The Conversations between the two worlds: An Investigation into Feeling Respected in an online space

Poopak Azhand

Abstract

There is a rich literature regarding cyberbullying, addressing its impact as well as strategies for preventing or minimising the phenomenon. However, historically, these have focused on children and the school context (those under 18), implicitly extending the physical environment into the digital. Significantly less attention has been directed towards the experience of young adults in Scotland (18-24) and digital life beyond the schoolyard. To discourage or prevent cyberbullying/bullying, is an ambition of the Scottish Government, primarily pursued through tactics addressing *promoting a culture of respect* in such online spaces; yet, there has been little discussion about what "feeling respected" means in an online space and how to encourage or facilitate this phenomenon among online users. This research project explores: how can Interaction Design be used as an approach to enable promoting feeling respected in an online space (or *online respect*) among young adults in Scotland in the context of cyberbullying.

To address the research question, I draw on evidence from my fieldwork where I engaged with six young adults (18-24 years old) and six key stakeholders. The research comprised two distinct but complementary phases of online fieldwork in response to the constraints imposed by Covid-19 and the wider consequences of the global pandemic. Adopting a co-design framework, where participants shared their knowledge, experiences, values, and thoughts on cyberbullying, online respect, and young adults coping strategies allowed a focus on participants' experiences, emotional states and behaviours. This, in turn, allowed a focus on the factors that underpin online respect, through online interviews, asynchronous activities, and online workshops. Data gathered from both phases of participation enabled me to provide anti-cyberbullying guidelines and recommendations for the policy level and establish an in-depth understanding of the role of digital technologies/online platforms in shaping young adults' relationships with the world that contribute to not feeling respected in an online space.

This PhD describes how an Interaction Design approach creates knowledge that brings an understanding and develops insights into online respect that contributes to psychology, social, and political disciplines from non-neutral digital technology viewpoints. Most prior studies stated that cyberbullying is school bullying transitioned

to an online environment due to the youth's sociocultural dependence on digital technology and communications. In other words, they investigated this phenomenon similarly to school bullying from a technology-neutral perspective. The technology-neutral perspective means that digital media and online space don't appear to influence or play any roles in shaping online behaviour or disrespect, but the way in which online users choose to use digital technologies should be considered key to the experience of feeling respected in such “spaces.”

The Interaction Design approach in this research project provided a form of research engagement that focused on the influence of digital technologies and online space leading to online disrespect among young adults. The Interaction Design approach to investigating the roles digital technologies and online space play in shaping online users' behaviours allowed a focus upon the concepts of *affordance* and *technological mediation* theories. Affordance theory enabled a critical and socio-technical view on how digital technologies and online space might permit novel behaviours, distinct from those of “real life,” including online disrespect among young adults. *Technological Mediation* theory offers a conceptual vocabulary encompassing sociocultural and environmental views on how digital technologies and online space might mediate young adults' relationships with their surroundings (both online and offline). These theories have been central in identifying profound insights into how one might support or encourage online respect among young adults from a non-neutral digital technology and context-based perspective for psychologists and policy-makers.

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Personal background to the study

As a child, I was fascinated by my parents' Apple Macintosh computer and the way they interacted with its user interface. This sparked my interest in digital technologies and led me to pursue computer engineering in Tehran, where I learned software, programming, and mathematics. However, I soon realised that designing effective human interactions with digital technologies requires more than just technical skills, mathematics, and physics. This realisation led me to explore other perspectives, and I pursued Industrial Design and eventually Interaction Design.

Through design, I learned that a solution to a problem doesn't always have to be technical or digital. A designer aims to understand the users' problem, define it, and find a solution within the socio-cultural context that fulfils their needs, values, and beliefs. This shift in perspective enabled me to focus on designing for human behaviours, beliefs and needs when interacting with digital technologies, and consider how to address the ethical and emotional aspects of those interactions.

Within my first year of my PhD, while investigating ethics and health and well-being in Scotland, I encountered the Scottish Government's anti-cyberbullying approach, which emphasised a culture of respect (being respectful toward each other) in online environments. However, as someone with a technical background, I noticed a lack of understanding of online space and digital technologies at the policy level. I realised that the policy failed to reflect on the role and impact of digital technologies, inspiring me to investigate the phenomenon of feeling respected in an online space from different perspectives that adopt the role of digital technologies and sociocultural contexts.

This research project aims to contribute to the development of policies and practices that promote a more respectful online environment for young adults in Scotland. The following section (Introduction) provides an overview of the research project's scope, with a focus on cyberbullying and online respect, and clearly states the research objectives and questions. Additionally, this project emphasises the importance of considering both the technical and human aspects of online interactions in the development of anti-cyberbullying policies and practices.

Introduction

In recent decades, technological advances have allowed interaction with other people through digital technologies and online platforms. The current technological revolution has transformed and altered the way people communicate and relate to the world. This has meant that, in the case of this research project, the physical environment is not the only space where people can live together, but a new space has been introduced in which they could interact with others, an online environment.

Regardless of the numerous opportunities the online environment and advanced technologies offer, an increasing number of incidents illustrate that there are risks to online platforms, such as cyberbullying. This research project discusses how the Interaction Design approach assists in exploring promoting feeling respected in an online space (online respect) among young adults (18-24 years old) in Scotland from the perspective of key stakeholders and young adults. The aim is not to critique cyberbullying scholars, psychologists, and policy-makers' intervention approaches but, instead to offer a novel way of thinking and conducting research about how to facilitate or encourage online respect among young adults in Scotland.

As findings in this PhD demonstrate, there has been debate among scholars and policy-makers about cyberbullying definitions (Grigg, 2010; Nocentini et al., 2010; Menesini et al., 2012a). Nevertheless, cyberbullying is generally understood as intentional behaviour to harm and abuse others repeatedly through digital technologies (Smith et al., 2008; Redmond et al., 2018; Chan et al., 2021). In other words, cyberbullying is essentially school bullying that occurs in an online space; it seems that this understanding of cyberbullying lacks the role and impact of digital technologies/online platforms in experiencing cyberbullying. As a result of this understanding, the anti-cyberbullying prevention interventions in Scotland have been centred around children (under 16 years old) in school settings. However, recent reports stressed that young adults (18 to 24 years old) in comparison with children (under 16 years old) experience more cyberbullying (Waldersee, 2019).

Moreover, as one of the Scottish holistic anti-cyberbullying and anti-bullying approaches suggested, the value of respect (being respectful toward each other)

among children in an online space discourages cyberbullying behaviour (the Scottish Government, 2017). However, there has been little discussion about how to implement respect in an online environment and what it means to be respectful toward each other in an online environment (Ibid). Besides, to date, the understanding of online respect in the context of cyberbullying has remained underexplored. As noted earlier, in response to this anti-cyberbullying approach, this research project investigates promoting feeling respected in an online environment (online respect) in the context of cyberbullying in Scotland.

Initially, this research project aimed to design an intervention to reduce cyberbullying by maximising feeling respected in an online space. To design the intervention, I require testing and evaluating intervention and whether promoting online respect reduces cyberbullying. It also requires collecting feedback from a large number of participants (young adults and stakeholders) in an online space. Due to the limited resources available for a PhD student, testing and evaluation didn't seem feasible for this research project. Moreover, as I elaborate in the following, due to the COVID-19 pandemic and the sensitivity of the topic (cyberbullying), accessing the pool of participants has been challenging and time-consuming. As a result, this research project shifted from designing an intervention to reduce cyberbullying by maximising online respect to exploring online respect in the context of cyberbullying.

Moreover, there has been little discussion around feeling respected in an online space. As, to date, there hasn't been any literature surrounding feeling respected in an online space (except for this research project), this research project focuses on investigating online respect in the context of cyberbullying. Conducting research in the context of cyberbullying has enabled me to A. provide an overview of current debate and knowledge and gaps in this research project. B. develop theoretical frameworks (affordance and technical mediation) and methodology for this research project by identifying and critically evaluating methods and techniques surrounding cyberbullying studies. C. analyses, synthesises and discusses the significance of findings in relation to the current literature and debate as a whole. D. address research questions and contribute new knowledge.

Furthermore, given that there is not a uniform definition of cyberbullying, there are lots of behaviours in an online space that could be considered under the umbrella of

cyberbullying (such as trolling and hate speech). However, as noted earlier, since this research project explores feeling respected in an online space in the context of cyberbullying, I will not directly engage with these online behaviours. Thereby, investigating these terminologies hasn't been the aim and focus of this research project.

In addition to the absence of common and uniformly accepted definitions to work with, the frequent perception of cyberbullying as being equivalent to traditional bullying although happening in an online space underlined another limitation of most cyberbullying studies. Specifically, the majority of these studies failed to reflect upon the role and impact of digital technologies and online platforms in enabling, encouraging or discouraging cyberbullying behaviour among online users (Festl et al., 2017; Wade & Beran, 2011). It might be due to the lack of technical knowledge and understanding of digital technologies/online platforms among scholars, particularly psychologists.

To make significant progress in addressing these knowledge gaps, certain sub-questions needed to be addressed. These are as follows: How can Interaction Design be used to investigate the key stakeholders' and young adults' understanding of online respect in the context of cyberbullying in Scotland? What coping strategies might young adults adopt in response to not feeling respected in an online environment from the perspective of key stakeholders and young adults? What are the factors that could potentially impact not feeling respected in an online environment in the context of cyberbullying for young adults from the perspective of key stakeholders and young adults? Finally, what are the factors that support online respect in the context of cyberbullying for young adults from the perspective of key stakeholders and young adults living in Scotland?

The Interaction Design approach in this research project offers a unique perspective by making central the role and impact of digital technologies/online platforms, specifically, in encouraging/discouraging online respect among young adults. This approach aims to propose meaningful relationships (Kolko, 2011) between young adults, digital technologies/online platforms, other stakeholders (such as policy-makers, "tech' company" developers, bystanders, and friends), and surrounding spaces (both online

and offline). In the case of this research project, proposing meaningful relationships refers to supporting/encouraging online respect among young adults.

The Interaction Design approach, as a form of design-led research enquiry, sets out to explore these relationships before users begin interacting with digital technologies/online platforms and continue after terminating users' interaction; as I propose, online users' evaluations and interpretations of the communication affect their following interactions. In other words, I suggest that online users' communications influence their beliefs, thoughts, values, and experiences. Online users based on these experiences and values interpret and evaluate and set up new communications with others; as a result, the Interaction Design approach in this research project focuses beyond the moment when online users interact with digital technologies/online platforms. For instance, after experiencing online disrespect, an online user (X) might delete their account and stop communicating with others on that online platform. Hence experiencing online disrespect changes how X relates to the world, uses digital technologies, and connects to others (both online and offline).

This approach is a user-centred and iterative process that takes into account the environmental, sociocultural, and philosophical context in which the use takes place (Benyon, 2014; Kolko, 2011; Moggridge, 2007). The environmental context here refers to the physical and online spaces in which online respect occurs. Firstly, unlike most cyberbullying studies, this research project attempts to investigate the role of the online environment in facilitating online disrespect among young adults. As noted earlier, most scholars have treated cyberbullying similar to bullying and failed to investigate the influence of digital technologies and online spaces on cyberbullying behaviour. However, as I elaborate in the Discussion Chapter, digital technologies/online platforms afford and facilitate online disrespect among young adults. Tagging someone on offensive photos results in online disrespect; the online platform here affords online disrespect by offering tagging features to online users.

Secondly, this research project looks into the impact of online disrespectful behaviour on online users' physical spaces. Prior studies found that experiencing cyberbullying causes physical effects (Ex, physical aggression and suicide ideation and attempts), psychological effects (Ex, anxiety and depression), and social effects among victims (Ex, academic difficulties and disrupt relationships) in the physical environment (John et

al., 2018; Cho et al., 2017; Patchin & Hinduja, 2010a; Bottino et al., 2015). To accommodate the environmental context, I investigated the following key points in designing participants' engagement tools: A. the impact of feeling respected in an online space on online users' lives in the physical spaces. B. considering the physical and online spaces where online respect occurred when defining online respect. Overall, this approach outlines a deeper understanding of how young adults (18-24 years old), the context and digital technologies/online platforms affect each other and their surroundings.

As outlined earlier, this research project considers the sociocultural context that influences online respect. This perspective looks into how social and cultural norms and expectations encourage online respect among young adults in Scotland. Research has shown that group influence and pressure result in negative behaviours and norms in an online space, such as cyberbullying (Shim & Shin, 2016; Piccoli et al., 2020). For example, the pressure of the community/group leads to collectively attacking, shaming, and cyberbullying someone on the online platform. To explore the sociocultural context, I addressed the influence of society/group in facilitating or discouraging online respect in the engagement tools. This perspective enabled me to identify the stigma surrounding cyberbullying, social influence, and lack of balance between freedom of speech and cyberbullying as sociocultural factors that affect online respect at the societal level.

Returning to investigating the role of digital technologies/online platforms in experiencing online respect in a philosophical context, I utilise two key theoretical concepts: *affordance* and *technological mediation*. These theories allow me to shift the discussion of cyberbullying from a focus on school bullying to a focus on the role and impact of digital technologies/online platforms on shaping online users' behaviours and mediating their relationships with their surroundings. Affordance theory describes action possibilities in the relation between users and digital technologies/online platforms. My reading of affordance theory enabled me to explore how digital technologies/online platforms play a role in supporting/encouraging online disrespect and cyberbullying among young adults.

Technological mediation theory seeks to describe how digital technologies/online platforms mediate young adults' relationships with online and offline environments,

and how young adults perceive their actions and relationships in relation to their surroundings or environment. Chapters One and Two describe how The Interaction Design approach helps explore online respect that hasn't been available to policy-makers and psychologists. Most policy-makers and psychologists limited the discussion of cyberbullying to school bullying and failed to reflect upon the role and impact of digital technologies/online platforms on experiencing online respect. Chapter Two details how my understanding of both *affordance* and *technological mediation* theories have shaped this approach and influenced my analysis of the data generated through my research engagement.

To address the research questions, I employed a co-design approach and thematic analysis technique. Co-design means sharing creativity with end-users; the new creative task for Interaction Designers could be the development of engagement tools to allow participants to contribute their ideas and contextual knowledge. In other words, it helped the discovery of multiple perspectives from stakeholders and young adults with diverse backgrounds through collaboration. The Co-design enabled me to collect meaningful data that reflect participants' knowledge, experiences and values about online respect, young adults' coping strategies, and factors that impact online respect among young adults. Chapter Three, the Methodology Chapter, outlines the fieldwork structure describing the data collection process in sociocultural and environmental settings in the framework of co-design. It simply demonstrates how I designed creative and innovative methods, tools, and techniques to gather data during the lockdown remotely.

Chapter Four addresses the recruitment process and details the description of the fieldwork. It explains how I recruited six young adults (18-24 years old) and six key stakeholders in six months in two phases. Stakeholders included one policymaker, two third-sector organisation representatives, one online safety representative, one designer, and one computer scientist. Chapter Four further elaborates on how the COVID-19 pandemic affected access to the pool of potential participants. It also reflects the negative impact of sensitivity of the context (cyberbullying) and long-hour participants' commitment to the recruitment process. To overcome recruitment challenges in the second phase I reduced the five-hour participants' commitment to a one-hour Zoom interview. Once I recruited participants, I began online engagement with the support of Zoom and Miro platforms. Participants' involvement included:

online interviews, individual asynchronous activities, online group Workshop 1, and online group Workshop 2 (evaluation). Following the collection of data, I analysed the data thematically.

Thematic analysis as a flexible method for qualitative data enabled me to analyse my large data set, interview transcripts, asynchronous activities (booklets), Workshop 1 and 2 activities and transcripts from all the workshops. This method allowed me to apply *affordance* and *technological mediation* theories while doing analysis and offered a profound understanding of the findings in relation to online respect. Analyses go beyond participants' individual experiences and knowledge by offering inductive and deductive approaches to the research project. While the inductive involves participants' experiences and discussions, the deductive derives from my Interaction Design approach and *affordance* and *technological mediation* theories. Thematic analysis briefly identifies and critically analyses the patterns (themes) that emerged from the findings (Braun & Clarke, 2006). It entails searching across a data set to identify, analyse, and report repeated patterns in relation to research questions (Ibid).

Chapter Five provides an analysis of the fieldwork data, addressing cyberbullying and online respect definitions, as well as factors influencing young adults' experiences of online respect and disrespect from the perspective of participants. In the evaluation workshop, as participants suggested, the conceptual intervention in this research project is referred to as the Digital Buddy. This digital concept establishes a strong connection with young adults through digital technologies, assuming roles such as a friend, moderator, coach, and digital assistant tailored to their specific needs. The Digital Buddy plays a vital role in discouraging cyberbullying behaviour and promoting online respect among young adults. Participants emphasized that the Digital Buddy enhances awareness of information literacy, online communication, cyberbullying, and online respect. It actively supervises and moderates online interactions, supporting young adults in experiencing more online respect throughout their online communication journeys.

After analysing data and developing six themes in Chapter Five, Chapter Six presents the synthesis of the findings presented as themes/sub-themes. This chapter enables me to make sense of the findings by interpreting themes based on current studies and debates. Given online respect among young adults is underexplored, most themes and

sub-themes haven't been addressed previously, especially at the policy level in Scotland. The body of evidence and insights also is valuable in enabling me to establish both policy recommendations for the Scottish Government and an in-depth understanding of the role of digital technologies in shaping young adults' behaviour that might result in online disrespect.

Chapter Seven presents a summary overview of this research project and four possible contributions to knowledge. It reflects upon limitations in the research project that became apparent during its undertaking, some sociocultural (Covid-19), others related to the theme, and methodological issues that arose: these are examined for contributions to future research in this area. This research project's contributions span digital sociology, cyberpsychology, and design ethics. The contributions to knowledge emerge at the intersection of the Interaction Design approach, contemporary design research process and methods, and an understanding of online respect relating to the formulation of governmental policy, design in digital environments and a philosophical and theoretical language that enables all of these. These are based on my understanding, reflections, experiences, and insights within this single-case study. These contributions to knowledge include: A. Unique and novel definitions of both online respect and cyberbullying that reflect the affordances of digital technologies in shaping young adults' online respect behaviours (see Discussion Chapter). B. Identifying environmental and sociocultural factors that facilitate or discourage online respect among young adults in Scotland. C. Policy recommendation to the Scottish Government in the context of online respect. D. The Interaction Design approach in this research project. As discussed previously, it is a critical approach to digital technologies/online platforms' roles in shaping online users' behaviours and relations to their surroundings. This approach looks into how digital technologies/online platforms mediate the relations between online users and online and offline environments from the perspectives of philosophy, sociocultural, and environment. The Interaction Design approach in this research project not only focuses on the moment interaction occurs but investigates how these interactions form and how the following interactions would be influenced by the previous ones.

Chapter One: Introductory

1.1. Introduction

This Chapter provides the background to this research project and locates feeling respected in an online space and cyberbullying in the sociocultural and environmental context. The chief purpose of this research project is to determine what feeling respected in the context of cyberbullying (online respect) and anti-cyberbullying policies and strategies to encourage and facilitate online respect among young adults in Scotland are. This Chapter also enables the reader to understand how Interaction Design could be used as an approach to investigate online respect. It then outlines the research questions, aims, and associated objectives, before addressing the overview of this thesis structure.

1.2.1. Introduction to the Problem

Prior studies and reports underlined the increasing number of cyberbullying in the UK and Scotland (Chalk et al., 2018; Stone, 2014; White, 2019; Corliss, 2017). According to Chalk et al. (2018), thirty-nine per cent of young people aged 11 to 25 have experienced cyberbullying in their lifetime. The YouGov poll revealed that one in four Britons have experienced cyberbullying (Waldersee, 2019). However, despite the increasing number of cyberbullying in Scotland, there is limited academic evidence-based in this area in Scotland, whether in schools or led by other agencies or third-sector organisations (Stone, 2014).

Given the limited understanding of cyberbullying in Scotland, the Scottish Government has continued to address online bullying as part of an anti-bullying approach (The Scottish Government, 2017b; Stone, 2014; White, 2019); “online bullying shouldn't be treated differently from face-to-face bullying. Online bullying, or 'cyberbullying' as it is often referred to on social networking sites and online gaming platforms. A person can be called names, threatened or have rumours spread about them and this can (like other behaviours) happen in person and online. We address online bullying effectively when we address it as part of our whole anti-bullying approach, not as a separate area of work or policy” (The Scottish Government, 2017b, p.11-12). Likewise, Stone (2014)

stated that “online bullying is essentially the same as bullying behaviour and requires similar approaches” (p.5).

In general, the Scottish Government policies focused on providing guidance on cyber resilience and online safety in school settings (The Scottish Government, 2017b). The approaches to prevent and deal with bullying and cyberbullying in the guidance broadly related to 1. raising awareness of the rights and responsibilities of children. 2. inclusive, supportive school cultures where bullying and discrimination are not accepted. 3. prosocial approaches in the classrooms and schools. 4. restorative practices (Stone, 2014; The Scottish Government, 2017b).

Additionally, the Scottish Government (2013) published Guidance on *Developing Policies to Promote the Safe and Responsible Use of Mobile Technology in Schools*. This guidance supported children and young adults (under 16 years old) to become digital citizens in school and beyond. In other words, it aimed to assist students in developing social, emotional control, and conflict resolution skills to reduce the likelihood that they will engage in or experience cyberbullying (The Scottish Government, 2013).

This guidance also enables schools and local authorities to develop anti-cyberbullying policies by creating a safe and responsible space for children. The chief principles included: “1. digital etiquette (standards of conduct when using mobile devices) 2. digital rights and responsibilities (what people can do if they feel uncomfortable with digital communication and how they can report misuse 3. digital security (precautions that can be taken to ensure digital safety” (The Scottish Government, 2013, p.3). However, there are not enough studies or reports to support the effectiveness and impact of these anti-cyberbullying policies and interventions (Gaffney et al., 2018).

Furthermore, in 2017, the Scottish Government published, *National Action Plan on Internet Safety for Children and Young People* to ensure suitable training, support, and information have taken place. In summary, this action plan puts both understanding of online risks and identifying these online risks for children, young people (under 16 years old), and parents/carers at the centre of attention. Despite this action plan encouraging businesses and industries to commit to creating a safer space in an online space (The Scottish Government, 2017a), it is unclear how the Scottish Government could supervise these online industries and businesses. Besides, ensuring children's

online safety for international online platforms and organisations remained under-explored (Ibid).

In brief, the Scottish Government strategy centred on preventing specific cyberbullying risk factors, safeguarding the online environment, promoting healthy internet use, and providing educational opportunities for youth (under 16 years old) to acquire online coping and help-seeking skills (Chen et al., 2017; Tsitsika et al., 2015). Notably, the Scottish Government's anti-cyberbullying strategies and understanding of cyberbullying haven't reflected the role and influence of digital technology/online platforms on experiencing cyberbullying (The Scottish Government, 2017a; The Scottish Government, 2017b; Stone, 2014); it seems that digital technology/online platforms solely represent where cyberbullying incidents have occurred.

As noted earlier, the Scottish Government treated cyberbullying similarly to school bullying. As a result, the Scottish Government has set schools at the forefront of anti-cyberbullying and anti-bullying (The Scottish Government, 2017b; Stone, 2014). Within the Scottish approach, school students and teachers have been encouraged to identify, resolve, and prevent cyberbullying in school settings (Ibid).

However, in the light of the availability of the internet and advanced digital technologies/online platforms, online users experience cyberbullying at any time and place (Patchin & Hinduja, 2015; Lonigro et al., 2014). Hence, such anti-cyberbullying efforts should include community-level and system-level interventions to support online users in other settings (Ibid). Gaffney et al. (2018) also recognised a gap in providing support for online users and evaluating the effectiveness of these prevention programs in non-school settings.

Moreover, another drawback of treating cyberbullying similar to school bullying appears in the age groups of online users who might experience cyberbullying. Simply, the Scottish Government appears to suggest that cyberbullying occurs among children (under 16 years old) (The Scottish Government, 2017b; Stone, 2014); this has led to the development of anti-cyberbullying policies that have been tailored to school kids, not other age groups (Ibid).

On the contrary, cyberbullying could happen to any online user that communicates on online platforms (Arıcak et al., 2008). Kowalski et al. (2019) stated that more online

exposure results in experiencing more cyberbullying. Previous scholars also discussed that as young adults (over 18 years old) spend more time in an online space, they experience more cyberbullying (Doane et al., 2014; Wang et al., 2017; Kowalski et al., 2019). In 2019, similarly, Waldersee reported that young adults (18 to 24 years old) are most likely to experience cyberbullying. Overall, prior studies underlined that cyberbullying studies among young adults are still relatively small (Doane et al., 2014; Wang et al., 2017). It is, therefore, necessary to conduct cyberbullying research among young adults.

Furthermore, in 2017, the Scottish Government published *Respect For All: National Approach To Anti-Bullying for Scotland's Children and Young People;* this report encouraged children and young people (under 16 years old) to treat each other respectfully in an online space to experience fewer cyberbullying incidents (The Scottish Government, 2017b). It further suggested developing a culture of respect, promoting positive respectful relationships, and developing practices that promote respect (The Scottish Government, 2013; The Scottish Government, 2017b). However, there has been little discussion about what the Scottish Government mean by feeling respected in an online space and how stakeholders implement or encourage/facilitate experiencing respect in an online environment (Ibid).

To summarise, there are not only limited cyberbullying studies in Scotland, but current studies have fallen short of addressing: A. cyberbullying in a different setting rather than in schools in Scotland; B. cyberbullying for different age groups (over 18 years old) in Scotland. C. the understanding of feeling respected in an online space and how stakeholders encourage/support feeling respected in an online space. D. exploring the influence and role of digital technologies/online platforms on experiencing cyberbullying and feeling respected in an online space.

This PhD is a response to the Scottish Government's approach to anti-cyberbullying policies as it needs to be noticed and changed. It attempts to address how Interaction Design can be used as an approach to explore promoting feeling respected in an online space (online respect) among young adults (18-24 years old) in Scotland from the perspective of key stakeholders and young adults. In the following, I outline the impact of the COVID-19 pandemic in this research project before discussing the Interaction Design approach.

1.2.2. The COVID-19 pandemic

In March 2020, the World Health Organisation called the novel coronavirus outbreak a pandemic. Coronavirus disease (COVID-19) is an infectious disease that has spread rapidly and affected millions of people. It has not just caused widespread increases in morbidity and mortality, but it has affected different aspects of individuals' lives and caused considerable economic, social, and political disruption (UK GOV, 2020; Belitski et al., 2022; Daly, 2022).

The impact of the COVID-19 pandemic on society in the long term and short-term has remained unclear, yet its impact on the usage of digital technology is very apparent (De' et al., 2020; Belitski et al., 2022); digital technology/online platforms have become the primary form of contact in order to minimise exposure to the virus (Ibid). The reliance on digital technology/online platforms has a significant potential to transform society and affect users' communications and shape their behaviour (Verbeek, 2005).

Moreover, prior studies have consistently shown that cyberbullying victimisation is associated with time spent online (Çelik et al., 2012; Livingstone & Haddon, 2009; Sasson & Mesch, 2017). In other words, increasing online users' time exposure leads to experiencing more cyberbullying incidents. Therefore, as online exposure increases during the COVID-19 pandemic, the possibility of experiencing cyberbullying and online harm would increase.

Furthermore, in the light of the COVID-19 crisis, my fieldwork structure, participants' engagements, and recruitment process have undergone various challenges. My fieldwork structure and design process have constantly developed to find creative and innovative ways to access and link to the potential participants and gather data from online and remote engagements. In the Methodology and Fieldwork Chapters, I further describe how the COVID-19 pandemic affected participants' recruitment and engagements and how this research project evolved during the pandemic. In the conclusion (Chapter Seven), I shall address the overall impact of this pandemic on the results and outcome of this research project.

1.2.3.1. An introduction to the Interaction Design Approach

Tools and technologies affect how people communicate, learn, and think. They have been used to explore, understand, and manipulate objects and the surrounding

environment in people's lives, communities, and society. Heidegger believed that the relationship between people and the world is achievable due to tools (Verbeek, 2005; Myerson, 2001). For instance, I could use the mobile phone to communicate my feelings and opinions with my friend who lives in another country; the mobile phone as a tool allows connection and interaction with the world. Or, it could be employed to harm or cyberbully others; the mobile phone could be considered a cyberbullying tool.

Overall, tools and technologies play a critical role in shaping individuals' relationships in societies/communities (Verbeek, 2005). However, Verbeek (2005) suggested that tools are not the centre of attention in the relationships between users and the world; the results and outcomes of the interactions with the tools are the centres of attention (Verbeek, 2005; Myerson, 2001). In other words, this invisibility aspect of technologies has led to the withdrawal of technologies from the communication between human beings and their world. Likewise, Marshall McLuhan (1967) addressed this aspect of technologies in the book *the medium is the massage*; McLuhan (1967) pointed out that media, such as radio, TV, photographs or wheels were not solely devices for communication; the medium itself is the content. Put simply, McLuhan attempted to turn the attention to the role of technologies in shaping individuals' interactions.

In the given context, Peter-Paul Verbeek (2005) asserts that the theory of technological mediation provides a profound insight into the intricate dynamics among humans, technology, and the world. Verbeek stands at the forefront of this theory, which surpasses the conventional notion of technology as a passive entity and instead acknowledges its proactive role as a mediator in shaping how individuals perceive, act, and engage with their surroundings (Verbeek, 2005). Verbeek underscores the intricate interplay between technology and human agency, departing from simplistic perspectives that label technology as inherently positive or negative. By embracing the theory of technological mediation, I am better equipped to grasp how technology influences people's perceptions, cognition, and ethical perspectives.

This perspective challenges the dominant human-centred design approach and encourages ethical inquiries into the desired behaviours that designed things should support (Dixon, 2022). It promotes a more inclusive and responsible agenda that considers the involvement of other species and lifeforms. Ultimately, the adoption of technological mediation theory in design research provides a lens through which I can

explore human-technology relations, apply theoretical frameworks, and address moral questions in shaping people's way of life.

In the case of the cyberbullying example, considering the invisibility aspect of technologies, scholars might disregard the role of technologies in shaping cyberbullying or feeling disrespected in an online space. They respectively might treat cyberbullying and feeling respected in an online space (online respect) similar to bullying and in-person respect. Therefore, I propose that in order to gain a better understanding of feeling respected in an online space, exploring the role and impact of digital technologies in shaping online users' relationships with the world could be crucial given the invisibility feature of technologies that have been hidden in the relationship between people and the world.

The Interaction Design approach enables me to investigate the relations between users and the world by drawing attention to the role of digital technologies. Firstly, this approach enables offering policy recommendations for the Scottish Government to support and encourage online respect among young adults. Unlike the Scottish Government's approach, the Interaction Design approach allows me to make sense of online respect by investigating the role of digital technologies in shaping online users' behaviours and their relationships. Secondly, the Interaction Design approach enables the development of an in-depth understanding of the role of digital technologies (affordances of digital technologies) in experiencing online respect. It gives space for philosophical, sociocultural, and environmental ways to understand the role of technologies in shaping online users' relationships with the world (Krogh & Koskinen, 2020). The following further expands the Interaction Design approach in this research project.

1.2.3.2. Interaction Design Approach

Since a universal definition of Interaction Design and its approach have not been agreed upon (Moggridge, 2007; Löwgren & Stolterman, 2004), I begin by elaborating on my understanding of the Interaction Design approach that has been employed throughout this PhD. In particular, taking into account that this research project aims to investigate feeling respected through the lens of the Interaction Design approach in the following chapters. Besides, in the following chapters, I not only return to this understanding of the Interaction Design approach, but sharpen this approach in my

practice. As Moggridge (2007) explained, “designers are much more at ease learning and knowing by doing than they are explaining” (p.647).

In this section, in order to address my definition of the Interaction Design approach, I discuss three different Interaction Design understanding and viewpoints. The first perspective was derived from Moggridge (2007); Moggridge referred to Interaction Design as “the design of the subjective and qualitative aspects of everything that is both digital and interactive, creating designs that are useful, desirable, and accessible.” (Moggridge, 2007, p.659). Moggridge (2007) seems to suggest usability, accessibility, and desirability (quality attributes of digital technologies) as the main approaches to Interaction Design. This perspective centred on the functions and possibly embodying meanings of digital technologies.

However, following the Jaspers's account of mass products (Verbeek, 2005), I don't see digital technologies as merely digital artefacts that fulfil functions; but as digital technologies enabling individuals to shape their relationships with the world (Verbeek, 2005). Imagine someone (X) appreciates a sustainable lifestyle. While buying a printer, X could first consider whether the printer is sustainable economically, environmentally, ethically, and socially. For X, buying a secondhand printer seems to have a positive social and environmental impact. It reduces carbon emissions and saves resources, water, and energy. It also prevents old printers from ending up in landfills. Hence, a printer for X here is not just a machine for printing text or pictures; it allows individuals to shape their relationships with the world in accordance with their values, lifestyles, thoughts, and beliefs.

The second viewpoint of Interaction Design that I would like to discuss in this research, emerged from Kolko (2011). Kolko claimed that Interaction Design is misunderstood and defined the term as “the creation of a dialogue between a person and a product, system, or service. This dialogue is both physical and emotional in nature and is manifested in the interplay between form, function, and technology as experienced over time” (Kolko, 2011, p.15). This understanding of Interaction Design, similar to the previous perspective, focuses on functionality. However, it could also underline the relationships between users, digital and physical environments, and digital technologies when Interaction Design appears to create a dialogue between users and digital technologies.

Kolko further considered that an Interaction Designer (a practitioner) could understand and alter users' activities, behaviours, thoughts, and feelings (Kolko, 2011). Kolko suggested, "because the manipulation of behaviour is so tightly related to power, politics, and control, it's critical to reflect on the values that are being prescribed through our creations and to think carefully about the work we do" (Kolko, 2011, p.15). From this perspective, the Interaction Design approach should uncover to what extent digital technologies shape users' thoughts, feelings, and behaviours. In the context of this research project, the Interaction Design approach should investigate the relationships between digital technologies, individuals, and the surrounding environments (both online and offline) that shape individuals' behaviours and thoughts and potentially result in feeling disrespected in an online space or cyberbullying.

The third viewpoint was approached by Benyon (2014). Benyon addressed Interaction Design quite similar to Jaspers's account of the product (Verbeek, 2005). Benyon conceptualised Interaction Design as a relationship between People, Activities, Contexts and Technologies (PACT). Benyon (2014) noted that PACT could be a valuable model for Interaction Designers as it addresses two fundamental relationships: A. It demonstrates the relationship between digital technologies and individuals; it ensures a good fit between digital technologies and the capabilities of individuals (Benyon, 2014). B. It also illustrates the relationship between activities and context; it ensures the effectiveness and overall experience of users and digital technologies for undertaking activity in context (Ibid).

It appears that Benyon identified People, Activities, Contexts and Technologies as fundamental elements that influence users' perceptions and understanding of the world through digital technologies. The central aspect of Benyon's understanding of Interaction Design is recognising the role of digital technologies in shaping users' relationships with the world. In the case of this research project, the spaces of interaction are: A. people: young adults (18-24 years old) who have been living in Scotland and have been active on online platforms. B. activities: feeling respected in an online space while connecting and communicating with others or using online platforms. C. context: cyberbullying in Scotland; online environment and physical environment. D. technologies: digital technologies and online platforms. PACT suggests that the investigation of feeling respected in an online space could be impossible when the online environment and the role of digital technologies have been

discarded. In other words, scholars could not explore cyberbullying the same way as bullying; the context of bullying and cyberbullying are not the same.

However, I argue that one of the drawbacks of PACT is that it doesn't explicitly identify the relationships between physical and online environments; hence, the effect of these two environments on each other could be dismissed. I suggest it is beneficial to acknowledge online and physical environments as separate spaces for interaction. As shall be discussed in the following chapter, users' experiences in an online space affect physical space or vice versa; for instance, studies noted that experiencing cyberbullying results in depression and anxiety or academic difficulties in the physical environment (Brewer & Kerslake, 2015; Huang et al., 2018; Varghese et al., 2017; Ortega, 2009).

As noted earlier, the Interaction Design approach in this research project would be developed throughout this thesis. In the Literature Review Chapter, I expand on how digital technologies shape users' relationships with the surrounding world by employing my understanding of affordance and technological mediation theories. Affordance theory enables me to establish a profound knowledge of the role and impact of digital technologies on experiencing online respect. And technological mediation theory further explores the role of digital technologies on relationships between users and the world.

Furthermore, the Interaction Design approach in this research project, in addition to focusing on the role of digital technologies in investigating feeling respected in an online space, focuses on users' needs, goals, values, and thoughts; in other words, it is User-Centred. The User-Centred framework helps to “understand the latent needs and desires of potential users before a design is created” (Moggridge, 2007, p.667). Within a User-Centred framework, designers are encouraged to involve users in the design process (Saffer, 2010).

In the Methodology Chapter, the User-Centred framework evolved into a Co-design in order to value and understand young adults’ and stakeholders’ (participants) lived experiences and insights rather than focusing only on their specific needs and values. Changing the landscape of design research to co-design enables me to better understand and respond to the complexity of the role of digital technologies in shaping young adults' relationships with the world. Co-design is defined as the “creativity of designers and people not trained in design *working together* in the design

development process" (Sanders & Stappers, 2008, p.6). I further describe the Co-design framework in Chapter Three.

1.3. Purpose of the research

As discussed in the previous sections, the Scottish Government has treated cyberbullying as school bullying that occurs in an online space regardless of the increase of cyberbullying among young adults (18-24 years old). As part of the anti-cyberbullying strategies, the Scottish Government encouraged a culture of respect in an online space in order to discourage cyberbullying behaviour. However, the definition of feeling respected in an online space and how stakeholders could support/encourage online respect remained unclear. The chief purpose of this research project is to determine the understanding of feeling respected in an online space and the factors that influence feeling respected in an online environment. This research project employs the Interaction Design approach to contribute a novel understanding of feeling respected in an online space from a sociocultural, environmental, and philosophical rather than psychological perspective. The Interaction Design approach attempts to investigate how digital technologies/online platforms play a role in shaping young adults' relationships with the world and potentially result in feeling disrespected in an online space or cyberbullying. In the following, I address research questions before outlining the objectives of this research project.

1.4. Research questions

On the basis of the above discussion, I set up a lead research question:

1. How can Interaction Design be used as an approach to explore promoting feeling respected in an online space (online respect) among young adults (18-24 years old) in Scotland in the context of cyberbullying as a response to the Scottish Government's anti-cyberbullying?

This research question has been supported through the following sub-research questions for this research project:

2. How can Interaction Design be used to better investigate the key stakeholders' and young adults' understanding of online respect in the context of cyberbullying in Scotland?

3. What coping strategies young adults would adopt in response to not feeling respected in an online environment from the perspective of key stakeholders and young adults?

4. What are the factors that could potentially impact not feeling respected in an online environment in the context of cyberbullying for young adults from the perspective of key stakeholders and young adults?

5. What are the factors that support online respect in the context of cyberbullying for young adults from the perspective of key stakeholders and young adults living in Scotland?

As discussed earlier, in brief, the internet and online platforms have increased the opportunities for social interaction and wider online social networks while simultaneously exposing online users to various online risks and harms, such as cyberbullying. Little is known, however, about how to facilitate and encourage feeling respected among young adults in an online space in order to experience fewer cyberbullying incidents. I begin this investigation by establishing five research questions. Given the absence of the definition of feeling respected in an online space (online respect), the second research question explores this definition from the perspective of participants. The third question attempts to uncover how young adults (18-24 years old) deal with online disrespect. Following the understanding of online respect and young adults' coping strategies, the fourth and fifth questions aim to investigate stakeholders' approaches to facilitating and encouraging online respect among young adults. Finally, the first research question demonstrates how the Interaction Design approach investigates online respect that hasn't been available to policy-makers and psychologists.

1.5. Objectives

Considering the research questions, the objectives of this research project are:

- To conduct a critical investigation and review of the existing cyberbullying debate and relevant literature, aiming to gain a comprehensive understanding of the context.

- To establish and critique a comprehensive definition of cyberbullying based on the perspectives of participants (young adults and key stakeholders) through interviews.

- To establish a comprehensive definition of feeling respected in an online space in the context of cyberbullying (online respect) based on the perspectives of participants (young adults and key stakeholders) through interviews and asynchronous activities.

- To map and explore coping strategies employed by young adults (18-24 years old) in response to not feeling respected in an online environment, as perceived by key stakeholders and young adults through interviews and asynchronous activities.

- To map and explore the factors that support online respect in the context of cyberbullying for young adults, as perceived by key stakeholders and young adults in Scotland through interviews, asynchronous activities, and workshops.

- To provide policy recommendations for anti-cyberbullying measures that promote feelings of respect in online spaces among young adults in Scotland, based on the perspectives of both young adults and key stakeholders through interviews, asynchronous activities, and workshops.

1.6. Structure of the thesis

This research project has been organised into seven chapters, including this Introductory Chapter which has addressed the identified gaps in the literature and justified research questions. In Chapter Two (the Literature Review), I critique and discuss the current research and debate on cyberbullying, feeling respected in an online space, the role of digital technology in experiencing cyberbullying, and the Scottish Government's anti-cyberbullying strategies and policies. This Chapter also explores the theoretical frameworks of this research project, affordance and technological mediation theories.

Chapter Three (Methodology) provides a methodological approach and fieldwork structure to conduct this research project. It explains how I planned the fieldwork structure and designed participants' engagement. This chapter introduces the

five-phase single case study, where I discuss the design process for qualitative methods and tools used in the fieldwork and a method of analysing data in this research project. This five-phase included semi-structured interviews, asynchronous activities, Workshop 1, evaluation workshop (Workshop 2), and reflection. These phases enabled me to gather data in relation to research questions from fieldwork.

In Chapter Four, the Fieldwork Chapter, I address the recruitment process and how my research project was implemented practically. I begin this chapter by elaborating on the difficulties and challenges in recruiting participants in two phases during COVID-19 and national lockdowns. Following this, I chronologically present a five-phase case study within a co-design approach. Within each phase, I provide an overview highlighting critical reflections and insights into the fieldwork's tools and methods, methodological difficulties, and the impact of COVID-19 on online participation.

Chapter Five details the findings gathered from online interviews, online workshops, and asynchronous activities in two phases of participation. I employed thematic analysis to analyse the collected data through participants' engagement to make arguments in relation to my research questions; these analyses have been grouped into themes. Additionally, this chapter outlines how the design intervention (Digital Buddy) emerged from participants' ideas and concepts and how they evaluated and reflected on this intervention in Workshop 2.

Chapter Six (Discussion) aims to explain the findings analytically and critically in relation to the understanding of online respect, factors that influence online respect, and young adults' coping strategies. It interprets and describes the significance of the identified themes in the light of current literature and debate. I conclude this chapter by proposing the contributions to knowledge: A. policy recommendations for the Scottish Government in order to facilitate/encourage feeling respected in an online space (online respect) and B. an in-depth understanding of the role of digital technologies/online platforms in experiencing online respect.

In Chapter Seven (Conclusion), I sum up my insights, reflections, and thoughts on this research project. I reflect on the design process and underline the limitations of this study, in particular in the light of COVID-19. This chapter contains recommendations for future studies where I suggest the under-explored areas. And finally, this chapter

addresses four contributions to knowledge reflected in the research questions and the design process. These contributions included: 1. Definition of both online respect and cyberbullying; 2. The factors that impact online respect among young adults; 3. Policy recommendation to the Scottish Government in the context of online respect; 4. The Interaction Design approach in this research project.

1.7. Summary

This research project seeks to understand feeling respected in an online space and how stakeholders support/encourage feeling respected among young adults in Scotland. In doing so, the Interaction Design approach in this research project provides for a greater understanding of these subjects socioculturally, environmentally, and philosophically as well as the role of digital technologies in experiencing respect in an online space. I also propose policy recommendations for the Scottish Government to ensure/enforce feeling respected among young adults.

In the following chapter, the literature on cyberbullying, its characteristics, anti-cyberbullying policies, and feeling respected in an online space are reviewed. Once the foundations of feeling respected in an online environment have been documented, I present the theories that enable understanding of the role of digital technologies/online platforms in shaping online users' behaviours; affordance and technological mediation theories. These theories help me to develop my understanding of the Interaction Design approach in this research project. Overall, Chapter Two discusses the current cyberbullying literature and the Scottish Government's anti-cyberbullying strategies and policies.

Chapter Two: Literature Review

2.1. Introduction

Hardware and software continuously are being developed and optimised allowing people to interact in different ways, easier and more entertaining (Moggridge, 2007). The way people communicate has changed drastically during the last decades and is still in constant evolution (Ibid). Despite the positive or neutral effects of new digital technologies, they could also be used as platforms for hurtful and humiliating messages to many people (Lonigro et al., 2014). One of the first digital technologies that have used cyberbullying was emails; now due to the use of the Internet, this platform is more complicated than ever (Elçi & Seçkin, 2016). Some of the most common venues are instant messaging, chat rooms, websites, online games, social networking sites, and text messaging (Kowalski & Limber, 2013). Even some online activities, such as online shopping, online research, and video sharing have the potential of experiencing cyberbullying (Navarro & Jasinski, 2013).

While young adults (18-24 years old) see digital technologies as an essential part of daily lives and social interactions and spend more time in an online space, the majority of cyberbullying studies have been focused on children (under 16 years old). Gahagan et al. (2016) addressed that over the last decade (from 2004 to 2014) the use of social media among young adults drastically increased (from 9% to 89%). Raskauskas and Stoltz (2007) outlined that easier access to the Internet, widespread availability of new technologies, and an increasing reliance on social networking and online platforms could potentially increase cyberbullying incidents.

In this chapter (Literature Review Chapter), I will investigate the literature surrounding current debates and understanding of cyberbullying (context) and feeling respected in an online environment (online respect). I will begin by outlining the definitions and understanding of cyberbullying and its impact on online users' health and well-being. Then, I will attempt to investigate the relations between cyberbullying and society/communities. Within this section, I will elaborate on the stigma surrounding cyberbullying, the role of peer influence on cyberbullying behaviour, the current cyberbullying laws and regulations, and the tensions between cyberbullying and

freedom of speech. Within the next section, I will explore the relationship between cyberbullying and digital technologies and discuss the online disinhibition effect. Following that, I will investigate how young adults have dealt with cyberbullying incidents and how stakeholders, such as organisations, the Scottish Government, parents, Universities, and bystanders could help young adults deal with cyberbullying incidents. In the next section, I will outline online ethics and highlight the studies that have explored online respect and/or ethics. And finally, I will elaborate on affordance theory and technical mediation theory in order to have a detailed and better understanding of online users' perceptions and activities; these will help to develop methodology and methods in the Methodology Chapter.

