of online anonymity is that of online disinhibition: the idea that specific categories of people – including cyberbullies – separate their real and online self and in turn create disconnections between the two (Barlett *et al*, 2019, p.2).

A revolutionary thinker in this area is John Suler. His 2004 article *The Online Disinhibition Effect* looked at the idea of the different ways people change when they are online. He coined two terms that are still heavily referred to in this area of academia. These terms are benign disinhibition and toxic disinhibition.

Benign disinhibition is the positive side of coin when it comes to online disinhibition. This is people using their analyticity to show a side of themselves that they do not have the confidence to show in public. As Suler explains: “They reveal secret emotions, fears, wishes. They show unusual acts of kindness and generosity, sometimes going out of their way to help others” (p.321).

On the flip side of this Suler coined the terms toxic disinhibition. In discussing this darker side of the online world he explains: “We witness rude language, harsh criticisms, anger, hatred, even threats. Or people visit the dark underworld of the Internet—places of pornography, crime, and violence—territory they would never explore in the real world”

(p.321). It is this term that so frequently finds its way into literature discussing cyberbullying. Cyberspace for many provides an escape from their reality, however when that escape merits action within the realm of toxic disinhibition, that is when a real problem arises, and this problem needs addressed.

Online disinhibition is often linked to a loss of inhibitions. With the negative online disinhibition effect being describe by Lapidot-Lefler and Barak (2012) as: “The concept used to refer to the negative results of this loss of inhibitions, usually manifested in aggressive behaviors that apparently would not be exhibited in a similar scenario in the ‘real world’” (p.434).

Information regarding online disinhibition is particularly prevalent for educating the cyberbullies themselves. For many people the online world can provide a sense of escapism. However, there is a line between where this goes from being good to dangerous and online disinhibition highlights this.

Providing tools to shape the online information behaviour of people from a young age is therefore critical. There has to be resources available that help people to form an understanding that what happens online will affect your everyday life, and that while it may be used as a means for escape there are repercussions for actions taken while online.

Online anonymity and online disinhibition are two problems that are a result of poor online information behaviour, but many other issues also exist. Problems like these cannot be quickly fixed. Instead they need to become part of people’s education and develop deeply rooted understanding of how things work. The next clear step is for educational intervention tools to be created to help tackle these issues, some thought provoking research has already gone into this idea.

## 5.5 Online Interventions

A study by Lonigro et al (2014) indicated that cyberbullying appears more frequently among preadolescents than adolescents. From this, plus the knowledge that people are being

exposed to technology younger and younger they concluded that some form of training programme should be brought in from the early school days as a prevention technique.

A study by Barlett *et al* (2018) showed a likely correlation between media violence and cyberbullying. However, their study was part of a wider project that encouraged researchers to look for further variables that are proven to affect cyberbullying with any strength of correlation. This is with the end goal of creating an exhaustive list of risk factors to be used by the relevant professionals including: parents, researchers, youth, school teachers and administrators, and intervention specialists.

Having an academically agreed list that could become a standard would undoubtedly help the creation of educational materials in this area. This would allow different places: whether that would be individual countries, cities, towns, or even as far as individual school level, to create their own resources depending on their own needs. However, if everyone was working from the same list of issues that need to be tackled there should still be some sort of consistency in attitudes.

There has been research that has suggested that the solution is to not expose people to technology so young or indeed restrict access to it. In the field of cyberbullying there has been suggestion that getting the victim to avoid technology for a set period of time can be a way to defuse the situation. In response to this, Sabella, Patchin and Hinduja (2013) argue that: "Advising a student to avoid technology in response to cyberbullying is like advising someone being bullied at school to quit going to school" (p.2707). They instead advise that providing training to both students and educational professionals alike is the key way to start to tackle cyberbullying.

If we expand on the point made by Barlett *et al* (2018) while the idea of a master list where educational professional could make resources to help with online information behaviour is great in theory. However, where it falls down is highlighted by Sabella, Patchin and Hinduja (2013) where they discuss that the teachers need to be educated on the matter just as much as the students. It comes down a frequently made point of 'who teaches the teachers?'

The digital age is still relatively new and the severity of the problems caused by the darker side of the world wide web are only beginning to make their way into the limelight. As a result of this people's knowledge on this subject matter is still developing. Therefore, it is key that the correct people have the right information on the matter before education and informative tools can be made.

Foody, Samara and Carlbring (2015) propose the idea of an online psychological therapy tool. They argue that "Considering that some Internet users are socially isolated and that they may look to the Internet for help or solutions, an online intervention would help victims deal with the psychological trauma of being cyberbullied" (p.239). They pose that there is permit to moving psychological treatments and consultations online and that many social issues would benefit from this type of online interventions with cyberbullying at the forefront.

As previously discussed a societal knowledge on these issues is not going to happen overnight and so while an information, educational tool should be the priority, the research has highlighted the need for helpful, informative online tool to help those people already suffering from an issue that has occurred online.