2.2. Cyberbullying: a complex phenomena

Cyberbullying has become one of the common threats to safety, identity, personal privacy and well-being that can occur to anyone without differentiation in any age, gender, ethnicity, academic performance, and socioeconomic level (Arıcak et al., 2008). It is a form of interpersonal violence that can cause short and long-term physical effects, such as physical aggression and suicide ideation and attempts (Smith, 2012; John et al., 2018; Hinduja & Patchin, 2010; Chen et al., 2018; Harper, 2017), psychological effects, such as violence, anxiety, and depression (Jiang et al., 2020; Brewer & Kerslake, 2015; Varghese et al., 2017; Bannink et al., 2014; Guo, 2016; Cho et al., 2017), and social effects among victims, such as academic difficulties, diminish self-worth and disrupt relationships (Vivolo-Kantor et al., 2014; Huang et al., 2018; Patchin & Hinduja, 2010a; Ortega, 2009; Şahin, 2012; Juvonen & Gross, 2008; Bottino et al., 2015; Beran & Li, 2007). Put simply, scholars outlined that youth who experience cyberbullying both as cyberbullies and as victims have worse subjective health than those who are not involved in cyberbullying (Gradinger et al., 2009; Sourander et al., 2010).

Estimations differ as to the percentage of online users who have experienced cyberbullying varied from 10% and 80% globally, depending on the variance in cyberbullying definitions and methodologies (Cassidy et al., 2013; Kowalski et al., 2014; Smith et al., 2008; Mora-Merchan et al., 2010; Vandebosch & Van Cleemput, 2008). For instance, Martínez-Monteagudo et al. (2019) addressed that nearly 20% of university students (18-46 years old) reported being cyberbullied in Spanish

universities. Another study showed that 55% of university students (18-22 years old) have experienced cyberbullying at least once in their life in Turkish universities (Dilmac, 2009).

For the purpose of this research study, I reviewed more than 400 cyberbullying journals, articles, and reports. The majority of cyberbullying articles were classified into the fields of Psychology (Ex. El Asam & Samara, 2016; Lianos & McGrath, 2018; Leung et al., 2019), Medicine (Ex. Waasdorp & Bradshaw, 2015; Fahy et al., 2016; Panumaporn et al., 2020), Education (Ex. Hunnicutt Hollenbaugh, 2015; Johansson & Englund, 2020), Criminology and Law (Ex. Lievens, 2014; Jang et al., 2014; Langos, 2014), Mixed (including more than one main field, such as Psychology and Medicine) (Ex. DeSmet et al., 2014; Selkie et al., 2015), and others, such as design (Ex. Daskal, 2018; Al-garadi et al., 2016; Zhong et al., 2021). The highest percentage of articles were published in the field of psychology, and so far, the majority of articles investigated victims' behaviours.

To date, most research on cyberbullying has focused on the characteristics of cyberbullies (Ex. Schenk et al., 2013), the prevalence of cyberbullying (Ex. Francisco et al., 2015; MacDonald & Roberts-Pittman, 2010; Selkie et al., 2016), the negative outcomes for both victims and cyberbullies (Ex. Bonanno and Hymel, 2013; Kowalski et al., 2015; Selkie et al., 2016), patterns of behaviours (Ex. Kowalski et al., 2014), strategies (Ex. Chan et al., 2020; Slonje et al., 2013), cyberbullying definitions (Ex. Zych et al., 2015), and differences and similarities to traditional bullying (Ex. MacDonald et al., 2010).

Despite an increasing number of cyberbullying among young adults (over 18 years old), a large number of research studies explored cyberbullying among children under 16 years old, in particular in school settings (Chan, 2020; Gahagan et al., 2016; Myers & Cowie, 2017). In other words, cyberbullying broadly has been considered an advanced form of school bullying in articles by various researchers and policymakers (Festl et al., 2017; Wade & Beran, 2011). The age of online users in cyberbullying studies could be all-important when considering the social, environmental, economical, and legal context of this phenomenon (Myers & Cowie, 2017). Besides, as mentioned earlier, most cyberbullying interventions have focused on individual (especially children) behaviour and attempted to change the attitudes and behaviour of

cyberbullies with less consideration of the role of groups, organisational and workplace culture (Doane et al., 2015; Deschamps & McNutt, 2016; Chan et al., 2021). It might be explained by the fact that cyberbullying has been a centre of attention in the psychology department. Additionally, Chan et al. (2021) underlined that cyberbullying studies in the non-school setting are underexplored and suggested future research to investigate cyberbullying among college students and professional workers.

Overall, cyberbullying has generated a new set of challenges for researchers that have been very different from traditional bullying (Sabella et al., 2013; Wong-Lo et al., 2011). Sabella et al. (2013) addressed "these [challenges] include the anonymous nature of the problem, greater breadth of audience, the lack of authority in cyberspace, and 24-h access to technology, as well rapid technological changes continually providing new means by which harm can be inflicted. These challenges, together with the rapidly changing landscape of technology, will continue to make future research in this area as difficult as it is necessary" (p.2709). Within the following sections, I elaborate on these challenges and characteristics of cyberbullying.

2.2.1. Terminology

Cyberbullying is a phenomenon that is difficult to define and often misunderstood (Corliss, 2017). As digital technologies continue to develop and expand, cyberbullying has become difficult to define (Nocentini et al., 2010). In other words, the complexity and accelerated evolution of digital technologies could make any cyberbullying classification and definitions often obsolete. To date, scholars have not agreed on a uniform definition of cyberbullying (Langos, 2012). Using dissimilar definitions could result in various results and outcomes since studies could investigate the different phenomena and measure different experiences, depending on the definition or interpretation of the definition used (Tokunaga, 2010). The absence of a single definition could lead to invalidating subsequent findings since most people lack an even rudimentary understanding of cyberbullying (Notar et al., 2013).

There are various definitions of cyberbullying with degrees of specificity (Hutson, 2016). For instance, Li (2009) refers to cyberbullying as "bullying via electronic communication tools, such as email, cell phone, Personal Digital Assistant (PDA), instant messaging or the World Wide Web" (p. 224). Another definition detailed that

cyberbullying would be "content that is published online by an individual and that is aggressive or hurtful against a victim" (Van Hee et al., 2018, p.22). Whereas, Smith et al. (2008) asserted, "[cyberbullying is] an aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and overtime against a victim who cannot easily defend him or herself" (p. 276). Further Redmond et al. (2018) provided the following definition: "cyberbullying involves the use of information and communication technologies to support deliberate, repeated, and hostile behaviour by an individual or group, which is intended to harm others'' (p.2).

The majority of cyberbullying scholars define it as an extension of in-person bullying that occurs in an online environment (Aricak et al., 2008; Kowalski & Limber, 2008; Patchin & Hinduja, 2006; Raskauskas & Stoltz, 2007; Smith et al., 2008; Dredge et al., 2014). Their definitions were based on three main in-person bullying criteria: A. repetition: "repeatedly passing on or spreading hurtful content that harms a person" (Chan et al., 2021, p.2); B. deliberate intent to harm: cyberbullying intends to harm the victim (Menesini & Nocentini, 2009); C. power imbalance: an imbalance of power could be created by advanced technical awareness and skills in using digital technologies/online platforms and anonymity (Menesini et al., 2012a; Ybarra et al., 2012; Langos, 2012).

However, there is an ongoing debate about these definitional criteria among scholars (Chan et al., 2021; Patchin & Hinduja, 2015; Langos, 2012). A number of studies outlined that a single cyberbullying attack could have a chief effect due to the nature of online platforms: contents cannot be easily removed (Aboujaoude et al., 2015; Thomas et al., 2015), or a single act of posting might be shared several times by others (Jang et al., 2014; Patchin & Hinduja, 2015). Regarding the intention to harm criteria, some scholars stated that the nature of cyberbullying could make it difficult to evaluate the intention to harm, as it relies on the interpretations of victims' perspectives of the attack (Menesini & Nocentini, 2009; Chan et al., 2021). Victims, for instance, could experience cyberbullying by teasing content responding to their appearance (Chan et al., 2021).

In the case of power imbalance, having technical knowledge regarding the existing tools/features could indeed empower users either victims or cyberbullies. However, it seems that, in general, digital technologies are limited to offering support or

prevention tools for users. Arguably, this power imbalance of cyberbullying could link to the absence of ethical affordance in designing digital technologies rather than higher technical skills in using digital technologies. I elaborate on affordance in the affordance section. For instance, despite using reporting features in an online platform, cyberbullies could still make infinite profiles and attack victims over and over again. This doesn't indicate that victims have less technical skills or awareness, yet it demonstrates what the design of digital technologies failed to afford.

In summary, establishing a cyberbullying definition has been problematic as it largely depends on the researcher, who is doing the definition. Besides, online users of different ages may also have different ideas about what cyberbullying could mean and involve (Smith et al., 2002); this difference in understanding between ages can impact investigations into cyberbullying (Naylor et al., 2006). As a result, as addressed in the previous chapter, this PhD also attempts to explore participants' (young adults and stakeholders) understanding of cyberbullying.

However, it is still a priority to reach a reasonable definition of cyberbullying in the literature review to proceed with this PhD. Hence, I conclude cyberbullying is defined as using digital technology in an online environment for harassment, and harmful interactions in a repetitive manner. In the Findings and Discussion Chapters, I elaborate more on cyberbullying definitions offered by participants and develop a cyberbullying definition according to participants' understanding of the matter.

2.3. Cyberbullying and society

2.3.1. Stigma surrounding cyberbullying

Cyberbullying can be a stigmatising topic (Kowalski et al., 2015; Gahagan et al., 2016; Moreno & Vaillancourt, 2017). Thelwall and Cash (2021) argued that stigmatising cyberbully/bully/victim labelling could have a negative impact on the help-seeking process. They noted that "victims often do not seek support because they blame themselves, regard victimhood as stigmatising..." (p.480). Similarly, Gahagan et al. (2016) referred to it as "a stigma associated with reporting cyberbullying" (p.1104). They indicated that "[participants] made the decision to reach out to someone based on how it would influence their self-preservation" (Gahagan et al., 2016, p.1104). In addition, Waterski and Wakeboard Scotland (2020) in their

anti-cyberbullying/anti-bullying approach pointed out that "labelling people as bullies or victims can be disempowering and unhelpful in changing their behaviour or supporting their recovery from being bullied" (p.8).

In 2021, Alsawalqa and Yang separately published papers about social stigma as one of the factors driving cyberbullying incidents. Both were concerned about the social stigma of anti-Asian/Chinese racism during COVID-19, which can adversely influence individuals' self-concept, social identity (Alsawalqa, 2021), and mental health (Yang, 2021). Alsawalqa (2021) addressed that "social stigma often leads to discrimination against individuals based on their culture, appearance, sex, nationality, ideas, or physical features [in an online space]" (p.2).

Other studies stressed various forms of social stigmas, such as obesity stigmatisation in an online context (Jeon et al., 2018; Thelwall & Cash, 2021), ethnic discrimination in the context of social media (Cano et al., 2020), and sexual and/or gender identity in the context of cyberbullying (Abreu & Kenny, 2017; Angoff & Barnhart, 2021). As Jeon et al. (2018) outlined cyberbullying is one of the most common forms of expressing weight stigma in an online space that “attack the self-concept of the receiver, intending to deliver psychological pain” (p.2). These studies investigated the negative impact of social stigma on online communication and the mental and physical health of people; and suggested minimising social stigma as an effective means to discourage the possibility of cyberbullying.

2.3.2. The negative impact of peer group/social influence in encouraging cyberbullying behaviour

A large number of studies attempted to investigate the psychological correlates of cyberbullying behaviour and the role of contextual variables in encouraging cyberbullying behaviour (Piccoli et al., 2020; Calvete et al., 2010; Fanti et al., 2012). Social influence and peer group influence as one of the contextual variables have been found to play a key role in promoting cyberbullying behaviours (Piccoli et al., 2020; Baldry et al., 2015; Singh & Drugunalevu, 2016). Social pressure/influence is defined as the influence of online social groups on individuals' behaviour, action, and thoughts in a certain way (Bastiaensens et al., 2016). This influence could lead to negative behaviours or norms (Eg. cyberbullying) even that don't accord with individuals' behaviour and values (Shim & Shin, 2016; Piccoli et al., 2020).

The sense of social identity could encourage individuals to discover and adopt the ingroup norms as a valid standard to shape their beliefs, values, behaviours, and attitudes (Piccoli et al., 2020). Prior research pointed out that the position that individuals hold within the groups could motivate members to behave according to the group's norms (Piccoli et al., 2020). In the case of cyberbullying, numerous studies outlined that central group members (group members who have the most power) are more likely to motivate cyberbullying behaviours (Sarmiento et al., 2019; Wegge et al., 2016; Baker, 2014).

Social belonging is supported in the literature as another underlying motivator for cyberbullying (Brandau & Evanson, 2018; Piccoli et al., 2020). Brandau and Evanson (2018) noted that social belonging refers to the sense of connectedness someone feels toward other members and might explain why individuals follow the ideology of their peers and join in cyberbullying.

Another property of social influence, social conformity, could also be considered to have an impact on cyberbullying behaviour (Shim & Shin, 2016). Shim and Shin noted that changing behaviour, values, and thoughts in order to match others in the group could be understood as social conformity. They suggested that social conformity might encourage bystanders to collectively attack the victim because of peer approval or they might fear that not participating might cause negative consequences (Shim & Shin, 2016).

In brief, online users by navigating the social environment, their self-representation from an individuals-based identity would shift to a group-based identity, social identity (Piccoli et al., 2020). The social identity of individuals could encourage them to discover the group norms through observations, and interactions with other members and adopt their beliefs, attitudes, values, and thoughts accordingly (Ibid). According to scholars, these group norms or peer norms could influence cyberbullying behaviour (Aizenkot & Kashy-Rosenbaum, 2018; Piccoli et al., 2020; Bastiaensens et al., 2016).

2.3.3. Cyberbullying and laws and regulations

Prior cyberbullying studies underlined that offline authorities (e.g., laws and regulations) and online mechanisms (e.g., reporting systems and detection algorithms) play a key role in protecting online users from being victimised (Chan et al., 2020; El

Asam & Samara, 2016; Baek & Bullock, 2014). "Strictness of criminal sanctions for cyberbullying crimes (which are often incorporated through separate legislation) can vary by age and graveness of offence" and country to country (Dasgupta, 2019, p.188). In the UK, cyberbullying is not a criminal offence; however, "there are a range of laws that criminalise activity that may be related to cyberbullying, including discrimination, harassment and threats" (Childnet International & Fraser, 2018, p.10).

In the UK, the areas of laws that could be seen as applicable could include: “criminal law; tort law (in terms of negligence and libel); human rights law (harassment and discrimination); constitutional law (freedom of expression and privacy); administrative law; and education law” (Cassidy et al., 2013, p.597). Cyberbullying as a legal offence could be under Education and Inspections Act 2006; Children Act 2004; Human Rights Act 1998; United Nations Convention on the Rights of the Child (UNCRC); Equality Act 2010 (p.25); Protection from Harassment Act 1997; Computer Misuse Act 1990; Malicious Communications Act 1998; Communications Act 2003, and the Public Order Act 1986; The Criminal Justice and Public Order Act 1994; and Breach of the Peace (common law) (Myers & Cowie, 2017; Respecting others: Cyberbullying, 2011; Angus Council, 2020; Respectme, n.d.a).

Chen (2021) and White (2019) raised their concerns regarding the lack of clear cyberbullying consequences and data protection laws and the lack of a clear distinction between cyberbullying and criminal offences, such as hate crimes. The absence of law enforcement and consequences in an online environment as well as ambiguous legal issues (such as the legal definition of cyberbullying) could result in a lack of supervision of cyberbullying and increase the possibility of experiencing cyberbullying (Jang et al., 2014). Regulatory actions could lead to increased awareness of cyberbullying and "greater clarity around the types of behaviours that are considered inappropriate or illegal, as well as set a norm or standard within society" (Cross et al., 2015, p.114).

However, in arguing against Chen’s (2021) and White’s (2019) viewpoints, Reason et al. (2016) stressed that some school students asserted that sometimes potential risks exacerbate after reporting the cyberbullying incidents to school officials or law enforcement officers. As a result, school students would rather share their cyberbullying experiences with their peers and families (Reason et al., 2016). Overall,

social influences and legal challenges associated with cyberbullying, such as freedom of speech and expression, social stigma or fear of school sanctions and/or increased parental supervision could potentially offset the intended deterrent impact of the legislation and laws (Dasgupta, 2019). For instance, criminalising cyberbullying could come in conflict with online users' freedom of speech.

To improve online regulations, Cross et al. (2009) suggested that the Government should engage more effectively with children, and empowered them to access the online environment "creatively, knowledgeably and fearlessly" based on five rights (digital rights) (The Scottish Government, 2017b, p.35). These five digital rights included: the right to remove, the right to know, the right to safety and support, the right to make informed and conscious choices, and the right to digital literacy (Ibid). The Scottish Government (SG) believed that "organisations should sign up and adhere to, in order to sufficiently protect and support young people in a digital environment" (Ibid).

One of the limitations of empowering children and young people (under 18) in the SG is that their needs and understanding of the online environment and communication would be different from young adults (18-24). Another criticism of these digital rights is that if organisations/online platforms don't sign up, it is unclear how the SG could protect these rights.

Moreover, El Asam and Samara (2016) suggested schools, online platforms and the government could be key stakeholders to raise awareness of cyberbullying laws. They indicated that "educational messages, ensuring privacy, and empowering users while installing reporting tools" could help online platforms educate online users (El Asam & Samara, 2016, p.136). Regarding the Government approach, they believed that "enacting a law can be a way of educating people and influencing their social norms" (El Asam & Samara, 2016, p.137).

With respect to the role of government, scholars encouraged government agencies to educate young adults and children on: the appropriate use of online platforms/digital technologies (Chan et al., 2020; El Asam & Samara, 2016), understanding their rights and responsibilities online (digital citizenship) (Stone, 2014), cyberbullying/bullying and anti-bullying/anti-cyberbullying strategies (Cross et al., 2009; The Scottish Government, 2010; Lievens, 2014), how to support each other online (Cross et al.,

2009; National Children's Bureau, 2015); online safety (Long et al., 2020; National Children's Bureau, 2015; Pedersen, 2013); and existing cyberbullying/online safety laws, etiquettes and consequences (Cassidy et al., 2009; Childnet International & Fraser, 2018).

Furthermore, in Europe, digital technology companies and online platforms have been advised by the European Commission and online platforms to develop better policies to protect and support online users. El Asam and Samara (2016) pointed out that digital technology companies should be committed to applying "Safer Social Networking Principles to safeguard young users" (p.136). Such principles included: "delivery of educational messages, ensuring privacy, empowering users while installing reporting tools" (Ibid). Considering the UK has left the European Union, it is undetermined how the Government will reflect upon these principles.

Some scholars have suggested that online platforms should establish zero-tolerance policies toward cyberbullying behaviour and explicitly indicate the punishment or consequences of cyberbullying behaviour, such as temporary account suspension (Chan et al., 2020; Milosevic, 2017; Veale, 2020), or taking down contents (Stone, 2014). Daskal (2018) encouraged online platforms to raise awareness of users' digital rights identity "to understand his or her social, political, and cultural prerogatives in the digital sphere" (p.252).

Moreover, a lack of effective consequences or punishment for cyberbullies' behaviour was found to promote cyberbullying incidents (Pettalia et al., 2013). Previous studies have pointed out that the perception of relatively limited cyberbullying consequences could discourage victims to report the incidents (Pettalia et al., 2013; Wachs & Wright, 2018).

Scholars noted that some aspects of digital technologies/online platforms could contribute to cyberbullying others by concerning less about the consequences of the cyberbullying behaviour/action. These aspects included: A. The characteristics of the online environment such as anonymity and distance could encourage online users to engage in cyberbullying behaviour (Wachs & Wright, 2018). B. Lack of the immediacy of the consequences in an online space could encourage cyberbullying behaviour (Steffgen et al., 2011). C. Not receiving any consequences in an online space could contribute to encouraging young adults to cyberbully others (Pettalia et al., 2013).

In addition, Lievens (2014) stressed that cyberbullying consequences/punishment (such as taking down content) or improving data protection and security depends on online platform providers' rules and legislation. However, Daskal (2018) emphasised that data protection and security were imposed by law and considerations of public parties or morals. Chen (2021) outlined that "the right to data protection is not absolute, but is often subject to restrictions" and recommended that "[it] should first be debated among the public and then clearly defined by law" (p.53). In other words, in order to discourage cyberbullying and online harm, "a society should reflect on data protection laws" (Chen, 2021, p.207).

In arguing against the effectiveness of *consequences* that could discourage cyberbullying behaviour, Baccarella et al. (2018) noted that sometimes cyberbullies, despite facing the consequences of their actions, still post harmful content. They stated that "[online] users revealed that they did not properly think about their reason for posting, misjudged who could be the audience, was highly emotional when posting, or were under the influence of drugs or alcohol" (p.434).

To summarise, "there is a clear need to work with law enforcement agencies and to legally protect internet users against cyberbullying"(El Asam & Samara, 2016, p.137); although the legal and law systems have been slow to act on cyberbullying (Aboujaoude et al., 2015; Perdew, 2016). Overall, developing cyberbullying laws has been challenging particularly due to a lack of uniform definition of cyberbullying, the age of cyberbullies, freedom of speech, and difficulties in establishing evidence and intent of cyberbullies (El Asam & Samara, 2016; Aboujaoude et al., 2015). Saura et al. (2021) underlined the lack of ethical design of online platforms and encouraged "the establishment of laws similar to the General Data Protection Regulation (GDPR) law developed by the European Commission" to protect online users' data (p.276). Similarly, Chen (2021) stressed the significance of data protection laws and suggested that a "list-based data protection regulatory toolbox" could benefit policy-makers to navigate these policies in an online space (p.207).

2.3.3.1. Online Safety and Social Media Platforms: Policies and Practices

With the increasing popularity and usage of social media platforms, it is crucial to maintain safe and respectful environments for all users. To this end, the UK Government has developed a set of recommended actions for online platforms to

prevent harmful conduct such as cyberbullying, insulting, intimidating, and humiliating behaviours (Department for Culture, Media & Sport and the Department for Digital, Culture, Media & Sport, 2019). However, the code of practice doesn't address the root cause of online safety issues, which is often the lack of enforcement of existing policies.

To address this, online platforms must take a more proactive approach towards moderation and enforcement. Moreover, the code of practice lacks specific guidelines for implementation and provisions for user education or awareness campaigns. Platforms could invest in educating their users about online safety and promoting responsible online behaviour. Furthermore, the code of practice is voluntary, which may lead to inconsistency in policy implementation and a lack of legal consequences for non-compliance.

Despite these criticisms, social media platforms like Meta, Instagram, and Twitter have established policies and measures to detect and remove violating content using AI, human review, and online user reports. By continuing to review and improve their policies, online platforms can promote positive online interactions and maintain the trust and safety of their users.

In this section, I review the policies of three major social media platforms: Meta, Instagram, and Twitter. Meta, formerly known as Facebook, has a comprehensive set of policies that address issues such as hate speech, cyberbullying, and harassment to better protect users (Meta, n.d; About Facebook, 2021). The company has invested in a range of measures to detect and remove harmful content, such as artificial intelligence (AI) and machine learning (ML) algorithms that identify and remove posts that violate community standards (Ibid). The platforms also offer tools to online users to prevent, stop, and report cyberbullying and harassment online.

Similarly, Instagram prioritises creating a safe and respectful environment for its users. The platform prohibits content that promotes violence, spam, illegal activities, hate speech or harassment and uses detection and removal systems for such content (Instagram, 2018). Online users can report violating content, which is then reviewed and removed by a team of moderators. Instagram also collaborates with law enforcement if there is a risk of physical harm or a threat to public safety.

Twitter also prohibits hate speech, harassment, and abusive behaviour, and has implemented a combination of AI and human review to detect and remove violating content (Twitter, 2019). Online users can report offensive or harmful content, and the platform has also introduced measures to protect public figures and journalists from harassment and abuse.

To summarise, online platforms such as Meta, Instagram, and Twitter have established codes of practice that govern social media behaviour and usage. These policies aim to create safe and respectful environments for online users, and they rely on a combination of AI, human review, and user reports to detect and remove violating content. To ensure the continued promotion of positive online interactions and the maintenance of user trust and safety, it is crucial for online platforms to regularly review and improve their policies. While the code of practice from online platforms is a step towards addressing online safety concerns, several criticisms can be made. Online platforms could take a more proactive approach towards enforcing their policies, provide specific guidelines for implementation, invest in user education and awareness campaigns, and consider making compliance with the code of practice a legal requirement.

2.3.4. The relations between cyberbullying and freedom of speech

While online platforms and digital technologies have created "great opportunities for the democratisation of expression and the diversification of public discourse [they] have likewise broadened the impact of harm caused online [cyberbullying]" (Theil, 2019, p.41). As the freedom of expression online could count as one of these double-edged sword matters, there is an ongoing debate with regards to effectively discouraging cyberbullying without restricting the freedom of expression (El Asam & Samara, 2016; Betts, 2016; Briggs, 2018).

One of the properties of the tension between freedom of speech and cyberbullying could link to criminalising cyberbullying. Zych et al. (2015) argued that the first cyberbullying article published within the Law field (the country of origin is unknown) contained a discussion about freedom of expression "which can only be restricted when there is a valid reason to do it" (p.192). They believed this could potentially "make victims vulnerable to internet bullying" (Zych et al., 2015, p.192). In addition, Dasgupta (2019) elaborated that "criminalising cyberbullying may often come in

conflict with an individual's constitutional rights to freedom of speech and expression provided by [governmental anti-cyberbullying legislation and laws]".

Moreover, previous studies (such as Myers & Cowie, 2017; Vogl-Bauer, 2014) outlined the blurring lines on how organisations could legally be able to respond to cyberbullying reports. Myers and Cowie were exploring the social and cultural context of cyberbullying among university students. Discouraging cyberbullying at universities appeared to be difficult due to "crossing a number of policing boundaries" by outside agencies (Myers & Cowie, 2017, p. 1180). They found "the tensions between "freedom of speech" of the online world and the need for control and/or censorship" could be challenging (Ibid). However, they stressed that "there is no centralised law or legal requirement for universities [in England and Wales] to have such anti-bullying policies in place. Therefore, within the university context, there is the potential for a legal minefield" (Ibid, p.1177).

Furthermore, scholars found that the online disinhibition effect (ex, online anonymity) could play a significant role in the tension between freedom of speech and cyberbullying (Betts, 2016; Alsawalqa, 2021; Klein, 2017). Whilst some argue that the anonymity of the Internet can promote social movements with the freedom to express their values and beliefs, it could bring motives that are not as noble (Klein, 2017). Prior scholars (such as Betts, 2016; Alsawalqa, 2021; Baker, 2014) hold the view that the online disinhibition effect facilitated cyberbullying through more freedom of expression. In support of this proposition, Betts (2016) suggested that individuals "would say things online that they would not say in a face-to-face setting" (p.42). Betts (2016) added that the hidden identity of individuals by empowering them could result in freedom of expression in a harmful way. Besides, Alsawalqa (2021) argued that both online anonymity and digital freedom of speech could lead to cyber-racism "by fostering people's confidence to express racist opinions and ideologies more openly, without fear of being held accountable" (p.9).

In brief, the relationship between freedom of expression and cyberbullying has been of interest in the field of criminology and law. To this date, prior studies failed to create a balance between cyberbullying and freedom of expression among young adults and children.

2.4. Cyberbullying and characteristics of digital technologies/online platforms

As noted earlier, previous studies discussed cyberbullying definition based on in-person bullying criteria (Moore et al., 2012; White et al., 2018; Wright & Wachs, 2020). In other words, scholars by demonstrating the differences between in-person bullying and cyberbullying attempted to uncover the characteristics of cyberbullying. Unlike in-person bullying, cyberbullying would not be limited to time and space, could be viewed asynchronously and spread quickly, and more widely shared by others (Slonje et al, 2013). It could take place 24/7, leaving the victims no escape from the victimisation (Patchin & Hinduja, 2015). Harmful messages, comments, and video clips on social media could follow the victims anywhere, violating their private space. This omnipresence of cyberbullying could make it difficult for victims to walk away from a situation (Cross et al., 2009).

One of the characteristics of cyberbullying is online disinhibition. Many publications addressed online disinhibition as a chief driver of online users' positive and negative behaviours (Wright & Wachs, 2020; Cheung et al., 2021; Udris, 2014). In particular, it is suggested that online users often say or behave in a way they wouldn't do in the physical environment (Cheung et al., 2021; Udris, 2014). Online disinhibition referred to "a psychological state in which individuals feel more relaxed and willing to engage in certain behaviours in the online environment"(Cheung et al., 2021, p. 49).

Suler (2004) pointed out that online disinhibition could include dissociative anonymity, invisibility, asynchronicity, solipsistic introjection, dissociative imagination, and minimization of authority. As demonstrated in figure 1, Cheung et al. (2021) provided definitions for each of these online disinhibition factors. Overall, online disinhibition could breed a reduction in concern for others' perceptions; even when the perpetrator knows the victim (Mason, 2008). Cyberbullies couldn't see the victim's reaction which may also contribute to a lack of concern for outcomes and reduced inhibitions (Kokkinos & Voulgaridou, 2017).

Dimensions	Definition
Dissociative anonymity	The degree to which an individual perceives that he/she can hide or change his/her true identity in the online environment
Invisibility	The degree to which an individual perceives that he/she is not physically seen by others in the online environment
Asynchronicity	The degree to which an individual perceives that the mode of communication enables delayed responses in the online environment
Solipsistic introjection	The degree to which an individual perceives a voice or an image of the other persons in his/her mind in online communication
Dissociative imagination	The degree to which an individual perceives the online environment as an imaginary world that has no connection to reality
Minimization of authority	The degree to which an individual perceives the absent or diminishing influence of real-life authorities in the online environment

Figure 1. Definitions of online disinhibition factors (Cheung et al., 2021, p.51).

Moreover, Pieper and Pieper (2017) pointed out that social cues and interaction in an online environment differ from the physical environment. "The Internet is governed by norms which are not always compatible with rules established by the larger society" (Udris, 2014, P.259). Prior studies suggested that a lack of non-verbal cues, such as eye contact, or frowns may lead to victimising others (Baker, 2014; Udris, 2014). Udris (2014) outlined that the online disinhibition effect "could influence someone to insult or ridicule others over the Internet, because of the perceived lack of repercussions and/or anonymity" (p.255). In addition, studies emphasised that a lack of tone of voice, other nonverbal cues, use of acronyms and punctuation, and technical features and problems could lead to the inability to convey humour and sarcasm in online communication (Kelly & Miller-Ott, 2018; Breitsohl et al., 2021).

Anonymity as one of the “online disinhibition” factors has been raised as a chief difference between cyberbullying and bullying by various scholars, such as Kowalski et al., 2008; Barlett & Chamberlin, 2017; Douglas, 2016. It appears that anonymity could facilitate cyberbullying as it helps aggressors conceal their identity and diminish accountability (Barlett & Gentile, 2012; McHugh et al., 2018). “Anonymity reduces the sense of responsibility for one’s actions since aggressors can carry out bullying without being recognised" (Halpern et al., 2017, p.705); cyberbullies could easily create a false identity which decreases the chance of being caught (Wong-lo et al., 2011).

According to previous studies, the nature of online platforms and digital technologies could result in misinterpreting content as a threat (Mancino, 2021; Bernhold & Rice, 2020). Prior studies pointed out that online interaction lacks access to nonverbal cues, such as facial expressions, eye contact, physical distance, tone of voice, or body language, which could modify users' behaviour (Barlińska et al., 2013). A lack of nonverbal redressive messages and social context cues could result in the misunderstanding of the meaning and intended interpretation of the initial communication (Darabos et al., 2019; Van Cleemput et al., 2014). In addition, Steer et al. (2020) argued that "young people have a shared understanding of online humoristic aggressive behaviours, such as online banter, describing them as ambiguous and difficult to interpret" (p.1).

Furthermore, overall, cyberbullying literature investigated digital technologies/online platforms that online users (in particular children) have experienced cyberbullying (Francisco et al., 2015; Smith et al., 2008; Jang et al., 2014; Ybarra et al., 2012; Nocentini et al., 2010). The majority of these studies captured certain online platforms where users could experience cyberbullying and investigated the relationships between the usage of these platforms and experiencing cyberbullying (Ibid). For instance, Francisco et al. (2015) in their studies outlined that "the more prevalent technologies reported [by participants] were Facebook (64%), cell phones (43%) and instant messages (43%)".

One of the chief problems with exploring the role of digital technologies in these studies could be they failed to reflect upon what these digital technologies could afford or the impact of these digital technologies on online users' behaviour/actions. Simply, online users communicate with others in an online space via accessible, available, and affordable (or even trendy) digital technologies/online platforms. Digital technologies/online platforms develop so rapidly that by the time these cyberbullying studies would be published, those digital technologies might be outdated. However, on the other hand, conducting affordance of current digital technologies in the context of cyberbullying could be valuable and beneficial in the development of digital technologies.

2.5. Dealing with cyberbullying incidents

As addressed earlier, cyberbullying could have a negative impact on online users' mental health. An understanding of how online users could cope with cyberbullying could be beneficial in the development of anti-cyberbullying interventions and strategies. Coping or dealing with cyberbullying incidents could refer to “the cognitive and behavioural strategies a person employs to manage [the incidents]” (Alipan et al., 2021, p.23). The ways in which online users deal with cyberbullying have been explored by prior scholars (such as Raskauskas & Huynh, 2015; Yang, 2021; Alipan et al., 2021). As demonstrated in figure 2, prior scholars reported three coping strategies that could benefit online users to deal with cyberbullying situations: problem-focused coping, emotion-focused coping, and cyber-specific technological solutions (Raskauskas & Huynh, 2015; Yang, 2021).

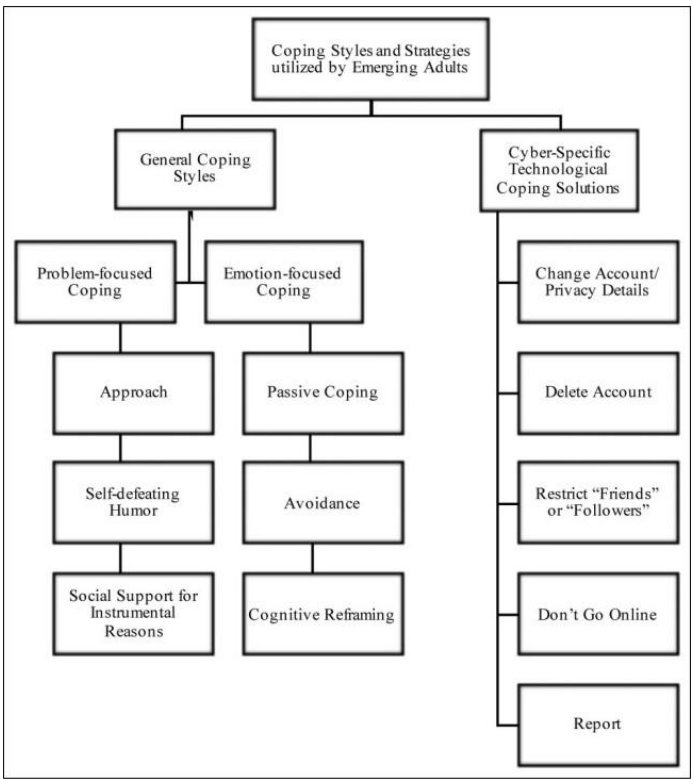

Figure 2. The thematic map of young adults and children's perception of coping strategies (Alipan et al., 2021, p.25)

Problem-focused coping referred to "actively seeking to change and control a stressful situation" (Alipan et al., 2021, p.23) by reaching out to the cyberbully, using humour to

deter the cyberbully, or seeking social and emotional support (Alipan et al., 2021; Byrne, 2021; Dinakar et al., 2012). Furthermore, Alipan et al. (2021) and Byrne (2021) defined cyber-specific technological solutions as an attempt to stop cyberbullying with technical solutions, such as blocking the cyberbully, changing account details or privacy settings, reporting the cyberbullying to the online platform or site moderator, avoiding going online, deleting accounts permanently or temporarily, or restricting social networks.

Another coping strategy identified by scholars was emotional-focused and/or avoidance-focused coping. Emotional-focused strategies were "aimed at changing one's thoughts and feelings rather than actively trying to change the situation" (Alipan et al., 2021, p.27). It could occur through passive endurance of the cyberbullying, reframing the situation as an issue with the cyberbully, not with the victim, or using drugs, alcohol, or self-harm to avoid the situation (Alipan et al., 2021; Byrne, 2021). Byrne (2021) outlined that some college students "shared that their emotional-focused strategy was to move on, e.g., "Let it go" or "None, who cares what people say about me.""(p.169). Furthermore, Raskauskas and Huynh (2015) described avoidance-focused coping strategies as, when someone "avoids or removes him or herself from the stressful situation either physically (walking away or blocking upsetting messages) or cognitively (not thinking about it or saying nothing can be done)" (p.119).

Overall, It seems that coping strategies depend on technological development, accessibility, availability, ease of use, technology/technology feature awareness and technology design. Apostolides (2017) underlined that individuals "should be able to use their device without fear" (p.5). Apostolides (2017) agreed that current technological solutions would not be sufficient to deal with the cyberbullying incident. Apostolides (2017) explained that "by deleting the content, it does not mean that the incident is over or erased from the victim's mind, as once something is seen it cannot be unseen…Therefore, it would be of great value for children and adolescents to have [other] coping tools…" (Ibid). Cunningham et al. (2014) were other scholars who found a chief opportunity to design better technological features, such as reporting: "Younger students lack confidence in the ability of adults to deal with bullying and are concerned that reporting may compound the problem or prompt reprisals. Students in all roles

preferred an anonymous online process that might simplify reporting, limit the risk of retaliation" (p.380).

The process of choosing a coping strategy depends on cyberbullying situations, the resources available, and the level of knowledge of strategies and resources to the person attempting to deal with it (Raskauskas & Huynh, 2015; Von Mare´es & Petermann, 2012). Francisco et al. (2015) pointed out that "college students (as well as younger students) do not always know how to regulate their use of coping strategies". Consequently, scholars, such as Von Mare´es and Petermann (2012) have suggested including coping skills within social skills programmes in schools as effective means to counter cyberbullying. However, Dinakar et al. (2012) outlined that this approach would not be beneficial, because schools typically offer "a set of reasonable, but vague guidelines, such as stay[ing] away from bullies, telling someone about a negative bullying experience" (p.3).

2.6. Anti-cyberbullying strategies and interventions

Previous studies indicated that stakeholders, such as universities, governments, organisations, schools, parents, and bystanders could develop anti-cyberbullying interventions and strategies to help young adults to deal with cyberbullying incidents or experience less cyberbullying (Broll & Reynolds, 2021; Vaill et al., 2021; Pepler et al., 2021). Scholars found that children and young adults need the support of their parents (Myers & Cowie, 2017; Broll & Reynolds, 2021), schools (Pepler et al., 2021; Lough Dennell & Logan, 2015), universities (Vaill et al., 2021; Kokkinos et al., 2014), social workers (Pepler et al., 2021), bystanders and friends (Pepler et al., 2021; Madden & Loh, 2018), communities (Argyll & Bute council, 2019), and colleagues (Madden & Loh, 2018) in order to deal with cyberbullying situations.

A large number of anti-cyberbullying articles have developed preventional programs and interventions, such as educational videos, games or interactive narratives (for instance learning how to deal with cyberbullying experience) (E.g. Chisholm, 2014; Lieberman et al., 2011; Ashktorab & Vitak, 2016), counselling, raising awareness, and guidelines (Calvo-Morata et al., 2020; Gaffney et al., 2018). Most educational prevention resources have focused on teaching what cyberbullying is and its consequences (Lievens, 2014), technological awareness and online safety (Wong-Lo & Bullock, 2014), and digital citizenship (Bauman et al., 2015). Crosslin and Golman

(2014) found that "awareness programs can continue to help shape cultural values and norms against cyberbullying" in the community (p.19).

As noted in the previous sections, the most popular strategies pupils advocated for cyberbullying were avoidance: blocking or deleting messages or identities or changing one's email address or phone number. The role of school staff, local authorities, organisations, and parents could be to monitor or manage children's online activities (Stone, 2014; The Scottish Government, 2017; Childnet International & Fraser, 2018). Childnet International and Fraser (2018) underlined that school staff should address cyberbullying by awareness-raising, blocking, filtering policies, and restricting access to online platforms. Schools should educate children about digital literacy, responsible use and online safety (Childnet International & Fraser, 2018). However, it remained unclear whether students report cyberbullying incidents and seek help from schools; or whether schools' staff anti-cyberbullying approach (filter, block and monitor students' content) could be effective (Ibid).

Restricting and limiting time in an online environment was another anti-cyberbullying approach recommended by scholars (Barlett & Chamberlin, 2017; Mancino, 2021; Balakrishnan, 2015; Mason, 2008). These studies asserted that spending more time in an online environment could result in experiencing more cyberbullying (Ibid). Mancino (2021) suggested, "intentionally limit time spent on social media and other cyber-platforms in an effort to disconnect and minimise exposure to its possibility for 24/7 connectivity" (p.258).

Simply, this recommendation could be equivalent to suggesting school students spend less time in schools to experience less in-person bullying! Alienating digital technologies by these scholars could seem that they might have a limited understanding of the online environment and digital technologies and their positive impact on individuals' lives. In particular, in the light of the COVID-19 pandemic, young adults and children could continue their education due to the help of online platforms and digital technologies. Besides, individuals, especially celebrities, could be involved in cyberbullying without spending more time in an online space. For instance, a celebrity despite not having any online social media profiles could be involved in cyberbullying; a cyberbully could create and share an offensive meme of the celebrity.

Furthermore, several reports in Scotland (e.g. Argyll & Bute council, 2019) suggested assemblies as proactive cyberbullying strategies for schools and third-sector organisations in the UK. In arguing against assemblies in schools, Bauman et al. (2015) found that innovative education benefits anti-cyberbullying strategies in schools. They recommended that "integrating innovative approaches into existing programs or routines" could enhance feasibility (Ibid, p.303).

Regarding the support of universities, studies stressed that currently in the UK, due to the fact that university students as independent young adults are responsible for their actions, "there are no centralised systems or guidelines to deal with the problem [cyberbullying], and there are vast differences across the sector" (Myers & Cowie, 2017). However, Kokkinos et al. (2014) outlined that as the online environment has been used as a learning and socialising tool for university students, universities should become more active in their formulation of anti-cyberbullying strategies. They encouraged universities to promote social skills training and problem-solving skills in their anti-cyberbullying policies (Ibid).

Moreover, scholars noted the significant impact of effective training on schools' staff (Argyll and Bute council, 2019), parents/carers, youth (Pepler et al., 2021; Zurcher et al., 2018), and universities (Myers & Cowie, 2017) to build skills and develop supportive relationships with young people. The training could include how to identify, handle the incident and discourage cyberbullying behaviour (Vaill et al., 2021).

Madden and Loh (2018) believed that educating employees should be part of workplace culture so that they can identify and mitigate the behaviours swiftly and effectively. They underlined that "management must therefore establish effective policies that define cyberbullying and that clearly communicate to employees the appropriate steps to be taken when the negative act occurs" (Madden & Loh, 2018, p.18).

With respect to the support of online platforms/digital technologies, several studies discussed improving data privacy and security as another means by which digital technology providers and online platforms might try to tackle cyberbullying (Fox & Moreland, 2015; Van Hee et al., 2018). As a result, according to studies, such online platforms would be required to: monitor users' activity independently (Van Hee et al., 2018; Cross et al., 2009), design a better interface (Cross et al., 2009), use online

privacy protection, provide anonymous reporting, referral systems and software safeguards (Wong-Lo & Bullock, 2014; Cross et al., 2009), and privacy of bystanders helping intentions (Bastiaensens et al., 2015).

Furthermore, in an attempt to address the cyberbullying phenomenon, the UK Council for Child Internet Safety (UKCCIS) provided a series of recommendations and guidelines as to how digital technology providers and developers could enhance the online safety of young people (under 16 years old) (National Children's Bureau, 2015). The UKCCIS anti-cyberbullying recommendations included online safety information, education, and awareness for online users; editorial responsibility (ensuring that content would be appropriate to children); ensuring that online users understand how their data will be used and who has access to them; ensuring online users could easily report abusive and offensive contents; ensure that online users under the age of 18 are not searchable and their sensitive info/data kept private; content screening and moderation by service providers and 57 developers; identity authentication and age-verification; provide clear guidelines on how to behave responsibly and respect digital rights; ensure online platforms are consistent with local laws and take legal actions against abusive reports that which is directed toward children and young people (under 16 years old) (National Children's Bureau, 2015).

With respect to the Scottish Government's anti-cyberbullying strategies and policies, the Scottish Government fails to reflect young adults' experiences (over 16 years old) in Scotland. The Scottish Government refers to RespectMe as Scotland's anti-bullying/anti-cyberbullying service (Respectme, n.d.b). RespectMe is fully funded by the Scottish Government and managed by SAMH (Scottish Association for Mental Health) in partnership with LGBT Youth Scotland (Ibid). RespectMe offers up-to-date information on the nature, extent, causes and consequences of bullying/cyberbullying among adolescents (under 16 years old) in Scotland.

Moreover, a large number of studies also have centred around the bystanders' role and consequences of possible interventions to prevent and help individuals in cyberbullying situations (Dillon & Bushman, 2015; Agatston & Limber, 2018; Young et al., 2018, Brody & Vangelisti, 2016). Empathy has been a major component of bystander intervention, because bystanders by "understanding victim's feelings well, are more likely to defend victims" (Song & Oh, 2018, p.274). Previous studies have

posited that cyberbullying could be associated with low affective empathy and consequently encouraged children and young adults to be more empathetic toward each other (Doane et al., 2014; Ang & Goh, 2010). Several studies also found that bystanders could respond to cyberbullying incidents with negative (reinforcing) behaviours (Gahagan et al., 2016; Song & Oh, 2018). It is important to note that exploring the bystanders' roles and interventions has not been the aim of this PhD.