It is clear that some form of educational resource is the solution but what is not so clear is what this should look like. While the research is going in this right direction it has almost skipped ahead one step, there is suggestions of how to combat a lack of online information behaviour without a real consideration of what online information behaviour is. Once that part of the research catches up there is definite potential within the current environment of research that some form of tool, whatever that may look like, could be created that can make an attempt at tackling the wider educational issue that exists.

## 6. Analysis

This chapter aims to gain a better understanding of the three main subject areas discussed within the research assessed in the literature review. It will bring this information together with the research questions in mind. It will look to gain a fuller understanding of how these three subject areas can be combined to provide a solution for what needs to be implemented within, at least, educational environments to help combat cyberbullying. As a reminder the research questions are:

1. What are the most identifiable traits of a cyberbully?
2. How can Baehr's intellectual virtues enhance an understanding of cyberbullying?
3. What role can online information behaviour play in cyberbullying?

The literature will be analysed under two main ideas Baehr's intellectual virtues and Heersmink's online intellectual virtues and vices. Baehr's theories have already been discussed in detail within the literature review in chapter 4. They are the foundation of what links all the areas discussed in this project together and within this analysis they will be used to begin to link these concepts and understand how they integrate.

The work of Heersmink is only briefly accounted for in the literature. While his work is vast the article used for the analysis covers a lot of the literature that was in the review, with close attention paid to Baehr's work. However, the importance of it is the section he has written on online intellectual virtues and vices. The three themes that he addresses are mirrored to those that appeared within the literature on all three subject matters. They will be used to analyse what skillsets should be the focus areas after intellectual virtues are successfully integrated in an education environment.

### 6.1 Analysis approach

The style, structure and approach of this analysis is loosely based on a matrix approach. The matrix approach typically compares lower level concepts to major variables. This has a compare and contrast approach towards the literature, and it highlights the difference between each variable for each concept. This analysis take the three subject matters



explored in the literature review chapters of this project: cyberbullying, intellectual virtues and online information behaviour and analyses them against two high level theoretical ideas. The first of these Baehr's nine intellectual virtues which were discussed in chapter 4 but will now be explored in more detail and used as an overarching analysis tool for all three subject areas. These are used as a tool to look at how the three subject areas come together in a more theoretical sense. The second is Heersmink's online intellectual virtues and vices which are associated with the field of online information behaviour. These are used as an analysis tool to understand how the three subject matters come together in the more practical sense.

## 6.2 Baehr's intellectual virtues

For this section the three intellectual virtues that lend themselves the most to cyberbullying will be used to bring together all the surveyed literature. These are intellectual autonomy, intellectual courage and open mindedness. The considerations made for each issue are threefold. First it will consider the intellectual virtue in the context of cyberbullying. Next it will look at the character trait of both the cyberbully and the cybervictim that are most aligned with the intellectual virtue at hand. Finally it will look at how the knowledge gained through consideration of the intellectual virtue can be combined with the field of online information behaviour to help combat cyberbullying.

### 6.2.1 Intellectual autonomy and cyberbullying

Understanding and development of this intellectual virtue has the potential to be used in a way that can help combat cyberbullying. At the heart an intellectually autonomous individual is a person that has an "active, thoughtful, and discriminating intellectual orientation" regarding the world around them (p.72).

This means that the person who possesses this trait does not just take the information given to them by others, or the social view of another person as the correct information. Rather, they take the time to consider all standpoints and make the conclusion of what is right based on what is most intellectually virtuous.

Therefore, if a person that was in possession of this intellectual virtue would not participate in cyberbullying due to an understanding that it is not the virtuous way to act but also understand that watching others cyberbullying or accepting being cyberbullied is also not a virtuous option.

When looking at the research on cyberbullying it is clear that someone that is intellectually autonomous would not possess many of these traits, or rather act in this manner. When looking at the study by Almeida *et al* (2012) the two traits associated with cyberbullying are moral disengagement and lack of emotional empathy. These qualities are associated with those who cannot distinguish between right and wrong. With an individual who is intellectually autonomous they will be able to take all the information provided and make a thoughtful decision on what the correct way to act is.

This means that not only are they unlikely to begin cyberbullying, even if they see someone else participating in the act that then encourages them to join in they will understand this is the incorrect way to act. Furthermore, if they are a bystander to cyberbullying this understanding combined with their intellectual courage should lead them to look for a way to help the cybervictim.

All of Baehr's nine intellectual virtues deal with a different character trait. However, each of the virtues cannot succeed in making a person intellectually virtuous on its own. The process of achieving the end success of intellectual character needs a constant balance between the virtues. For example while intellectual autonomy is an important intellectual virtue, especially within the topical area of cyberbullying, it needs to be combined with other virtues such as intellectual humility and intellectual trust. These help understand and respect authority in an educational context and also for peoples to understand their intellectual limitations.

Within the discussion of these virtues Baehr discusses it within the practical modern day context. As such the consideration is made in relation to the digital age that society now exist within and the importance of educating children appropriately to live within it. As Baehr explains:

*“Given their pervasive exposure to digital media, children of all ages are regularly bombarded with messages and claims about what they should believe, care about, value, purchase, look like, and more. Unlike adults, they are especially vulnerable to these messages, many of which purport to be reliable and authoritative while in fact being the opposite” (p.73).*

This is so prevalent within the area of cyberbullying. In Chapter 5 the work by Chadwick (2016) referred to the mixed abilities of the younger generation when it comes to access information in an online environment, it is very much dependent on the skillset of the individual.

The main knowledge area of information seeking behaviour that is missing here is how to evaluate information. Lucassen *et al* (2013) explains “domain experts on the topic at hand primarily focus on semantic features of information (e.g., factual accuracy), whereas novices focus more on surface features (e.g., length of a text)” (p.254). Individuals need to know to first understand when cyberbullying is taking place but also understand the source that it is coming from to decide if and how to act. Clear malicious bullying being undertaken by a bully and victim that is known to the individual requires different action than hearing about people receiving computer viruses. An online training tool could then be created that focused on ensuring people can move their skillsets from novices to domain experts.

Being intellectually autonomous is not as simple as differentiating from right and wrong. It is also about stepping back, assessing the situation, and deciding the best course of action in an active, thoughtful, discriminating, and most importantly, virtuous manner.

#### 6.2.2 Intellectual courage and cyberbullying

Baehr links the traits of intellectual autonomy and intellectual courage more than any other two intellectual virtues. He explains: “Intellectual autonomy is importantly related to intellectual courage, for it often takes courage to think and believe for oneself in the face of disagreement” (p.71).

A lack of intellectual courageousness can impact all three actors in cyberbullying: the cyberbully, the cybervictim, and the bystander. Baehr speaks about the importance of the intellectual courage in relation to the nine intellectual virtues for students to develop. This is due to the social nature and the fears and insecurities that happen alongside this. In the digital age this also includes the socialisation of the digital age including social media which is one of the main platforms for cyberbullying.

Baehr (2015a) suggests the best way to help students develop this intellectual virtue on a larger educational scale is to create supportive conditions (p.142). This is to encourage an open environment of trust and respect to lay down the foundations for building intellectual courage.

Like all intellectual virtues, becoming intellectually courageous does not happen overnight. Rather, it develops over time through repetition of the virtuous action. While the creation of a supportive educational environment will not necessarily make everyone within it intellectually courageous and definitely not all at once, individuals are more likely to start acting in line with this virtuous trait.

By helping the creation of intellectual virtues, these supportive conditions can help to prevent negative character traits developing, some of which have been shown in the research to be linked with cyberbullying. One of these is loneliness. Loneliness was discussed in the literature by the study by Brewer and Kerlake (2015) who identified loneliness as one of the three traits that differentiate cyberbullying from traditional face to face bullying.

Another one of the traits discussed by Brewer and Kerlake (2015) as being linked to those that cyberbully is lack of self-esteem. When speaking about the creation of a supportive environment with the education environment regarding developing intellectual courage, Baehr (2105a) really focuses on the area of self-esteem. He explains how those that feel they cannot express their idea within an educational setting lack in intellectual courage which then leads to a lack of self-esteem (p.142-144). Intellectual virtues are thought to be acquired through repetitive actions over an extended period of time. If an individual is

suppressed from practicing virtuous actions then they are less likely to develop intellectual virtuous.

Ong (2015) outlined three main characteristics that are fundamental in anyone who bullies whether this is traditional face to face bullying or cyberbullying. The first of these is that it must be intentional. One that is intellectually courageous must decide on how to think or act depending on what the virtuous action is. Therefore, even if everyone around an individual is participating in cyberbullying, that individual must be intellectually courageous enough to make the intentional decision not to contribute. It is important that the reason this individual is choosing not to involve themselves in this behaviour is because they understand it is the virtuous action.

A link to consider is one between intellectual courage and online disambiguation. While online disambiguation does not correlate with cyberbullying in every instance it does have many overlapping qualities associated with it. An individual who is not intellectually courageous may crave an escape where they can share their thoughts and feelings which may come from an online environment. However, those that are not taught to hone the skill of intellectual courage are not aware of how to differentiate good intellectual risks with bad ones. Therefore, they may act in a way that is not intellectually virtuous by participating in online disambiguation and showing their opinions in a negative way such as cyberbullying.