2.7. Cyberbullying and ethics

2.7.1. Introduction

The ethical use of information and digital technologies could need a safe online environment, where communication and interaction could flourish; yet users interacting online tend to morally disengage. This moral disengagement and individuals' behaviour could be affected by online users feeling less guilty, a lack of socioemotional cues, and social and personal factors (Bandura, 2002; Runions & Bak, 2015). Runions and Bak (2015) reported that the features of online space could facilitate moral disengagement and consequently lead to cyberbullying. Hence, cyberbullying behaviour could be influenced by personal and social environments.

Furthermore, Wachs (2012) argued that cyberbullies feel less guilty compared to in-person bullies. Research suggested that youth feel less pressure to behave online due to the disjunction between the real and virtual worlds and the consequences of cyberbullying would be less likely to seem immediate or real (Denegri-Knott, 2006; Perren & Gutzwiller-Helfenfinger, 2012). Cyberbullies tend to engage in harmful behaviour in an online space if they believe that it is unlikely to result in immediate consequences (Pettalia et al., 2013). Bandura (1991) discussed that individuals might downplay the effects of their actions by denying or understating the impact on victims.

Another factor that could have a negative impact on moral disengagement could be a lack of socioemotional cues in an online space. As discussed earlier, studies have pointed out that the absence of socioemotional cues such as facial expressions, and tone of voice could complicate the interpretation of mediated messages and could have a negative impact on moral disengagement (Perren & Gutzwiller-Helfenfinger, 2012; Pornari & Wood, 2009; Runions & Bak, 2015). Byron (2008) argued that “people act differently on the internet and can alter their moral code, in particular, because of the

lack of gatekeepers and the absence in some cases of visual cues…This is potentially more complex for children and young people, who are still trying to establish the social rules of the offline world" (p.5).

2.7.2. Definition of online ethics

Wiener (1954) explored the impact of information technologies on human values, such as life, health, knowledge, security, and abilities in his book *The Human Use of Human Beings*. Computer ethics (online ethics, or cyber-ethics) is understood today as a subfield of Wiener's information ethics (Himma & Tavani, 2008). Wiener (1954) stressed that the integration of digital technologies into society will constitute the reshaping of society, which affects every aspect of life. He suggested philosophers must rethink and redefine old social and ethical concepts accordingly.

In 1985, Moor defined computer ethics as "the analysis of the nature and social impact of computer technology and the corresponding formulation and justification of policies for the ethical use of such technology" (Moor, 1985, p. 266). Moor (1985) outlined that digital technologies and the online environment have created new choices for people. Furthermore, Kizza (2014) pointed out that "the role of ethics is to help societies distinguish between right and wrong and to give each society a basis for justifying the judgement of human actions" (p.18). Therefore, computer ethics aims to "interpret human conduct, acknowledging and distinguishing between right and wrong" (Ibid).

In addition, Fuchs et al. (2009) addressed that morality, an individual's conception of what is right or wrong, is formed through an interactive process of communicating and reproducing social structures. And moral disengagement is defined as a mental process of legitimising an action by selectively applying moral censure (Park et al., 2014). Besides, Gini et al. (2014) inferred that moral disengagement enables the perpetration of aggressive acts, including cyberbullying.

2.7.3. The rejection of Skeuomorphism

Initially, when computers were introduced, the skeuomorphic style was used to help users better understand and use their digital technology. Skeuomorphic refers to "the technical term for incorporating old, familiar ideas into new technologies, even though they no longer play a functional role." (Norman, 2013, 159). And, it simply represents physical properties, such as shape, surface, and substance based on reality (Bollini,

2016). For example, an object in the skeuomorphic style has a three-dimensional (3D) look with light, shadow, and photorealistic texture. Another example is the calendar on your mobile phone which looks like a real-life calendar. In the case of this study, skeuomorphic offers to follow the bullying approach; it means that in order to promote online communication respectfully, the Interaction Designer should look at ways to promote communication respectfully in a physical world. So in this section, I want to investigate and clarify, as skeuomorphic suggests, whether I should consider both bullying and respectful communication approaches in the real world for this study; it means, whether I should consider the definition of respect in an online environment similar to the physical environment.

In the digital age, young adults' first experience of files might be a computer file rather than a physical file. Therefore, for them, the concept of the file didn't come from a physical world. Moggridge (2007) added that using metaphors for digital technologies is not only becoming obsolete but also "the appearance and behaviour of the designs have evolved to a level where they communicate their own attributes rather than the characteristics of a throwback to a physical world" (p.146).

Besides, if bullying occurs on the street; the bully can be responsible for the bullying consequences. On the other hand, if bullying occurs in the online environment, it is still unclear whether it is the responsibility of the cyberbully, the online platform suppliers, or even the software team that has developed the programme. It seems that the online environment and advanced digital technology have added more complexity to the cyberbullying phenomenon.

Consequently, this approach (skeuomorphism) wouldn't be appropriate for this study, particularly in such levels of complexity that digital technology has created. For investigating feeling respected in an online space, there is no need to study feeling respected in the real world; in particular due to the differences between ethics, sociocultural, and organisational structures of the online and a physical environment.

2.7.4. Culture of online respect

Prior anti-cyberbullying reports stressed the significance of respecting others in an online space (The Scottish Government, 2017b; National Children's Bureau, 2015). However, how to implement online respect and how to encourage online users to be

respectful toward each other in an online space remains unclear. It is also not clear the accountability of stakeholders (such as parents, schools, digital technology developers and providers, and the Government) in facilitating the culture of respect in an online environment (Ibid).

According to Jaffer and Brazeau (2012), parents, schools and society must participate fully in order to achieve a culture of respect and empathy. Jaffer and Brazea (2012) asserted that in order to overcome cyberbullying, schools should educate students on the values of respect, responsibility, accountability and a sense of community altogether with how to use digital technology in innovative and meaningful ways. Conversely, Cross et al., (2009) stated that since cyberbullying is typically non-criminal and tends to move between different digital technologies, digital technology/online platforms developers and providers should be responsible to solve this problem. Also, the UK Council for Child Internet Safety (UKCCIS) outlined that "service providers should offer clear guidelines on how to behave responsibly and respect the rights of others" (National Children's Bureau, 2015, p.12).

To summarise, to my knowledge, there are no studies that have defined the term feeling respected in an online environment (online respect). As I said in the previous section, considering the differences between both the physical and digital environment suggested that the definition of online respect might be different from the physical environment. Following a social constructionist account, insights from participants enabled me to develop a definition and understanding of online respect in the Discussion Chapter.

2.8. Theories

2.8.1. The theory of Affordance

Digital technologies help to shape how people are involved with their both physical and online worlds and interpret the worlds. It means that when digital technologies are used, they help to shape the relationship between people and their worlds in specific ways. They *mediate* how people are present in the worlds and how the worlds are present to them, and even create *new forms* of contact between people and the worlds (Verbeek, 2005). It seems crucial to study and understand the impact of digital technology on both environments (physical and online). Affordances by focusing on

how people make sense and relate to the world provide a meaningful understanding of their interaction. Using affordance enables users to develop support for action possibilities provided by both environments.

Initially, the theory of affordance proposed by James Gibson (1979) in his book *The Ecological Approach to Visual Perception*, defines affordance as, "what it offers the animal, what it provides or furnishes, either for good or ill" (p.127). The central idea is that animals and the environment are "two parts of a whole system: one of them implies the other." (Kaptelinin, 2014, p.13), and it can be perceived directly (Costall & Still, 1989). Gibson asserted that perception is designed to inform people or animals about the meanings of the environment and the environment provides useful possibilities for action (Moggridge, 2007; Kaptelinin, 2014; Jones, 2003). For instance, a rock can be climbable for some animals and unclimbable for others.

Gibson (1979) stated that humans and animals exist in a system related to the environment. Hence, it is necessary to study the environment to explain some behaviour; to fully understand cyberbullying it is crucial to study the online environment (and digital technologies), not solely its relation to the physical world.

Costall and Still (1989) suggested that there is a fundamental tension within the Gibsonian view. On the one hand, Gibson has positioned himself as a relativist. On the other hand, he sought to promote a non-dualism, a "developmental approach to the problem of human cognition, in which direct perception would provide the starting point, but also, presumably, be envisaged as itself undergoing fundamental transformation" (Costall & Still, 1989, p.439). As a result of this tension, the most significant "problem of the dualism between the natural and the cultural, and the individual and the social" remains unclear (Ibid).

In the late 1980s, Don Norman introduced affordance within the user-centred approach through his book *The Design of Everyday Things, a revised and expanded edition of the psychology of everyday things* (Norman, 2013). The theory of affordance is adopted in Interaction Design and is even described as a basic design principle in Interaction Design (Rogers et al., 2011). For Norman, the term affordance "refers to the relationship between a physical object and a person (or for that matter, any interacting agent, whether animal or human or even machines and robots)" (Norman, 2013, p.10). Norman (2013) stated that "[perceived] affordances result from the mental

interpretations of things, based on our past knowledge and experience applied to our perception of the things about us" (p.219).

An affordance, according to Norman (2013) is the design aspect of an object; affordance refers to the perceived and actual properties that may not exist (Norman, 2013). It suggests how to use the object (technology). For example, balls are for throwing or bouncing. The affordance of the ball is its actual properties (such as its round shape and physical material) and the perceived properties as to how the ball should be used as well. Moreover, Norman's view of affordance can be dependent on users' experience, knowledge, or culture. Similarly, Vyas et al. (2006) and Bonderup Dohn (2009) have also emphasised the dependency of an affordance on sociocultural factors.

On the contrary, Gibson focused only on the action capabilities of the users. A chair, for instance, could have an affordance of seat-ability, but not so for an infant who is not tall enough to seat and therefore doesn't have the action possibilities. As opposed to Norman's view, Gibson's notion of perception is culturally and experientially independent (McGrenere & Ho, 2000; Torenvliet, 2003). Gibson's view of existence is binary: an affordance exists or doesn't exist. The problem with this notion is that users need to either be taught to see or be given prior knowledge, before engaging their perceptual capacities (O'Neill, 2009).

Therefore, in Gibson's view, people's understanding of their interaction with technology is independent of their culture, experience, and knowledge. Gibson's perspective on affordance could encourage designers to consider the interaction through digital technology regardless of users' cultures, and experiences. However, in contrast to Gibson's view, I, as a social constructionist, think that people's interpretation is shaped by cultural and historical contexts. Consequently, I could see a strong connection between online users' cultures, knowledge, values, belief, and experiences and their interactions through digital technology.

Norman believed that people could change or design their environment to perceive the utility easily (McGrenere & Ho, 2000). Norman (2013) developed a seven-stage of action model to not only easier understand human actions and intentions while interacting with technologies, but also as a guideline for service/product development and interventions. As demonstrated in figure 3, these stages include: A. Three steps of

execution (plan, specify, and perform). B. Three steps of evaluation (perceive, interpret, and compare). C. The goal (Norman, 2013). And the identified steps are 1. Forming the goal. 2. Forming the intention. 3. Specifying an action. 4. Executing the action. 5. Perceiving the state of the world. 6. Interpreting the state of the world. 7. Evaluating the outcome. Norman (2013) believed as this model could allow designers to have a deep understanding of users and their actions, this model could be beneficial for them to consider; otherwise, “the designs are apt to be faulty, difficult to use, difficult to understand” (Norman, 2013, p.44).

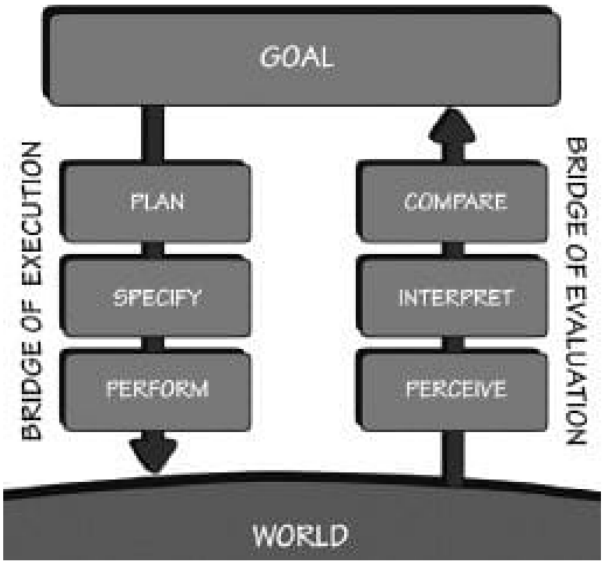

Figure 3. The Seven Stages of the Action Cycle of Norman (2013); source: (Norman, 2013, p.41)

Hence, Norman’s definition of affordance includes the physical capabilities of individuals as well as the goals, plans, values, beliefs, and past experiences of the individuals. It means Norman has taken into account the mental and perceptual capabilities of the users (McGrenere & Ho, 2000). In Norman's perspective, the cultural context of users and action (such as users’ perception of the world, and their evaluation of the action) could be necessary factors that affect the outcomes.

Referring to cyberbullying, the culture, environment, and society of both victims and cyberbullies could shape their online communication by impacting on and designing people’s perception of the world and their evaluation of online communications. It is

worth mentioning that the online world has already created its own culture, environment, and society; hence both digital and physical culture, environment, and society could have affected people's actions in the digital and physical world. In other words, as figure 3 indicates, people's interactions with both the digital and the physical world, have created their system of beliefs and values, and experiences; and this system influences their interpretations and evaluations of their interactions. And accordingly, people set up new goals and intentions for the new interaction with the world (physical or digital).

Gaver (1991) extended affordance to Interaction Design and HCI (Human-Computer Interaction) in his paper entitled *Technology Affordances*. According to Gaver (1991, p.81), "the concept of affordances points to a rather special configuration of properties. It implies that the physical attributes of the thing to be acted upon are compatible with those of the actor, that information about those attributes is available in a form compatible with a perceptual system, and (implicitly) that these attributes and the action they make possible are relevant to a culture and a perceiver." Simply, the information about the attributes of the technology should be directly available to the people with the use of affordance; and that information should be relevant to people's values, cultures and beliefs.

Gaver's understanding of affordance is different from Norman's. Where Norman stressed that "affordance suggests the action", however, Gaver stressed that design suggested the affordance of the things (McGrenere & Ho, 2000, p.183). Besides, Gaver (1991) considered affordances in design as an opportunity for designers to emphasise the strengths and weaknesses of technologies concerning the possibilities they offer to users. Regarding this study, affordance provides "an integrated account of a complex configuration of attributes" in an of physical and functional affordances" and "reveals the functional affordance, which tells users what will happen when they perform that action" (Vermeulen et al., 2013, p.1938). As shown in figure 4, Vermeulen et al. (2013) believed that feedforward can provide a powerful tool and theoretical account of Norman's (2013) Gulf of Execution.

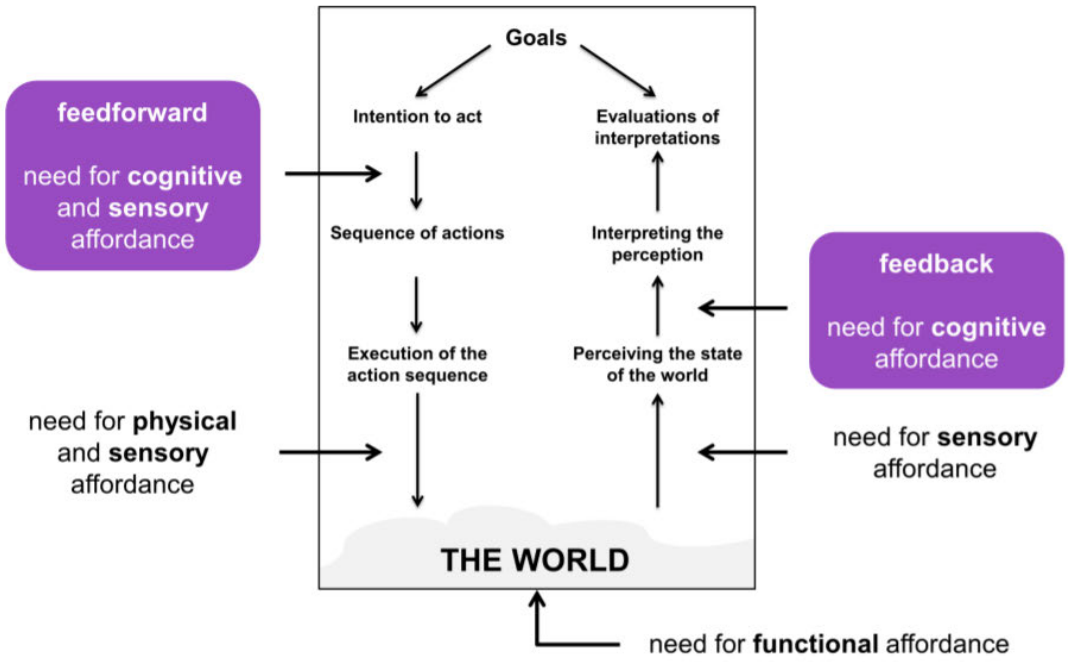

Figure 4. The position of perceived affordances, feedforward and feedback in Hartson's UAF. Source: (Vermeulen et al., 2013, p.1936)

On the other hand, Norman (2013) defined the term as "information that helps answer questions of execution (doing)" (p.71). In Norman's understanding, feedforward could apply to the gulf of execution as a whole, rather than a specific part. Although, he added that "feedforward is accomplished through the appropriate use of signifiers, constraints, and mappings. The conceptual model plays an important role...Both feedback and feedforward need to be presented in a form that is readily interpreted by the people using the system" (Norman, 2013, p.72).

Relating to this research project, feedforward as one of the most well-known Interaction Design principles could be used to help online users to experience more respect in an online space. Simply, feedforward could enable online users to be aware of the impact of their interaction through digital technology. For instance, it could enable online users to be aware of the impact of their offensive comments on receivers' feelings, or it could suggest/encourage online users to be more respectful in an online space.

As briefly discussed earlier, there have been several debates about the meaning of affordance and its role in Interaction Design. Despite a range of different viewpoints on

the concept of *affordance*, the common understanding is that affordances are the possibilities for action provided by the environment and that they "exist relative to the action capabilities of a particular actor" (Mcgrenere & Ho, 2000, p.179). It has been claimed that the Gibsonian sense of affordance has limitations relating to Interaction Design and particularly in my position as a social constructionist. In a nutshell, Gibson doesn't support the understanding of human interaction socioculturally and historically as Norman does (Turner, 2005; Rizzo, 2006; Kaptelinin & Nardi, 2012; Glăveanu, 2015).

Affordance has so far been mostly dealing with physical or virtual actions in software applications, such as grasping door handles or clicking on apps (e.g. Norman, 2013; Gaver, 1991). McGrenere and Ho (2000) underlined physical interaction with devices, such as a monitor, keyboard, and mouse, as well as "functions that are invokable by the user" as virtual possible actions on a computer system (p.184). These functions include searching, drawing, and writing. Put simply, affordance in an online environment has focused on the design of the software application's interface concerning the functionality and both the physical and virtual input and outcome of the interaction with the software. For instance, the virtual input is to click on a print button; the virtual outcome is to see the process of printing virtually; the physical input is touching the screen, and the physical outcome is printed paper.

Therefore, the affordance of virtual actions in the physical world is limited to the device, its surroundings, and the outcome of the interaction. And indeed supporting affordance for virtual actions concerning the physical world in terms of the mental outcome (such as emotions, and experience) is not fully explored. This mental outcome as I have said earlier could shape people's system of meanings, beliefs and values (system of the meaning). And people, based on this system of meanings, could interpret, evaluate and correspondingly interact in the physical and virtual world. Before developing the methodological model based on affordance for an online environment in relation to the physical world, it seems to be needed for further exploration of the position of technology in relation to people and the world. In the next section, technological mediation theory provides an understanding of this system of meaning from the viewpoint of technology concerning the world.

2.8.2. Technological mediation theory

Verbeek (2005) in his book *What Things Do: philosophical reflections on technology, agency, and design* stressed that "in order to develop an adequate picture of technology it is also necessary to think "forward," from the specific technological artefacts with which human beings deal with the experiences and ways of existing that these technologies shape" (p. 234). Also, Verbeek pointed out that technology has dimensions of style and meaning that "mediate" the relations between people and the world (physical and online), and consequently shape people's experiences (Verbeek, 2005). This dimension of meaning is the system of meaning (in the previous paragraph). This system of meaning structures the connection between two environments in a form of interactions.

In the post-phenomenological account, Don Ihde (1990), Ihde and Selinger (2003), and Peter-Paul Verbeek (2005) attempted to theorise the technological mediation approach. Based on post-phenomenologist, people perceive and interact with the world through technologies (Verbeek, 2005). Technological mediation describes the way "technologies actively mediate how people relate to the world" (De Boer et al., 2018, p.300). De Boer also added that "post phenomenologists endorse the 'co-constitution' of people and their material environment. 'Co-constitution' means that, rather than existing independently, the relevant features of a person, a technological medium and the world appear as a result of their mutual relatedness" (p.300).

Hence, in the post-phenomenologist account of mediation, the key point is that "entities are rather constituted in their mediated relation" (Verbeek, 2012, p.392). Then, mediation "becomes the origin of entities, rather than a 'middle position' between them. In such a postphenomenological reading of the concept of mediation, the 'subjectivity' of human beings and the 'objectivity' of their world is the result of mediations" (Ibid). Mediating technologies are mediators that "help to constitute what is real for us, and what we are in relation to that reality" (Ibid). Relating to this research project, digital technology is not in a 'middle position' for people to communicate through; feeling respected or disrespected in an online space could be the result of the relations between people, digital technologies, and the world (physical and online). If two friends insult each other in a joking manner on social media, bystanders could

think that someone has been cyberbullied and might report this to the social media and it could end up suspending the account. Bystanders developed their system of meanings based on their experiences of the world and technology and acted upon this system. Social media has made its decisions based on the relations between people and technology, and on the relations between programmers and technology (Facebook.com, 2020).

Van Den Eede (2011) in the article *In between us: On the transparency and opacity of technological mediation* outlined the individual human-technology relations and the social origins and effects of technologies. “Mediation is not simply something that happens to occur when technologies are used; it can have important social impacts, and therefore it deserves careful attention in practices of use and design.” (Verbeek, 2012, p.392). In the article, Van Den Eede formulated mediation theories in terms of both *transparency* and *opacity of use and context*. “When mediating, specific aspects of technology are opaque while others become transparent” (Verbeek, 2012, p.392). For example, technology could disappear from people’s experiences like chatting with your mother *through* a mobile phone. Or it could play a major role in their experience, such as cyberbullying and posting embarrassing photos on social media.

The transparency of use “embodies an experiential form of the distinction between transparency and opacity” (Verbeek, 2012, p.394). Transparency here referred to perceptual neutrality. It meant technologies function as a lucid interface between people and the world. Transparency of context, “embodies a more cognitive dimension of the distinction; it concerns our awareness of the mediating role technologies plays rather than our direct experience of the technologies themselves” (Ibid). Van Den Eede (2011) outlined that these two transparencies could help to mitigate the harmful effects of technology.

Verbeek (2012) discussing *expanding mediation theory* stated that there is a “need to develop a form of ‘double vision’ to simultaneously see the transparency of use and of context, but so do users and designers” (p.394). For instance, online users need to be empowered to see the mediations they subject themselves to when using digital technologies. Likewise, designers and digital technology developers should attempt “transparency in use while keeping up a contextual opacity” (Ibid). As a result, I have presented co-design as an approach for this research project to collaborate with

participants in the design process. Verbeek (2012) highlighted that “it is precisely mediation theory, with its increasing richness of insights into the various dimensions and aspects of the phenomenon of mediation that can offer a basis for an ‘informed prediction’ here” (p. 395).

Moreover, Verbeek (2015) argued that technological mediation approaches could be useful in the moral design and assessment of technologies. Because it aims to study technologies from an independent and neutral perspective (De Boer et al., 2018). From an ethical perspective, social media (online platforms) might not be completely neutral to values. Software developers and programmers by writing “codes”, could encourage a certain way of behaviour in online users and society in general. Such codes may be the result of research and conscious design and unintentional side effects as well. Verbeek’s (2006) technological mediation highlighted a part of the responsibility of digital technology developers and programmers for social media use. Technology developers should design online platforms/digital technologies to serve as mediators; encouraging online respect and discouraging online disrespect.

2.9. Summary

This chapter has explored cyberbullying and feeling respected in an online space. Since there is no unique definition of cyberbullying, I have adopted the definition based on cyberbullying criteria. I conclude the definition of cyberbullying as a harmful interaction in an online environment in a repetitive manner through digital technologies/online platforms.

Then, I address the current cyberbullying stigma in Scotland and its negative impact on encouraging cyberbullying behaviour. The negative impact of a peer group has also been raised as a factor playing a key role in promoting cyberbullying behaviour. Also, I discuss the unbalanced relationship between cyberbullying and freedom of speech. Overall, I conclude that there is a need for transparent cyberbullying laws, regulations and guidelines globally and in Scotland.

Moreover, this chapter explores the characteristics of digital technology that have a significant impact on cyberbullying. These characteristics include the omnipresence of digital technology and the online disinhibition effect. With the increasing availability,

use and reliance on digital technologies, cyberbullying occurs more than often, particularly for young adults who spend more time online.

Furthermore, I investigate how online users have dealt with cyberbullying experiences. Scholars suggested that problem-focused coping, emotion-focused coping or cyber-specific technological solutions enable young adults to cope with cyberbullying situations.

Within the next sections, I describe how stakeholders, such as government, Universities, parents, and organisations developed interventions to discourage cyberbullying incidents or offer support to online users after experiencing cyberbullying. The Scottish Government's anti-cyberbullying strategies have focused on raising awareness, safeguarding both the internet and digital environment, filtering, monitoring, and encouraging young adults to self-report the incident.

After describing cyberbullying strategies, I explore the definition of online ethics and the reasoning behind the moral and ethical disengagement of young adults while communicating online. Byron (2008) and Runions and Bak (2015) suggested that social, environmental, and personal factors and the characteristics of the online environment and digital technology, such as anonymity as well as lack of online supervision might facilitate moral engagement. Prior studies have also associated online unethical behaviour with the lack of immediate and physical consequences and socioemotional cues. Then, I outline the studies exploring feeling respected in an online environment. To date, the definition, and understanding of online respect in the context of cyberbullying remains unexplored.

And finally, this chapter discusses the theoretical background of this research project: the theory of affordance and mediation theory. The theory of affordance allowed me to have an in-depth understanding of online activities in relation to digital technology in the sociocultural context. Besides, technological mediation theory provides specific relations between digital technology, people, and the environments (online and physical).

Chapter Three: Methodology

3.1. Introduction

Previous chapters have described that online platforms and digital technologies have not only been utilised by online users to understand, communicate, and explore the world, but also exploited by cyberbullies and those who target and harm others. Cyberbullying has been the subject of research, information and prevention interventions for scholars to protect against or discourage cyberbullying behaviour, particularly among children (under 16 years old). In Scotland, cyberbullying has been treated similar to school bullying. The Scottish Government suggested that a culture of respect among online users could be beneficial in reducing cyberbullying behaviour. However, given the lack of discussion about what feeling respected in an online space (online respect) means, this research project studies online respect and the factors that support or discourage online respect among young adults in Scotland.

As noted earlier, the Scottish Government and most studies have approached cyberbullying as school bullying that happens online; these studies disregarded the role and impact of digital technologies/online platforms on shaping online users' behaviour that might result in online disrespect or cyberbullying. However, as described in the first chapter, the Interaction Design approach in this research project not only centres around both digital technologies/online platforms and young adults' values, thoughts, and perceptions, but addresses the role of digital technologies and online platforms in shaping young adults' behaviours and the relations to their surrounding environment. The Interaction Design approach also attempts to explain the impact of the sociocultural, environmental, and philosophical context of feeling respected in an online space. Besides, unlike prior cyberbullying studies, this approach conducts feeling respected in an online space and cyberbullying in relation to both online and physical environments.

Overall, this chapter (Methodology) outlines how the Interaction Design approach enables investigating the understanding of feeling respected in an online space. It lays out the design process and fieldwork structure in detail and describes the methods and tools for gathering and analysing data. I begin by outlining the social constructionist

position as the epistemological approach underlying this research project; I position the Co-design as a framework for the Interaction Design approach. The following section addresses my rationale for selecting a single case study, advocating its nature whilst anticipating potential limitations for this research project. Section five describes the methods, tools, and interventions employed, which formed a five-phase single case study. And before concluding this chapter, I discuss the potential participants for this PhD and describe the limitations of accessing the pool of participants.

3.2. The social constructionist position

In the nineteenth century, social constructionism took new forms in political theory in the work of Karl Marx (1818-1883) (Berger & Luckmann, 1991; Galbin, 2014). Yet most of the dialogues that were involved today have emerged as a paradigm in psychology and other social science in the twentieth century; sociologists, such as Peter Berger and Thomas Luckman (1991) in the book *The Social Construction of Reality* have made a chief contribution in developing the term.

Social constructionism asserts that all meanings are socially created (Given, 2008); in other words, all meanings are an invention of a given society. The social constructionist belief is that knowledge production is a result of human relationships (McNamee, 2012). Therefore, what we take to be objectives arises out of social processes in the context of history and culture. Furthermore, Crotty (1998) addressed social constructionism as multiple ways of knowing, in which reality (meaning) is created through social interactions, including the historical, environmental, cultural, and social context. In the case of this PhD, knowledge would be constructed from a collaborative process between participants and me the researcher through participants' engagements (workshops and interviews).

This epistemology is subjective; meaning findings are the creation of the process of interaction between the researcher and participants (Gray & Marlins, 2004). It simply concerns the data interpretation in the research and emphasises the ways meanings are generated in a specific context (Schwandt, 1994). The results of this engagement are “a dialectic and iterative process built around analysis, criticism, reiteration and re-analysis” (Charreire-Petit & Huault, 2008, p.77), and the methodologies are hermeneutic (interpretative) (Gray & Marlins, 2004). Returning to this research project, the iterative design process as a reflexive process offers meaningful insights into online

respect. Reflexive iteration is at the heart of visiting and reviewing findings and connecting them with developing insights, progressively leading to refining and establishing understanding.

I position myself as a social constructionist because online respect is influenced by online users' experiences, feelings, values, behaviours, and beliefs that have been shaped by their relationship between the world, digital technology, and others (read technological mediation theory in the Literature Review Chapter). Online users based on these experiences interpret and evaluate their online communication and consequently reflect on their interaction with the world and digital technologies (read affordance theory in the Literature Review Chapter). Therefore, I believe it is crucial to understand online users and their feelings and values in order to improve their relations with digital technology and the world. And in the case of this research project, it enables me to address the research question of how Interaction Design can be used as an approach to explore promoting feeling respected in an online space (online respect) among young adults (18-24 years old) in Scotland in the context of cyberbullying from the perspective of key stakeholders and young adults.

3.3. Co-design approach

Sanders and Stappers (2008) addressed that the co-design approach has been used for nearly 50 years. Initially, it has “built on the workers’ own experiences and provided them with the resources to be able to act in their current situation” (Sanders & Stappers, 2008, p.7). According to Sanders and Stappers (2008) the term co-design “refers to the creativity of designers and people not trained in design working together in the design development process” (p.7). In other words, the co-design approach enables a “wide range of people to make a creative contribution in the solution but critically also in the formulation of a problem, a task that has been predominantly led by designers.” (Tsekleves et al., 2018, p. 917). In the case of this research project, co-design allowed the collection of data from participants with different backgrounds and perspectives.

The co-design process goes beyond the traditional designer-user relationship and deepens collaboration and contribution between users and designers; users, as experts of their needs, values, and experience, become central to the design process (Visser et al., 2005). In the process, the role of designers is a facilitator providing creative ways

for users to engage with each other as well as “providing ways to communicate, be creative, share insights and test out new ideas” (figure 5) (Sanders & Stappers, 2008; Tsekleves et al., 2018, p. 918).

Although, Sanders and Stappers (2008) stressed that the role of designers is still crucial in giving form to the ideas and insights and interpreting the findings. In the case of this research project, as discussed in the first chapter, I undertook the role of facilitator when collecting data and sociotechnical expert while analysing the data set. Sociotechnical experts briefly establish an understanding of online respect by taking into account that social, environments, and structures (both online and offline) are constantly changing. For example, with respect to social interaction, young adults in an online environment are keen to share their personal photos with strangers on social media. It is expected that new expectations and responsibilities will emerge. The responsibilities of ensuring data safety, security, and ownership by online platforms/digital technologies. Sociotechnical aspects also ensure that digital technologies/online platforms are meaningful to young adults and afford online respect.

In the recent decade, given the relations between people, digital technology, and the world have become very complex, technology-driven companies have drawn their attention to user-centred approaches and users’ experiences and behaviours (Moggridge, 2007). Since digital technologies/online platforms play an all-important role in this research project, I argue that the co-design approach enables me to gather meaningful insights into young adults and stakeholders' understanding of feeling respected in an online environment (online respect). Following a social constructionist perspective, collaborating with young adults and stakeholders leads to proposing policy recommendations aligned with young adults' values, understanding, needs, and beliefs. This approach allows young adults and stakeholders with different backgrounds, experiences, knowledge, and values to come together to create an environment that supports and encourages online respect and discourages cyberbullying/online disrespect. Besides, it allows gaining a detailed understanding of how digital technologies/online platforms shape young adults' understanding of the world.

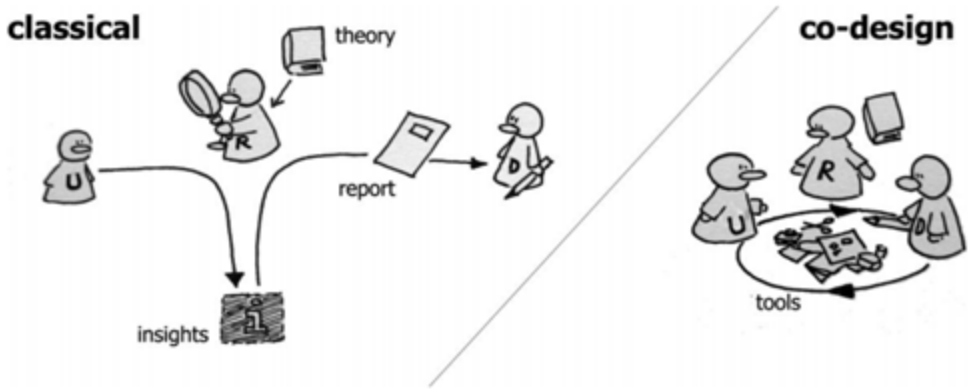

Figure 5. The roles of users, designers, and researchers in the design process and co-design process. Source: (Sanders & Stappers, 2008, p.11).

3.4. The single case study

Using a co-design approach, I constructed a single case study (Ledford & Gast, 2018; Gerring, 2006). My initial intention for this research project was to establish a profound understanding of online respect among young adults and construct several case studies. However, given the difficulties of recruiting participants during the COVID-19 pandemic, I realised that doing multiple case studies could be very time-consuming and challenging, in particular within the timeframe of this PhD. I further elaborate on the difficulties in recruiting participants in the Fieldwork Chapter (Chapter Four). In this section, whilst the limitations of a single case study, I justify how it could provide an appropriate structure for fieldwork.

Dyer and Wilkins (1991) argued that in the case of creating high-quality research projects, single case studies could be better than multiple cases because the researchers spend less time studying the case studies. A single case study would be a more careful study, as it enables researchers to explore different aspects of issues and research questions and gain a deeper understanding of the research project (Gustafsson, 2017; Yin, 2003). Dyer and Wilkins also stressed that the ability of the researcher to describe and interpret the findings in relation to research questions could be one of the crucial aspects of high-quality research projects.

In addition, most cyberbullying studies seem to suggest a reliance upon methodological strategies, such as using large and representative samples;

randomised and controlled designs; and validated reliable instruments (Aboujaoude et al., 2015; Garaigordobil, 2015). These methodologies allowed scholars to gather a large quantity of data relatively quickly and cheaply (Mathiyazhagan & Nandan, 2010). However, the results might not be an accurate reflection of how the participants feel and think; in the light of the social desirability bias, participants tend to respond to the questionnaires in a way that makes them look better than they are (Ibid). Returning to this research project, a single case study allows me to exhibit the characteristics, thoughts, and values of participants and provide an in-depth understanding of online respect by collecting rich and context-specific findings.

With respect to the anticipated outputs, one of the chief critiques of the single-case study could be the inability to generalise the findings. In this research project, as noted previously, I aimed to research young adults (18-24 years old) who have been living in Scotland and have been active on social media. This research project has not concluded that the outcomes could be generalisable to other age groups or other young adults who have been living in other countries; I would expand on this matter in Chapter Seven. Moreover, as I address in the following chapters, I have intended to access a wide range of participants with different backgrounds across Scotland; this ensures that this single-case study intensively studies online respect from various perspectives, understanding, experiences, and values. In the following, I outline how this single-case study was structured to collect data in order to explore participants' understanding of online respect.

3.5. Fieldwork structure, Methods, and Tools

As discussed in the first chapter, the Interaction Design approach sees as a creation of meaningful and effective dialogue between people and digital technologies/online platforms (Kolko, 2011); this approach helps shape the relationship between People, Activities, Context, and Technologies (PACT) (Benyon, 2014). In this section, I set out to explain the research process by addressing how the understanding of affordance and technological mediation enabled me to develop methods, tools, and techniques.

As noted previously, affordance in sociocultural contexts is actively constructed by interpreting the interaction with both physical and online environments. Affordance in this PhD is appealing in its direct approach to the factors of action and perception. Perception provides insights into activity and arises from properties of the world (both

online and physical environments) (Kaptelinin, 2014). These insights go beyond digital technology and its surroundings and establish meaningful links to the physical environment; I called these insights “systems of meaning”. In other words, people’s experiences, values, and knowledge constitute this system of meaning; people follow this system of meaning by interpreting and evaluating online activities and planning for the following actions.

As mentioned in the previous chapter, technological mediation theory also offers insights into the relations between humans and digital technologies that deepen understanding of what interaction could mean. Technological mediation aims to understand how technologies play a mediating role in people’s life. It helps shape more respectful experiences in an online space by identifying the relations between digital technology/online platforms, the world (both online and offline environment), and online users. In this research project, this theory enables the development of responsible forms of mediation in a neutral position.

In summary, affordance theory offers a comprehensive picture of human interaction regarding their perception, interpretations and evaluation in both online and physical worlds. And secondly, in the account of postphenomenology, technological mediation theory provides a unique perspective on the relationship between digital technology and users. In the case of this research project, empowering young adults and key stakeholders (such as designers, policymakers, technology developers, and third-sector organisations) enabled me to investigate the relations between young adults and digital technologies in the context of online respect creatively and critically.

In the following, I elaborate on the five phases of fieldwork structure: semi-structured interviews, asynchronous activities, Workshop 1, evaluation workshop, and reflection. Overall, this chapter demonstrates how I chose methods and techniques and designed participants' engagement and activities in fieldwork. Chapter Four addresses how I implemented these five phases in the fieldwork, and Chapters Five and Six discuss and analyse the data gathered from fieldwork.

Phase 1. Semi-structured Interviews method

The first phase of fieldwork was conducting online semi-structured interviews (Remler & Van Ryzin, 2015). As discussed in the Literature Review Chapter, neither cyberbullying nor online respect have concrete definitions. Hence, it is essential, to begin with, participants' understanding of the matters. Semi-structured interview method helps to gather detailed information regarding individual experiences of online respect. In particular, taking into account that online respect is rather a complex topic that needs an explanation to thoroughly investigate. This method also allows asking participants follow-up questions based on their responses. Overall, this phase aimed to gain insights into participants' understanding of cyberbullying and online respect. It enabled me to address a second research question: how can Interaction Design be used to investigate the key stakeholders' and young adults' understanding of online respect in the context of cyberbullying in Scotland?

In the case of this research project, to ensure covering the entire scope of the project, I prepared the interview questions in advance. The questions focused on the understanding of cyberbullying as a context, understanding of feeling respected in an online environment (online respect), factors that influence online respect/disrespect, and young adults' support journey from the viewpoint of participants (see Appendix B and C).

Phase 2. Asynchronous activities (Booklet)

The second phase of fieldwork took the form of asynchronous activities. While real-time group and individual sessions (workshops, interviews) are often the most common and preferred way of engagement with participants (Martin & Hanington, 2012), the COVID-19 pandemic encouraged me to consider alternative means of collecting data remotely. I was intrigued to not only engage with participants and collect data, but to build a better relationship (participant-researcher) and understand participants' values, thoughts, and beliefs better. Besides, asynchronous activities enabled me to offer additional time for participants to rethink and reflect on their understanding of feeling respected in an online space.

This phase was designed to simulate a mini mobile workshop and create a real workshop experience in participants' homes. Similar to a workshop, I provided all the

materials participants might need to take asynchronous activities up in a starter kit. As you can see in figure 6, the starter kit contains pens, markers, post-it notes, glue, prepaid envelopes, snacks, and a booklet. The booklet holds all asynchronous activities, where participants elaborate on their thoughts, beliefs, experiences, knowledge, and ideas.

Figure 6. An overview of starter kit materials

Moreover, in designing booklets, I was inspired by interactive activities and books in particular, children's books given the simplicity of interactive books for different backgrounds. Interactive booklets help me design simple activities that introduce new ideas clearly and encourage participants to think and engage with the activities in a tangible way. In other words, it brings attention to detail and enables the understanding of ideas, concepts, and questions in an enjoyable way. Designing activities interactively ensures that activities are easy to understand for participants with different backgrounds. It also builds a positive connection that allows for more interaction between participants and myself as a researcher, given the limited time commitment for the project.

Figure 7 demonstrated how the activities of the booklet evolved to ensure that the activities would be easy to understand, engaging, and positively framed. In the light of the sensitive nature of the context (cyberbullying), reframing the activities in a positive language could be a valuable technique in delivering a friendly and supportive tone to the activities. Moreover, as shown in figure 7, the activities enabled me to gather data from participants to address the research questions. The booklet began with an introduction about myself; it followed by addressing the purposes of the research project and reminding the next phases of participants' engagement.

As detailed in the following, the booklet contained four activities (figure 8). Each activity explicitly offered a description and the purposes of the activity. Elaborating on each activity and its purposes clearly allowed me to collect relevant data/info; it assures me that participants’ interpretations of the activities are similar to the activities' goals. In the following, I further explained each activity.

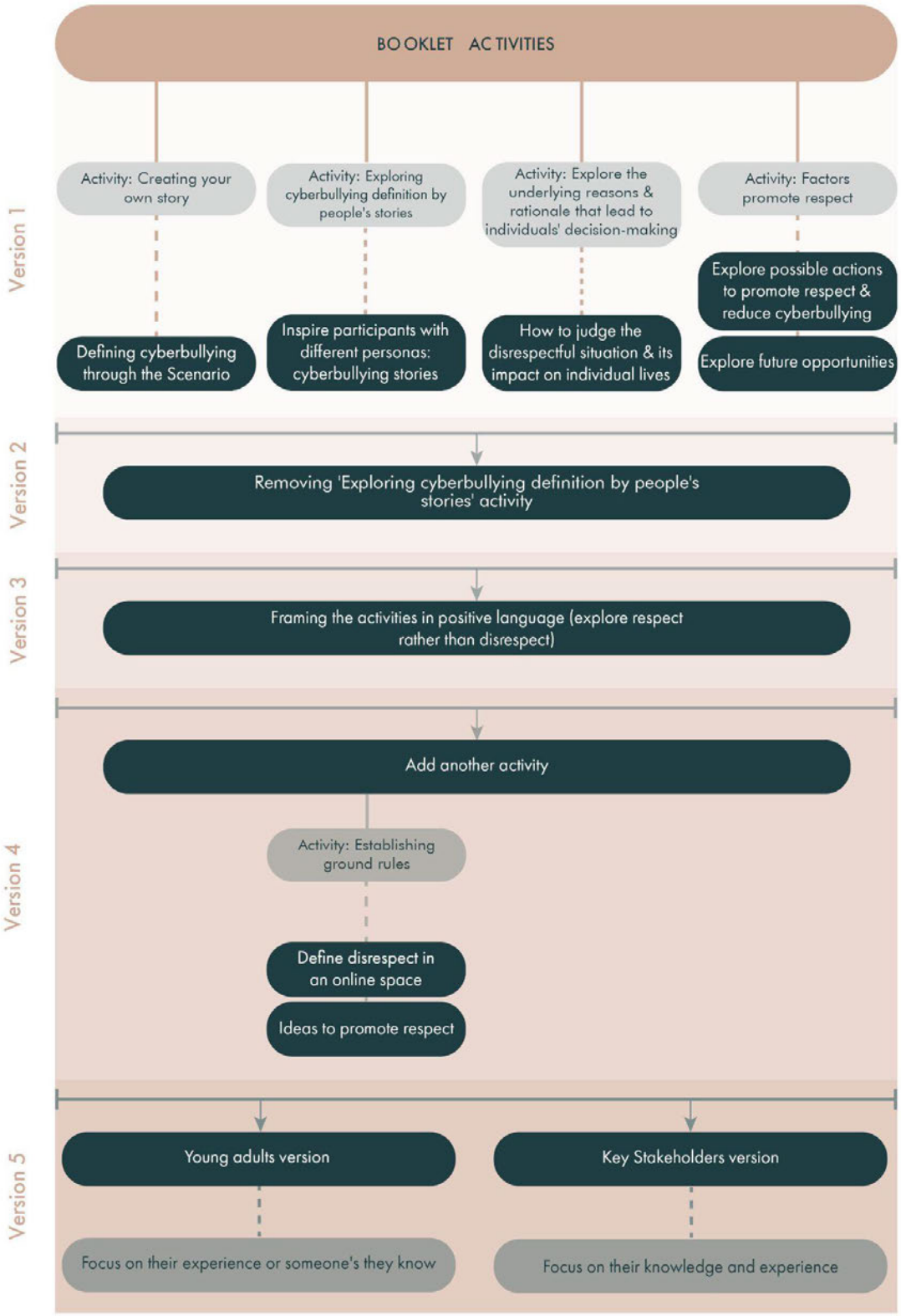

Figure7. An overview of booklet design

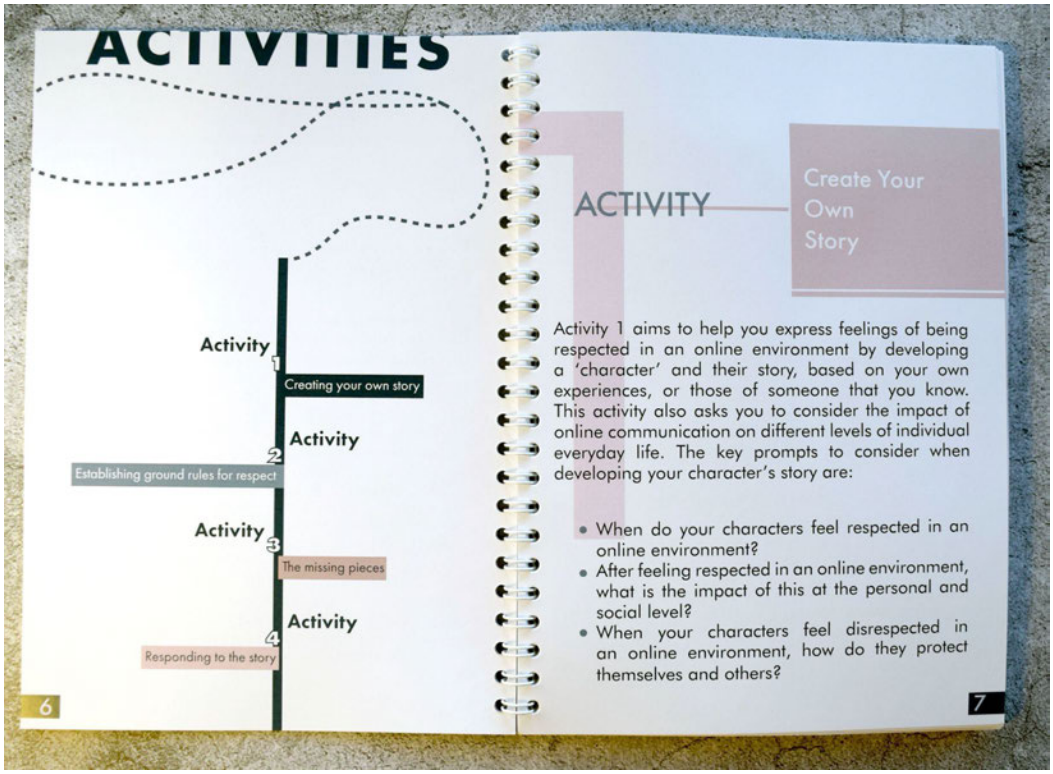

Figure 8. An overview of booklets' activities

Designing Booklet activities

Activity 1: Creating your own story: The goal of Activity 1 was to explore participants' definitions of feeling respected in an online environment through scenario-making techniques. A scenario is a narrative that explores respect in an online environment from a participant's point of view, and it has been commonly used in design (Martin & Hanington, 2012). This technique allowed participants to express their knowledge, understanding and experience of online respect by developing their characters and stories.