### 6.2.3 Open mindedness and cyberbullying

There is a similarity between intellectual courage and open mindedness to the point that they can be easily confused. Rather than be two sides of the same coin though they instead complement each other. As Baehr explains: "firm conviction and open-mindedness can coexist" (p.127). Where on one hand being intellectually courageous allows an individual to have the courage to take an intellectual standpoint on the matter based on clear undisputed evidence, the intellectual virtue of open mindedness allows a person to understand when they do not have the knowledge to have a clear standpoint on an issue, they should instead be open minded on the issue.

A person who is open minded is open to alternative standpoints and does not have a fixed view of the world and the people in it. Open-mindedness is also an important intellectual virtue to possess as it combats the inherent need to be right.

While it seems from the research that it is even more difficult to understand the traits or qualities that are associated with the cyberbully, it seems to be even more difficult to find patterns within those that are the cybervictims. As the study by Zalaquett and Chatters (2004) showed when 62% of the cybervictims picked the 'other' category to describe the reason they were being cyberbullied. However between those that did categorise their cyberbullying and also the study by Anderson and Strum (2007) who made a list of the qualities people are most frequently bullied for, it can be seen that they are all associated with those who fit outside the societal norm of the white, straight, educated male.

An individual who possesses the trait of open mindedness would not cyberbully on these grounds due to having a flexible idea of the world. If they also possess the intellectual virtue of autonomy then they are not only open minded about the different people they meet in life and their view but also are able to make a thoughtful and virtuous decision on what they think of a person.

Open mindedness should also be considered within the field of online information behaviour. One of the key aspects of possessing this intellectual virtue is that it looks to solve the issue of the mass of unreliable information that is given to us in the digital age. It helps an individual to consider the vast information we encounter on a day to day basis and evaluate it properly. As Baehr explains open mindedness is crucial to "forming the best, most reasonable, and most accurate beliefs we can" (p.126).

An individual who is intellectually autonomous understands how to decide whether the online information they receive is accurate. However, those that are open minded looks at all the positive and negative information with an open mind and makes their own intellectual judgements on in. They also respond to both types of information in a virtuous way. If something has been considered by one who possesses the intellectual virtue of open

mindedness and is still deemed to be negative, wrong information, this individual does not respond in the same unvirtuous manner.

Regarding cyberbullying this would mean that the virtuous individual would not act in any negatively towards someone who acts in an unvirtuous way online. It also means that an open minded person would be able to tell when cyberbullying was occurring to a harmful extent and understand when action should be taken. Therefore intellectual open mindedness is also an important virtue for the bystander.

Overall, the intellectual virtues of autonomy, courage and open mindedness all have the ability to impact on creating a positive online information behaviour that would decrease the likelihood of the individual cyberbullying. Furthermore, while they address the issue from a different angle a more complete picture is provided when you look at them altogether. This shows that a person is only truly virtuous when they possess all intellectual virtues as they provide checks and balances on each other to create intellectual character.

### 6.3 Heersmink's online intellectual virtues and vices

Now that an understanding has been developed of how all the subject areas come together it is important to consider the impact of intellectual virtues in the digital sphere. This section will look at three thematic areas that make up Heersmink's online intellectual virtues: internet literacy skills, epistemic responsibility, and virtues and selfhood. Within each theme the following three acknowledgements will be made. Firstly, where this theme stands within the topic of online information behaviour. Next, how the chosen intellectual virtues will help the achievement of this theme. Finally, how successful up taking of these areas can help to combat cyberbullying.

#### 6.3.1 Internet literacy skills

Internet literacy is an element of online information behaviour. An individual who is internet literate has good information seeking behaviour (p.7). However, those that are intellectually virtuous are likely to possess internet literacy skills of a higher quality.

Those who possess the intellectual virtue of open mindedness are willing to consider alternative views, and if these views are found to be more accurate, then this individual should be willing to change their mind accordingly (p.7).

An intellectual autonomous person will have a healthy dose of scepticism towards the information they receive, even if it is through a popular source (p.7). This is best considered in combination with the virtue of open mindedness. The virtuous individual must first consider the information with an open mind but then look at it from an intellectually autonomous viewpoint.

Information from the internet after being considered with an open mind it must be considered with a thoughtful, discriminating point of view. It is important for those that have strong internet literacy skills to search in the digital sphere in places that are not consistent with one's political, cultural, religious or scientific views (p.7).

Both Aboujaoude *et al* (2015) and Barlett *et al* (2019) identify that one trait of a cyberbully that differentiates it from traditional face to face bullying is that are a person who cyberbullies is likely to be technically savvy. However, it is important to distinguish the difference between being technically savvy and being internet literate.

One who is technically savvy may have a good grasp of how the internet works from a technical standpoint. They may understand how to manipulate the internet so they can perform some of the more technical versions of cyberbullying. One particular action that is outlined by Vandebosch and Van Cleemput (2009) is purposely sending a virus infected file. Another example is masquerading i.e. deceiving someone by pretending to be someone else. This may not seem technically complex in the age of social media where this action can be performed by just simply setting up a fake profile. However, a person that wants to seriously harm someone through cyberbullying and without having it traced back to them would have to have advanced technical knowledge to achieve this.

However, one does not need to possess any type of advanced technical skills to be internet literate. Rather they need to have a working educational knowledge of their online seeking



behaviour and how to assess the information they find online. As discussed above those that are intellectually virtuous are more likely to have the skill set to become internet literate.

### 6.3.2 Epistemic responsibility

Epistemic responsibility can be seen to be what all intellectual virtues branch from (p.8). As Heersmink explains “An intellectually virtuous person will want to take responsibility for knowledge acquisition” rather than taking the online information they receive at face value with no additional thought process (p.8).

As outlined in chapter 4 there are two types of virtue epistemology which are explained by Heersmink which are virtue reliabilism and virtue responsibilism. It also explained how this project focused more on the virtue responsibilism side as this is one of the theories that Baehr’s nine intellectual virtues branched from.

The main difference between virtue reliabilism and virtue responsibilism is that virtue responsibilism believe that intellectual character traits are acquired and learned over a period of time. The viewpoint that Baehr has over his nine intellectual virtues is that they are developed through education over a period time through repetition of virtuous actions. Epistemic responsibility is essential for the development of these virtues.

If an individual is intellectually open minded about a subject matter and after consideration decides on a viewpoint, then further down the line realises the information they choose to believe is incorrect, they cannot try and take the blame away from themselves. Rather they must be intellectually courageous and accept epistemic responsibility for their actions.

Epistemic responsibility is extremely relevant to the issue of cyberbullying as for an individual to cyberbully is for them to go against their online epistemic responsibility. It links to the idea outlined by Ncube and Dube (2016) that cyberbullying is a violation of information ethics. Virtue and ethics are closely connected, this is most obviously shown through Aristotle’s Virtue ethics. Thus, to not act epistemically responsible is a violation of

information ethics and furthermore, as cyberbullying is a violation of information ethics it is also a way of acting epistemically irresponsible.

### 6.3.3 Virtues and selfhood

Heersmink believes that by improving ones intellectual virtues especially in the online environment is important as “such cognitive virtues are an important part of one’s selfhood” (p.9). Therefore, being intellectually virtuous helps an individual reach their full potential.

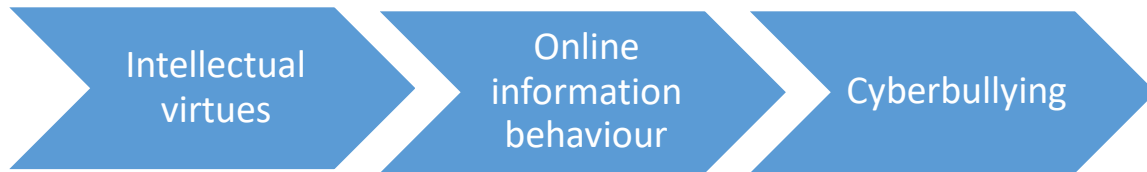
Cyberbullying is a form of negative online behaviour and thus by looking at intellectual virtues as a way to combat cyberbullying, it was also in part looking at ways to create more positive online behaviour overall.

This project has cyberbullying as its core concept and looks at how the theoretical disciplines or intellectual virtues and online information behaviour can help to combat it. While the focus on bringing these disciplines together is to provide further information on cyberbullying, it is naturally looking at good behaviour practices in general, especially within the digital sphere.

The final section of chapter 3 looks at research which links cyberbullying to wider societal issues. These include areas such as internet addiction, psychopathic traits, and suicide. While it is important to understand that there is not a necessary direct correlation but rather an indication of the further possible issues that can arise, it is also essential to realise that by tackling cyberbullying there is a chance that further issues may come into play. Therefore, online training tools that consider the issue of cyberbullying must also look at other issues that may be affected.

Virtues and selfhood is an important factor for cyberbullying. At its root it is about how one who is intellectually virtuous can reach their full potential in a number of important aspects of life including in the digital sphere. One who is intellectually virtuous is therefore not only less likely to cyberbully and act virtuous in their digital life but also continue this into their day to day life.

## 6.4 Summary



From this chapter the links between the three issues discussed within the project. Firstly, intellectual virtues must be acquired over time in an educational environment to create intellectual character. Secondly, digital responsibility and information seeking behaviour should also be addressed. The combination of these skills with these intellectual virtues will then lead to positive online information behaviour. Finally, this virtuous behaviour and positive online information behaviour will make an individual less likely to cyberbully, or at least, less likely to possess the traits of someone who would engage in cyberbullying.

Overall, this chapter has explored the three subject matters discussed within the literature review: cyberbullying, intellectual virtues, and online information behaviour, against two theoretical: Baehr's intellectual virtues and Heersmink's online intellectual virtues and vices. Bringing all these ideas together has both highlighted the strength behind the research concept but also its limitations and gaps that have not been able to be filled within this specific research project.