As shown in Figure 9, this activity attempted to invite participants to consider both digital and physical spaces while defining online respect by asking them: where has the character felt respected: the physical places (ex, home, restaurant, Uni) and online platforms (ex, FB, Amazon). Once participants were encouraged to think about where online respect has occurred (both digital and physical spaces), participants answered questions surrounding their understanding of online respect.

Initially, this activity encouraged participants to consider the impact of feeling respected in an online environment on different levels of young adults' everyday lives. The key prompts for participants to consider when developing their characters were: when do the characters feel respected in an online environment? After feeling respected in an online environment, what is the impact of this incident at the personal and social levels? When the characters feel disrespected in an online environment, how do they protect themselves or others? (figure 10). To conclude this activity, participants defined their understanding of online respect after considering A. both digital and physical spaces and B. all key prompts.

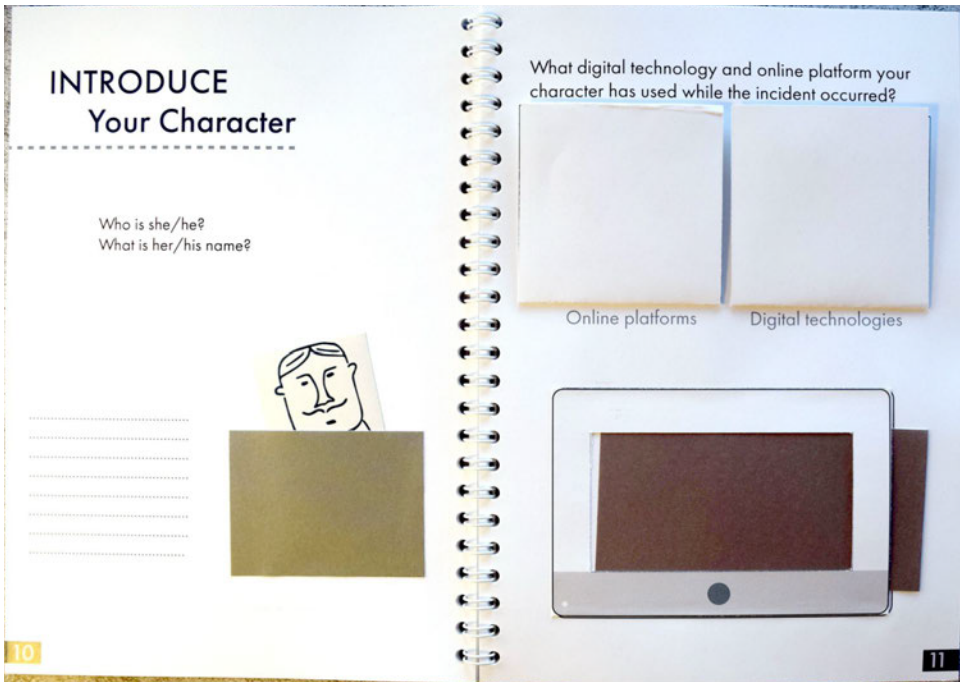

Figure 9. An Overview of Activity 1

Figure 10. An Overview of Activity 1

Activity 2: Establishing ground rules for respect in an online environment: The purpose of Activity 2 was to allow participants to establish ground rules for facilitating online respect and protecting online users against cyberbullying/online disrespect on their online platforms. These ground rules have been expected to be followed by both online users and online platform providers. The ground rules could be guidelines, etiquette, rules, requirements, and a code of conduct applied to behaviour, action, and online activities. They should be communicated to online users before their online communication. As demonstrated in figures 11 and 12, this activity enabled me to collect data regarding participants' perceptions of online respect and their ideas to promote feeling respected in an online environment.

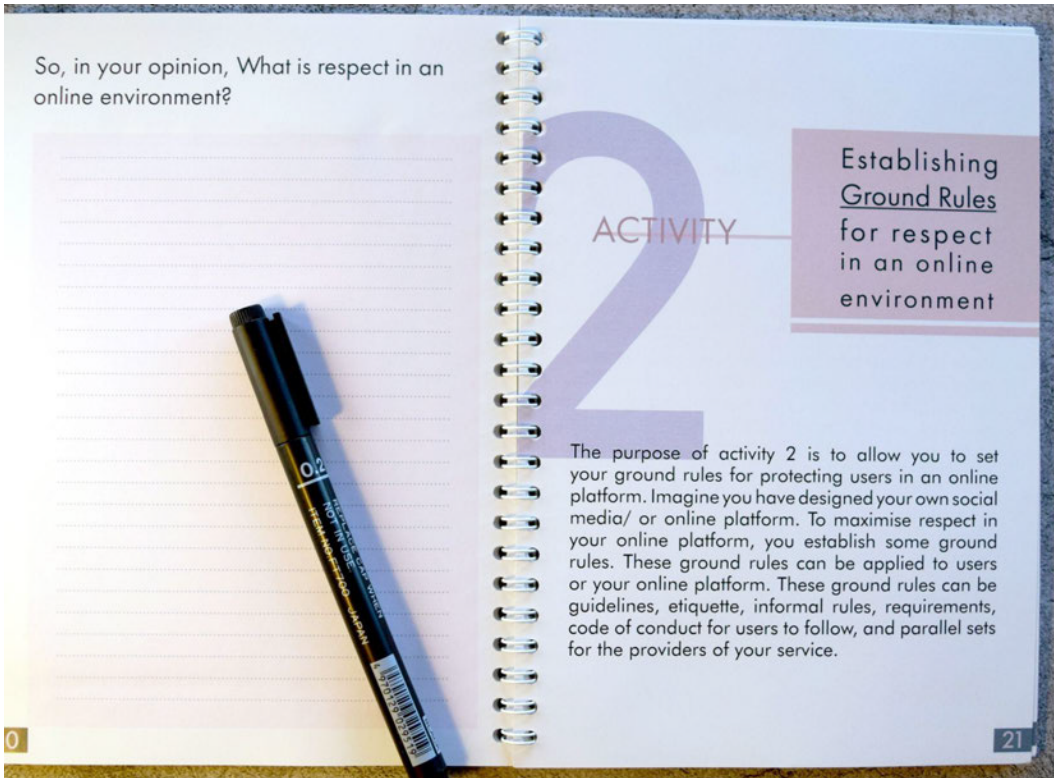

Figure 11. An Overview of Activity 2

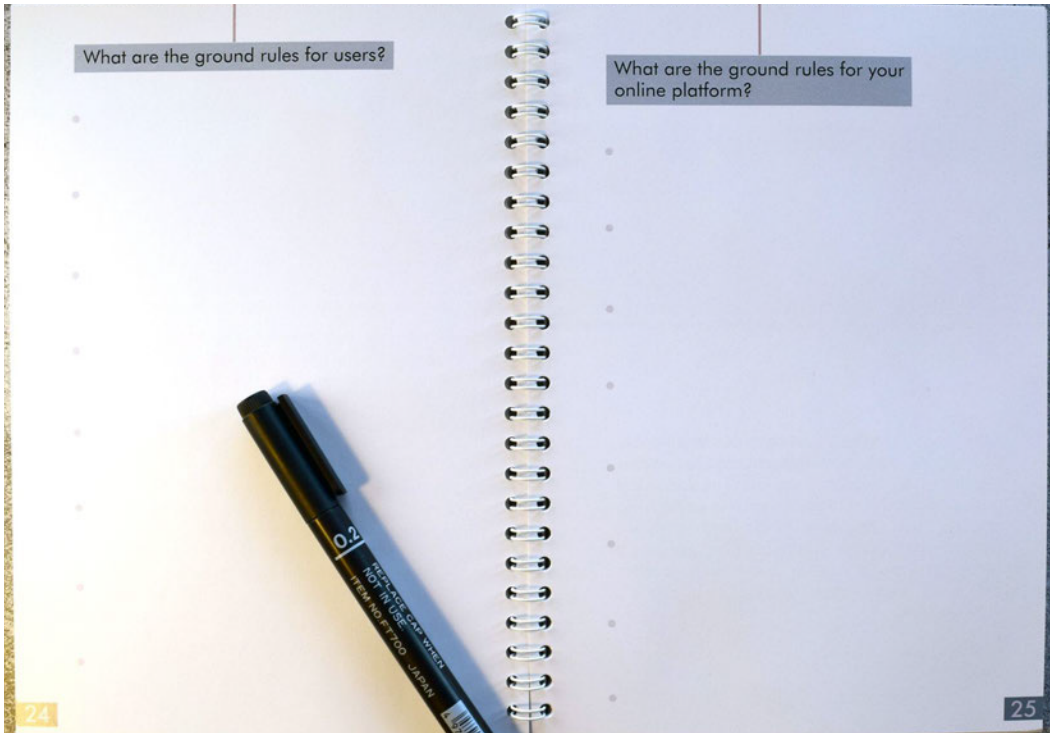

Figure 12. An Overview of Activity 2

Activity 3: The missing pieces: Once participants developed their characters in Activity 1, Activity 3 aimed to investigate the characters' evaluations and interpretations of online respect. Simply, it identified the factors that influence young adults' feeling respected in an online space. In the Literature Review Chapter, I referred to these factors as the system of meanings. People interpret and evaluate according to their systems of meanings and correspondingly interact with online and physical spaces (for more information read affordance theory). Participants' interpretations and evaluations have translated into the underlying reasons and rationale for feeling respected in an online environment. These underlying reasons lead to the characters' decision-making; they helped the characters understand whether they have experienced respect in an online environment or not. Figure 13 demonstrates Activity 3. Participants reflected on how they realised that the situation (that described in Activity 1) was respectful and, in general, how they judged this situation.

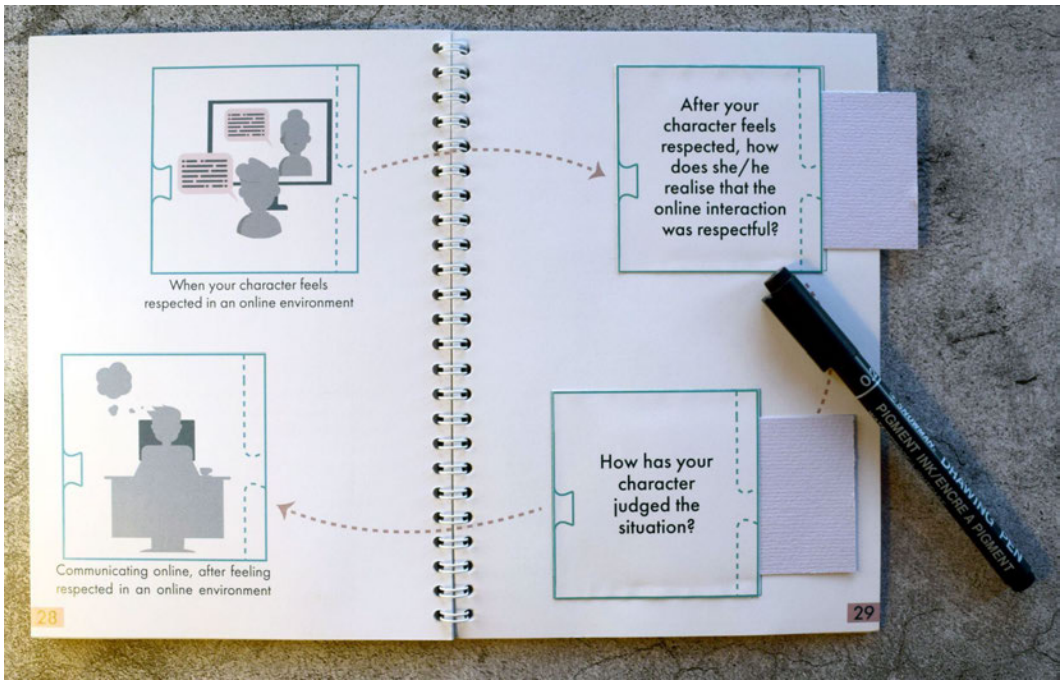

Figure 13. An Overview of Activity 3

Activity 4: Make a better story: As noted in the Discussion Chapter, according to technological mediation theory, the relationship between people and technology is not just limited to the device and its surroundings. These relations reflect different aspects of individuals' lives. In order to understand the relationship between people, digital technology, and the world, I developed activity four. This activity aimed to explore the

influence of people, online and offline environments, and digital technologies on young adults' online respect/disrespect experiences. It represented how people (stakeholders), the world (both online and offline), and digital technologies facilitate or encourage online respect among young adults.

This activity was inspired by psychological maps and the *Ralph Breaks the Internet* (2018) animation. The psychological map (model) studies the ways people make sense of their surroundings in the physical world (Milgram & Blass, 2010). It is a method usually used by psychologists, representing a psychological process of things in an individual's mind (Ibid). People create psychological maps of everything, especially the technology with which they interact (Ibid) (Figure 14). With training, instruction, and experience, people begin to build up a picture in their mind of how the elements of the things connect with one another, the relationship among them, and the tasks they must perform to do the activity using technology (Norman, 2013; Milgram & Blass, 2010). In the case of this study, psychological maps represented participants' perceptions of online respect. It enabled me to visualise how participants make sense of their online activities in relation to the physical world.

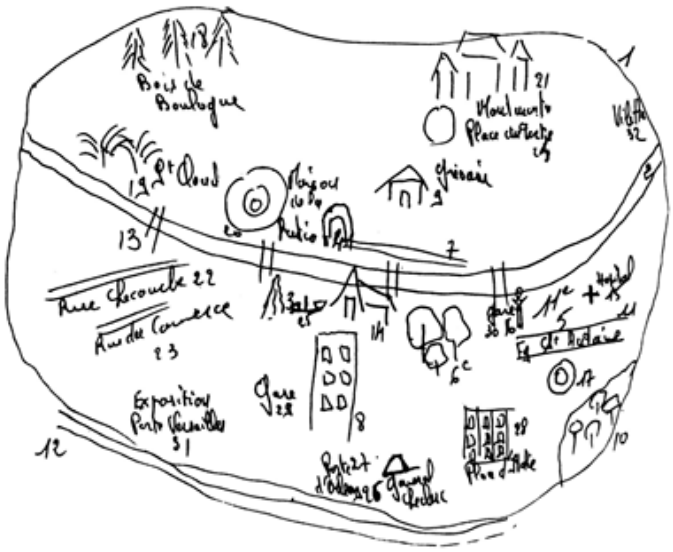

Figure 14. The psychological map of Paris, source: (Milgram & Blass, 2010, p. 80)

As mentioned earlier, I was also inspired by *Ralph Breaks the Internet* (2018) animation. This animation inspired me to visualise the online environment and platforms in simple and tangible ways. In this animation, as shown in figure 15, online space was represented as “a modern city that did not feel like you were looking inside

a computer, buildings were made out of concrete, metal and glass, with different ratios depending on the building type. Roads and sidewalks took on the look of circuit board patterns, complete with gold inlays" (Sarto, 2018). In the case of my research project, this representation of the online space and digital technology helped participants elaborate on their perception of online communication and activities in relation to the physical world. This visualisation enabled participants to not only relate to online space as a separate environment, but connect online space to physical space more tangibly. Figure 16 illustrates an inspired online environment as part of activity four.

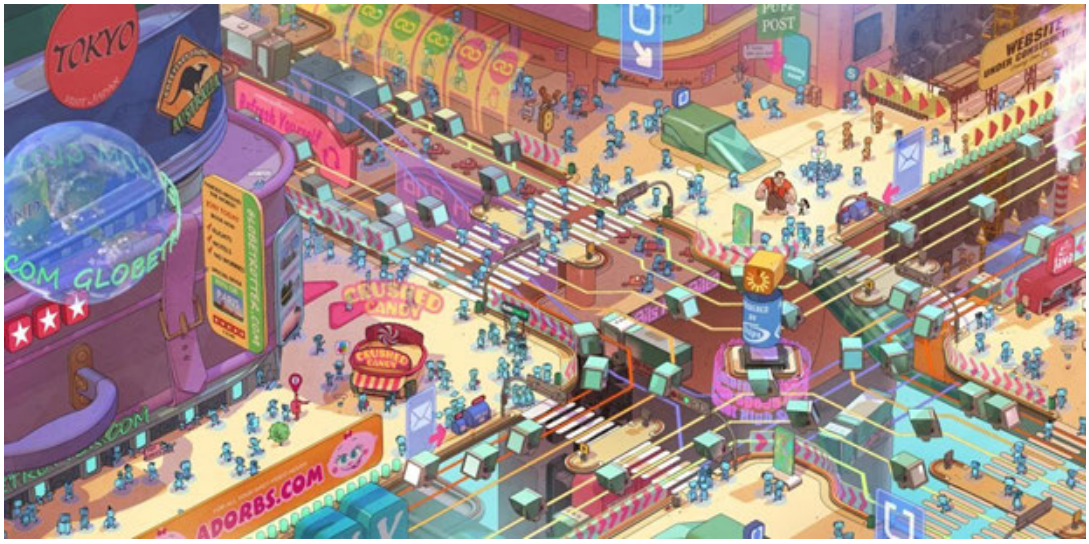

Figure 15. Ralph Breaks the Internet (2018) concept art for the world of the Internet shows, source: (Sarto, 2018).

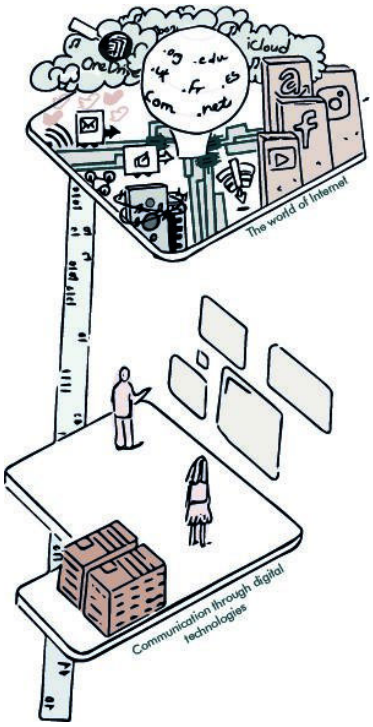

Figure 16. An overview of the online environment in activity four.

Overall, the purpose of activity four was to address the fourth and fifth research questions: what factors could potentially impact not feeling respected in an online environment in the context of cyberbullying for young adults from the perspective of key stakeholders and young adults? What factors could support online respect in the context of cyberbullying for young adults from the perspective of key stakeholders and young adults living in Scotland? Activity four aimed to explore the possible actions provided by different stakeholders to promote online respect behaviour. This activity came with the selection of stickers, aspiring to consider both the physical and online environment, the relations between these environments, different platforms, and different stakeholders.

Activity 4 had two parts. The first part focused on the factors that have limited or discouraged online respect. It investigated these limitations at different levels of everyday life, such as personal, social, governmental, and community (figure 17). The second part centred on the possible actions that support or encourage online respect and possibly discourage cyberbullying behaviour. This part also encouraged participants to consider their aspirations for the future.

In order to inspire participants and encourage them to consider different points of contact in their lives, I illustrated six points of contact that alter online users' experiences of feeling respected in an online space. Participants were encouraged to reflect on how these contact points either support or limit respect in an online environment. These contact points occur before, during, or after young adults' online communication. These six points of contact are: The world of the Internet (e.g. smartphones, Instagram, Facebook, laptops) while using digital technologies, public places (e.g. parks, trains), organisations and businesses (e.g. restaurants, charities), people (e.g. friends, classmates, teachers, and parents), workplace or universities (e.g. universities, home).

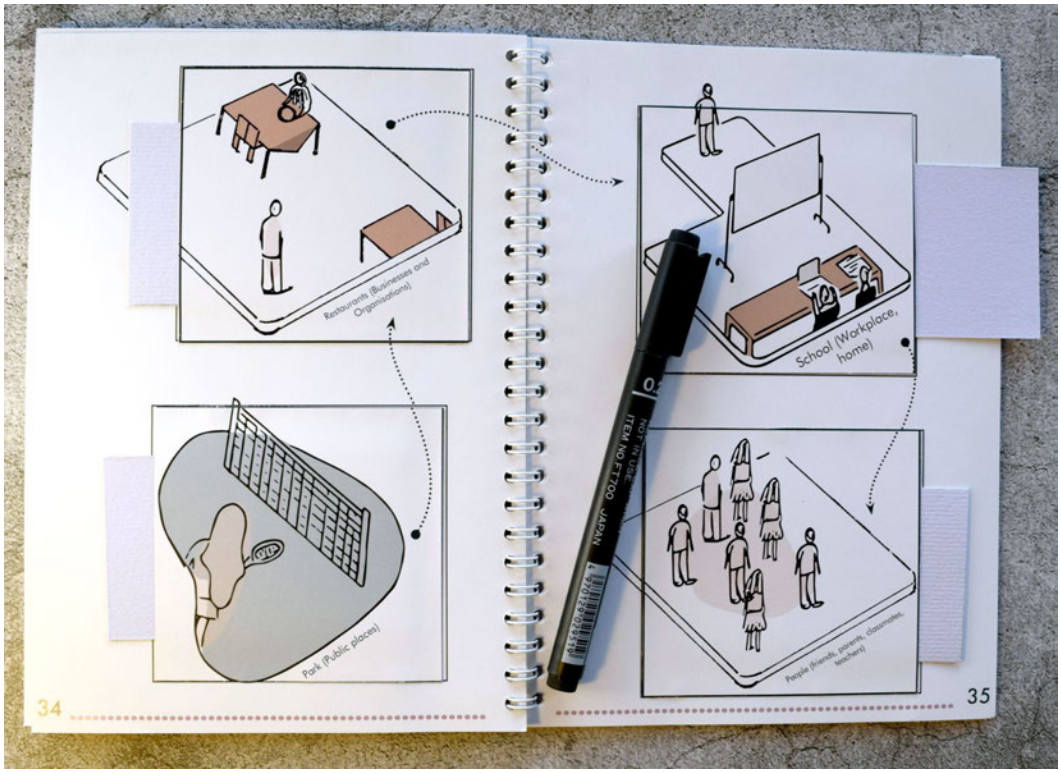

Figure 17. An overview of Activity 4.

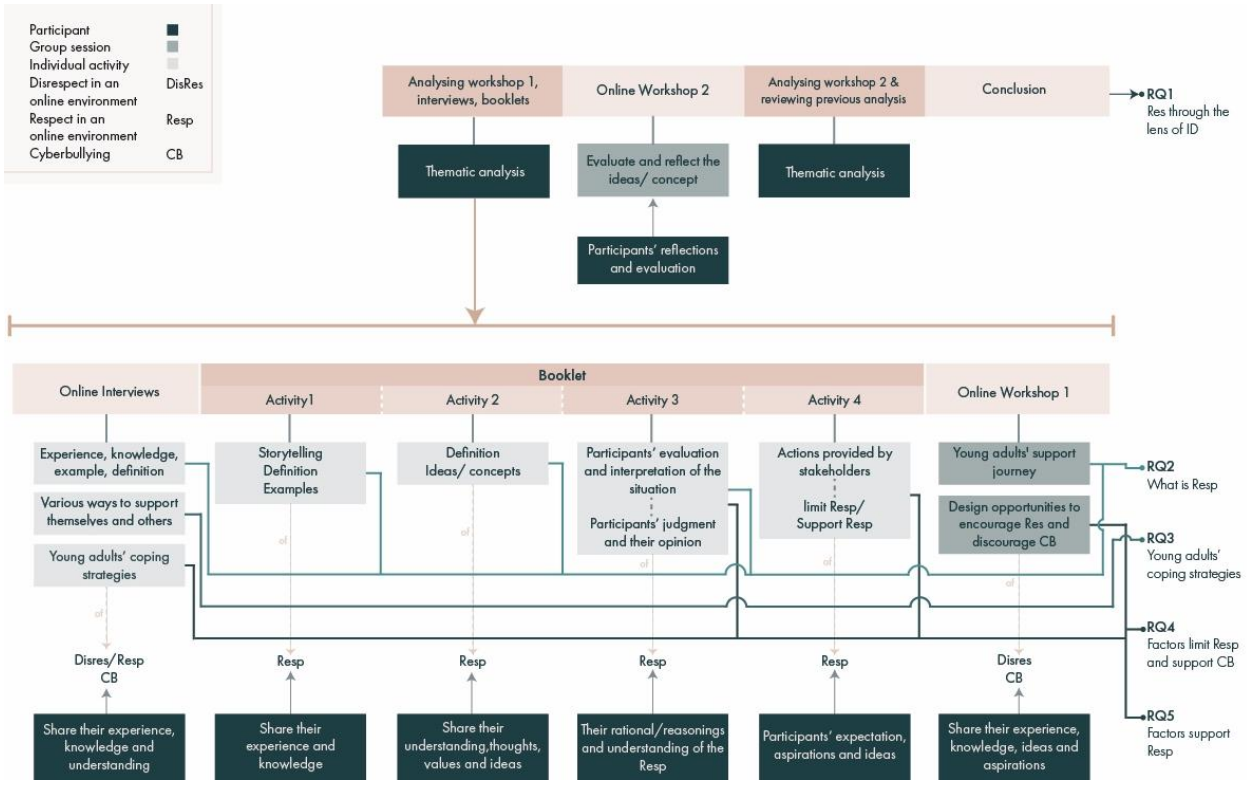

Figure 18. An overview of the participants' engagement regarding the research questions

Phase 3. Workshop 1

The third phase of fieldwork took the form of a co-design online Workshop 1. Workshops provide a suitable environment for collaboration, brainstorming, interactive sharing, and networking. Developing and running successful online workshops for the first time could rely on my understanding of online platforms (Zoom and Miro) and my facilitation skills. Some of these facilitation skills included: ensuring the provision of equal resources and opportunities to engage in discussions; remaining impartial as much as possible by guiding and encouraging participants to consider new ideas/different perspectives, not dictating; setting ground rules and boundaries before workshops. Miro is a user-friendly online workshop platform that allows participants to share their thoughts, experience, and knowledge remotely (figure 19). Miro boards have also been inspiring and helpful in designing workshop activities.

The aim of Workshop 2 was to investigate young adults' support journey and design opportunities to encourage online respect from the perspective of participants. As

shown in figure 18, Workshop 1 addresses the fourth and fifth research questions; it attempts to collectively explore the factors that influence online respect/disrespect. In addition, Workshop 1 offers in-depth insights into the accountability of the Scottish Government in supporting/ensuring online respect among young adults. The following chapter describes how I designed Workshop 1 activities and how they took place in an online space. Findings Chapter outlines the outcome of this workshop. And finally, the Discussion Chapter discusses how themes/sub-themes emerged from the findings from workshops, interviews, and asynchronous activities and how these findings enabled me to provide policy recommendations to the Scottish Government.

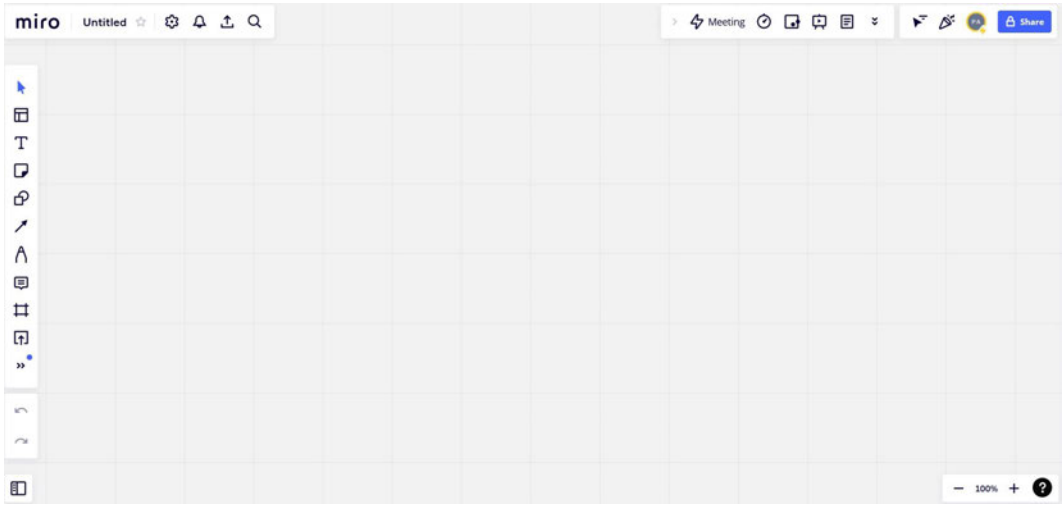

Figure 19. An overview of the Miro platform, source: (Miro, 2019).

Phase 4. Evaluation workshop (Workshop 2)

In phase four, I ran evaluation/feedback workshops (Workshop 2) on Zoom and Miro platforms. Within Workshop 2, I brought together participants' ideas, thoughts, and values about their understanding of online respect that emerged from previous phases (interviews, remote activities, and Workshop 1) in the form of conceptual intervention (Digital Buddy). Workshop 2 aimed to evaluate and discuss Digital Buddy in a group. I demonstrate how I ran evaluation workshops in an online space in the Fieldwork Chapter. The Findings Chapter addresses how Digital Buddy emerged from the findings and how participants evaluated this intervention. The outcome of this workshop enabled me to propose policy recommendations and gain a profound understanding of the affordances of digital technologies/online platforms in online respect in the Discussion Chapter.

Phase 5. Reflection

Within the last phase, reflection, I employed the thematic analysis method to identify and analyse the data gathered from previous phases (interviews, asynchronous activities, and workshops). This phase enables me to generate themes and patterns to address the research questions, offer policy recommendations, and propose an understanding of digital technologies' affordance in the context of online respect.

The thematic analysis is a flexible and useful method in qualitative research that has been poorly branded (Braun & Clarke, 2006; Nowell et al., 2017). Some scholars discussed that thematic analysis considers a process used by various qualitative methods that help researchers in the analysis process (Holloway & Todres, 2003; Ryan & Bernard, 2000). On the other hand, some scholars outlined that thematic analysis is a method in its own right (Braun & Clarke, 2006; Nowell et al., 2017). In the case of this research project, the thematic analysis would be seen as a method that enables analysing, organising, and describing the information gathered and collected into meaningful, actionable design insights (Martin & Hanington, 2012; Braun & Clarke, 2006). Simply, it helps "identifying, analysing and reporting patterns (themes) within data. It minimally organises and describes your data set in (rich) detail" (Braun & Clarke, 2006, p.79).

Furthermore, Attride-Stirling (2001) noted that "one of the principal reasons for using this method is, precisely, to bring to light the meaning, richness and magnitude of the subjective experience of social life" (p.403); meaning could be understood in the social and environmental context (Attride-Stirling, 2001). I argue that as this research project attempted to investigate the understanding of online respect among young adults by considering the sociocultural and environmental aspects, the thematic analysis enables the creation of insightful, rich, and trustworthy research findings to address the research questions and aims. Additionally, Hsieh and Shannon (2005) underlined that this method is valuable when there are no previous studies.

Within a social constructionist epistemology, I employ thematic analysis across all interviews, booklets, and workshops to identify patterned findings to address my research questions. Data sets in this research project would be participants' understanding and perceptions of online respect and cyberbullying, young adults' coping strategies, and factors that encourage/support online respect/disrespect. The

thematic analysis method enables me to reflect on participants' thoughts, feelings, values, and beliefs and unpack “the surface of reality” as transparently as possible (Braun & Clarke, 2006, p.81).

In this research project, I employ the six-phased method as demonstrated by Braun and Clarke (2006) (table1). As detailed in table 1, although thematic analysis is presented as a linear method, it is an iterative and reflective method that involves moving back and forward between phases (Braun & Clarke, 2006). After collecting data, I transcribe the interviews and workshops from previous phases; where recording was not permitted, I use my field notes. In the first phase, I should obtain a sense of the whole by reading the transcripts and field notes several times. I also took notes of initial codes and ideas that I return to in the subsequent phases.

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

Table 1. Phases of thematic analysis with the description; source (Braun & Clarke, 2006, p. 87).

The next phase is generating initial codes under potential sub-themes or themes that require to keep revisiting the data. “Codes identify a feature of the data (semantic content or latent) that appears interesting to the analyst and refer to ‘the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon’” (Braun & Clarke, 2006, p.88).

In phase 3, I group all the potentially relevant codes and identify potential themes/sub-themes. Sub-theme exists under the umbrella of a theme; it centres on one specific element of the theme that is significant or relevant to the research questions (Braun & Clarke, 2006). “They [sub-themes] can be useful for giving

structure to a particularly large and complex theme, and also for demonstrating the hierarchy of meaning within the data”(Braun & Clarke, 2006, p.92). DeSantis and Ugarriza (2000) defined a theme as "an abstract entity that brings meaning and identity to a recurrent experience and its variant manifestations. As such, a theme captures and unifies the nature or basis of the experience into a meaningful whole" (p.362). Simply a theme captures meaningful and/or crucial information in relation to the research questions (Braun & Clarke, 2006).

Theme is a "more abstract entity that involves a greater degree of interpretation and integration of data" (Kiger & Varpio, 2020,p.3). It could be identified "irrespective of the number of times a particular idea or item related to that theme appears in a data set" (Ibid). Themes could employ an inductive or deductive approach to theme identification (Braun & Clarke, 2006). An inductive approach derives themes from scholars' data sets (Ibid). Conversely, deductive approaches "use a pre-existing theory, framework, or other researcher-driven focus to identify themes of interest" (Kiger & Varpio, 2020, p.3). Therefore, "an inductive approach tends to provide a broader, more expansive analysis of the entire body of data, whereas a deductive approach is useful for honing in on a particular aspect of the data or a specific findings that could be best illuminated or understood in the context of a pre-existing theory or frame" (Ibid). Simply, themes come from literature, current debate, local common-sense constructs, as well as, researchers’ values, theoretical orientation, and personal experience with the subject matter (Bulmer 1979; Maxwell 1996).

The next phase is reviewing and refining themes/sub-themes; this phase ensures that themes/sub-themes would be in relation to the coded extracts and the entire data set as a whole. In this phase, the inadequacies in the initial coding, sub-themes, and themes would be revealed and might require recoding the data set. The validity of individual themes should be considered in relation to the data set and whether themes "accurately reflect the meanings evident in the data set as a whole" (Braun & Clarke, 2006, p.91). Additionally, to ensure covering relevant issues/research questions in the text, either new codes might be identified or some codes might be deleted.

During the fifth phase, I determine what aspects of data each theme/sub-theme captured (Braun & Clarke, 2006). At this stage, I should consider how each theme/sub-themes fit into the overall story about the entire findings in relation to

research questions and aims (Ibid). Once I clearly describe the scopes and contents of each theme/sub-themes, I move on to the next phase.

Phase six would be the final opportunity for data analysis in the thematic analysis method. Braun and Clarke (2006) noted that thematic analysis should provide a coherent, concise, logical, nonrepetitive, and interesting account of data across themes/sub-themes. "The final analysis should create an overall story about what the different themes reveal about the topic" (Nowell et al., 2017, p.11). Moreover, Vaismoradi et al. (2013) suggested that scholars present their analysis in the form of a storyline, map, or model.

To summarise the thematic analysis, table 2 demonstrates a concise checklist of criteria to consider when analysing data using thematic analysis. This table helps to be clear and explicit about what this method is and determines whether a good thematic analysis has been generated.

Process	No.	Criteria
Transcription	1	The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for 'accuracy'.
Coding	2	Each data item has been given equal attention in the coding process.
	3	Themes have not been generated from a few vivid examples (an anecdotal approach), but instead the coding process has been thorough, inclusive and comprehensive.
	4	All relevant extracts for all each theme have been collated.
	5	Themes have been checked against each other and back to the original data set.
	6	Themes are internally coherent, consistent, and distinctive.
Analysis	7	Data have been analysed – interpreted, made sense of – rather than just paraphrased or described.
	8	Analysis and data match each other – the extracts illustrate the analytic claims.
	9	Analysis tells a convincing and well-organized story about the data and topic.
	10	A good balance between analytic narrative and illustrative extracts is provided.
Overall	11	Enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase or giving it a once-over-lightly.
Written report	12	The assumptions about, and specific approach to, thematic analysis are clearly explicated.
	13	There is a good fit between what you claim you do, and what you show you have done – ie, described method and reported analysis are consistent.
	14	The language and concepts used in the report are consistent with the epistemological position of the analysis.
	15	The researcher is positioned as *active* in the research process; themes do not just 'emerge'.

Table 2. Checklist of criteria for good thematic analysis; source (Braun & Clarke, 2006, p. 96).

Chapter Four demonstrates how I analysed the data set (digitally and manually) through examples. Chapters Five and Six present, describe and interpret these

analyses in relation to online respect. The following describes participants in this research project and the summary of this chapter before demonstrating how I implemented these five phases in an online space.

3.6. Participants in my research project

As noted in the previous chapters, in this research project, I attempted to address: how can Interaction Design be used as an approach to explore promoting feeling respected in an online space (online respect) among young adults (18-24 years old) in Scotland in the context of cyberbullying from the perspective of key stakeholders and young adults? As I explained in Chapter One, investigating young adults (18-24 years old) understanding of online respect was justifiable due to the following takeaway points.

A. The Scottish Government (SG) have treated cyberbullying similar to school bullying (The Scottish Government, 2013; The Scottish Government, 2017b); consequently, the SG has developed guidance focusing on awareness-raising and discouraging cyberbullying behaviour among children (under 18 years old) (Ibid). As a result, far too little attention has been paid to young adults' cyberbullying experiences at the policy level.

B. In 2019, Waldersee reported that young adults (18-24 years old) experience more cyberbullying compared with children and adolescents (under 18 years old). Stone (2014) and Waldersee (2019) also outlined that more than one-third of young adults who have experienced cyberbullying wouldn't report cyberbullying incidents.

C. In the light of the COVID-19 pandemic, the way people live and work has changed radically (Tušl et al., 2021); there has been a surge in using digital technologies/online platforms in education, entertainment, shopping, working, communication, etc. (De' et al., 2020). As scholars pointed out, spending more time in an online space leads to experiencing more cyberbullying and online disrespect (Mancino, 2021; Barlett & Chamberlin, 2017). In other words, because of the COVID-19 crisis, young adults might experience more cyberbullying and online disrespect.

In order to investigate young adults' understanding of online respect, I developed a series of online engagements using a co-design approach carried out with young adults and the relevant key stakeholders. I recruited young adults (18-24 years old) who have been living in Scotland and have been active on online platforms. Given my

lack of knowledge and experience in mental health problems or conditions, I didn't intend to recruit young adults who might have experienced any form of online harm.

Furthermore, as noted earlier, key stakeholders participated alongside young adults in this research project on account of the difficulties recruiting young adults for five-hour participation during the COVID-19 pandemic. Key stakeholders involved in this research project were: two third-sector organisations, one policy-maker, one academic with a computer science background, one online safety representative and one designer. This range of stakeholders enabled me to look at and collect data about online respect from different angles. I further elaborate on the recruitment process and how the COVID-19 pandemic further complicated the recruitment and research engagement on this process in the Findings Chapter (Chapter Four).

3.7. Summary

The purpose of this chapter (Methodology Chapter) was to explore the fieldwork structure, research design, methods, tools, and techniques in the research process. I have positioned myself as a social constructionist; the relational background becomes enormously important to recognise the possibilities inherent in various ways of life. Within this study, it could be referred to as a social influence on an online user's experience of online respect. Also, to address the difficulties recruiting participants during the COVID-19 pandemic in the limited timeframe of this PhD, I employed a single case study for this research project.

As discussed previously, I have changed the landscape of my Interaction Design practice from a User-Centred Approach to a Co-design approach, to create a domain of collective creativity. Co-design enables me to collect meaningful data about participants' understanding of online respect and factors that impact online respect among young adults.

Following a co-design approach, I describe the research process and fieldwork structure so as to construct a single case study. The first phase of the fieldwork structure is conducting semi-structured interviews on Zoom platforms. This phase enables me to investigate participants' understanding of online respect, cyberbullying, and factors that affect online respect. Asynchronous activities are the second phase; it aims to offer additional time for participants to rethink and reflect on online respect in

their homes. The third and fourth phases are online workshops. In the third phase, I investigate young adults' support journey and design opportunities to support and facilitate online respect among young adults. In the following phase, I present all participant's ideas to facilitate online respect in the form of intervention; they evaluate this intervention in an online Workshop 2.

In the final phase, I reflect on the findings that have been gathered from the previous phases using the thematic analysis method. I look for patterns and themes, following the collection of qualitative data through online interviews, remote asynchronous activities, and workshops. To arrive at consolidated descriptions, I employ the Thematic Analysis method as illustrated by Braun and Clarke (2006). The Thematic Analysis method helps generate insights into participants' perceptions of online respect and the factors that influence feeling respected in an online space. This phase enables me to not only propose policy recommendations for the SG and insights into the affordances of digital technologies in the context of online respect, but also reflect on this research process.

In the final section, I elaborate on who would participate in this research project. As noted, both young adults (18-24 years old) who have been living in Scotland and have been active on online platforms and key stakeholders would participate in this research project. In the following chapter (Fieldwork), I outline how I recruit a potential pool of young adults and key stakeholders. Having addressed the recruitment process and its challenges and difficulties for this research, I present the case study fieldwork.

Chapter Four: Recruitment and Fieldwork

4.1. Introduction

The Literature Review Chapter indicated that I discussed cyberbullying studies for young adults (18-24 years old) in Scotland are limited, and the implication of respect in an online environment, as one of the Scottish Government's anti-cyberbullying approaches is unclear. In response to the absence of understanding of feeling respected in an online space, I have posed the research questions of how Interaction Design can be used as an approach to explore promoting feeling respected in an online space (online respect) among young adults (18-24 years old) in Scotland in the context of cyberbullying from the perspective of key stakeholders and young adults. How can Interaction Design be used to investigate the key stakeholders' and young adults' understanding of online respect in the context of cyberbullying in Scotland? What coping strategies might young adults adopt in response to not feeling respected in an online environment from the perspective of key stakeholders and young adults? What are the factors that potentially impact not feeling respected in an online environment in the context of cyberbullying for young adults from the perspective of key stakeholders and young adults? What are the factors that support online respect in the context of cyberbullying for young adults from the perspective of key stakeholders and young adults living in Scotland?

To address these research questions, in the Methodology Chapter, I positioned my research project within the framework of a Collaborative or Co-design approach, which is described as involving stakeholders in the design process of exploring online respect; it ensured that the outcome of the research meets stakeholders' needs, values, understanding, and beliefs. Following a Co-design approach, I implemented five phases of fieldwork; these phases included interviewing participants, conducting asynchronous activities (booklets), running initial group workshops, running evaluation workshops, and reflection. Collecting data through various means enabled me to develop a better picture of online respect for young adults from the perspective of young adults and stakeholders.

Overall, this chapter offers a rationale for and a detailed description of the fieldwork, connection to participants and how I ensure to carry out participants' engagement. It aims to present how I implemented a series of methods, tools, and techniques to gather data from participants in relation to feeling respected in an online space. In other words, Chapter Four demonstrates the data collection in an online setting and remotely that tries to provide insights into participants' subjective understanding of online respect and findings in the following chapter.

In brief, I begin a Fieldwork Chapter, by recounting the process of recruiting participants, in two different phases. In the light of the pandemic, sensitivity of the context (cyberbullying), and five-hour commitment, I have faced difficulties recruiting participants. I had to establish different recruitment strategies in order to access the pool of participants. In the first phase following my recruitment strategies, I recruited stakeholders instead of young adults. I eventually connected to seven participants in five months; (during the pandemic). And I engaged with these recruits in four stages where I could gather data regarding their understanding of cyberbullying as a context, online respect, their roles, different ways to support young adults and factors that affect experiencing online respect. Such stakeholders' recruitment has been beneficial to the research process, as the emerging data enabled me to shape a profound understanding of online respect from different perspectives especially experts.