This will all be considered in the final two chapters. The penultimate chapter will look at the limitations of the project that were found through both the literature review and the analysis. It will also look to make recommendations for both future research and for the library and information science professionals. The final chapter will conclude on some of the key areas. First on the two theoretical concepts used in this analysis before finally looking at the three research questions that have guided this project.

## 7. Recommendations and limitations

This consideration of this chapter will be twofold. Firstly, the main limitations of the project will be explored. Secondly two sets of recommendations will be given based on the research undertaken within this study. The first set of recommendations will consider what further research areas have been highlighted as a result of this project. Following on from this, this chapter will look at practical recommendations that LIS professionals can implement into their practice.

### 7.1 Limitations of the project

This first section will discuss two limitations of the project and how they impacted on the final result.

#### 7.1.1 Timescale

As this project is a graded master thesis, it was produced under a timescale. This timescale was approximately three months. Because of having a time limit on the execution of this project some stages had to either get cut short or rushed. This is especially relevant within the research stage. There is an intimidating amount of research available on the issue of cyberbullying and it is difficult to ensure that all the relevant research has been explored. This is particularly difficult in a time sensitive situation.

However, through well-structure literature searching as outlined in the methodology, this was resolved in the best way possible. So, while the time constraint on this project was a limitation it did not hinder it to a large degree. It is believed that the most relevant research was extracted to be used within this project.

#### 7.1.2 Purely theoretical

The project has taken the form of an extended literature review which is a purely theoretical discipline. It was decided to conduct and present this research in a theoretical form as these subject areas have not been considered together before. It was felt that this was the best way to gain the best understanding of not only the topic of cyberbullying but how the

disciplines of intellectual virtues and online information behaviour can impact knowledge in this area.

However, in this context doing purely theoretical research is limiting. The analysis leads to the understanding that practical education tools, both classroom and online based, are needed to help combat the idea of cyberbullying. However discussing the impact of these tools through practical research may have been more impactful and further enhanced understanding.

## 7.2 Recommendations for future research

This section outlines four areas of research that, due to the results of this project, are thought to need further exploration.

### 7.2.1 Practical studies looking at cyberbullies regarding intellectual virtues.

To gain a better understanding on whether an individual is in fact less likely to cyberbully if they possess these virtuous traits, a more practical exploration is needed. There is a number of ways this can be done and perhaps more than one type of practical study is needed. However, the general idea should be to use Baehr's research to form a way to test if one is intellectually virtuous or not. This should then be used on two groups: one who admits to participating in cyberbullying in some form and another that consists of people who have never taken part in this type of behaviour.

### 7.2.2 Practical studies looking at cyberbullies regarding online information behaviour.

The idea here is similar to the one above. It involves a need for further validation on the relationship between cyberbullying and online information behaviour. There is a need to expand on the theoretical evidence presented here with practical studies. One way to do this would be to identify a group of those who will admit to having participated in cyberbullying in the past. Then either create or use a previously created test for online information behaviour which would then be taken by these individuals. For a comparison a group of people who claim to have never participated in cyberbullying or any similar action would take the same test. To enhance the study a selection of random people unaware of test purpose could be added. This would reduce observer effect and confirmation bias.

This would allow researchers to identify a general level of online information behaviour that exist within those that cyberbully. This information can then be used to create ways to help to improve this including the creation of an online training tool.

#### 7.2.3 More education classroom based studies.

To understand the ways intellectual virtues can impact in an educational classroom based environment, practical studies need to be undertaken in this area. These would ideally take place as an observational study where in the first instance a classroom situation would be observed, and notes would be taken. Recommendations would then be made on techniques that could be implemented to introduce intellectual virtues into the classroom. After a chosen amount of time has passed another observational period would take place where any changes in classroom behaviour since Baehr's classroom based intellectual virtues were implemented would be noted.

#### 7.2.4 More research into online training tools.

While the other calls for further research have all been practical based this final one could be undertaken in a theoretical or practical project. While the research within this thesis calls for some form of educational online training tool around cyberbullying and/or the issues related to it, it only briefly details how this could be achieved.

It is believed that research into online training tools merits a whole project itself, perhaps even two: one looking at the theoretical side and one looking at the practical side. The theoretical side would structure itself similar to this project in some style of literature review looking at all the key aspects of creating an online training tool to then use the analysis chapter to understand best practice. This best practice can then be used to create practical research projects. These would create prototypes of online training tools that would then be tested with groups of students.

#### 7.3 Recommendations for library and information science (LIS) professionals

The final section explores three practical recommendations that are specifically in line with the expertise of LIS professionals.