To overcome recruitment challenges in the second phase, I reduced the participant's commitment from five hours to one hour. Eventually, I recruited five young adults (18-24 years old) for a one-hour Zoom interview. During the interviews, I inquired about young adults' understanding of online respect, cyberbullying, how they navigate themselves in an online space, and different ways to promote online respect for young adults. And finally, after the completion of all participants' engagement, I analysed all the findings using thematic analysis. As discussed in the previous chapter, thematic analysis is a useful method for analysing qualitative data. Collecting data from young adults and stakeholders enabled me to acknowledge both standpoints in the analysis. In other words, it allowed me to establish in-depth insights into online respect in the context of cyberbullying from different perspectives (young adults and experts).

4.2. Participant Recruitment

Recruitment took place between November 2020 and March 2021 after approval by the GSA research ethics committee (see Appendix D-I), and then a second round took place in August 2021 (figure 20). The recruitment process has been very challenging due to the pandemic and the sensitivity of the context of cyberbullying. Eventually, I recruited seven participants in five months. One participant committed to a one-hour online interview, and six participants committed to a five-hour online engagement.

Given the difficulties in recruiting seven participants during the COVID-19 pandemic and its associated disruption, I was obliged to reconsider the research approach and the range of methods this incorporated. This enforced reformulation of the research phase offered an opportunity to incorporate a case study approach that extended beyond previous plans. I set about exploring single-case-study journals and studies in order to develop a better plan for the project and its incorporation of the single-case-study context. Within this investigation, I was inspired by several studies in which data were gathered by a combination of participants' engagements, such as interviews, focus groups, and surveys (ex, Mowbray & Hall, 2020). Besides, it appeared that five hours might be a long commitment for participants, according to email responses. Hence, I began to explore the possibility of recruiting participants with less commitment (one-hour interviews) in August 2021. Following my recommendations (see Chapter Seven), I successfully linked to five participants in one month.

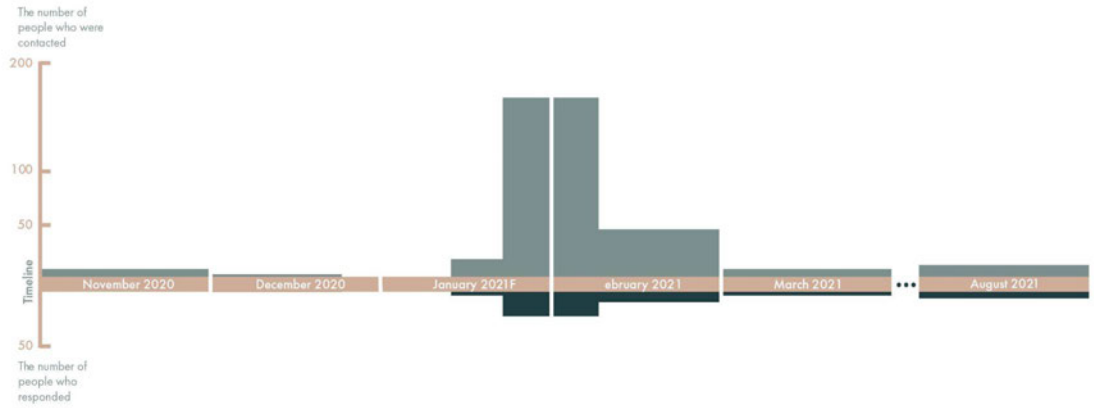

Figure 20. Participant recruitment response rate.

A more in-depth reflection addressing the consequences of COVID-19 on the recruitment process is provided in the following section, as this historically unprecedented event had a significant material impact on my recruitment plans, strategies and, ultimately, evaluation and synthesis. In addition, in 4.2.2 section, I seek to outline and include some reflections with associated recommendations for researchers who might recruit in a similarly unprecedented situation.

4.2.1. The recruitment process during COVID-19

Recruiting participants from November 2020 until March 2021: I developed my participant recruitment plan (Plan A) while completing the GSA ethics process and associated documents, as illustrated in figure 21. Initially, I planned to connect to any young adults (18-24 years old) living in Scotland, who had knowledge and interest in cyberbullying. As discussed in the Literature Review Chapter, cyberbullying has a negative impact on young adults' mental health; as a result, first, I attempted to link to them through one of the youth mental health networks as an intermediary organisation. In September 2020, I contacted an academic youth mental health research network to inquire about the possibility of access to six participants. It is worthwhile mentioning that access to six participants has been advised by supervisors and confirmed by the research committee at GSA. The network has been historically interested in supporting projects associated with the negative impact of digital technology and young adults' mental health. Therefore, I thought they might be one of the best networks to raise awareness of my project and link me to the potential young adults in Scotland who have an understanding of cyberbullying as a context.

The network undertook to include and disseminate details of my study in their monthly e-newsletter (see Appendix E). The network's November 2020 e-newsletter included a summary of this project: including details of which young adults would be eligible to participate and how potential participants could get in touch with me.

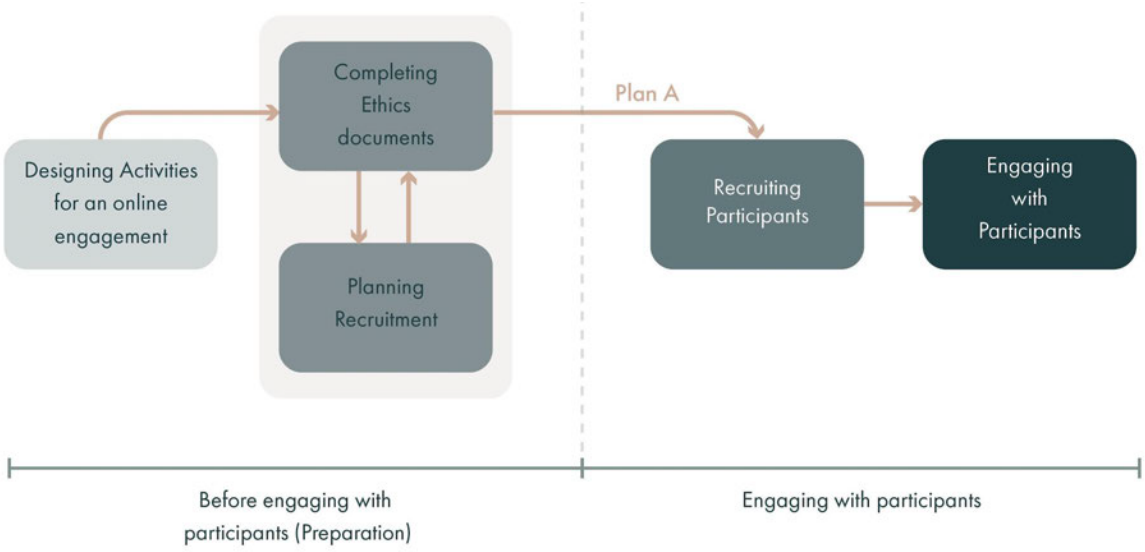

Figure 21. Initial Recruitment plan (Plan A)

In December 2020, following a disappointing failure to link to a pool of interested participants through the network, I set out to develop two other recruitment plans: Plan B: recruiting through a computer science network; Plan C: recruiting through a Student Association network of the Higher Education Institutions in Scotland. The Student Association allowed me to connect with young adults who have been living in Scotland. The computer science network could enable me to access young adults who have been studying technology-related fields and living in Scotland.

In December, following plan B, I contacted [a computer science network] to promote this research study and link to the pool of participants. I received one note of interest, requesting more information about the project. However, the potential participant decided not to take part in the project. Plan C (recruiting through the Student Association) was delayed to the end of January 2021 due to the Christmas holidays and exam season. Recruiting students raised concerns regarding the disclosure of student information to their tutor and Department. Hence, the "any personally identifiable information won't be disclosed to the student's Department or Faculty" statement was added to the ad. Eventually at the end of February I recruited one student (one young adult).

As I experienced multiple factors limiting my access to a pool of potential young adults (participants), I sought to recruit the required participants through other platforms and

venues. I established Plan D, to seek to recruit young adults from other universities and colleges in Scotland (twenty-three in total). Meanwhile, I consulted with a couple of researchers with experience in engaging with young adults on whether they could recommend ways to link to the potential participants.

Raising awareness of the project through other universities was unsuccessful. According to the majority of the limited number of responses, they couldn't promote this study because they are only permitted to send a limited number of mass emails each month, and they would rather promote their own projects. Another issue raised by some universities and colleges was: that they were limited to supporting their own students; to put it simply, they couldn't promote my project since I haven't been studying at their universities.

Following Plan E, I contacted more than one hundred and sixty-five communities, third-sector organisations, clubs, and charities all over Scotland in February; and inquired about the possibility of promoting my PhD through their network. Most of the responses were associated with the COVID-19 difficulties and they were unable to promote this project. The majority of the third-sector organisations have been closed due to COVID-19 restrictions. However, a couple of third-sector organisations agreed to promote the study on their online networks.

As seen in figure 22, I recruited one young adult as a participant through five different recruitment plans (planA to PlanE). Prior studies also addressed the problems entailed in participant recruitment for studies on stigmatised topics, such as mental health (Ex. Roth, 2012; Punt et al., 2020), and sensitive studies (Ex. Butera, 2006; May & Tenzek, 2018). In the light of the unsuccessful recruitment process, I set out to investigate stakeholders' perspectives on online respect. Notably, stakeholders' perspectives on online respect are underexplored.

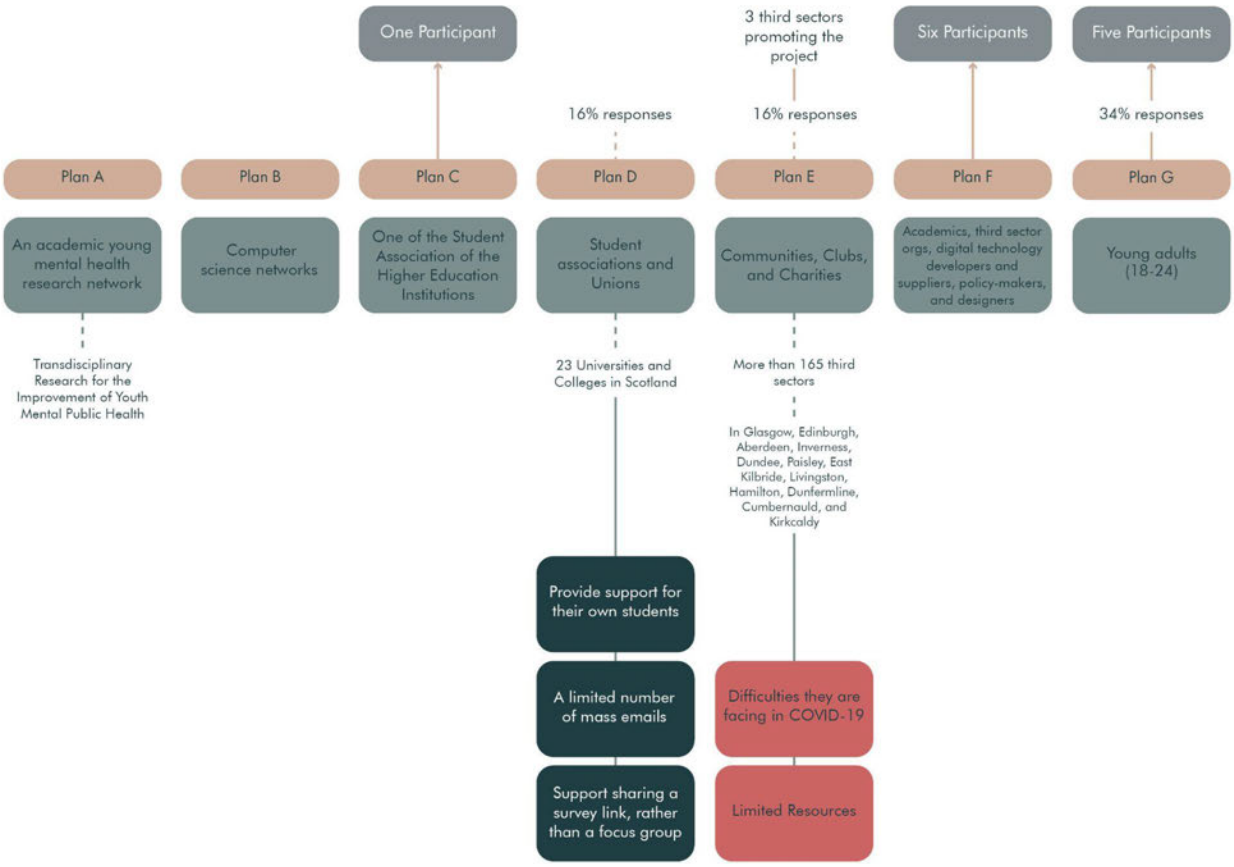

Figure 22. The overview of the recruitment plans

In mid-February, I contacted stakeholders who might be interested in taking part in the project. The stakeholders I reached out to included academics, third-sector organisations, digital technology developers and suppliers, policy-makers, and designers. Accessing these stakeholders allowed me to gather different perspectives, experiences and understanding of cyberbullying and online respect.

Since this PhD attempted to explore online respect at the policy level, the first stakeholder I contacted was one of the Scottish anti-bullying/anti-cyberbullying organisations as a policy-maker stakeholder. One policymaker agreed to take part in this project. Next, I contacted eight academics in the field of psychology, computer science, and cyber security departments in Scotland who might have experience in cyberbullying or projects associated with ethics. As discussed in the Literature Review Chapter, prior studies suggested that these fields would have knowledge and experience in cyberbullying and online respect. Eventually, I was linked to one computer scientist.

Other stakeholders I contacted were third-sector organisations. I reached more than twenty-five third-sector organisations that have been active in either anti-cyberbullying/anti-bullying or promoting youth mental health in Scotland. A large number of the responses were in relation to third-sector organisations' limited resources and expertise to participate in the project. During COVID-19, small third-sector organisations, particularly mental health services, have been trying to keep their services running with the increased demand from people. So they haven't had enough resources to take part in the study. And big third-sector organisations accommodated their resources for a few projects. On top of it, some of the employees started working part-time due to third-sector organisations' financial difficulties or personal matters such as home-schooling. Fortunately, considering all of these limitations, I was able to link to 2 third-sector organisations.

Digital technology designers, suppliers and developers in Scotland were other potential stakeholders as they could have experience and knowledge of offering online safety support to young adults in an online space. I reached out to fifteen digital technology developers regarding their interest in cyber security, online safety, and cyberbullying at the local and governmental levels in Scotland. After sending follow-up emails, I received three responses addressing their busy schedule that wouldn't allow them to participate in the project with a five-hour commitment. Correspondingly, I arranged a one-hour interview with one of the respondents (one online safety representative stakeholder).

Designers were other stakeholders I was interested in collaborating with. I contacted five designers who have been working on mental health and wellbeing projects in Scotland or have an in-depth understanding of policy and strategy in Scotland. One designer responded, and agreed to take part in the project. Mental health counsellors could also bring a unique perspective to the project; however, due to COVID-19, it has been very tough to collaborate with these types of stakeholders. According to one response, the strictly confidential nature of the counselling service was the biggest obstacle to participating in the project. So, I couldn't link to any counsellor. Eventually, I recruited one young adult (university student), two third-sector organisations, one policy-maker, one academic with a computer science background, one online safety representative and one designer.

The second phase of recruitment: recruiting participants in August 2021

As addressed earlier, in August 2021, I challenged myself to recruit more young adults as participants. Following my recruitment recommendation (the following section), I developed Plan G to recruit potential participants for a one-hour Zoom interview. I contacted more than forty-five young adults (18-24 years old) who have been running their businesses in an online environment in Scotland. In addition, I have contacted a couple of cyberbullying and mental health young adult activists in Scotland.

Within this plan, I inquired about participants' understanding of the online environment, how they navigated themselves and their online businesses, and their opinions on how to support online respect. I have also made it clear that I haven't been looking for young adults who have experienced cyberbullying, but who have been active in an online environment and have been willing to share their experiences with others. Overall, changing the language and time commitment was a tactic I employed to recruit young adults. In this phase, I linked to five young adults in one month.

In the following section, I elaborate on my reflection, thoughts, and experience recruiting participants during the COVID-19 pandemic. And I offered some recommendations for scholars who might face difficulties recruiting participants in a similar situation.

4.2.2. Recruitment recommendation during COVID-19

Given the difficulties in recruiting participants over six months, this research study also provided an overview of my experience, thoughts, reflections and observations on the recruiting process. Overall, even though recruitment is a challenge, especially for sensitive topics details about recruitment plans and strategies are rarely published (Marks et al., 2017; Joseph et al., 2016). Such recruitment recommendations during the pandemic could be vital because recent studies have a limited understanding of the impact of the pandemic on the research projects such as the lack of organisational resources. The following recommendations offer valuable insights into how researchers could recruit in a similar situation effectively. Effective recruitment strategy "enables the timely collection of data and prevents disruption to research timelines." (Marks et al., 2017, p.34).

A. Recruitment strategy during COVID-19

In the light of the COVID-19 pandemic, recruitment has been very challenging considering both the sensitivity of the context (cyberbullying) and a five-hour participant's commitment. Initially, I set out to recruit young adults (18-24 years old) through one of the youth mental health networks in the UK, given the context of this research project (cyberbullying). In this strategy, I overestimated the success rate of participant recruitment and planned to recruit through one network. Prior studies have also raised overestimating the pool of potential participants as an issue for researchers (Jeong-Yol et al., 2013). Due to the unsuccessful recruitment plan, I developed other strategies. The second strategy aimed to raise awareness of the research project by actively looking for potential connections/networks to link to a pool of young adults (18-24 years old) who were living in Scotland and communicating on social media.

The second strategy was also unsuccessful. The factors that led to an unsuccessful recruitment plan included: A. The COVID-19 pandemic: some third-sector organisations found it difficult to cope with the New Normal and extend their activities and services in an online environment. It could be due to the lack of technological knowledge, financial difficulties, and the type of service they offer. B. Limited resources during the pandemic, especially for third-sector organisations. C. Organisational and personal matters, such as home-schooling.

Following the unsuccessful recruitment plans, I developed a third strategy: directly recruit potential participants. This strategy enabled me to find eligible participants and ask for their collaboration. It is notable that I haven't planned to recruit young adults who have experienced cyberbullying because of ethical concerns regarding cyberbullying and the safety of participants and myself. Within this strategy, I aimed to recruit two pools of potential participants: A. Stakeholders who have experience and knowledge in either digital technology or young adults' mental health/cyberbullying. B. Young adults who have been running their businesses in an online environment. Eventually, this strategy enabled me to link to twelve participants (figure 23).

Besides, it is worthwhile to note that participants' activities and interview questions could change according to recruitment plans. Simply, the recruitment process could impact engagement activities and even the project. In the case of this research project,

recruiting young adults and stakeholders has led to different participants' engagement activities and interview questions.

Overall, the recruitment process is time-consuming, especially when taking into account the time for the ethical approval process and the various stages/formats required to establish a suitably large participant base (Jeong-Yol et al., 2013). I propose that the most efficient recruitment plan is to make various recruitment plans ahead and discuss all of these recruitment possibilities with the research office. The research office could also provide more advice regarding new, innovative, and ethical ways of online recruitment. To facilitate recruitment and improve the enrolment rate, I suggest building up diverse personal and professional connections, performing promotion activities with diverse strategies, being aware of the potential challenges of participant recruitment, and cooperating with communities and third-sector organisations.

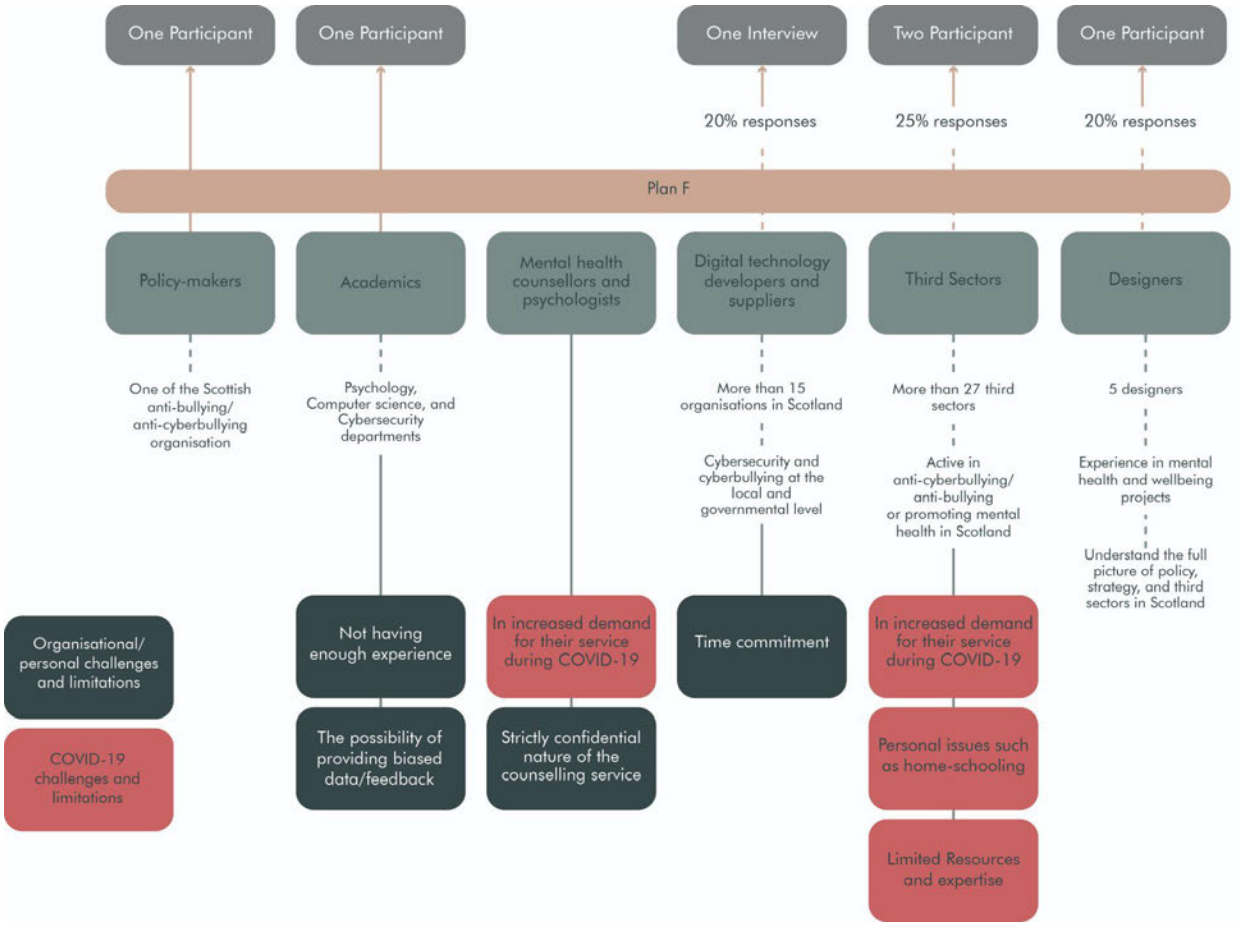

Figure 23. Plan F

B. The Ethics of Monetary payments

Monetary incentives have commonly been used to encourage and make participants more willing to participate in the research process, although more often in the commercial than the academic realm. It ensures participants are compensated for the effort required to participate in the project and increases the response rates. However, there have been certain ethical concerns regarding whether it “may lead to reductions in the integrity of a study’s findings” (Bentley, 2004). Prior studies, such as Bentley (2004) stressed that there is not a certain and definitive position on whether monetary payments are ethical or not. Therefore, it is worthwhile to discuss the opportunity to provide monetary payments, such as gift vouchers with the research office.

According to the “socially distant research methods'' event, offering vouchers as a prize could play a significant role in overcoming the recruitment difficulties during COVID-19. The event was organised by the computer science network in January 2021 where researchers shared their experiences of online engagement during the pandemic. One of the key points was considering ethical options while choosing vouchers; for instance, offering charity shop vouchers, or book vouchers. Another key point that arose was offering a choice of a voucher or organisational services with the same value that can be purchased and used online.

C. Connecting to the pool of participants/stakeholders

The recruitment process sometimes relies on gatekeepers or networks/communities to access the eligible participants. These could be crucial to raising awareness of the project and linking to a pool of participants. As identifying and approaching appropriate networks during the pandemic have been a challenge, I have developed the following recommendations in order to help researchers to make more effective personal and professional connections and access the pool of potential participants.

1. Get in touch with people rather than the organisation. Also, it is worthwhile to take into consideration that asking people personally might introduce social pressure.

2. When contacting the potential participants/stakeholders, offer an online meeting (such as Zoom). Developing respectful and trusting relationships, in general, could lead to the successful recruitment of a pool of participants.

3. When contacting the potential participants/stakeholders ask whether they can refer you to the potential participants. Or it could be effective to set up preliminary meetings with organisations, stakeholders, professionals, or other researchers who hold an interest in your field of the project to ask for their recruitment recommendations.

4. Pursue existing Listservs or Slack channels and post a recruitment ad for further distribution. Listservs allow reaching a large group of potential participants.

5. If you haven't received any responses after two or three weeks, you could send follow-up emails and ask whether they had a chance to consider your opportunity to take part in the project.

6. Try to build up a wide variety of personal and professional connections particularly in interdisciplinary projects by attending different events, and conferences. This also allows gathering different perspectives on the project.

7. Set up a mixture of different recruitment strategies and channels

8. Always wisely take into account how much information you are sharing with your stakeholders while speaking to them. Because if they contribute to the project, they might provide biased feedback or data.

9. Recruitment times should be planned around the availability of the potential participants. For instance, during exam season, students are unlikely to have spare time to contribute to any studies.

10. Despite considering demographics, attitudes, and the number of participants, it could be notable to raise the following question: What if I couldn't access this pool of participants?

D. The first contact point

The first point of contact is the first time people hear about your project, whether it be person-to-person, through an e-newsletter, email, website, flyer, app, or any form of contact. It is all-important to take the time to carefully draft the project invitation, flyers, or ads; the style and form vary depending on the project and recruitment plans. I developed the following recommendations for the first point of contact; considering

these key points lead to accessing the pool of potential participants more effectively and efficiently.

1. An accurate and clear description of the study. For example, within this project, I have never intended to recruit young adults who have experienced cyberbullying or any other form of abuse in an online space. Therefore, it has been beneficial to make this clear to young adults in the emails.

2. Explicitly address why you have chosen the specific stakeholder or participants to contribute to the project.

3. Try to form the first point of contact in positive language, especially for sensitive projects. For instance, in the case of this study, shifting the focus from exploring cyberbullying to exploring respect in an online environment in the context of cyberbullying.

4. Sense-check the text of the first contact point (such as emails) with someone else.

5. Consider that the gatekeeper or the network might introduce bias to participants inadvertently or deliberately.

6. Try to make the first contact point as visible as possible. For instance, I recommend using images, or colours for ads.

7. It is important not to expect people to be available outside of typical business hours.

E. Connecting to participants/stakeholders through social media

As recruiting through online platforms becomes widely popular, it is essential to address this way of recruiting. Social media can be an efficient way to promote the project and boost transparency in the design process by sharing your process, especially in participatory approaches. However, one of the problems of recruiting online through personal social media is that researchers might connect with people who share similar beliefs, cultures, mindsets, and understanding; this is because of how the algorithm Internet works. So you might not gather a wide variety of perspectives on the project.

It is also important to consider how researchers could protect the identity of the participants (especially vulnerable participants) during data collection, analysis and dissemination. Researchers are encouraged to think of how they can create a safer place for participants on social media/online platforms and how they can support a healthy debate in an online environment accordingly.

Following participants' recruitment, in the following section, I outlined how I engaged with participants in an online environment during the COVID-19 pandemic.

4.3. Online engagements (fieldwork structure)

4.3.1. Pilot Interview and asynchronous activities

As shown in Figure 24, before participant engagement, I piloted interviews and asynchronous activities. The purpose of the pilot interview was to test out the efficiency of the process, whether I could cover all the interview questions within one hour, and get familiar with the Zoom platform. It helped to ensure that I can create a safe place on Zoom and provide further support if it's necessary. I learned to develop different scenarios of cyberbullying situations and online respect/disrespect to challenge participants and help them to see the project from different perspectives and explore other possibilities. For example, whether receiving harmful messages on dating apps or Amazon/ eBay could count as online disrespect or cyberbullying.

Piloting asynchronous activities enabled me to ensure the activities were creative, engaging, exciting, and easy enough to understand. It helped to assure the activities outcomes would be relevant to research objectives and scope. It also enabled me to estimate how long it could take to complete the activities.

I piloted the interview and asynchronous activities with one participant. I tested out the digital format of the activities due to the COVID-19 pandemic. I emailed the activities to the participant and arranged a Zoom interview with the participant. Figure 25 shows one of the completed activities by the participant; as this figure might contain identifiable data, it has been blurred. The interview went smoothly. The participant feedback was positive and addressed that the activities were not challenging and easy to understand. However, I expected to gather more critical feedback and insights into how to make activities more engaging.

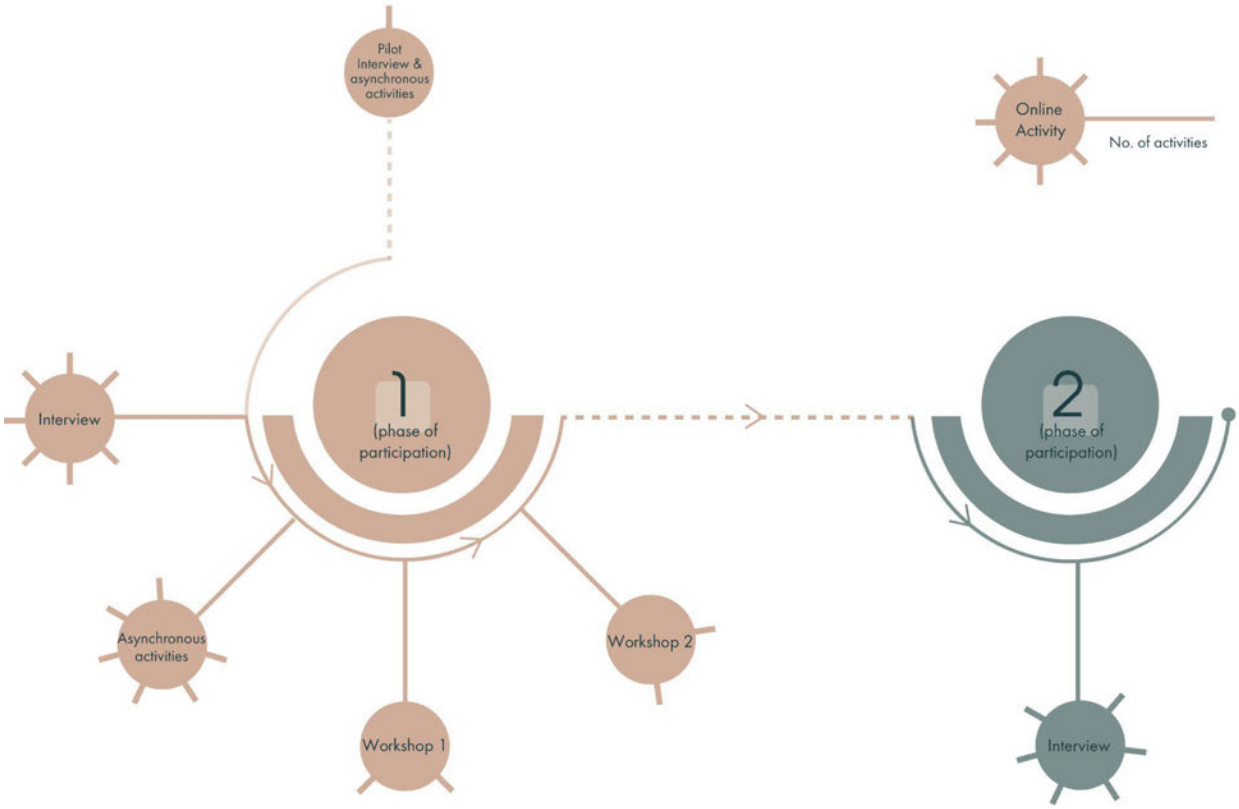

Figure 24. An overview of online engagement in both phases of participation

Describe **how this experience impact the relationship of the victim or cyberbully with other people**. This relationship can be with your partner, family, friends, colleague, flatmates, etc.

Please take into account: where does it happen? What victim will do?/ what cyberbully will do? Does it have a negative or positive impact on the relationship?

Please draw here.

Please write here.

Tinder:

- I was avoiding to speak up or open up to my family or friends because I feel ashamed, and if I tell them that means I have to share a story that I consider private. At that time I was actually secretive about being on a dating app. There was actually nothing embarrassing about my dating profile, it was very normal. But the thought of getting caught, or the idea of someone taking that out of context, was a little bit unsettling and worrying.

Instagram:

It was actually affecting my relationship with my boyfriend. Cause it stressed and frustrated me and it affected my self-esteem. Because my boyfriend thought the acne was not a big deal and I shouldn't listen to other people's comments on instagram, but I felt frustrated and wasn't being understood.
I isolated myself more; I didn't really want to socialize, meeting up with new people even though I kind of needed to since I was new in the city and I didn't know anybody. But I had a really low self-esteem and I was worried that I'd be judged by my acnes and I knew it didn't define me. But also I didn't want to video call my friends because I knew they'd say something about it. I was kind of embarrassed and upset about being so affected by some horrible comments on instagram.

Figure 25. An overview of a completed digital prototype of Activity 1. In the light of identifiable data, the figure is blurred.

4.3.2. Semi-structured Interview

As noted in the Methodology Chapter, I developed a set of interview questions focusing on participants' understanding of cyberbullying, online respect, young adults' coping strategies, and factors that impact online respect (see Appendix B and C). The interview questions were framed in positive language. In order to avoid vague or irrelevant answers, I considered whether questions were too narrow, overly broad, or could introduce bias. The questions also adopted participants' (stakeholders) roles. For instance, one of the questions for computer scientists was “how can digital tech provide support for young adults?” and this question for the third sector was “how [the name of the third sector] can provide support for young adults?”.

As discussed earlier, I recruited an additional five participants in August 2021 for online interviews. Due to the time limit (one hour interview), I revisited the interview questions to ensure the questions uncover the scope of this research project: young adult’s understanding of the online environment, cyberbullying, online

respect/disrespect, and how they navigated themselves/online business in an online environment (see Appendix C). To explore the factors that impact online respect in the context of cyberbullying, I illustrated six diagrams; as shown in figure 26, these diagrams briefly demonstrated the key findings from the first phase of participants' engagement to promote respect in an online environment in the form of keywords. These diagrams were presented during the interview on the Zoom platform. They offered an opportunity for participants to reflect on and think about some of the key findings from the previous phase of participants' engagement.

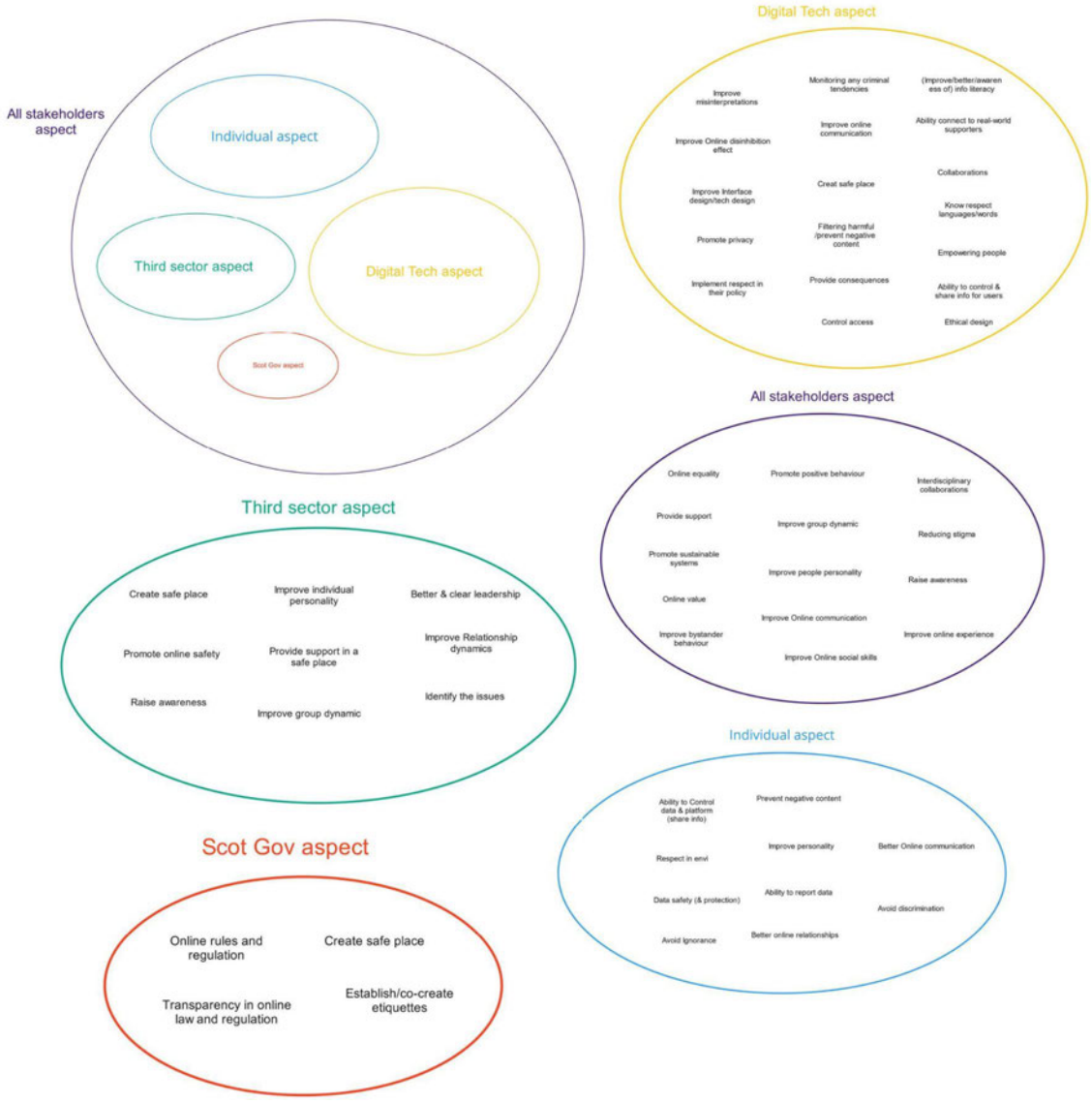

Figure 26. An overview of diagrams presented in the second phase of participation

During the interview: One of the major tasks that I undertook was building trustful relationships to encourage participants to engage in activities and communicate with other participants confidently. In doing so, I attempted to accommodate their availability and respect their circumstances. After collecting participants' consent forms (see Appendix H and I), I scheduled solo interviews according to their availability; and I sent their Zoom links. The interviews occurred on Zoom and lasted nearly one hour. Zoom is a video conferencing platform where I talk online with participants. Before recording the sessions regardless of their consent forms, I double-checked whether I could video record the meetings.

The meetings began with a brief overview of the interview aim, interview questions, how I would gather and analyse the interview data, and finally how I would share the interview transcript with them afterwards. In addition, before interviewing young adults, in order to create a safer environment, I stressed that the interview aims to offer an opportunity to share their understanding of the matters as young adults who have been active in an online environment, not particularly those who have experienced cyberbullying because of my lack of expertise in offering support for mental health problems.

As expected from the Semi-structured Interview, some questions developed during the interviews and a couple of questions expanded even further and were asked by other participants. For instance, how young adults could create a safer online community, or whether participants support freedom of speech or cyberbullying.

Furthermore, as shown in figures 27 and 28, during the interviews, I made interview notes (field notes). These notes captured: the ideas that came to my mind during the interview; participants' initial reactions to some questions; whether I explained further the questions; and whether I had to make them feel comfortable or provide further support. The interview notes enabled me to create a safe place in group sessions; for example, by considering whether participants were sensitive about particular topics.

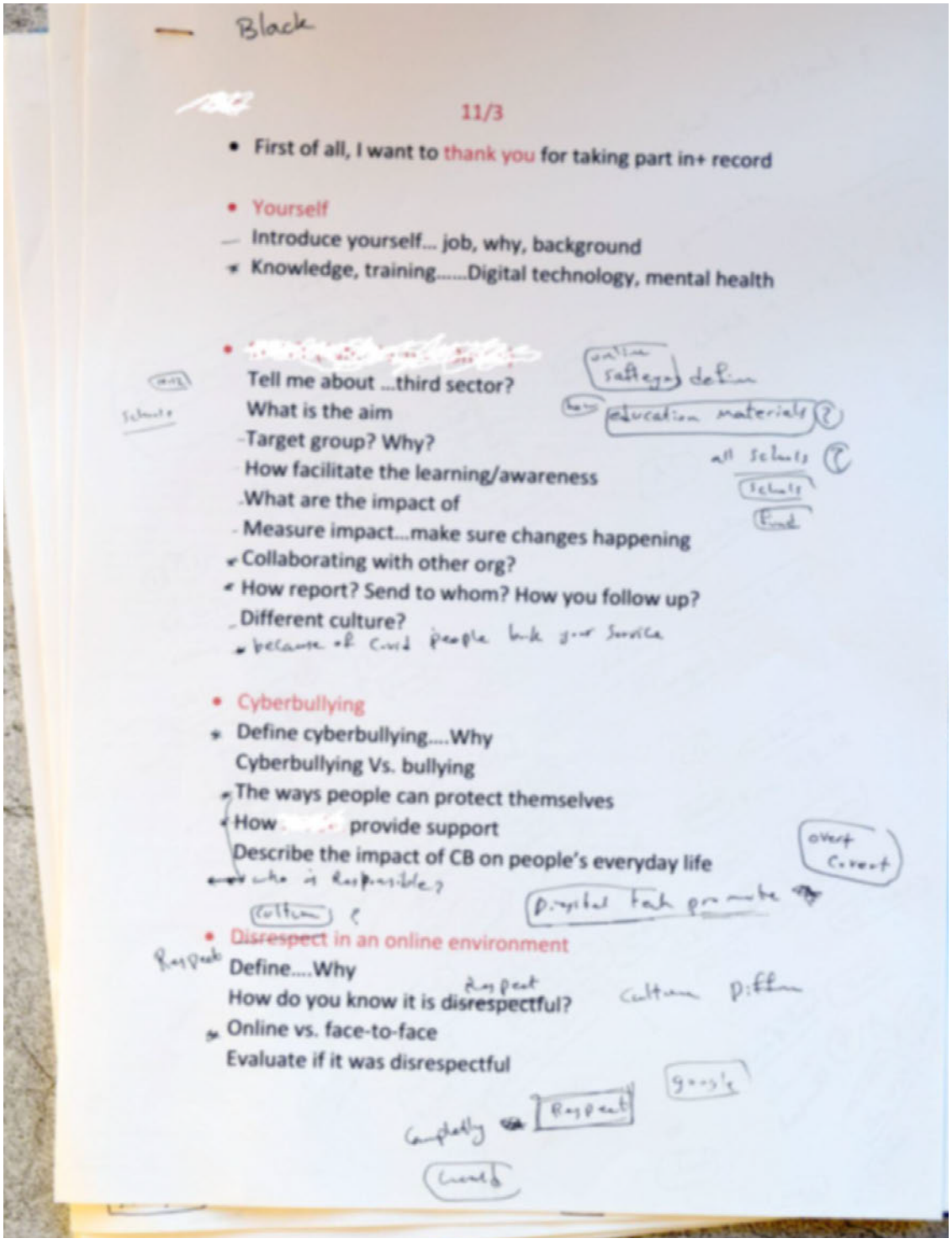

Figure 27. An overview of interview questions and interview notes. To protect the confidentiality of participants, any identifiable information has been blurred.

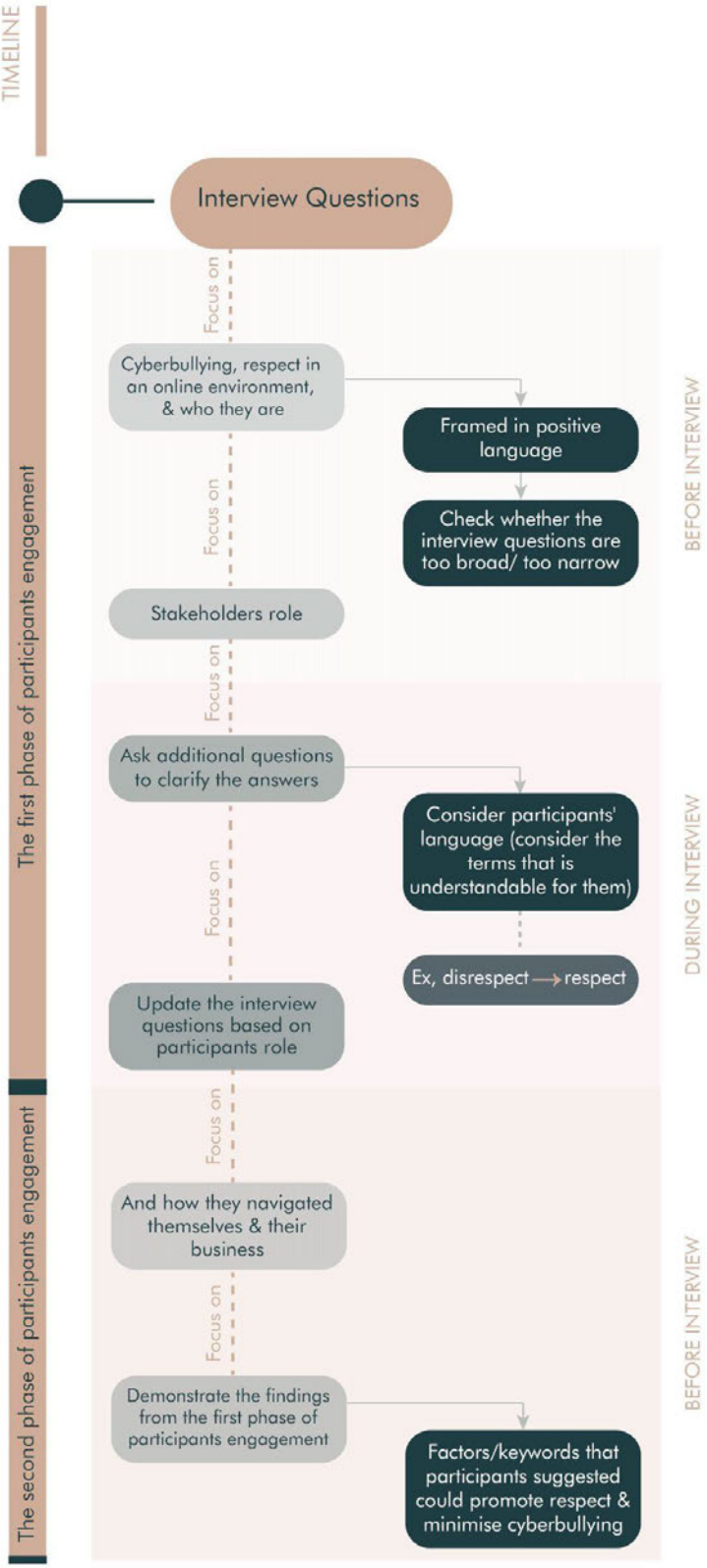

Figure 28. An overview of the interview process

Introducing participants (Personas): As noted earlier, I interviewed twelve participants; six of the participants couldn't engage in either workshops or asynchronous activities. The interview sessions began with thanking participants for their participation and introducing myself, followed by ensuring they were familiar with the Zoom environment. After asking the interview questions, I ensured the participants' engagement process was transparent enough; I reminded them of the next phases of their involvement: receiving a starter kit and group workshops. In terms of the starter kit, I showed them what and when they will receive it. And in terms of group workshops, I asked whether they were familiar with the Miro online platform. The interview was ended by participants asking their questions regarding the process.

In the following, I will introduce the participants and my personal notes. These interview notes would offer another layer of understanding of the participants and provide additional data regarding the analysis in the following chapters. Also, in order to protect their identity (ex, gender, ethnicity), I replaced their names with colours (see Appendix D and H).

Green (computer scientist): **Green** attended a mental health and wellbeing workshop as a personal interest and hasn't had any training regarding online communication. **Green** answered some questions from both **Green**'s personal opinion and professional (computer scientist) perspective, such as the question "what are the ways people can protect themselves against cyberbullying"; I ensured to collect and analyse both perspectives (see Findings and Discussion Chapters). It is also noteworthy that **Green** had a great awareness of the significance of ethics in designing digital technology. **Green** pointed out that this awareness came from **Green**'s personal interests and philosophy courses at school. All computer scientists would not necessarily be aware of the ethical aspects of digital technology while designing interventions.

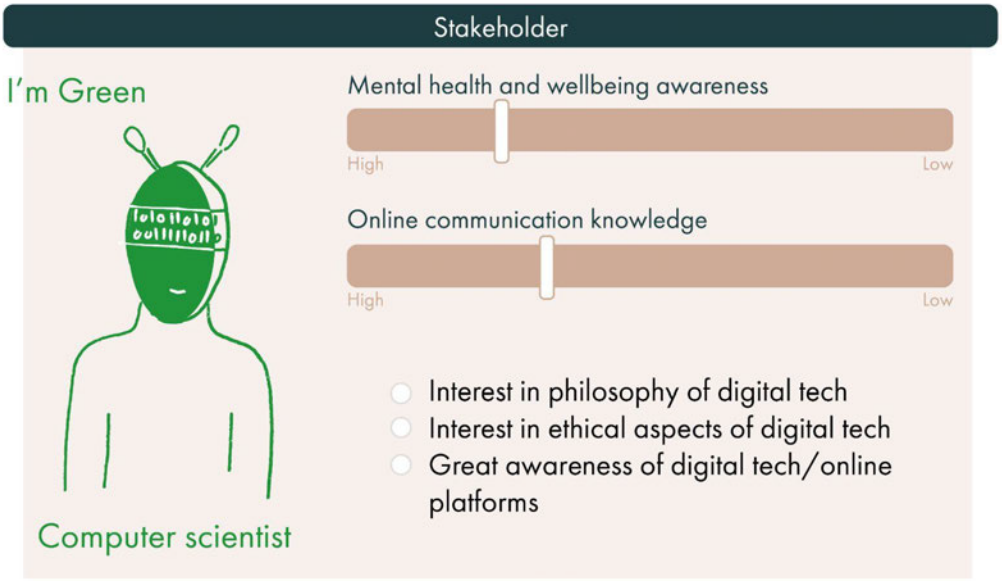

Figure 29. **Green** (computer scientist)

White (policy-maker): It is important to note that **White**'s background was in economic development. **White** joined the organisation twelve years ago, due to **White**'s experiences in policy writing and policy development skills. **White** attempted to answer the questions according to their organisational findings and reports, not personal thoughts and reflections. For instance, when I asked, "what do you think is the definition of cyberbullying?". **White** couldn't recall the accurate definition by their organisation and encouraged me to look at the definition in their report.

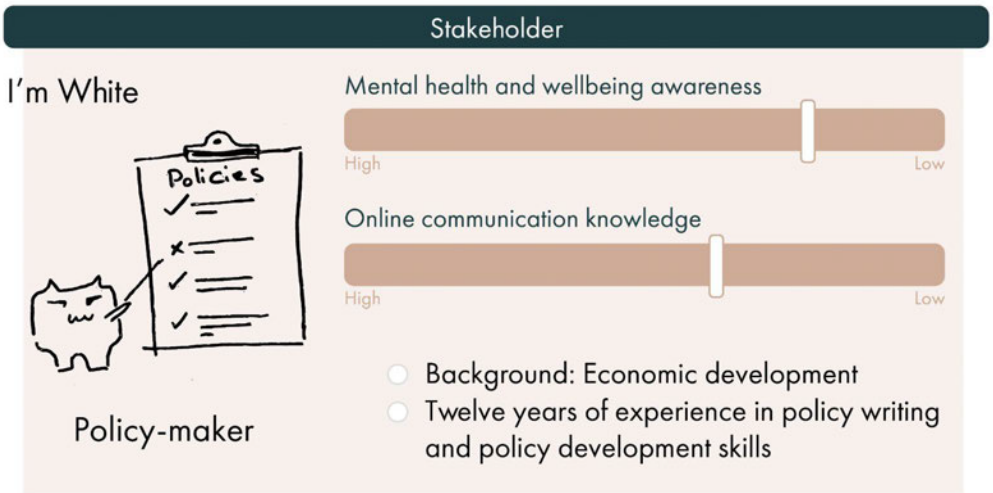

Figure 30. **White** (policy-maker)

White hasn't had any training regarding digital tech and mental health. **White** learned about digital tech "on the job" and "social media sharing". **White** pointed out that cybersecurity and online safety teams have kept them up to date regarding the functionality of the new Apps. **White** noted that since there are lots of apps, it's impossible to know all of them. **White** asserted that policy-makers need to be aware of what apps do, what are their risks and benefits, and why young adults use those apps.

Black (online safety representative): **Black** was confident about the project scope (online respect); for instance, **Black** suggested using online bullying rather than cyberbullying. **Black** has an AI and linguistics background and has been working in one of the online safety organisations in Scotland for over twenty years. **Black** had lots of experience and knowledge regarding cyberbullying, online environment, online safety in Scotland, ways to raise awareness of cyberbullying in school settings, and online communication.

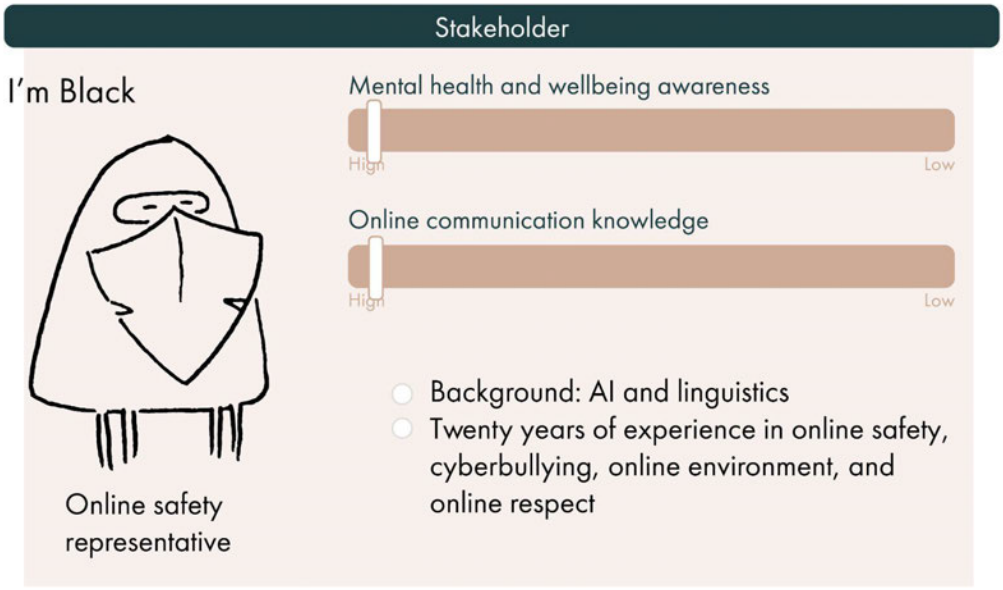

Figure 31. **Black** (online safety representative)

Black introduced me to two people (Jon Ronson and Joe Edelman) who enabled me to develop a better understanding of the online environment and online communication (Edelman, n.d.; Ronson, 2015). After interviewing **Black**, I framed a new question regarding accountability: which one of the stakeholders could be responsible for reducing cyberbullying?

Yellow (young adult): During the interview, **Yellow** got confused when I asked: “In your opinion, what is the definition of not feeling respected in an online environment”. To help **Yellow**, I gave an example of a situation where I didn’t feel respected in an online environment and then changed the question to feeling respected. This approach allowed **Yellow** to define the term easier and more clearly.

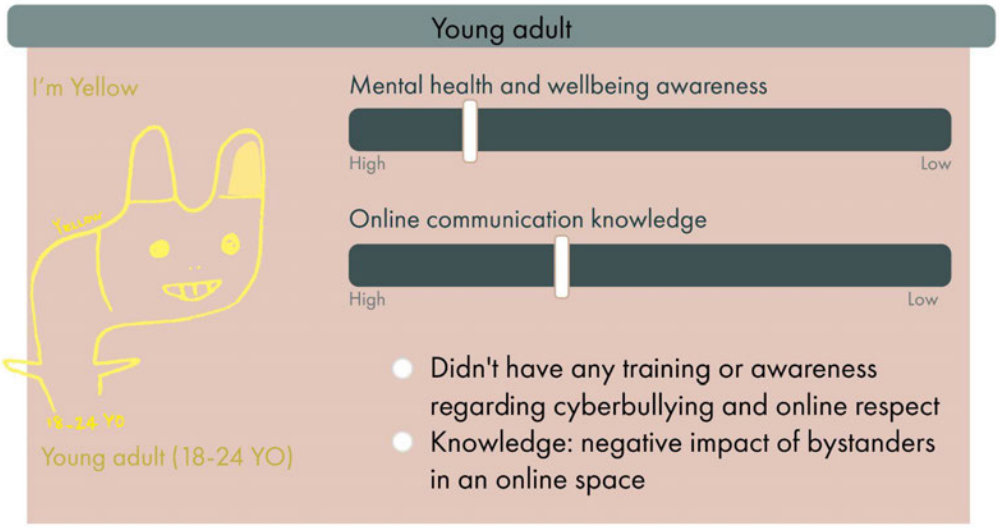

Figure 32. **Yellow** (young adult)

Yellow had a great understanding of online communication skills and the negative impact of digital technology on individuals’ lives and their mental health. **Yellow** gained this understanding from an assertiveness course. **Yellow** stressed that this understanding wouldn’t be achievable through culture, society and environment. Also, **Yellow** hasn’t had any training or awareness regarding cyberbullying. However, due to the pandemic, **Yellow**'s university provided a course regarding the role of bystanders in an online space.

Blue (designer): **Blue** preferred to answer all the questions from the perspective of a designer. **Blue**’s understanding of cyberbullying was “a very harmful situation that can possibly encourage the person who experienced the situation to commit suicide”. I challenged **Blue** by offering an example of cyberbullying that wasn't as extreme as **Blue**’s understanding. This example enabled **Blue** to consider other perspectives; **Blue** discussed the negative impacts of cyberbullying on young adults' lives, such as young adults' identity, mental health, etc.

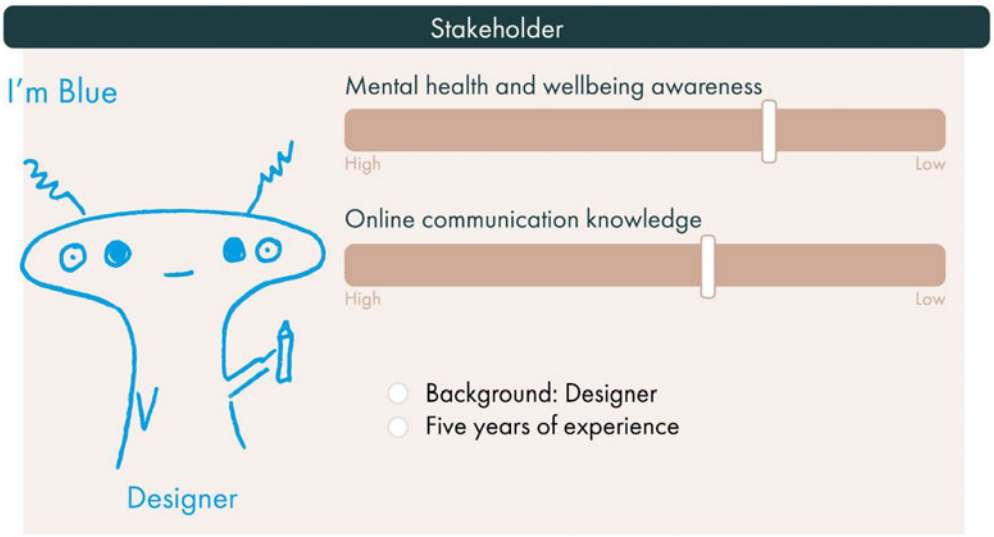

Figure 33. **Blue** (designer)

Blue has been working as a designer for five years. **Blue** has been involved in projects associated with young adults in Scotland and has been interested in projects at policy levels. **Blue** hasn't had any training in online communication and cyberbullying. **Blue** addressed that cyberbullying training might not be necessary for all occupations. For instance, people who have been working on Facebook or media benefit from cyberbullying training; not **Blue** as a designer hasn't connected to strangers through social media platforms. I will elaborate on this in the Findings and Discussion Chapters.

Red (third sector organisational representative): **Red** studied digital media and Information Studies. **Red** developed an interest in representing data in digital forms and third-sector organisations. **Red** had a Mental Health First Aid training aiming to raise awareness of mental health problems, enable supporting colleagues, and support young adults who use the service and might be at risk.

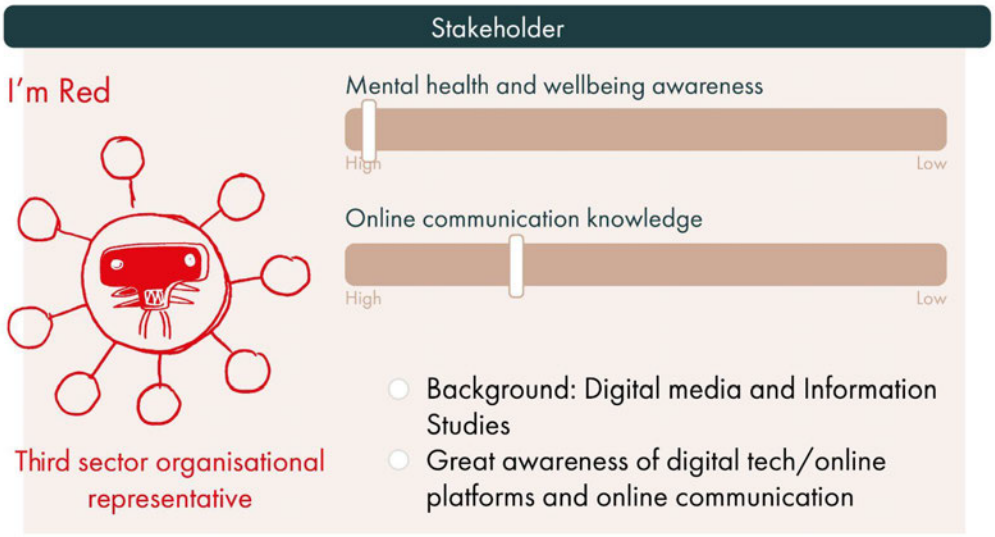

Figure 34. **Red** (third sector organisational representative)

Red had an in-depth understanding of online communication, and its impact on individuals' lives at personal, social and environmental levels. **Red** attempted to build a healthy balance between the online environment and the physical environment in **Red**'s personal life.

Orange (third-sector organisational representative): **Orange**'s background is in advertising and public relationships. **Orange** developed an interest in third-sector organisations and social work due to **Orange**'s passion for working with children and young adults. **Orange** has had regular mental health training. **Orange**'s third sector organisation has trained all staff, regardless of how much they interact with the young adults. Mental health training focused on supporting young adults and children, how to ask questions, how to intervene, etc.

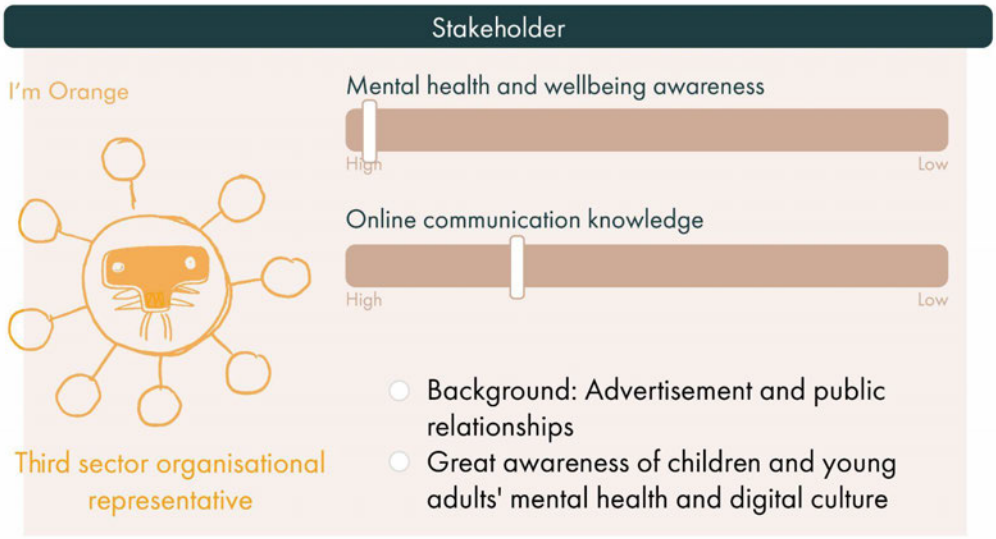

Figure 35. **Orange** (third sector organisational representative)

Orange had a solid understanding of children's and young adults' online culture and how they communicate in an online environment. **Orange** was well-informed about new online platforms and their functionality. **Orange** actively supervised young adults' communication on online platforms and provided further support for young adults in a physical environment.

Gold (young adult): **Gold** is an illustrator freelancer and has been running a small online business since the pandemic started. **Gold** pointed out that despite "[the online environment becoming] such a big part of being artists these days", **Gold**'s university hasn't taught art students how to communicate/navigate themselves and run a business/work on online platforms. **Gold** believed that the COVID-19 pandemic pushed everyone to promote themselves and their works in an online space.

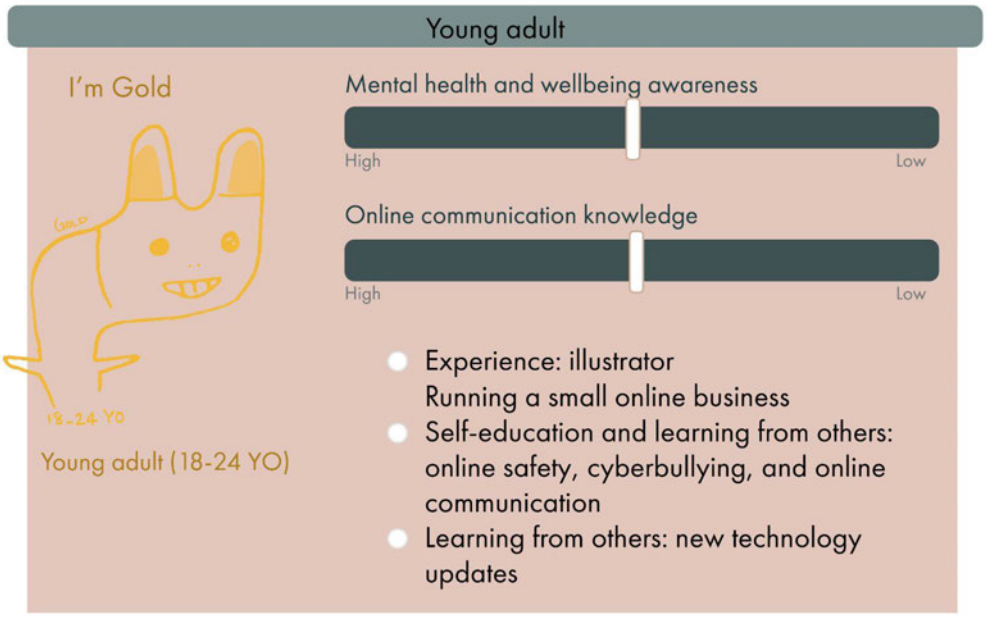

Figure 36. **Gold** (young adult)

Gold further explained that the self-driven learning and motivation approach has played a significant role in learning about the online environment, online safety, cyberbullying, and how to navigate in an online environment. **Gold** also underlined the positive impact of learning from others about new technology updates and how to use online platforms in an online space.

Yellow-Green (young adult): **Yellow-Green** has been working for one of the third-sector organisations in Scotland and running an online shop since 2020. **Yellow-green** underlined that **Yellow-green**'s mental health has been affected by online platforms and social media. **Yellow-Green** addressed that the university offered an online business course focusing on navigating the business in an online environment.

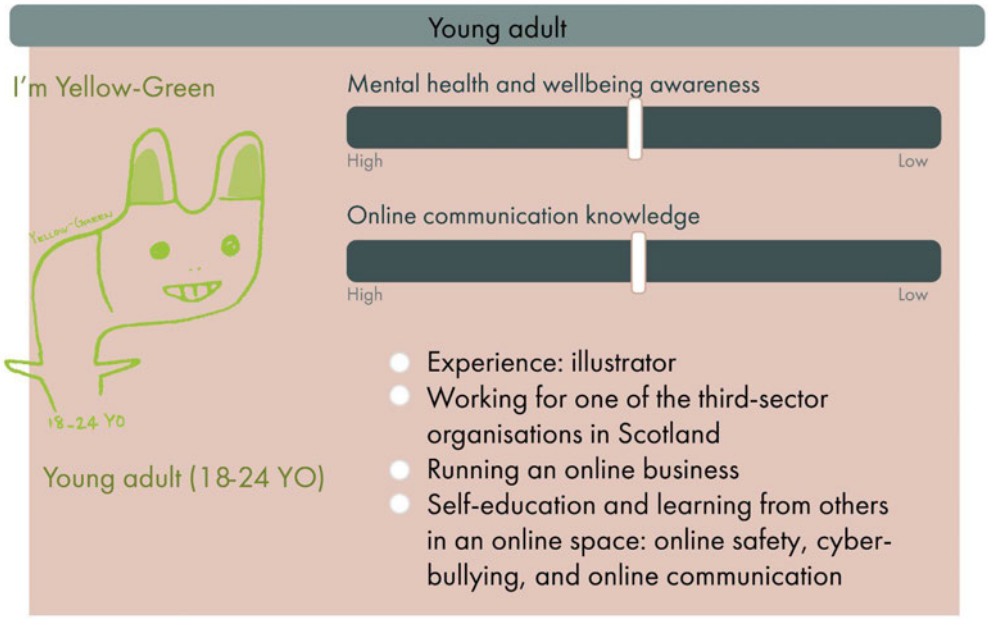

Figure 37. **Yellow-Green** (young adult)

For **Yellow-Green**, self-education and learning from others in an online space played a fundamental role in learning about online safety, cyberbullying, and online communication skills. **Yellow-Green** stressed that these approaches also helped to improve **Yellow-Green**'s mental health problems. For instance, **Yellow-Green** outlined what they learnt from others in an online space: "not be insecure about sharing" or "not overthinking before posting [content]...and not care too much about likes [people's reactions]".

Teal (young adult): **Teal** has been one of the mental health and online hate crime activists and a journalist in Scotland. **Teal** has been bullied at school and cyberbullied in their teenage years due to **Teal**'s disability. **Teal** pointed out that "school was out of their depth [in cyberbullying situations]" and they had no idea how to offer support.

To further support Teal during the interview, I empathised with Teal; I ensured that Teal would get the support Teal might need by providing mental health and anti-cyberbullying services and helplines in Scotland (Appendix F). As the participant wished to continue and was not distressed, I did not withdraw from the interview; otherwise, I would offer a break or end the interview.

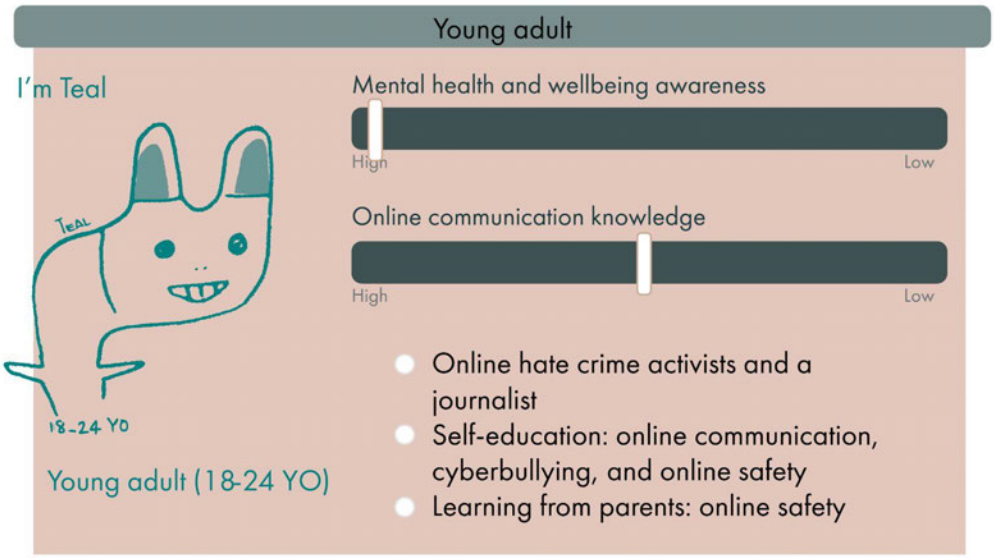

Figure 38. **Teal** (young adult)

Teal's parents used to monitor **Teal**'s online activities; they used to look at the screen and follow **Teal** on social media. In addition, **Teal**'s parents provided online safety advice, such as "don't talk to strangers, and just add people you know [on your social media]." Yet, despite parental control, **Teal** experienced harm in an online environment. Overall, **Teal** described learning about online communication, cyberbullying, and online safety through a trial and error approach; "just try it. If it doesn't work...try something else".

Navy (young adult): **Navy** has been a freelance illustrator and digital content assistant for local newspapers in one of the cities in Scotland. **Navy** has also been running a printing business, providing online services for customers since 2021. **Navy** was educated about online safety and cyberbullying by the school; however, **Navy** criticised the school's approaches to raising online safety awareness and addressed that "I think school makes it [online environment] sound really big and scary. Everything is going to come back and get you later in life. But I think sometimes it doesn't!" In addition, **Navy**'s university, similar to **Yellow-Green**'s university, provided an online business course to help students develop better business plans in an online environment.

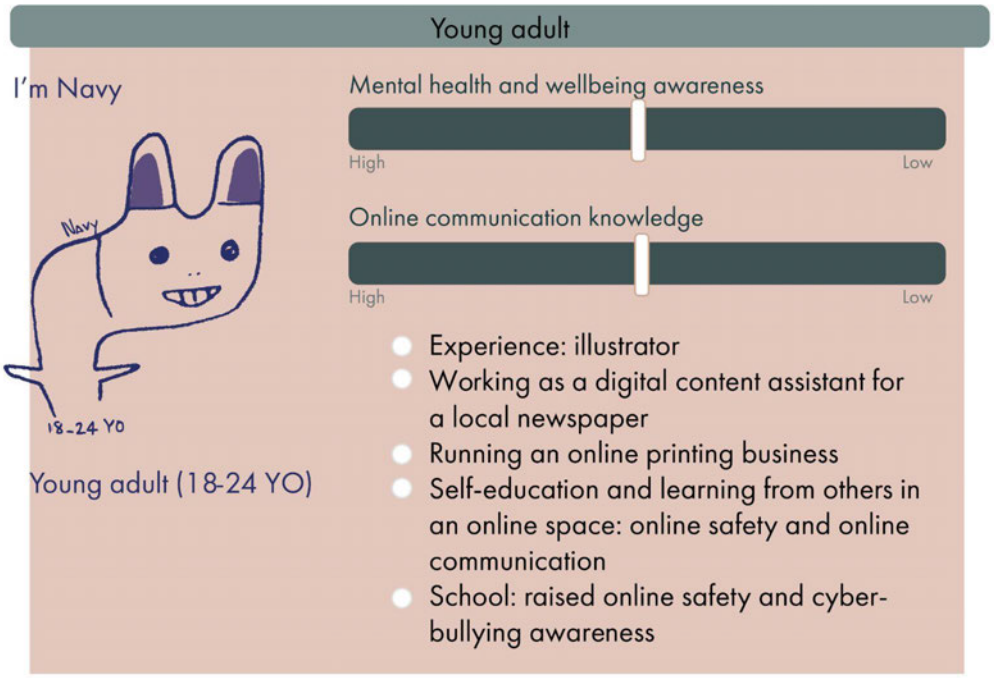

Figure 39. **Navy** (young adult)

Overall, for **Navy**, self-education and learning from others played a crucial role in learning about online communication skills and online safety. In respect of learning from others, **Navy** addressed the positive impact of learning from social media personalities in order to learn tips and tricks on online platforms. Besides, **Navy** stressed that online users learn from their experiences as they get older.

Purple (Young adult): **Purple** has been a freelance artist for just over two years. **Purple** has done lots of work with the queer community, such as running art clubs in physical space and online platforms. **Purple**'s understanding of online safety, cyberbullying, and online communication arose from self-education and learning from others. **Purple** outlined that the COVID-19 pandemic has encouraged people to understand the importance of using digital technologies in people's lives and pushed them to learn more about online platforms.

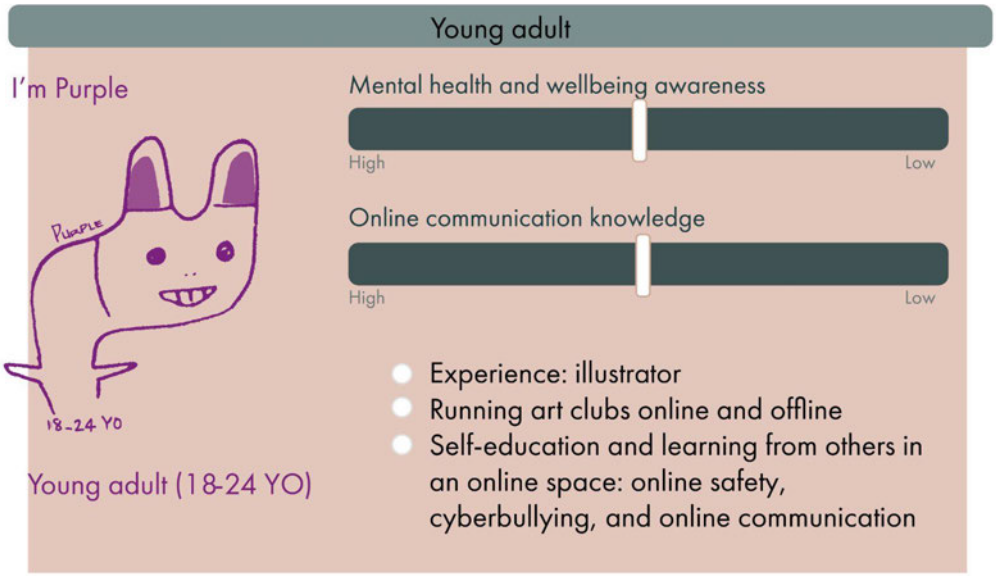

Figure 40. **Purple** (young adult)

Purple stressed that self-driven learning is essential because people "need to be actively aware of changes/updates [of online platforms]". Further, **Purple** explained that young adults should always "research all the tips and tricks [of engaging with people in an online environment]". With respect to the learning from others approach, **Purple** highlighted that linking and engaging with a similar-valued community enables online users to learn a lot of educational content.

After the interview: After the interviews, I sent follow-up emails to remind participants when they would receive the starter kits containing asynchronous activities. I have also shared their transcripts via Miro links where I shared all their analysis. I elaborated on this in the analysis section.

4.3.3. Asynchronous activities (Booklet)

As discussed in Chapter Three, I developed asynchronous activities in order to collect more meaningful data from participants remotely. Besides, given the sensitive nature of cyberbullying (context), asynchronous activities offered an opportunity to offer more time for participants to rethink and reflect on online respect creatively. Additionally, during interviews, participants were also challenged by the question of the definition of feeling respected in an online environment, as they referred to it as "a big word" and

"a complex word". Asynchronous activities allowed them to rethink carefully and share their insights regarding their understanding of the matter.

Asynchronous activities were presented in the booklet as part of a starter kit. These activities within the booklet investigated participants' understanding of online respect and the factors that influence online respect among young adults. Figures 41 to 48 demonstrate examples of completed activities by one of the participants in the booklet. In the Methodology Chapter, I expanded upon designing each activity in detail.

I posted the starter kits after their interviews. After completing the booklets, participants were asked to post the booklets in prepaid envelopes as soon as possible.

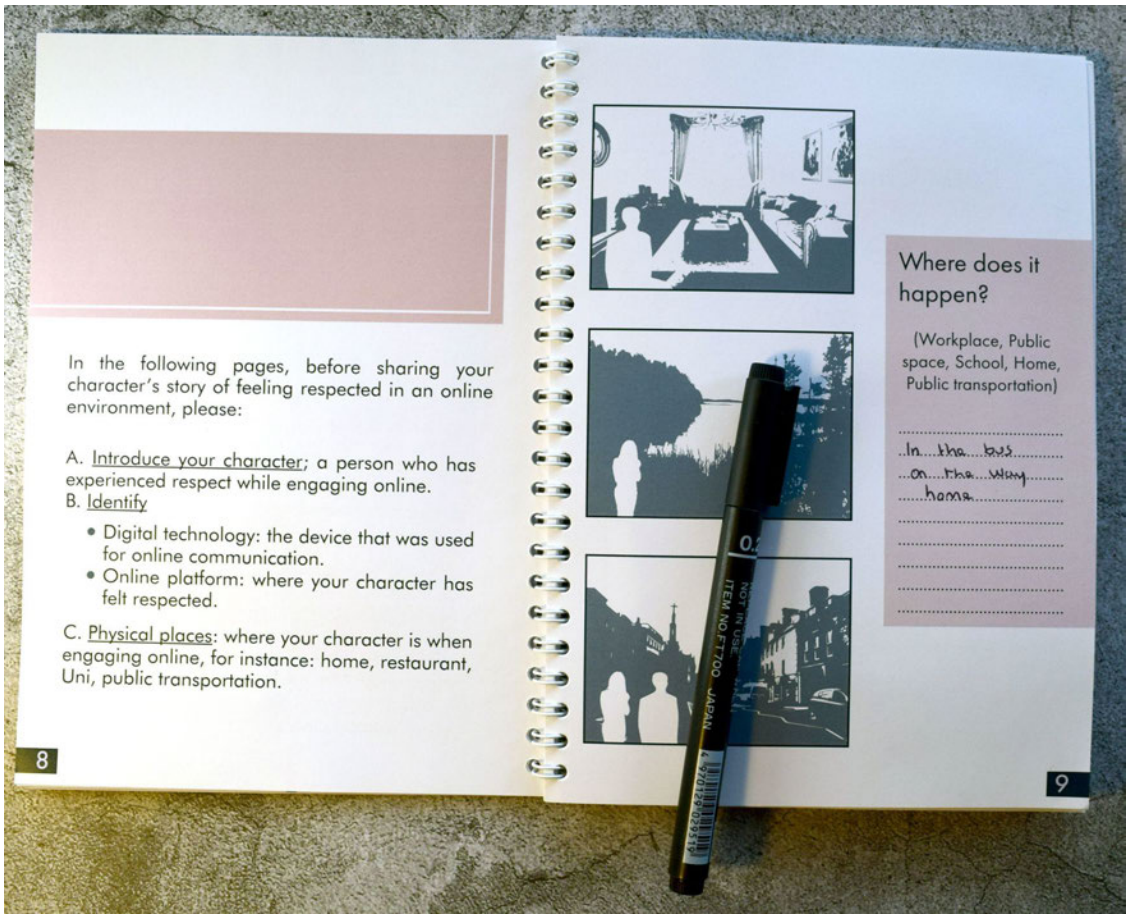

Figure 41. An overview of the completed Activity 1.