### 7.3.1 Create cyberbullying master lists

As highlighted in the research, cyberbullying is often used as an umbrella term for many different actions. It is important for any professional that may come into contact with those who are participating in cyberbullying or who are cybervictims to be able to spot all the ways that it can manifest itself. An accessible list with all this information and examples of ways in which sub-types of cyberbullying can manifest themselves can help these be identified more easily. This could be presented in the form of a publicly accessible Wikipedia style page that could be edited by multiple LIS professionals.

LIS professionals are in the best position to be the creators of this list as they have experience dealing with a wide range of people especially those working within public and school libraries. Throughout the years LIS professionals have been at the forefront of teaching individuals digital skills. Librarians help people develop everything from their basic computer skills to positive online information seeking behaviour. Within the variety of library settings, librarians teach people from a number of different backgrounds with various levels of computer literacy skills. Thus, they are likely to have the best professional knowledge base to understand the variety of ways that cyberbullying can manifest itself and what each of these look like.

### 7.3.2 Advise on online training tool.

Traditionally LIS professionals provide training to students on a number of issues. A lot of the time when this appears within school libraries. It tends to cover common issues such as general IT, research, and information seeking behaviour. As previously discussed librarians have been at the forefront of teaching digital skills and therefore they understand necessary training techniques required when teaching skills needed in the digital sphere. It is also becoming apparent within the field that it is now expected for LIS professionals to be trained in digital skills and be able to transfer these skills onto others.

An online training tool that focuses on combatting cyberbullying would require a number of expertise to come together in order to create and execute it. However, it is important that

one of these expertise comes from a LIS professional to ensure that these specific expertise are applied and that the LIS specific skillset is utilised.

### 7.3.3 Provide support and advice on cyberbullying

LIS professionals and the institutions they represent can be the best person or place for people to receive advice about cyberbullying. Whether this is a cyberbully looking for a way to mend their actions or cybervictim looking to get help.

For many, information institutions, especially libraries, can be used as a safe place. Because of this an increasing number of libraries are introducing support services as part of what they offer.

While it is far-fetched to advise all libraries to have a person on hand to advise on cyberbullying there still needs to be something in place. In the best case scenario this would resemble a professional who was dedicated to providing advice on these kinds of issues for a couple of hours once a week. However, due to resources and budget for some libraries this would not be possible. At the very least information institutions should have well-informed materials on the issues easily accessible for those that need them and some form of online service.



## 8. Conclusion

This final chapter will give concluding thoughts on the project. These will be split into two main sections. The first of these will look at the two main theories that were used in the analysis chapter: Baehr's intellectual virtues and Heersmink's online intellectual virtues and vices. The second section of this chapter will look at the three research question as outlined from the beginning of this project within the introductory chapter.

### 8.1 Conclusion from the analysis chapter

The analysis chapter brought together the three main issues discussed within the literature review: cyberbullying, intellectual virtues, and online information behaviour under two theoretical umbrellas. An in-depth discussion was undertaken under both theoretical ideas with the analysis chapter under a subset of these ideas. This first section of this final chapter brings together everything discussed within each theoretical discipline within the analysis chapter and makes conclusions on the knowledge that was acquired.

#### 8.1.1 Baehr's intellectual virtues

While all nine of Baehr's intellectual virtues have merit, and it is important to acknowledge that a truly virtuous individual must possess all nine to an extent to have true intellectual character, this project focused on three of these virtues. These were intellectual autonomy, intellectual courage and open mindedness. When looking at these intellectual virtues as a tool to combat cyberbullying it became increasingly clear that they act as checks and balances on each other. Similarly, where it was found difficult to identify a key set of traits that cyberbullies possess, it is the same when considering which intellectual virtue can be used to combat the issue.

When bringing together all the research from the literature review what started to become clear when looking at it under this concept is how important intellectual virtue can be for education, both classroom based and online. Baehr's book *Cultivating Good Minds* deals specifically with intellectual virtues within an educational context. However, while the whole text was considered for the research only the first part which outlined the intellectual

virtues was used within the research. The rationale behind this was to keep more open minded about which context intellectual virtues can best be used as a tool for cyberbullying.

When evaluating all the information under this theoretical idea it became apparent that online information behaviour is the area that links everything together. This project has examined the link between negative online information behaviour and cyberbullying. The research has shown that an individual who exhibit virtuous behaviour continues this behaviour when interacting in the digital sphere. This should be encouraged within the physical classroom environment.

For those that do not yet possess these virtuous traits it is important to ensure that intervention tools are in place. These would be able to help individuals who are just beginning to build up their information seeking behaviour and those that have already been existing within the digital sphere for a significant period of time. Intervention tools could be used to both stop negative information seeking developing or to try and solve the already existing problems. These tools could manifest themselves in a number of ways. One of these ways would be an online education tool with short bursts of information and videos to help with the development of positive information seeking behaviour. This would have different levels targeted at different age ranges and could be used both in and out with an educational environment. Therefore, a focus on positive, virtuous online information behaviour can help to combat cyberbullying.