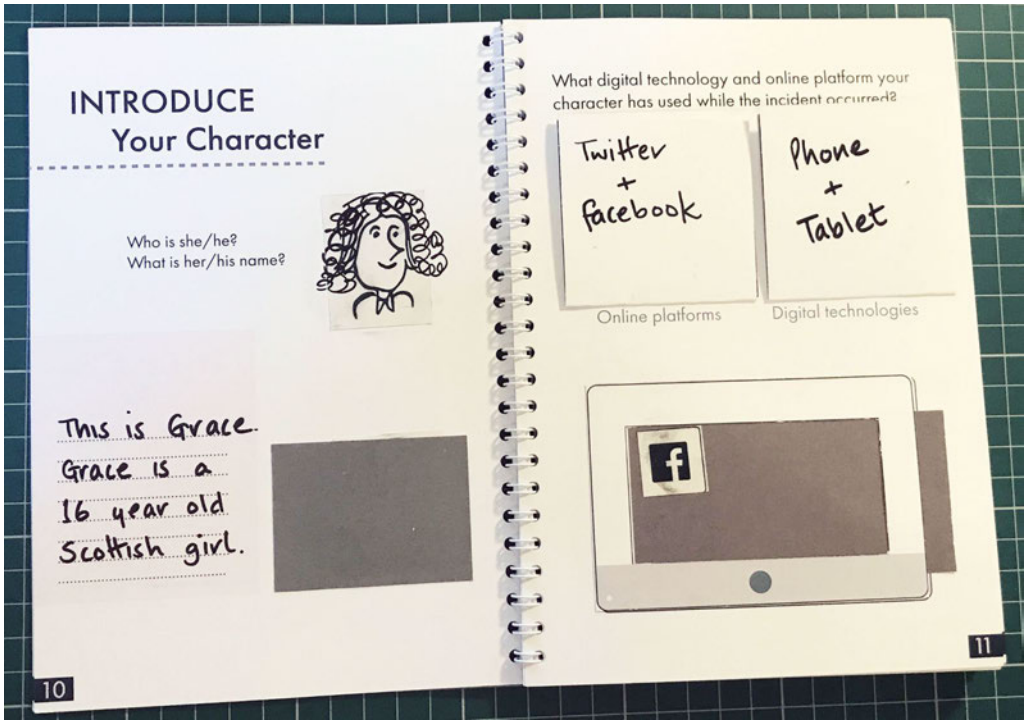

Figure 42. An overview of the completed Activity 1

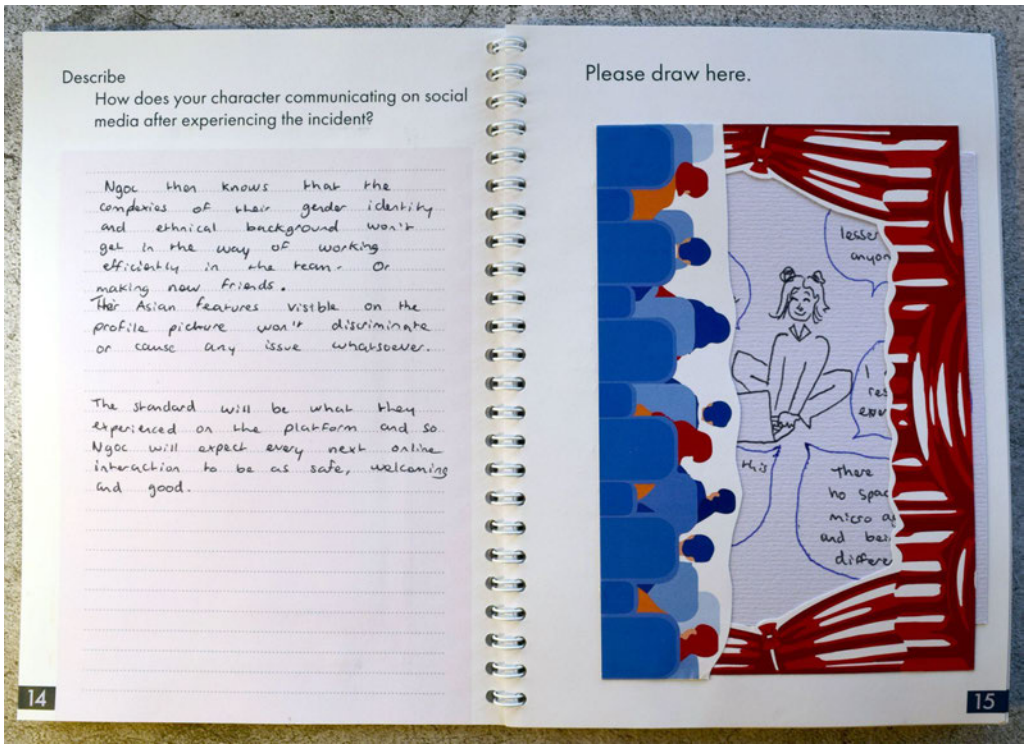

Figure 43. An overview of the completed Activity 1

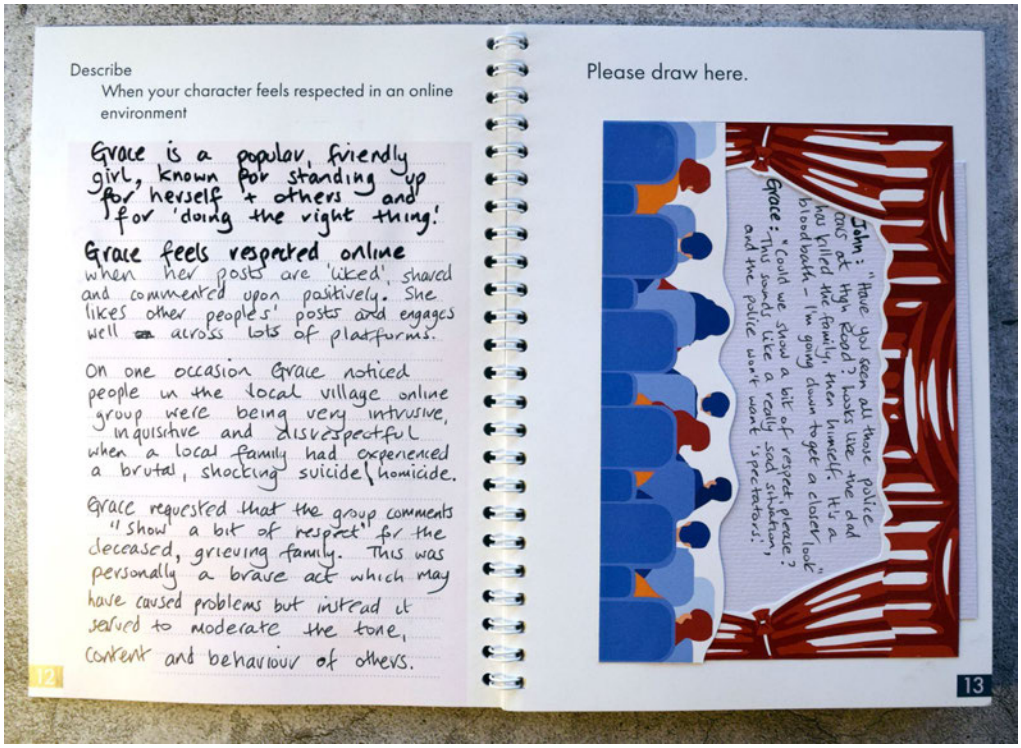

Figure 44. An overview of the completed Activity 1

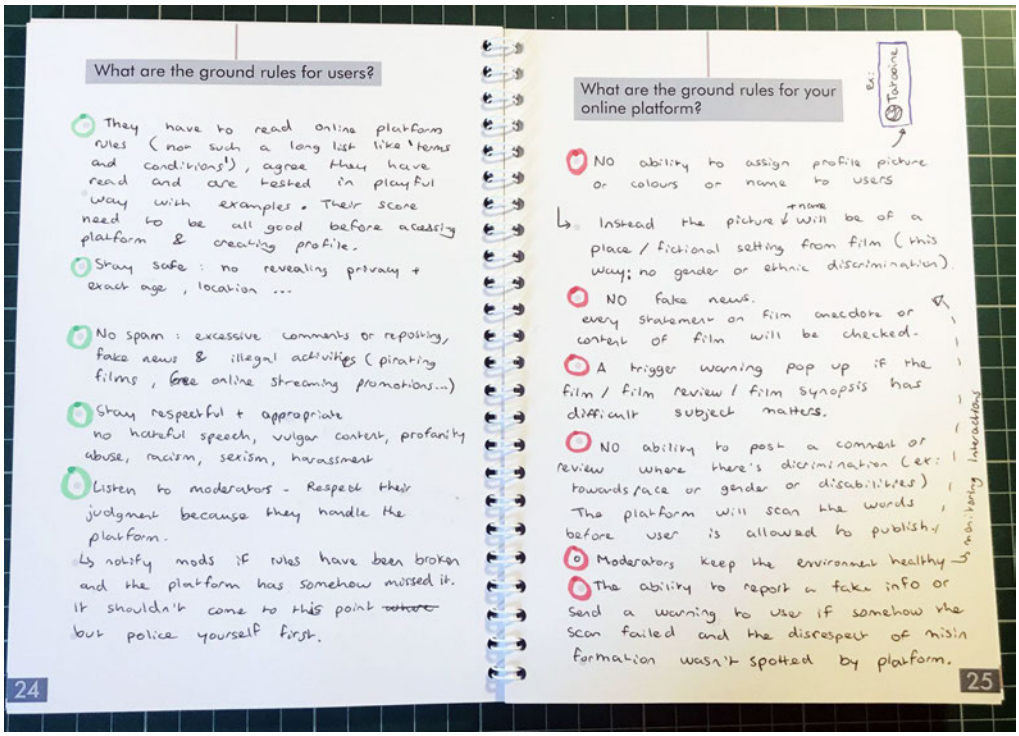

Figure 45. An overview of the completed Activity 2

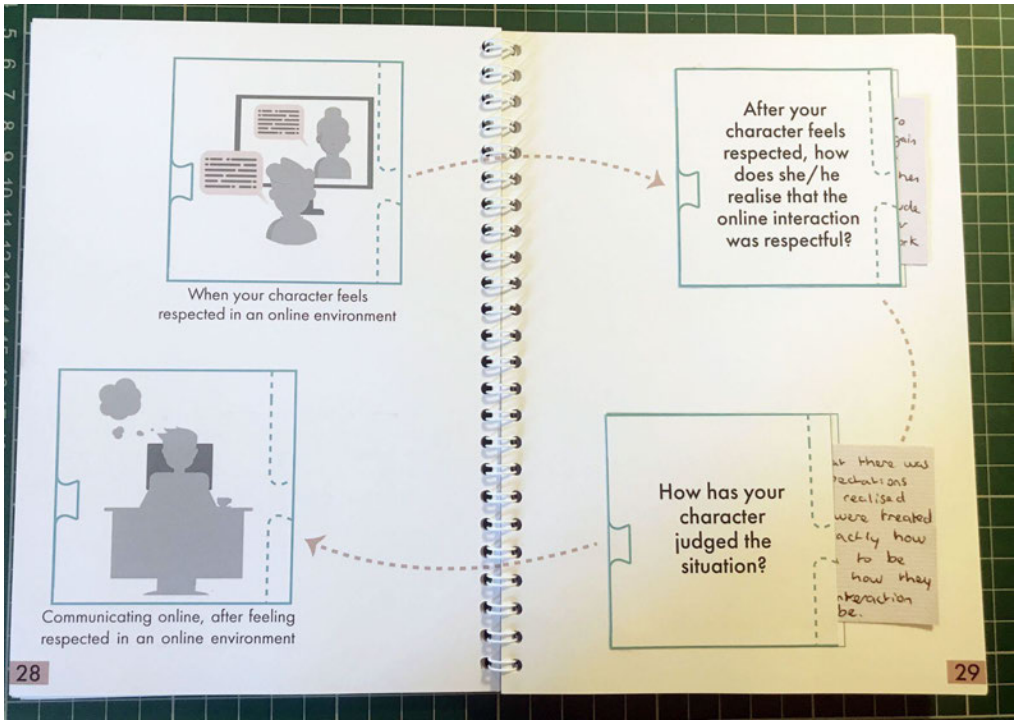

Figure 46. An overview of the completed Activity 3

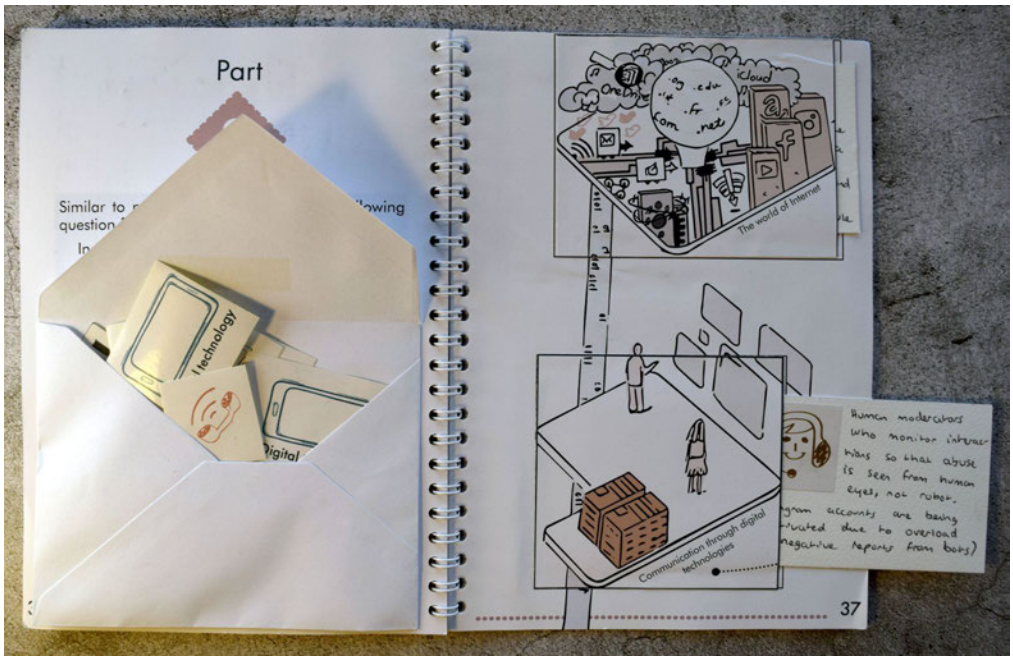

Figure 47. An overview of the completed Activity 4

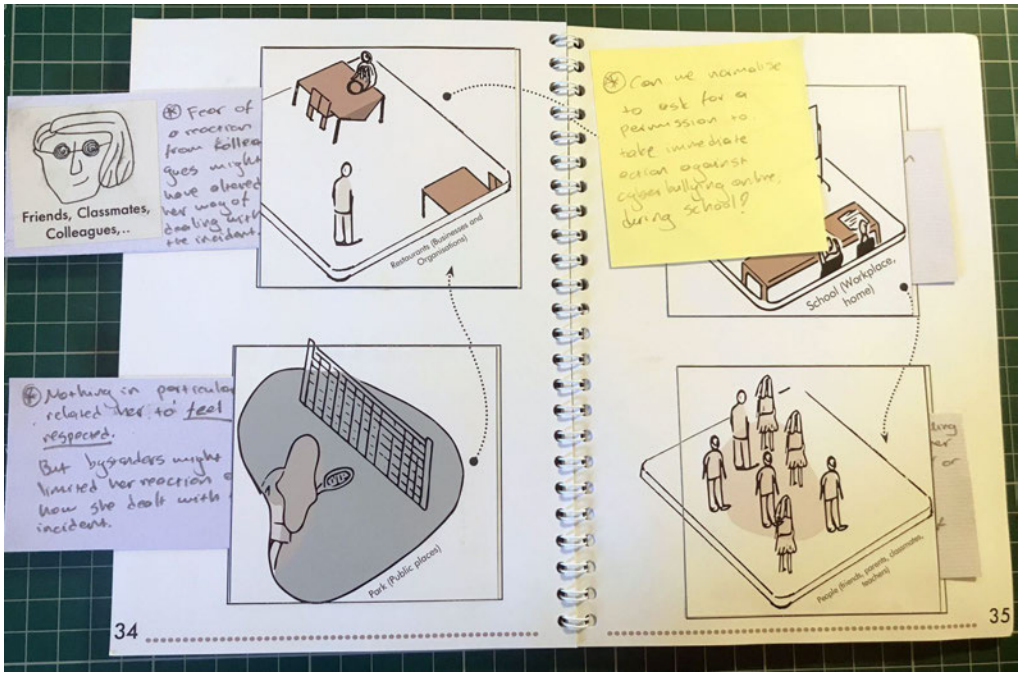

Figure 48. An overview of the completed Activity 4

4.3.3.1. Booklet feedback

During Workshop 1, I launched a poll on Zoom to gather feedback regarding booklets from all participants. I conducted the polls anonymously to create a safer place to share their opinions. Overall, all participants voted quite high for the quality of the starter kit (such as easy to understand, exciting, and engaging activities); five participants rated four out of five and one rated five out of five. According to their feedback, the number of activities was about right; it wasn't too many. The majority of participants (sixty-six per cent) said that completing the booklet took more than one hour, unlike what I estimated based on the piloting workshop.

Half of the participants stated the booklet was easy to understand and the other half found it challenging. The booklet seemed exciting according to eighty-three per cent of the participants. After Workshop 1, one of the participants emailed me regarding Workshop 1 and booklet feedback. And addressed "... even though I didn't use all the stickers [in Activity 4] they were very well chosen because they helped triggering thoughts and getting ideas".

Such feedback helps me to identify designing interactive and creative engagement tools as one of my strengths in collecting data in my future research. Additionally,

building on their critical feedback to make a better estimation of participants' expected time commitment, I will pilot activities with more than one participant in my future research projects.

4.3.4. Online Group Workshop 1

Workshop 1 preparation: As discussed in the Methodology Chapter, I ran a series of workshops after completing the booklets (asynchronous activities). To design Workshop 1 activities, I analysed interview transcripts. Analysing interviews allowed me to ensure that Workshop 1 further elaborates or uncovers matters that haven't been discussed during interviews. This section outlines how I implemented Workshop 1, and the following chapter discusses the findings that emerged from Workshop 1.

It was crucial to ensure all participants were familiar with these online platforms since workshops occurred on Zoom and Miro. As mentioned previously during the interviews all participants were queried whether they had used Miro and Zoom online platforms. Participants were familiar with the Zoom environment. Yet, half of the participants had not used Miro. Consequently, before the workshop sessions, I shared a short YouTube video explaining how to use Miro. In addition, during the workshops, I reminded them how to use Miro.

Miro is a user-friendly online platform that allows participants to share their experiences, knowledge, and thoughts regarding the workshop activities. It enabled everyone in the workshop to participate actively. The workshop Zoom and Miro links were shared with participants one week and one day in advance respectively (figure 49). Sharing the Miro link ensured all participants access to the Miro board and activities for the workshops.

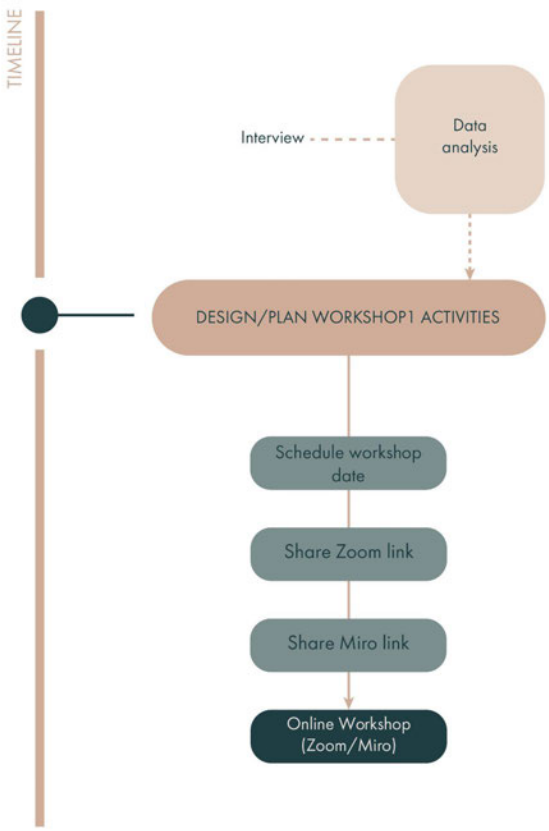

Figure 49. An overview of planning Workshop 1

Icebreaker activity: I started the sessions with an icebreaker activity. The icebreaker helped all participants feel relaxed and comfortable on the Zoom platform. I used the icebreaker as an effective tool for setting a scene for the workshop. I provided a couple of questions, focusing on the relationships between individuals' lives and advanced digital technologies in the future; this offered opportunities to explore the possibilities for digital technology design and think about the positive and negative impact of the online environment on people's lives. I posed the question "how do you want the world to exist?". I began describing the world where all the humans are cyborgs - mechanical elements built into the human body. Most participants were inspired by my response correspondingly and shared how digital technologies shape and influence individuals' lives. This ice breaker activity allowed participants to share similar values and understanding of the future of digital technology.

Online Workshop 1 Activities: Since the availability of participants was varied, I set up two 1-hour online workshops. Three participants attended each workshop. Considering

the workshop time limit, I developed two activities. Designing two different activities enabled me to plan innovative exercises and tools that allowed thinking, exploring and inspiration. As a facilitator, I encouraged participants to be actively involved, contribute, and share their thoughts, knowledge and experiences during the workshops. And I made sure that I set up a safe space by valuing all participants' opinions and concerns; using understandable and inclusive language and concepts that speak to participants with different backgrounds; allowing for empathy.

Initially, I planned to explore the definition of online disrespect as well as young adults' support journey from the perspective of different stakeholders in Scotland (figure 50). However, the findings from interviews suggested that there has been little discussion about: 1. the accountability of the stakeholders. 2. design interventions and opportunities. Consequently, I developed new workshop activities accordingly.

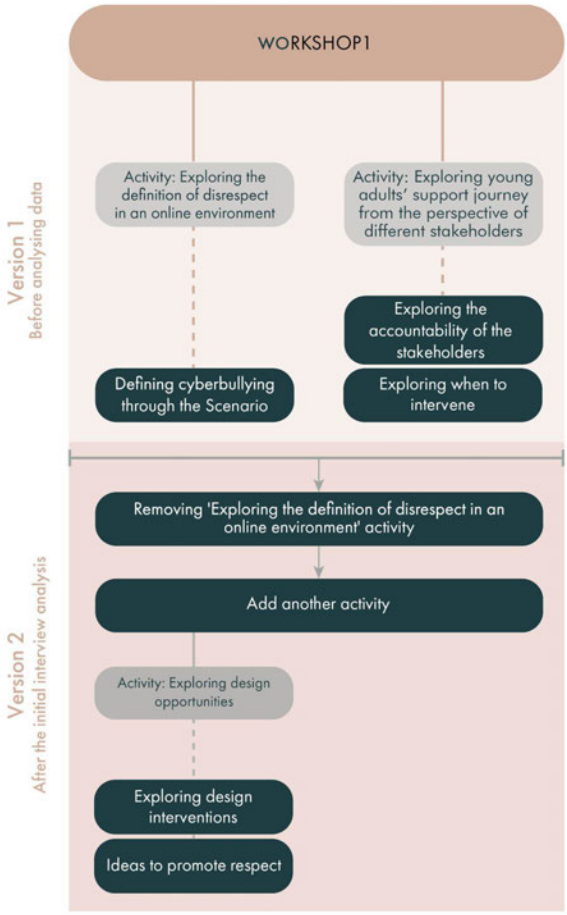

Figure 50. An overview of Workshop 1 activities

The first activity addressed young adults' support journey from the perspective of stakeholders and young adults. As shown in Figure 51, this activity explored how stakeholders (the Scottish Government, local authorities, Uni, org, friends, parents, and bystanders) support online respect among young adults at three different stages: before young adults' online communication, during young adults' online communication and after young adults' online communication.

During the workshop sessions, first, I asked participants to think about the question individually and write down their ideas in digital post-it notes. After 15 minutes, participants discussed and brainstormed the activity collectively, and I posed the question: "Which one of these stakeholders could be responsible for promoting online respect". We concluded this activity and moved on to the next one.

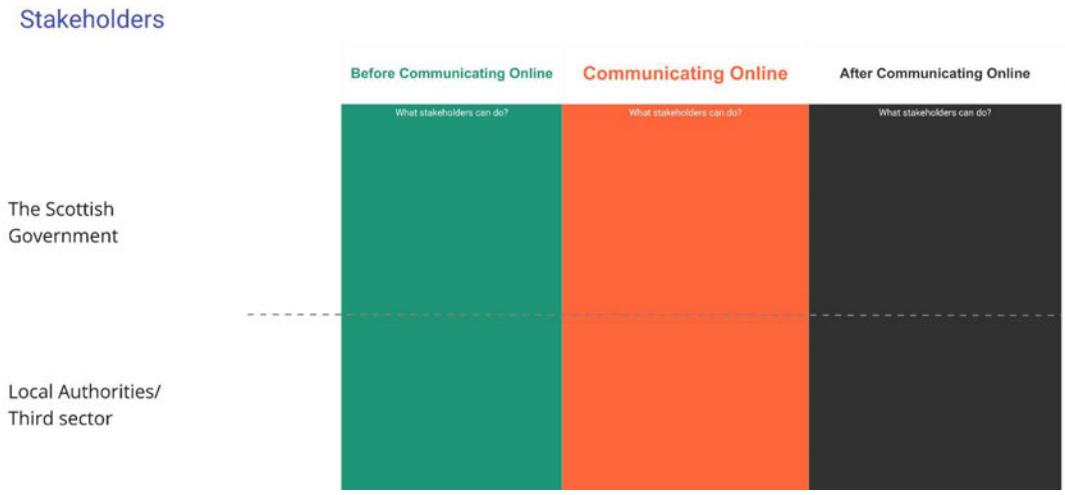

Figure 51. An overview of Activity 1 Workshop 1

The second activity focused on the opportunities to maximise and encourage online respect among young adults. This activity encouraged participants to think about digital and real (analogue) opportunities to intervene at personal and social levels (figure 52). Similar to Activity 1, first, participants reflected on the questions individually, and then they explored the best opportunities for design interventions collectively. As noted earlier, Chapter Five presents the outcome of this workshop. The data from both activities were gathered and analysed with the thematic analysis technique and discussed in Chapter Six.

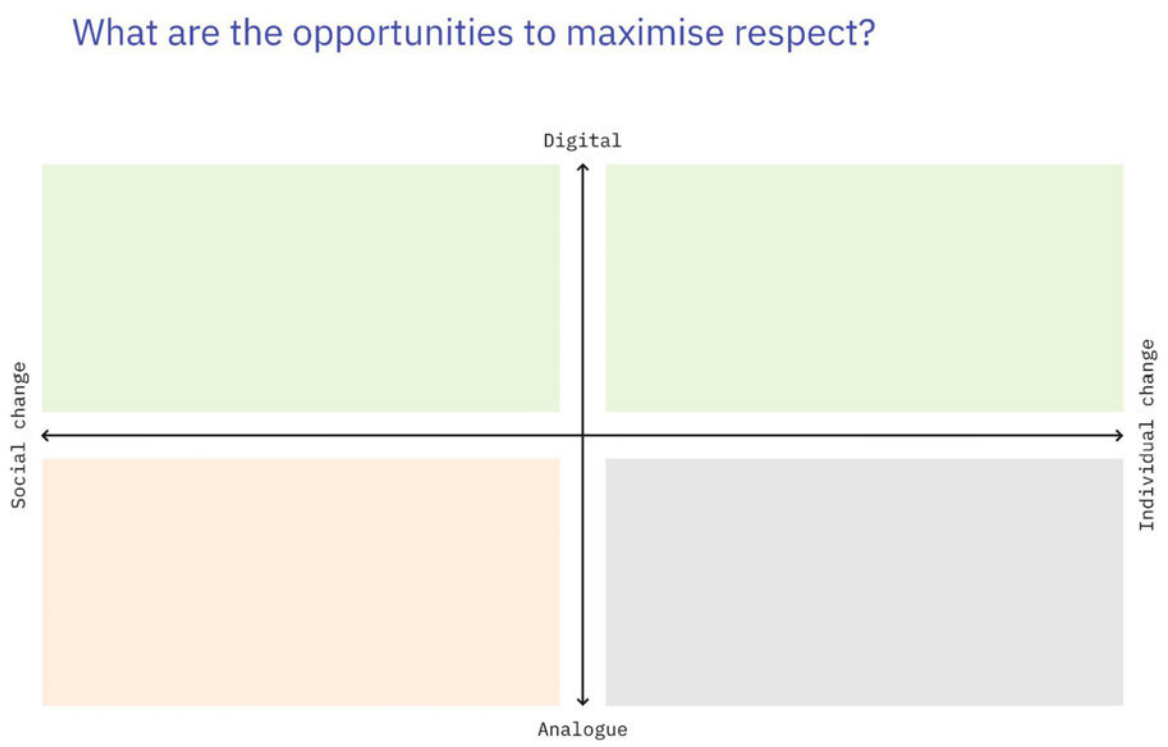

Figure 52. An overview of Activity 2 Workshop 1

4.3.5. Online Group Workshop 2

The last workshop was the evaluation of an intervention to facilitate online respect. It aimed to collect more insights into online respect among young adults collectively. This section demonstrates how I implemented this workshop in an online space. Since this workshop brought together all participants' ideas, thoughts, and values gathered from interviews, booklets, and Workshop 1 in the form of an intervention, I presented the intervention and how participants evaluated the intervention in Chapter Five. Chapter Six further elaborates on the findings gathered from this workshop; analysing the insights from the evaluation workshop enabled me to offer policy recommendations and an in-depth understanding of digital technologies affordances in the Discussion Chapter.

As shown in figure 53, initially, I planned to evaluate the intervention with participants in two stages: individually and collectively. Similar to the asynchronous activities, I intended to provide an opportunity for participants to reflect on the intervention individually. Yet, given the lack of time, I couldn't design individual evaluation' activities; consequently, I began to design the evaluation workshop intervention.

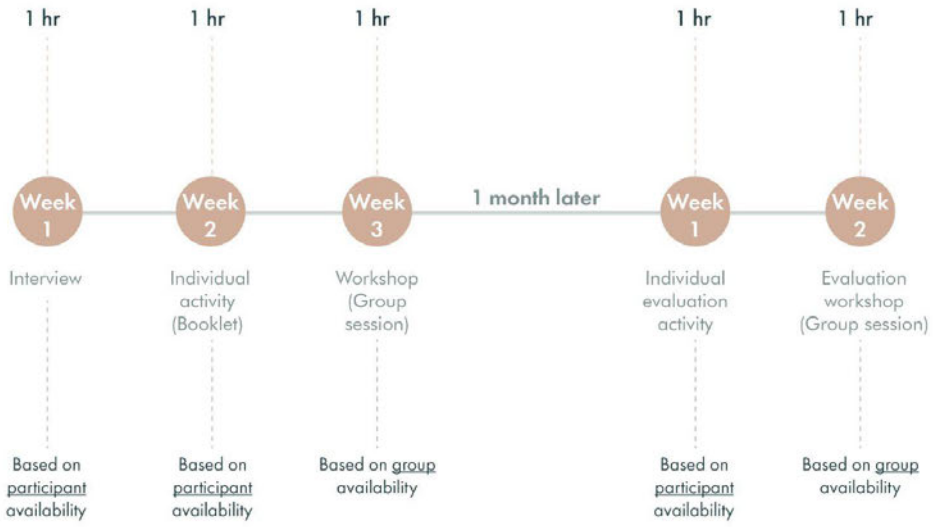

Figure 53. An overview of initial participants' commitment in the first phase of participation

As discussed earlier, participants have elaborated their ideas, concepts, and thoughts on supporting/encouraging online respect in interviews, booklets, and Workshop 1 individually and collectively. To plan and design intervention (the activity for this workshop), I analysed all the findings gathered from interviews, booklets, and Workshop 1. As noted earlier, I undertook data analysis after carrying out the interviews using thematic analysis.

I split participants into two groups similar to Workshop 1. After setting up workshop dates, I emailed the Zoom and Miro links to participants two weeks and one day in advance. Unfortunately, one of the participants couldn't attend the workshop. I began Workshop 2 with a summary of the findings and a brief analysis of booklets and interviews. Simply, I explained how intervention emerged from the data gathered from all participants' discussions. Then, participants discussed and brainstormed the activity with the help of my description.

As a facilitator, I ensured all participants engaged in the activity and had enough time to articulate their thoughts and experience. One of the workshops, as I planned, finished in one hour. However, the other one lasted for nearly 95 minutes because of their interest in discussing the ideas in the intervention. After 73 minutes, I apologised that the workshop took longer than expected; they stressed that the conversation was enjoyable and didn't mind if it took longer.

Designing online Workshop 2 activity: All participants highlighted the importance of an intervention that fosters meaningful connections with young adults and provides them with ongoing support before, during, and after online communication. They expressed that this intervention plays a critical role in facilitating online respect among young adults, particularly in challenging situations such as online arguments. In line with participants' suggestions, the conceptual intervention from Workshop 2 is referred to as the Digital Buddy. Participants described the Digital Buddy as a companion, moderator, assistant, coach, and friend.

Workshop 2 activities aimed to capture participants' ideas on how the Digital Buddy could effectively support and encourage online respect among young adults. To communicate Digital Buddy more effectively, I organised participants' ideas into four groups: conceptual overview, pre-communication stage, during communication, and post-communication, each containing multiple sub-groups based on participants' ideas. Chapter Five provides a detailed elaboration on the Digital Buddy, along with a comprehensive diagram presented in figures 54 and 55.

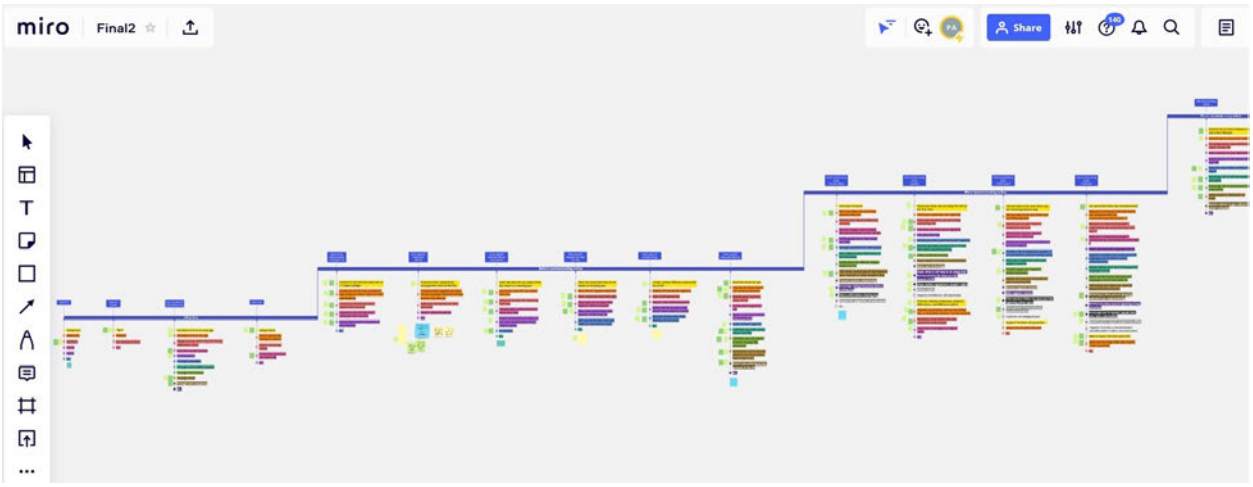

Figure 54. An overview of Workshop 2 on the Miro platform

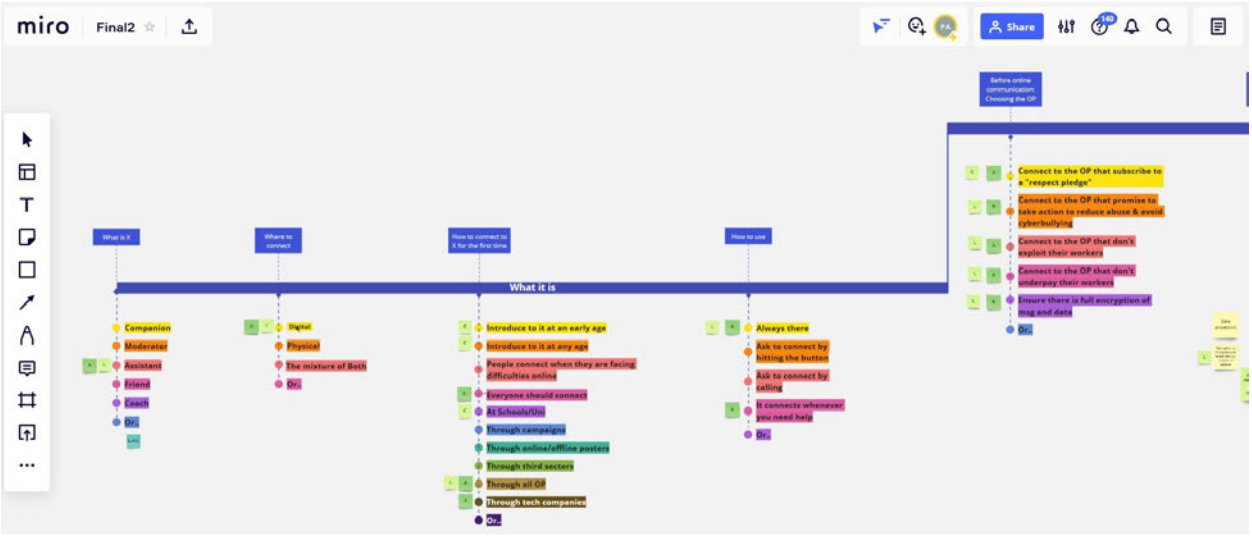

Figure 55. Workshop 2 on the Miro platform

To evaluate the effectiveness of Digital Buddy, participants engaged in a two-step process. Firstly, they individually reflected on each sub-groups ideas, selecting those that promote online respect or contributing additional ideas. Then, participants collectively discussed the selected ideas and moved on to the next sub-group. After completing all sub-groups, the participants deliberated on whether Digital Buddy effectively supports online respect among young adults. As the facilitator, I prompted discussions by inquiring about the reasoning behind their chosen ideas.

To maintain the dynamics of the second group, I excluded the selected ideas from the first group when sharing Digital Buddy with them. This approach aimed to prevent social affordance (read the Discussion Chapter), where the second group might be influenced to adopt the same ideas simply because they were chosen by the first group. However, I retained all the additional ideas from the first group, as they served as inspiration for the second group to generate new ideas or potentially select those additional concepts.

The workshops concluded with my expression of gratitude for their participation. I acknowledged that their involvement exceeded my expectations and assumptions and I emphasised how valuable it was to connect with them and gain insights into their experiences, knowledge, values, and understanding of the world and the role of digital technologies.

4.3.6. Analysing data using thematic analysis

After describing the thematic analysis method in the previous chapter, this section addresses how I analysed the data set collected from this research project digitally and manually. As noted before, in conjunction with my fieldwork, shortly after the interviews (the first stage of participant engagement), I undertook thematic analysis to analyse interviews. This initial analysis of the interviews helped me design Workshop 1 activities. Analysing findings also was beneficial to find out what I needed to cover and clarify in Workshop 2. After the completion of Workshop 2, I analysed Workshop 2 and reviewed the other analysis in order to develop policy recommendations and a philosophical understanding of digital technologies (see Discussion Chapter).

Analysing process: I analysed the data from interview transcripts, my interview notes, asynchronous activities (booklets), Workshop 1 and 2 activities and transcripts from all the workshops. The analysis started with interview transcripts and my interview notes. It was followed by analysing booklets, Workshop 1 activities and transcripts, and Workshop 2 activities and transcripts.

I employed the speech-to-text transcription application called Otter.ai to transcribe interviews and workshops. As I said in Chapter Three, the first phase of thematic analysis is familiarising myself with the context by reading participants' transcriptions a couple of times. Editing the transcriptions on Otter while listening to the recorded Zoom audios also helped me reacquaint myself more with the participants. Within this phase, I was also noting down initial ideas for coding. At first, I started the analysis by coding all the transcripts manually (see figures 56-57); since the initial analyses contained identifiable data, the close-up photos were blurred. The process of coding manually provided an additional thinking opportunity regarding naming the codes and clustering them. Moreover, I found it helpful to see all the codes tangibly while searching for themes.

Figure 56. Analysing data manually 1

Figure 57. Analysing data manually 2

Figure 58. Analysing data manually 3

As thematic analysis incorporates both latent and manifest aspects, I generated codes at two different levels (Braun & Clarke, 2006). Figure 59 shows an example of the manifest level of the coding process; manifest codes easily could be identified "within the explicit or surface meanings of the data" (Ibid, p. 90). At the latent level, I looked beyond what participants said or what they have written in their booklets. With the support of my interview notes, I identified underlying reasons, ideas, and assumptions that have been relevant to the research scopes, questions and objectives (online respect and cyberbullying). Figure 60 demonstrates a snippet of **White**'s interview coded at the latent level. Another example of coding at the latent level is the affordances of digital technologies/online platforms. In the Discussion Chapter, I further elaborate on the affordances of digital technologies in this research project.

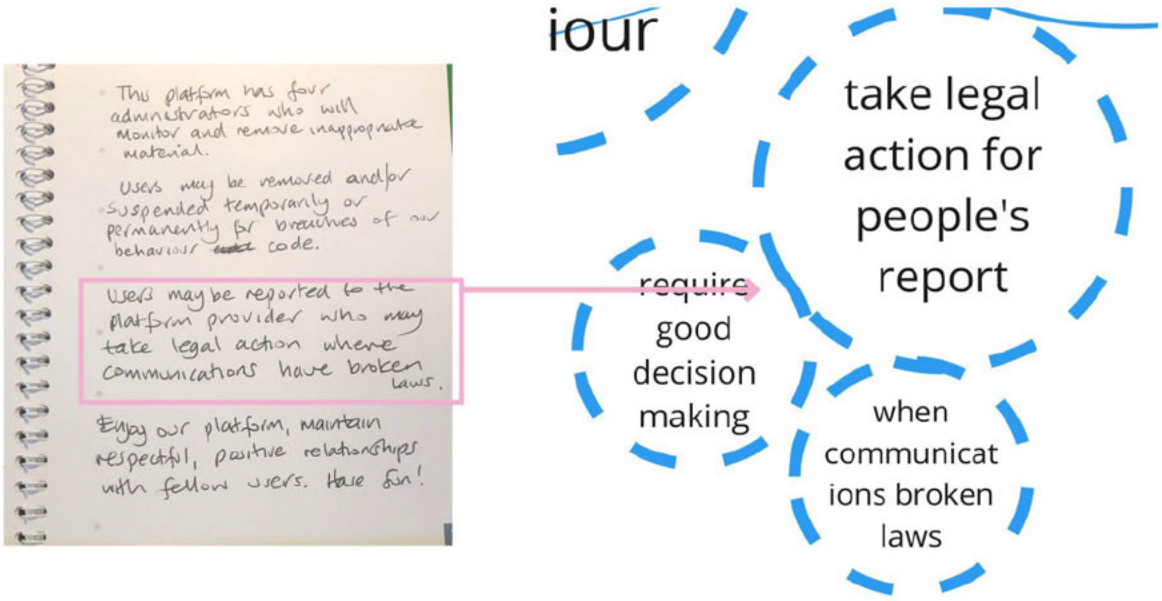

Figure 59. An example of coding booklet data at the manifest level

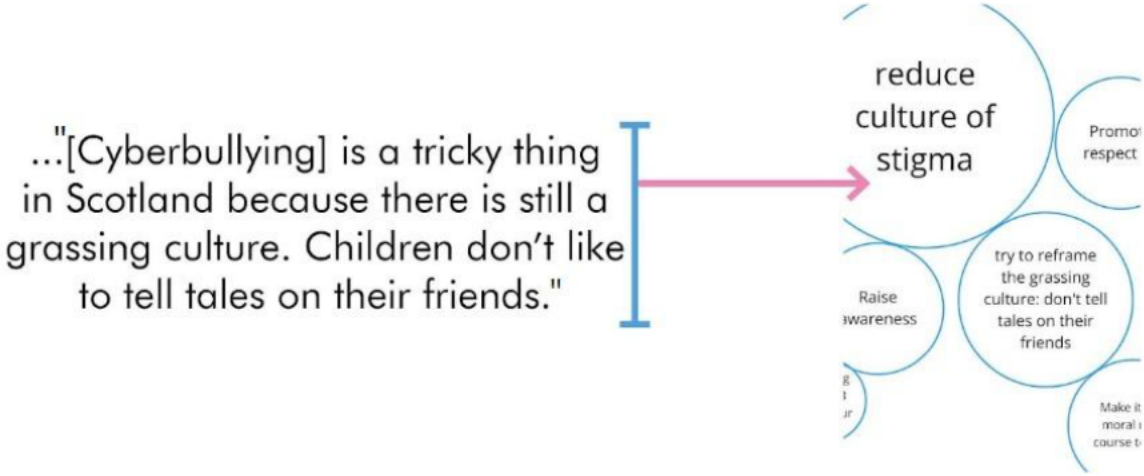

Figure 60. An example of coding interview data at the latent level

Coding data at the latent level requires an in-depth understanding of the current debates, theories and context to interpret the data. However, Sandelowski (2010) outlined that both approaches (latent and manifest) entail interpretation, even if the interpretive elements reflect in discussions of its broader exploration. It also is notable to point out that I have been surrounded by personal boundaries (experiences, background, knowledge, etc.) that could reflect on my interpretations and

understanding of this project. Interpreting data has been one of my roles as a researcher in this project that I have taken over.

As shown in figure 61, after generating initial codes, I looked for emerging themes and sub-themes. As described in the Methodology Chapter, theme refers to a patterned meaning derived from findings. Sub-theme exists underneath the umbrella of themes and "delimits the scope of what each theme entails or includes" (Kiger & Varpio, 2020, p.852). After manually collating all codes into sub-themes and themes, I digitised emerging themes, sub-themes, and codes. Next, I reviewed each participant's codes and themes. Figures 62 and 63 illustrate an overview of the analysis process.

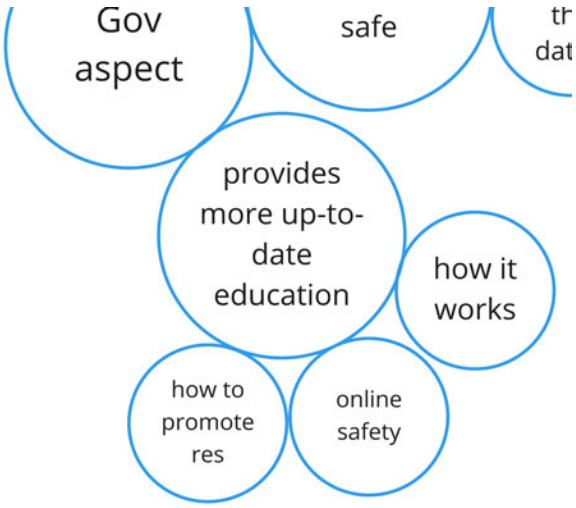

Figure 61. An example of theming data

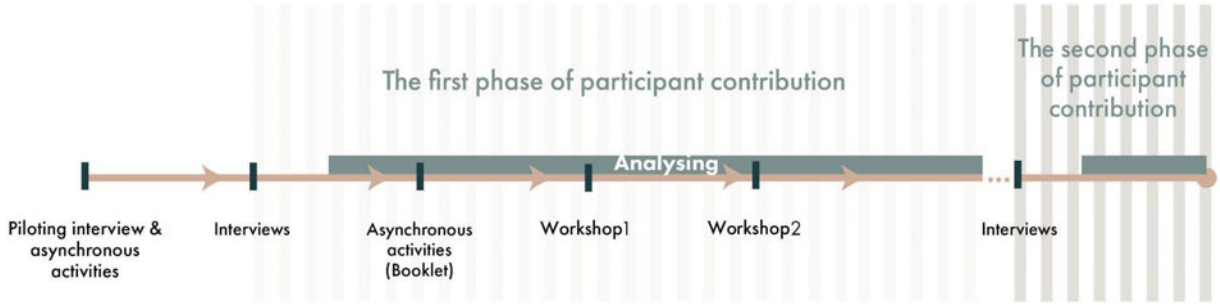

Figure 62. An overview of analysing process timeline

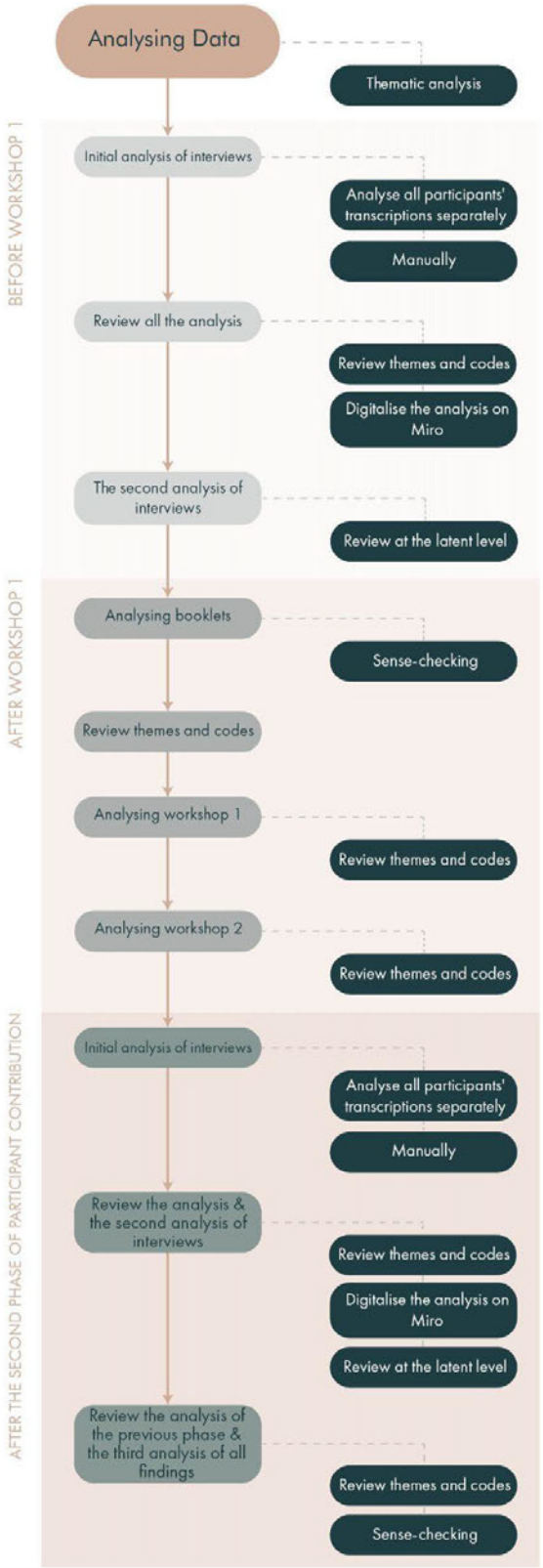

Figure 63. An overview of the analysing process

Engaging with participants with different backgrounds offered a unique opportunity to view the project from different mindsets and understanding. In particular, it has been valuable and beneficial in interpreting the data at the latent level. For example, **Black**'s discussion and analyses enabled me to review all participants' analyses from the perspective of online safety and the online disinhibition effect; it allowed the discovery of online value and the online disinhibition effect as sub-themes from other participants.

As addressed earlier, after analysing interviews, I began analysing booklets, following similar steps. Then, I sense-checked the analyses in relation to the interview analyses and research questions; I reviewed the codes, sub-themes, and themes of interviews and booklets together. Illustrating both booklets' and interviews' analyses into one diagram offered a simpler means to communicate the findings to participants. The diagrams were presented with an information box, allowing participants to identify the codes that emerged from booklets and interviews (see figure 64).

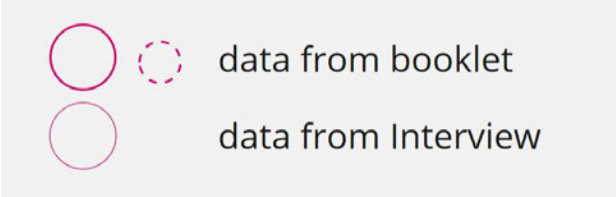

Figure 64. The information box helped participants to identify data from booklets and interviews

I followed the same steps for analysing Workshop 1 and 2 activities and transcripts. As noted earlier, after finishing the participants' engagements, I again analysed and revised all the analyses. Following the second phase of participation in August 2021, I repeated the same steps for analysing the second phase's interview transcripts. Then, I reviewed all twelve participants' (from both phases of participation) analyses a couple of times. Figure 65 demonstrates an example of one of the participants' analyses. As this figure might contain identifiable data, it was blurred. In the following chapters, I present the analysis that emerged from the findings in order to explore how to promote online respect. And by this construct, how designers, policy-makers, and psychologists investigate the affordances of ethical aspects (online respect) of digital technologies/online platforms.

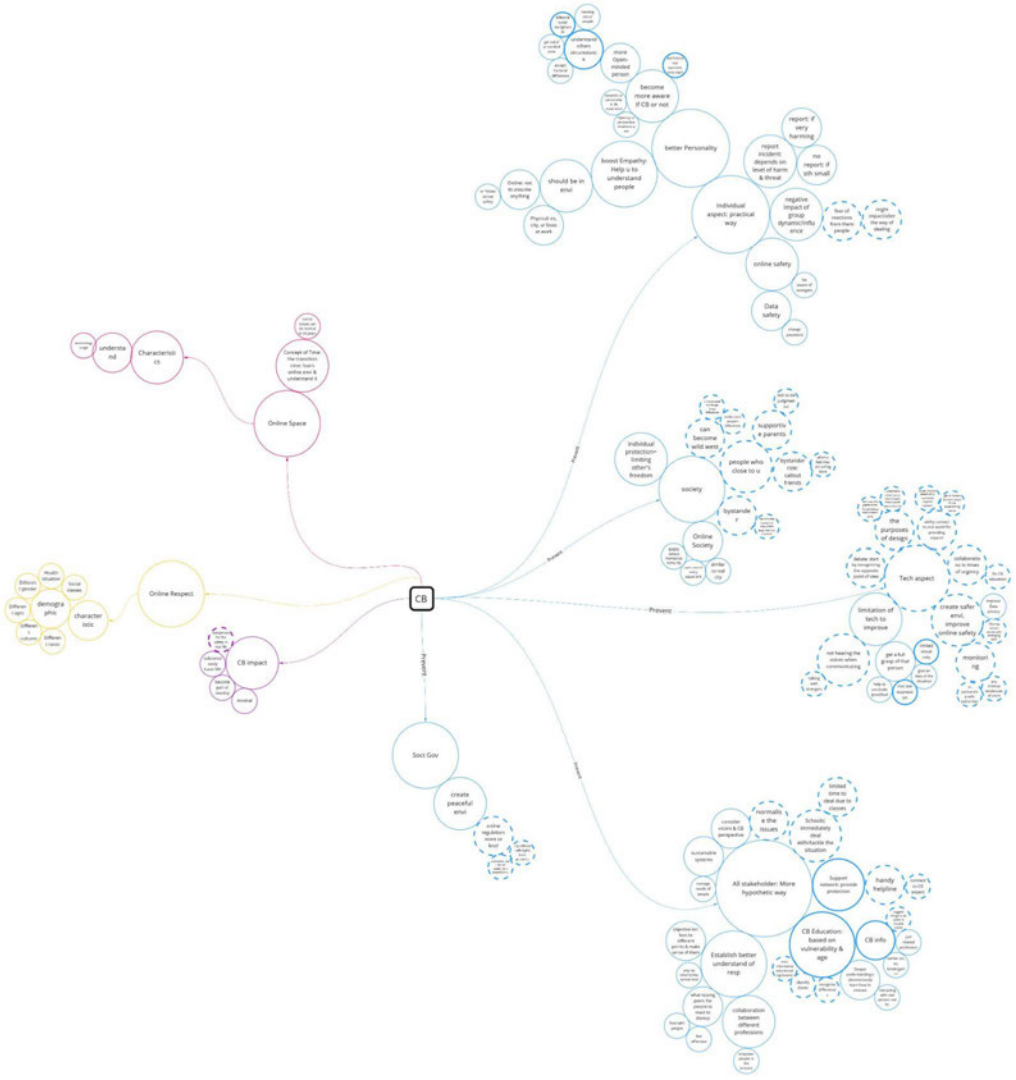

Figure 65. An example of the participants' analysis. In the light of identifiable data, the figure is blurred.