#### 8.1.2 Heersmink's online intellectual virtues and vices

When evaluating the research using Heersmink's theory it became quickly apparent that any methods, especially those online, used to combat cyberbullying must also look at the wider picture of tackling further negative online behaviour.

When looking at the research under Baehr's intellectual virtues, online information behaviour was discussed in a more general sense. However, when using Heersmink's online intellectual virtues and vices to make the same considerations it became easier to consider this issue in more detail.

Within Heersmink theory an appreciation is found for how many aspects of online information behaviour affects and the extent to which intellectually virtuous character traits can have an impact.

When reviewing the three main subject areas under Baehr's theory it was difficult to fully understand what this virtuous individual would look like and what online behaviour they would exhibit to show whether they were likely to cyberbully or not. However, in looking at the three areas outlined by Heersmink: internet literary skills, epistemic responsibility and selfhood this becomes clear. These areas provide an understanding of the main differences between those that exhibit positive information seeking behaviour in comparison to those that show negative online seeking behaviour. It also shows the affect that these areas can have on other aspects of a person's life both in the digital and physical world.

Thus, any future research that looks into the creation of an online training tool focusing on information seeking behaviour should make strong considerations on these areas.

## 8.2 Conclusions on research questions

The three research questions that were outlined from the introductory chapter of this project have been at the forefront of leading the research from the beginning. This section will provide concluding thoughts on each research question from all the information that has been acquired thus far.

### 8.2.1 What are the most identifiable traits of a cyberbully?

Cyberbullying was the main topic that drove the research for this project. The decision to focus on the traits was to identify what areas to tackle when looking at ways to combat the issue.

While it was suspected before the beginning of this research that it would be difficult to get a consistent profile of the traits of a cyberbullying, it was not thought that it would be so difficult to find consistencies within the definition. How much the research was plagued with inconsistencies became apparent from the beginning of the research process.

However, while not a lot of research was agreeable with each other, there was still a lot of credible and important research that was found. From this, the project was able to outline a large number of traits that could be seen as contributing to whether an individual would cyberbully or not. These were then used within the rest of the project to consider how intellectual virtues and online information behaviour can help to combat cyberbullying.

Thus, it is not possible at this stage, with the research that has currently been accumulated on cyberbullying to identify a neat, well-informed list of traits that would occur in the majority of people who cyberbully.

8.2.2 How can Baehr's intellectual virtues enhance an understanding of cyberbullying?  
Baehr's theoretical texts were an important factor in the foundational idea of the creation of this project. However, it was unclear at first to what extent his ideas could enhance understanding of cyberbullying. Especially to what extent this would be greater than the cyberbullying research that would be explored within the project.

Intellectual virtues are built up over a long period of time through repetition of behaviour. Therefore, they cannot be used as a quick fix tool to an issue such as cyberbullying. However, what has been proven within the research is that intellectual virtues and the creation of intellectual character could be used as to counteract unvirtuous behaviour such as cyberbullying as long as these traits have been built into a person's character before they start to act in these ways.

The main way they have been shown to enhance the understanding on cyberbullying is that by studying intellectual virtues and the effect they can have on a person's character you can start to understand what traits are missing in those who cyberbully. Thus, with this knowledge the best way to tackle these issues can be considered.

8.2.3 What role can online information behaviour play in cyberbullying?

The link between online information behaviour and cyberbullying is one that can be made within the research without much dispute. However, what this project sets out to explore

was not only the strength of the link between these two concepts but also the different ways in which online information behaviour can be used to combat cyberbullying.

It is always a difficult task to attempt to find a solution that would be applicable for a large number of people. However, what this research has shown is that there seems to be a lack of good online information behaviour in general. The research suggests that the main reason to explain this is that now people are self-taught when it comes to how they navigate their way online. Whereas, this information used to come from an information professional.

What has become clear within the research project is that just because the younger generation are now more technically savvy than previous generations it does not mean they have positive information seeking behaviour. As negative information behaviour leads to issues such as cyberbullying it is important to address this. Therefore, while the type of IT skills that are taught need adjusted, it is important they continue to be taught by skilled professionals.

### 8.3 Final thoughts

While it is clear that research is advancing with the field of cyberbullying this project has shown there is still so much more still to be done. While it is clear a lot of practical applications need to be implemented to address cyberbullying as a societal issue, the project has highlighted the importance of this starting with education. This includes introducing intellectually virtuous practices within the classroom and also ensuring that positive, virtuous information seeking behaviour is getting taught. Finally, this project has highlighted the need for two key online services. Firstly an online training tool and secondly online information and help for cyberbullies and their cybervictims.

While a lot of the responsibility of this lies with education professionals the LIS professional still have an essential role that should not be overlooked. They are key for providing training on information seeking behaviour, or at the very least advising others on how to do so. They also have a key role when it comes to providing information and support to both cyberbullies and cybervictims.

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