Sharing with participants: As part of the co-design process, I aimed to involve participants in the different stages of the design process. Since participants became familiar with the Miro platform during Workshop 1, I shared all the analyses on the Miro platform. Each participant was given one Miro platform, and a link hasn't been shared with other participants to add another layer of participants' data protection. Participants accessed their analysis before Workshop 2. Sharing these analyses with participants empowered them by allowing them to edit, revise, or even learn and inspire by them. The highlighted sections in figure 66 demonstrate the edited parts by one of the participants; as the figure contains sensitive personal data, it has blurred. In

total, I shared three diagrams with each participant. These diagrams also helped to prepare participants for the final workshop.

Figure 66. The screenshot of edited parts by one of the participants. To protect the confidentiality of participants, any identifiable information has been blurred.

4.4. Summary

To conclude, Chapter Four highlights participants' recruitment and participation in this research project. Recruiting participants was challenging due to the sensitivity of the context of cyberbullying, the COVID-19 pandemic, and possibly a five-hour commitment. Initially, the research questions centred around young adults (18-24 years old) who have been living in Scotland and have been using online platforms' perspectives on online respect. I called for participants through youth mental health networks, computer networks, charities, young adult communities, third-sector organisations, and Higher Education Institutions in Scotland. Overall, the recruitment was unsuccessful due to their limited resources and expertise during the pandemic.

In response to the young adults' recruitment challenges, I initially proposed a plan where I recruited key stakeholders as participants. Through this plan, I contacted academics (psychologists and computer scientists), mental health third-sector organisations, digital technology developers and suppliers, policy-makers, and designers who have been working in Scotland and developed an interest in cyberbullying or respect/ethics in an online environment. Eventually, I recruited six participants to participate in all four stages of online engagement: a computer scientist, a policy-maker, 2 third sector organisational representatives, a designer, and a young adult; one participant (an online safety representative) also agreed to engage in a one-hour online interview. It seems that these stakeholders bring unique perspectives to the research, as each of them has a different understanding, experience, and knowledge regarding online respect and cyberbullying.

Furthermore, in August 2021, I set up the second phase of participant recruitment in order to link to more young adults. I developed a plan focussing on inviting participants with less time commitment (one-hour Zoom interview). I reached out to young adults who have been active on social media and running online businesses in Scotland. Within this phase, five young adults agreed to take part in this research project where they shared their understanding of the online environment, online respect and cyberbullying.

I also offered five recommendations for recruiting participants during a pandemic or similar situation. In a nutshell, I advised the researchers to plan various strategies in advance by thinking outside the box. They should ensure that strategies adapt to the potential challenges. Researchers should develop recruiting strategies targeting different pools of participants effectively. And they should draw their attention to the first point of contact as one of the chief means to connect to participants. It is essential to ensure the first point of contact is designed carefully and visible enough to the pool of participants.

After recruiting all participants, I started online engagement with the support of Zoom and Miro. Participants' involvement included: online interviews, individual asynchronous activities, online group Workshop 1, and online group Workshop 2 (evaluation). Online Zoom interviews focused on exploring their understanding of

cyberbullying, online respect, their roles in supporting/encouraging online respect, and different approaches to promoting online respect among young adults.

The next phase of online engagement was participating in asynchronous activities. Asynchronous activities offered additional time for participants to reflect and elaborate on their understanding of online respect. I posted the starter kit containing all the materials needed to complete four asynchronous activities. As noted in the Methodology Chapter, these activities were built on research questions that investigate definitions of online respect and factors that influence online respect among young adults. The first activity explored participants' definitions of online respect through scenario-making techniques. The second activity focused on participants' ideas to facilitate online respect on the online platform. The following activity explored how participants evaluated and interpreted online respect situations. And the final activity explored the possible actions provided by different stakeholders to encourage and facilitate online respect among young adults. Participants were encouraged to complete the booklets and post them in prepaid envelopes before Workshop 1.

I ran Workshop 1 on Zoom and Miro platforms; it aimed to explore the accountability of the stakeholders and design opportunities for the intervention. Participants were separated into two groups due to their availability. After the completion of Workshop 1, I analysed all the findings to design the Workshop 2 activity (intervention), using the thematic analysis technique. The evaluation workshop, similar to Workshop 1, occurred on Miro and Zoom platforms allowing participants to evaluate and reflect on their ideas on promoting online respect among young adults collectively. Afterwards, I analysed and reviewed all the findings to address the research questions and develop both policy recommendations and an in-depth understanding of the philosophical aspect of online respect (see Discussion Chapter).

To conclude, despite facing difficulties recruiting participants during the lockdown, I accessed twelve participants (young adults and stakeholders) with different backgrounds and knowledge. Their participation enabled me to ensure the collection of meaningful data that looked at online respect phenomena from various angles. Collecting meaningful data allowed me to analyse the data and look for patterns and generate codes and themes. In the following chapters (Findings and Discussion Chapters), I present themes and codes that emerged from the findings. These analyses

allow establishing a better understanding of online respect and the factors that encourage or discourage online respect among young adults in Scotland. In the Discussion Chapter, I further describe these findings and insights in relation to the current literature and debate.

Chapter Five: The Findings

5.1. Introduction

Returning to the overall thesis research question of how Interaction Design can be used as an approach to explore promoting feeling respected in an online space (online respect) among young adults (18-24 years old) in Scotland from the perspective of key stakeholders and young adults, I have investigated the understanding of online respect, cyberbullying, and the factors that influence experiencing online respect. This case study aims to provide a valuable perspective for policy-makers and psychologists by offering different and innovative approaches to explore online respect in the context of cyberbullying among young adults in Scotland.

In the previous chapter, I demonstrated participants' recruitment and online engagements. Chapter Four described how online engagement tools developed, and the workshops' activities began to operate within the research project. In the light of the pandemic and the sensitivity of the topics (cyberbullying), recruiting participants became the chief challenge leading to a small poll of participants. In order to access more participants, the second phase of participation called for a one-hour engagement (interview) rather than five-hour. Overall, I recruited seven participants in the first phase and five participants in the second phase. The previous chapter also addressed how I gathered the data and findings from fieldwork and employed thematic analysis. Following the collection of data from online interviews, individual asynchronous activities (booklets), and online group workshops 1 and 2, I analysed the data thematically.

Thematic analysis as a powerful and flexible method for qualitative data enabled me to analyse the data set, interview transcripts, my interview notes, asynchronous activities (booklets), Workshop 1 and 2 activities and transcripts from all the workshops. Braun and Clarke (2006) described the thematic analysis in six phases: "1. Familiarising yourself with your data: Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas. 2. Generating initial codes: Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code. 3. Searching for themes: Collating codes into

potential themes, gathering all data relevant to each potential theme. 4. Reviewing themes: Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis. 5. Defining and naming themes: Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme. 6. Producing the report: The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis" (p.87).

As I began the analysis with interview transcripts and booklets, I developed the initial themes, sub-themes, and codes; the initial analyses allowed me to design Workshop 1 and 2 activities. After the workshops, I reviewed the themes a couple of times. And eventually, the analysis process was followed by analysing workshops 1 and 2 and design intervention. Analysing data enabled me to expand the current literature and establish a better understanding of online respect in the Discussion Chapter (next chapter).

This chapter (Findings Chapter) sets out the results of online participants' engagement, interviews, booklets, and workshops 1 and 2. It addresses the analyses that emerged from findings and discovers valuable insights into online respect that haven’t been available to policy-makers and psychologists. This chapter presents the findings as pieces of evidence in four sections: cyberbullying definitions, online respect definitions, factors that influence young adults' experience of online respect/disrespect, and the evaluated intervention by participants in Workshop 2 that facilitate online respect from the perspective of participants. This body of evidence and insights would be beneficial in developing an understanding of the matters and drawing conclusions in the Discussion Chapter.

5.2. Cyberbullying definition as a context from the perspective of participants

As discussed in the literature review, prior studies noted that in the light of the accelerated evolution of new technologies, developing a uniform cyberbullying definition has been a challenge (Menesini et al., 2012a; Grigg, 2010; Nocentini et al., 2010). Besides, no previous study has investigated the definition of the term feeling respected in an online environment (online respect). Given the absence of these definitions, I set out to explore these terms from the viewpoint of participants (young

adults and key stakeholders). Defining these terms would offer a novel cyberbullying and online respect definition and enable policymakers and psychologists to make sense, reflect, and act on the result of this study. When policymakers and psychologists begin to identify and recognise online respect, they reform and/or implement the policy recommendation provided by this research project (see chapter six).

As participants' understanding and definitions of cyberbullying were diverse, I employed the thematic analysis technique to analyse the data. To analyse the data, I examine participants' definitions of cyberbullying to identify common themes, codes and patterns of meaning. The possible explanation for various definitions could be associated with their roles, background, experience, knowledge of cyberbullying and online respect, or even the lack of understanding of these phenomena. This section details themes that emerged from participants' definitions of cyberbullying. It outlines my understanding, reflections and insights into cyberbullying's definition, gathered from participants' interviews. In the following chapter, these findings and insights enable me to unpack whether "the SG strategies translated into operational reality" (**White**) and establish a cyberbullying definition based on the collected data.

Theme: Cyberbullies send/target abusive/unwanted/negative content: This theme emerged from most participants' findings. As demonstrated in figure 67, participants linked cyberbullying to receiving harmful, negative, targeted, abusive, and distressing content.

Figure 67. An overview of the codes

Theme: Cyberbullying could be intentional or unintentional: As demonstrated in figure 68, participants appeared to have differing opinions regarding the intentions of cyberbullies: A. In **Black** and **Red**'s opinion, "we [stakeholders] have never quite grappled with whether to consider cyberbullies' intention to hurt victims appropriately" (**Black**). B. **White** believed intention to harm could separate the SG definition and

academic or traditional definition of cyberbullying. **White** pointed out that "[**White**'s organisation] do not recognise persistence and intent as being valid for bullying behaviour. Instead, we say it can be persistent, it can be intentional; but actually, one episode of bullying can have a massive impact on the young person. So let's not wait for a pattern to develop". **White** added that proving the intention to harm "allows them [cyberbullies] to negate the behaviour". C. On the contrary, **Yellow** thought that cyberbullying could be intentional.

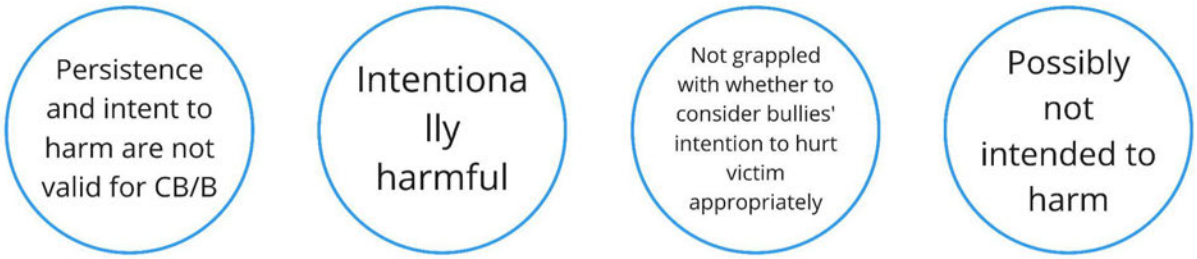

Figure 68. An overview of the codes

Theme: Cyberbullying could be relational or anonymous: Participants expressed different opinions on whether cyberbullying occurs in the context of relationships (figure 69). A. **White** and **Black** (first phase of participation) discussed that cyberbullying/bullying behaviour has relational characteristics: "[cyberbullying occurs in] a function of a relationship with somebody they know" (**Black**). According to **White**'s organisation's reports, "children [under 16 years old] who had been bullied online, knew exactly who had bullied them...there was no attempt to take a persona. 92% of those children knew who it was". **White** added that anonymity could be relevant in grooming, sexual coercion, and sexual exploitation.

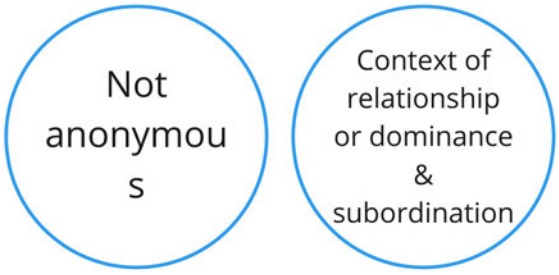

Figure 69. An overview of the codes

B. On the contrary, young adults in the second phase of participation outlined that cyberbullying could be anonymous. **Gold** outlined that "when I was a kid, people that I knew in real life would be mean to me online"; "[yet] now it is anonymous". Notably, young adults have been communicating with strangers to promote their service, business, or themselves. However, as **White** and **Black**'s understanding of cyberbullying developed from children under 16 years old, they asserted that children shouldn't communicate with strangers; consequently, cyberbullying for them could be relational. I will address this relational aspect of cyberbullying in the Discussion Chapter.

Theme: Cyberbullying could be a repetitive or one-episode behaviour: This theme emerged from both phases of participation. Some participants saw cyberbullying as repetitive behaviour and some as a one-episode behaviour: A. **Yellow**, **Gold**, and **Navy** addressed cyberbullying as repetitive behaviour. For instance, **Gold** described,"[cyberbullying] is people who are constantly just sending maybe the same message over and over again". **Navy** defined cyberbullying as: "somebody that is constantly commenting on stuff [content] negatively". B. However, as discussed earlier, **White** pointed out that one episode of harm could be considered cyberbullying. **White** explained that "one episode of bullying can have a massive impact on the young person".

Theme: The impact of digital technologies/online platforms on cyberbullying behaviour: Participants in both phases of participation expressed different opinions on whether digital technology/online platforms could influence cyberbullying behaviour (figure 70). A. **Green**, **Black**, **Teal**, **Purple**, and **Yellow-Green** asserted that digital technology/online platforms affect online users' interactions and lead to cyberbullying behaviour. As **Yellow-Green** defined: "[cyberbullying] would be people commenting or harassing people using online platforms; the way of saying things or taking actions that they would not normally [do] in real life". **Blue** addressed that “[cyberbullying is] not understanding and not grasping [that] there is a real person behind the screen”. **Blue** outlined that limitations of visual information and the absence of non-verbal cues as characteristics of online platforms in online space result in cyberbullying.

B. On the other hand, **White**'s (policy-maker) definition failed to express the impact and role of digital technologies in experiencing cyberbullying. For **White**,

"[cyberbullying is] a mix of both behaviour and impact" that will threaten or harm people and take place in the context of a relationship either online or offline.

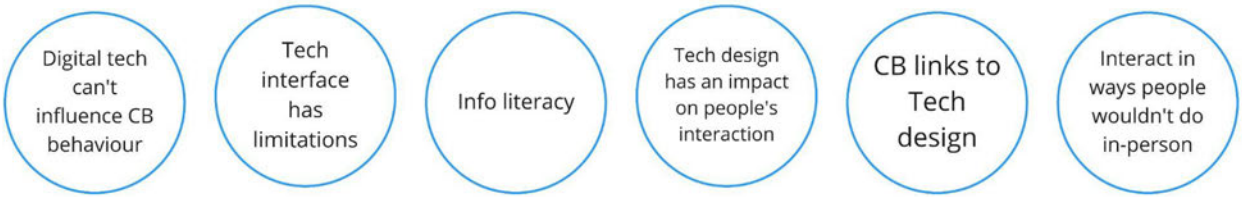

Figure 70. An overview of the codes

Theme: Cyberbullying as an expression of opinions: This theme emerged from **Gold**, **Navy**, **Black**, **Teal**, and **Purple**'s interviews in the second phase of participation (figure 71). For **Gold**, cyberbullying could be a group attack: "[cyberbullying] is more like groups of people organised to attack one person". **Gold** described: "I have gotten involved with [a name of social media] arguments...My friend was talking about something to do with [a political topic]...And then random people were obviously searching the different search phrases [and] looking for a fight. [They] started adding my friend and replying to my friend and calling all these horrible names...". Likewise, **Navy**, during the interview, outlined that people with stronger opinions argue in an online environment as a form of cyberbullying. **Black**, **Teal**, and **Purple** asserted that debate in an online space could turn into a tribal response: "it is about my tribe, against your tribe. It is council culture" (**Black**). **Gold**, **Navy**, **Black**, **Teal**, and **Purple** discussed that online debate could usually be associated with political arguments in which people express their opinions without listening to each other.

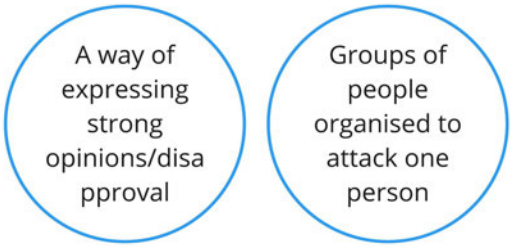

Figure 71. An overview of the codes

Theme: Ignorant and exclusive behaviour: This theme was identified in both phases of participation from **Black**, **White** and **Purple** definitions (figure 72). **Purple** described cyberbullying as "...people being ignorant to know you...". **Purple** explained that being

ignorant could refer to cyberbullying others without knowing who they are and their circumstances. For **White** and **Black**, excluding others from online groups seems like cyberbullying. I will further elaborate on these exclusion behaviours in the following section.

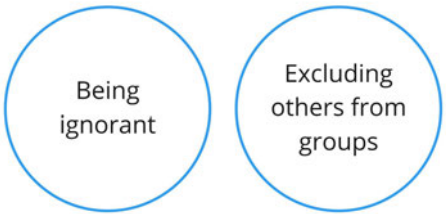

Figure 72. An overview of the codes.

Theme: Cyberbullying could have a precise or vague definition: As demonstrated in figure 73, participants (both phases of participation) expressed different opinions on whether the cyberbullying definition should be vague. **Black** stressed one of the challenges of establishing universally accepted cyberbullying definitions: "[it is] difficult to detect what is cyberbullying due to the ever-changing definition". **Black** pointed out that "there are lots there to think about [regarding the definition of cyberbullying]...you can not say, it is [cyberbullying] and it is not; [cyberbullying is] going to be lots of things". The following illustrated participants' viewpoints on this matter.

A. **Orange** explicitly explained the underlying reason for the abstract definition: "[**Orange**'s third sector org] likes to keep it vague because we have seen all kinds of forms. And it is difficult to measure if you have a small definition. I think a lot of people tried to put certain words to it. And we have witnessed that there are a lot of passive-aggressive comments that can be as harmful as direct insults". It seems that this vague definition could add value by allowing stakeholders to measure the impact of any form of online harm on online users' lives and provide support; **Orange** saw this vagueness as a great potential to reduce stigma and prevent cyberbullying. B. On the contrary, as discussed earlier, the policy-maker (**White**) provided a comprehensive and precise definition based on prior studies, especially in comparison with other participants.

C. Another aspect of **White**'s definition was cyberbullying is bullying that occurs online: "we do not have a separate definition for online bullying. It is all one definition...[**White**'s org] see it [cyberbullying] as part of the overall spectrum of

bullying, certainly playing out in a different digital location". Likewise, the SG developed the definition and anti-cyberbullying strategies based on the idea that cyberbullying is an extension of school bullying (The Scottish Government, 2017b). D. **Blue**, **Black**, **Red**, **Yellow**, and **Gold** addressed the role of online platforms in the definition of cyberbullying. They pointed out that the "definition [of cyberbullying] is continually evolving" due to the technology development.

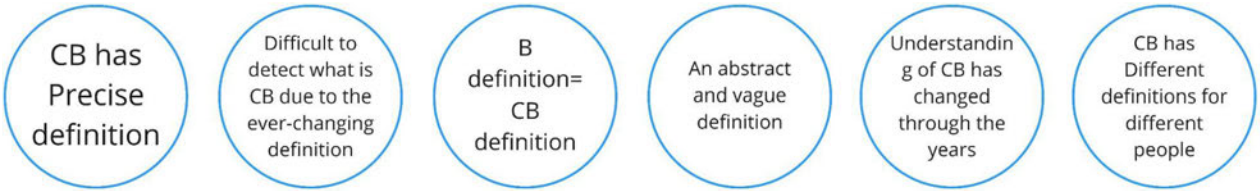

Figure 73. An overview of the codes

Theme: Cyberbullying has a negative impact on young adults' lives: This theme arose from **White**, **Yellow**, **Purple**, and **Orange** interviews (both phases of participation). **White** explicitly spoke about this theme in the definition: "[cyberbullying] speaks to the themes of bullying as a mix of both behaviours and impact [on online users' lives, such as losing out on academic achievement]". Besides, as mentioned earlier, the underlying reason for **Orange**'s vague and abstract definition was to measure the impact of cyberbullying on young adults' lives and mental health.

5.3. Feeling respected in an online environment (online respect) from the perspective of participants

As noted previously, there has been little discussion about the definition of online respect. Consequently, I have investigated the definition of the term from the perspective of the participants in both phases of participation. This section reports the findings related to the second research question: how can Interaction Design be used to investigate the key stakeholders' and young adults' understanding of online respect in the context of cyberbullying in Scotland? I begin this investigation by analysing the data gathered from interviews and booklets by employing the thematic analysis method. Briefly, this method allowed me to identify patterns, codes, and themes in relation to the definition of online respect. The following presents themes and codes that emerged from the findings. The Discussion Chapter addresses how I reflected

upon the following themes and establishes a unique and novel definition of online respect.

Theme: Improving young adults' online communication skills: Most participants associated improving young adults' online communication skills with online respect. This theme emerged from both phases of participation. Figure 74 illustrates codes that were identified from participants' understanding of online respect/disrespect that linked to improving online communication skills. It simply details participants' suggestions for improving online communication skills.

White's definition of online respect explicitly addressed how young adults improve their online communication skills: "[improving] the qualities of listening/reading properly what is said; responding respectfully; no offensive terms/ names/ languages; not leaving people out; not spreading rumours and mistruths; no hurtful remarks".

Moreover, **Blue**, **Yellow**, and **Red** suggested that not being judgmental helps to improve listening and communication skills. In **Red** and **Yellow**'s view, unbiased communication regarding online users' demographics and social classes minimises prejudgments. **Yellow-Green**, **Blue**, **Red**, and **Yellow** suggested that empathising with different people is beneficial in understanding their circumstances and differences.

Additionally, **Yellow** and **Black** spoke to the code of "improving online debate" in their understanding of online respect. Based on their experience, they believed that young adults couldn't debate and argue in an online environment in a respectful manner. For **Yellow**, avoiding disrespectful language, further communication, not attacking people, and better and more respectful criticism improve the online debate and facilitate online respect. In **Black**'s opinion, online respect in the context of online debate is centred around online users' ability to cope with different opinions, especially on political issues.

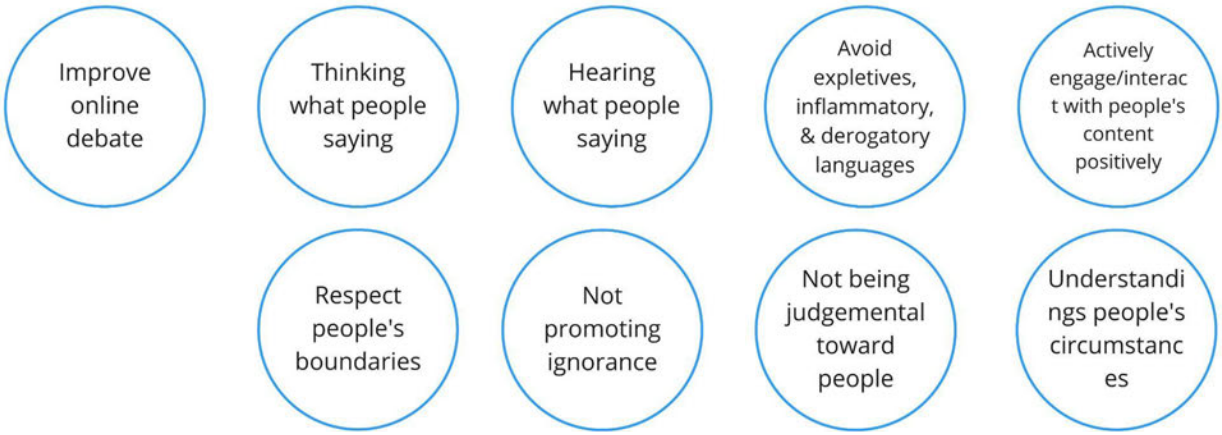

Figure 74. An overview of the codes

Theme: Individuals' interpretations, perceptions and understanding of disrespectful languages/words: This theme was discovered from both phases of participation (**Blue**, **Teal**, **White**, **Red**, and **Navy**'s interviews). **Blue** pointed out that "it is difficult to define [online respect] because you would need a lot of information; testing with people at which point people get offended". Likewise, **Teal**, **White**, **Red**, and **Navy** addressed that online users have different perceptions, interpretations, and understanding of disrespectful languages/words: "any communication that is not offensive as received by the person" counts as feeling respected in an online environment (**White**). For example, **White** referred to the disrespectful language as "expletives, inflammatory, and derogatory languages". And, for **Teal**, respectful language was "not asking uncomfortable questions".

Furthermore, **White** highlighted that the differences in online respect' understanding relate to *cultural differences*; nudity, for example, could be part of someone's culture, yet in another culture could seem disrespectful. In **Teal**'s perspective, these differences link to the *different values and knowledge between generations*; **Teal** explained that sometimes when older generations speak about sensitive topics in an online environment could seem offensive and disrespectful to younger generations.

Theme: The impact of digital technology/online platforms on online communication and online disrespect/respect: Figure 75 listed the codes that emerged from online respect definitions associated with the impact of digital technologies on online respect. Most participants in both phases of participation stressed the negative impact of digital technology in their definitions of online respect. **Black** explained that: "something went

wrong in our creation of this online space, that we allowed it to develop this idea that you can do some things with technology that you would never do face to face...". **Yellow-Green**, **Orange**, **Black**, **Green**, **Teal**, and **Yellow** addressed a lack of face-to-face interaction and non-verbal cues in their definitions of online disrespect. For instance, **Teal** referred to online respect as "the way you [online users] ask it [uncomfortable/personal questions]...It [online respect] is the words that you use, it is the tone, which can be difficult online, especially on social media...". In the following section and Discussion Chapter, I unfold the role of digital technologies in supporting online disrespect.

On the contrary, **White** explicitly stressed that "digital technologies do not influence people's characteristics". **White** explained that "there is an expression: who you are online is who you are. Online platforms do not fundamentally change people's characteristics simply by providing a virtual space to be heard. Mean people will stay mean, kind people will stay kind, mostly!". Unlike White, I propose that digital technology/online platforms shape online users' behaviours and attitudes. I further explore this in the affordances of digital technologies in the Discussion Chapter.

Furthermore, the code of "promoting online privacy and security" was identified in **Orange**'s interview. **Orange** noted that online users have some form of protection (barrier) from others; this barrier creates a sense of safety for them. **Orange** outlined that "when we talk about disrespect it is mostly when you jump a barrier, you shouldn't..."; here, "jumping a barrier" could be interpreted as invading online users' privacy.

Moreover, **Blue**, in the booklet, defined online respect as "respect can be knowing and understanding the purpose of using the particular social media platform...". In **Blue**'s opinion, using online platforms for different purposes could be understood as not feeling disrespected in an online environment. In the following section, I will further explain this matter.

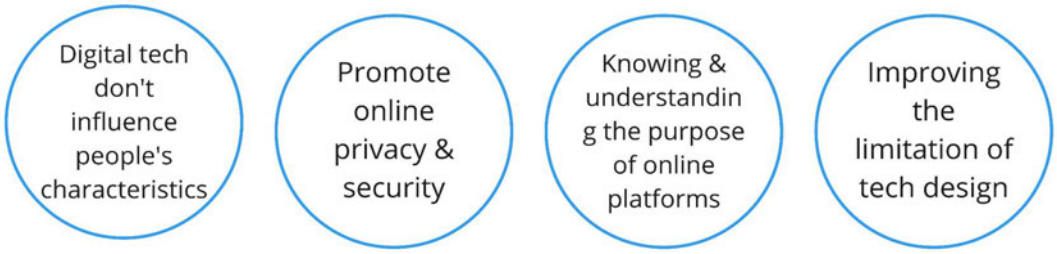

Figure 75. An overview of the codes

Theme: The perception of online respect in an online society: Figure 76 listed codes discovered from both phases of participation in relation to this theme. **Blue**, **Red**, **Yellow**, **Black**, **White**, and **Teal** spoke about the role of society/community in shaping young adults' understanding of online respect. **White** pointed out that young adults learn from their environment; if offensive communication is a norm in the online environment, it would be difficult for young adults to navigate and understand whether the communication was disrespectful. In other words, **White** emphasised that *offensive communications and environment depend on the judgments, interpretation, and understanding of the context, society, community*, and the surrounding environment. As an example, **Teal** pointed out that "in the disability community, [online] respect means not asking those [uncomfortable] questions. And in a way that is disrespectful. It is okay to ask questions because that is what people learn. But it is the way you ask; it is what you say. It is the words that you use; it is the tone...".

Promoting positive online values emerged from **Black**'s definitions of online respect. **Black** was concerned that the way online space was created allowed people to act, react, and interact differently from the physical environment. These different forms of interactions in an online society result in different forms of values, norms, and behaviours in the online space. **Black** described that “[imagine] you want to be popular [in an online space]. Then you are going to post stuff [content] that is going to get lots of likes, not stuff that accords with what you really believe in”. It appears that promoting positive online values in society has a major impact on feeling respected in an online space among young adults.

Blue and **Yellow** found that *creating a balance between freedom of speech and cyberbullying/online disrespect* links to online respect's understanding. **Blue** raised the concern of whether respecting someone could limit others' freedom of speech: "[online

respect] requires to shut down one or another opinion". In other words, **Blue** outlined that online users potentially limit others' freedom by protecting themselves against cyberbullies. **Blue** and **Yellow** outlined that society should clarify the definitions of freedom of speech and cyberbullying/online disrespect.

Furthermore, **Red** and **Yellow** spoke about *promoting online equality* in their definitions of online respect. They asserted that online society should facilitate online equality for young adults. In **Yellow**'s perspective, online equality could refer to "every person is equal to others [in an online space]..." and their opinions should not get dismissed. For **Red**, online equality meant not prejudging people based on their demographics and social classes. In the following section, I further explain online equality and the relations between online respect and freedom of speech.

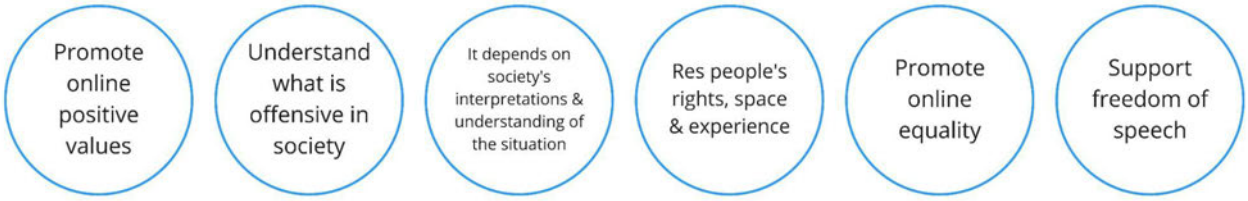

Figure 76. An overview of the codes

5.4. Emerging themes from participants' findings in relation to online respect/disrespect in the context of cyberbullying

As discussed in the previous chapters, this research project has investigated online respect through a lens of the Interaction Design approach. The Interaction Design approach, here, essentially provides a holistic understanding and insights into how to facilitate online respect in Scotland. Both digital technologies and young adults' values, beliefs, and needs would be at the core of this approach. This approach is concerned with young adults' relationships with digital technologies/online platforms, online users, and their surrounding environment at sociocultural and philosophical levels. Following the Interaction Design approach, I interpret and reflect on these complex relationships and findings and present themes in this section.

As noted earlier, I begin to examine the understanding of cyberbullying and online respect from the participants' perspectives in the previous sections. Defining these terms ensures that the outcomes of this research project present a clear and coherent

picture of online respect in Scotland. In the following, to expand upon the factors that impact online respect/disrespect, I introduce themes, sub-themes, and codes that emerged from interviews, booklets, and workshops. Simply, I applied Braun and Clarke's (2006) thematic analysis framework to look for patterns, codes, themes and sub-themes. These themes centre around addressing how young adults deal with disrespectful incidents (third research question) and the factors that affect online respect/disrespect among young adults (fourth and fifth research questions). They enable me to respond to anti-cyberbullying strategies and policies in Scotland and propose policy recommendations in the following chapter. Besides, themes also assist me in developing a profound understanding of the role of digital technologies/online platforms in shaping young adults' experiences of online respect/disrespect (see Discussion Chapter).

Theme 1: Young adults cope with online disrespect by connecting to a support network, further communicating with cyberbullies, using technological solutions and disengaging from disrespectful communication

As mentioned earlier, the first theme attempts to investigate the third research question: what coping strategies might young adults adopt in response to not feeling respected in an online environment from the perspective of key stakeholders and young adults? As shown in figure 77, participants found that young adults cope with online disrespect in different strategies: ignoring cyberbullies and disrespectful content, using technological solutions (such as reporting cyberbullying), self-regulating and policing themselves, communicating further with cyberbullies, and connecting to the support networks. However, **Blue** pointed out that external factors affect young adults' coping strategies, such as “fear of reactions from other people”. In other words, **Blue** outlined that “[bystanders' behaviour] can limit the reaction of how the victim coped with the incident”.

Both **Yellow** and **Blue** stressed that using technological solutions "depends on the level of harm and threat…if it is very harmful, [young adults should] report it" (**Blue**). **Yellow** also outlined that reporting the abuse and sharing negative experiences require young adults to build not only trust in online platforms, but confidence and courage to report the incidents.

Figure 77. An overview of theme 1 and codes

Furthermore, **Yellow** and **White** underlined that young adults should "police themselves" and follow online safety. In **White**'s experience, "[one of the] ways of protecting themselves [young adults] is being smart about technology. Being their gatekeepers for whom they let in, who is in their group, who can see their stuff…". **Red**

and **Yellow-Green** referred to it as self-regulating online activities and limiting contact. It meant that young adults "[should] not accept messages from strangers" and think carefully before "joining a certain group on social media" (**Yellow-Green**). **Red** added that finding a group with similar values and interests prevents talking about a contentious topic and leads to more online respect.

Connecting to young adults' support networks was another means that potentially allowed them to deal with online disrespect. **Green**, **White**, **Blue**, **Yellow**, and **Red** in their booklets addressed that young adults should share their negative online experiences with their support network. For **Green**, young adults should "seek comfort through close friends online". **Blue** and **Yellow** described it as "family, the real people around [young adults]" and people whom young adults express their thoughts, values, beliefs, identity, and sexual orientation without any prejudices.

And lastly, further dialogue with cyberbullies was raised by some participants as an approach to coping with online disrespect. **Black**, **Orange**, **Yellow**, **Green**, and **White** believed online misunderstandings and misinterpretations cause online disrespect. As a result, they outlined that further communication with cyberbullies enables young adults "to put the situation/discussion in the context". For **Black**, it meant that young adults have an opportunity to share how they felt after the disrespectful situation. In **Yellow**'s opinion, discussion afterwards allows room for apologising and explaining why they treated each other disrespectfully. However, **Red** and **Black** emphasised that the safety of victims should be a priority. In other words, further communication with cyberbullies depends on the level of the severity; "if victims have been abused, they should never start the dialogue with them" (**Black**).

In summary, most participants in both phases of participation outlined that not taking [disrespectful communication] seriously and ignoring cyberbullies or disrespectful content could be the main approaches for young adults to deal with the disrespectful incident. They suggested young adults should delete hateful/negative content, switch off their phones, block people, or deactivate their accounts on online platforms after the incident.

Theme 2: Society approaches online respect/disrespect by reducing stigma, creating a balance between cyberbullying and freedom of speech, and promoting positive and better dynamics of online social groups

The second theme addresses how society encourages/discourages online respect among young adults. As discussed previously, the surrounding environment impacts young adults' behaviours, actions, values, and beliefs and leads to cyberbullying/online disrespect behaviour. Participants underlined that society facilitates online respect by A. creating a balance between cyberbullying and freedom of speech. B. reducing stigma. C. and promoting positive and better dynamics of online social groups (figure 78). These societal approaches to support online respect are considered sub-themes. In the following, I further explain each sub-theme. And in the Discussion Chapter, I elaborate more on how this theme enabled me to provide policy recommendations and a better understanding of the impact of digital technologies on young adults' lives.

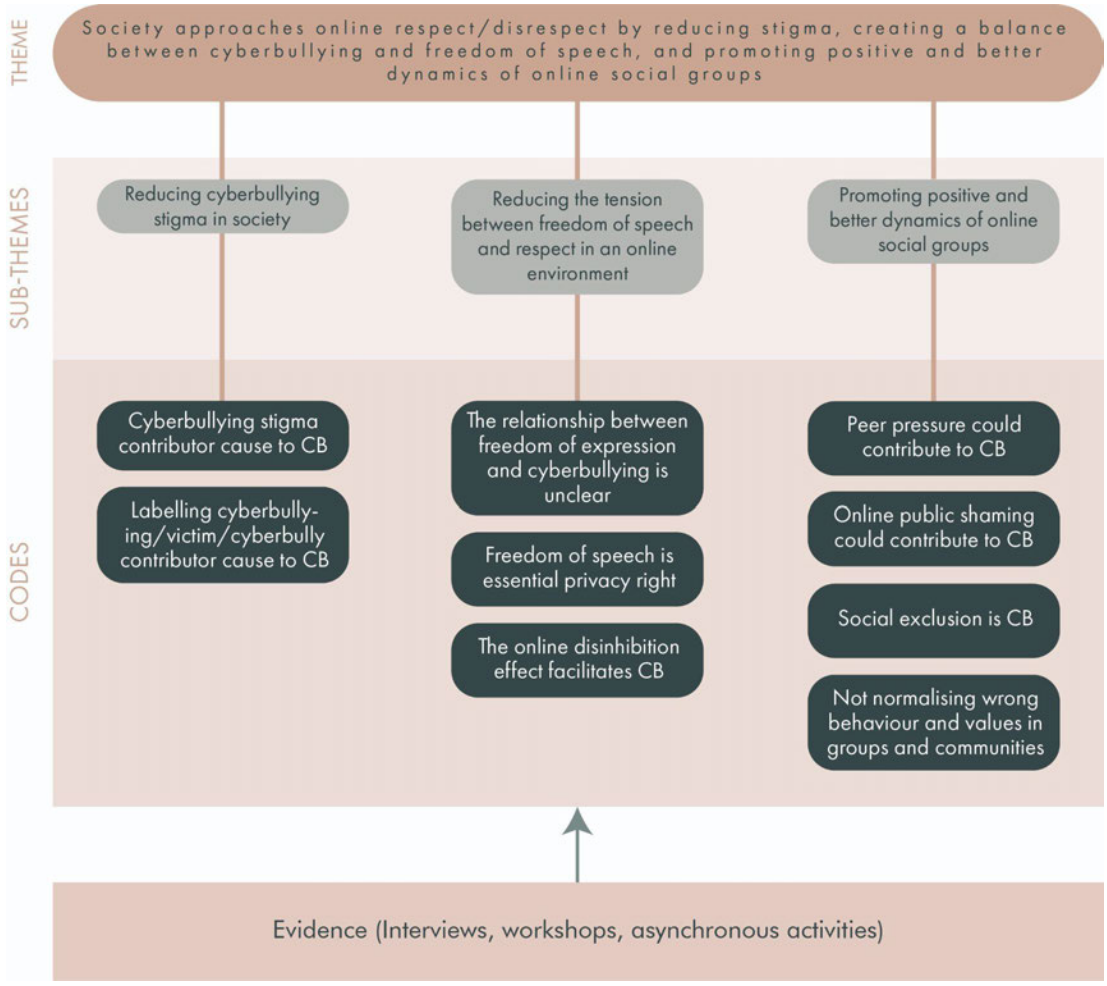

Figure 78. An overview of theme 2, sub-themes and codes

Sub-theme: reducing the tension between freedom of speech and online respect: The first sub-theme addresses reducing the tension between freedom of speech and online

respect/cyberbullying. **Blue** and **Yellow** (the first phase of participation) raised their concerns regarding the tension between freedom of speech and online respect/cyberbullying. **Blue** expressed that online users *limit others' freedom by blocking* their harmful/negative content. In the second phase of participation, this unbalanced relationship between freedom of speech and cyberbullying/online disrespect has also been a centre of attention. It might be due to the ability to express freely in a respectful manner would be vital for young adults in an online space. **Yellow-Green** and **Gold** asserted that freedom of expression is "tricky" and young adults should "[develop] an understanding where the line between freedom of speech and cyberbullying is" (**Yellow-Green**). **Yellow-Green** explained that sometimes *online users misunderstand a topic* and post horrible comments. In **Gold**'s view, freedom of expression encourages online disrespect. **Gold** explained, "right-wing people making a platform [non-censoring online platforms]; so that they could talk about anything that they wanted, I imagine how they hated certain minority groups".

Sub-theme: Reducing cyberbullying stigma in society: Reducing cyberbullying stigma was identified as a second sub-theme. **Red** and **White**, in the first phase of participation, discussed that everyone in society should be accountable for talking about cyberbullying to reduce stigma. They suggested that *raising social awareness* is a chief approach to making victims feel supported; it helps to promote online respect by "*not labelling people* and giving them space in which to change [cyberbullying/negative behaviour]". In the second phase of participation, participants haven't spoken about cyberbullying stigma. It might be due to a limited participation time (one hour) compared to the first phase of participation more than four hours commitment.

Sub-theme: Promoting positive and better dynamics of online social groups: Promoting positive and better dynamics of groups is the third sub-theme that emerged from the findings. In the first phase of participation, **White**, **Black**, and **Orange** described that being part of any group deals with *constantly changing and adjusting relationships among group members*. They explained that young adults join a particular group due to shared motives, interests, or values; young adults might change their perceptions and mindsets on account of the sense of belonging to a group or peer pressures. In other words, the group's principle of belonging, perception, power and common motives result in conformity to the norms of the group. As **White** addressed that online

users “learn those lessons [offensive language] much more quickly” and adjust their behaviour accordingly; otherwise, "it exposes them…and they will become a target next”.

Similarly, **Orange** noted the group's languages and norms could be forced on the members; "especially when the majority opinion is in agreement, it is hard to question what is morally/ethically right" (**White**). **Black** also underlined that bystanders actively *create negative social norms* by doing nothing. These social norms and structures could consider social affordances. In the following chapter, I will elaborate on social affordance.

Taking into account that the online environment is saturated with "different values, culture,[and] expectations of behaviours" (**White**), participants argued that *promoting positive social norms and expectations and discouraging normalising negative behaviours* contribute to building a better and safer online society. **Yellow** explained that "positive values and behaviours could make people feel welcomed [in the society/community]"; for instance, indicating pronouns on social media allow online users to use correct pronouns and respect others' identities. Within the second phase of engagement, **Purple** and **Teal** pointed out that building a positive mindset (such as online respect) in society plays a chief role in building a safer and more respectful environment.

Moreover, **White** recommended that encouraging positive bystander behaviour reduces the possibility of cyberbullying in groups. **White** suggested that who has the most power should encourage positive behaviour, discourage wrong behaviour, and educate others on how to behave respectfully. **White** referred to it as "group administrators" in the booklet: "someone in a group moderates the tone, content and behaviour of others". **White** also underlined that members of the group should "support [normalise positive/right behaviour and values of] the person who spoke up".

Discouraging online public shame was identified as another approach to support online respect. In the first phase of participation, **White** and **Black** found that online shame could be a huge driver in cyberbullying. **Black** described, “we get that mob mentality…people have done bad stuff, and they get called out for it. Fair enough, but they do not just get called out for it, they get completely vilified…it is like the public executions”. **Black** further explained that “this idea of self-righteousness; that person

did something terrible. And so we kind of collectively join in pointing the finger at how terrible they are, and feeling good about ourselves without recognising that behaviour in itself has unpleasant undertones".

Furthermore, in both phases of participation, the concept of *social exclusion* or *ignorance* emerged from **Orange**, **Purple**, **Yellow-Green**, **Black**, and **White**. This idea centred around deliberately leaving (or isolating) someone out of online groups or not congratulating their achievements (denial attitude). **Purple** described "people being ignorant to know you [and engage in your content negatively]". **Purple** explained that "it is the biggest oxymoron. Because you [online users] have a wealth of knowledge on the internet that you could research that topic, rather than typing a hateful comment...being ignorant is the easiest choice. It is the most comfortable choice. Because you do not want to educate yourself".

Participants addressed that this denial behaviour (ignorance) results in shaping social norms and behaviours. **White** suggested that creating a safe and supportive online community with peers by "showing respect to others' feelings" decreases this form of ignorance. **Orange** also pointed out that engaging positively with online users' content could "make young adults feel like being part of a community".

Theme 3: The Scottish Government approaches online respect/disrespect by representing young adults' values and ensuring a safe online environment for young adults

The third theme explores how the Scottish Government (SG) supports or ensures online respect among young adults. The findings demonstrate that representing young adults' values and ensuring a safer online environment enables the SG to support online respect among young adults. Figure 79 illustrated codes and sub-themes that emerged from the findings in both phases of participation. This theme played a chief role in providing policy recommendations for anti-cyberbullying in Scotland (see Discussion Chapter). In the following, I further explain each sub-theme.

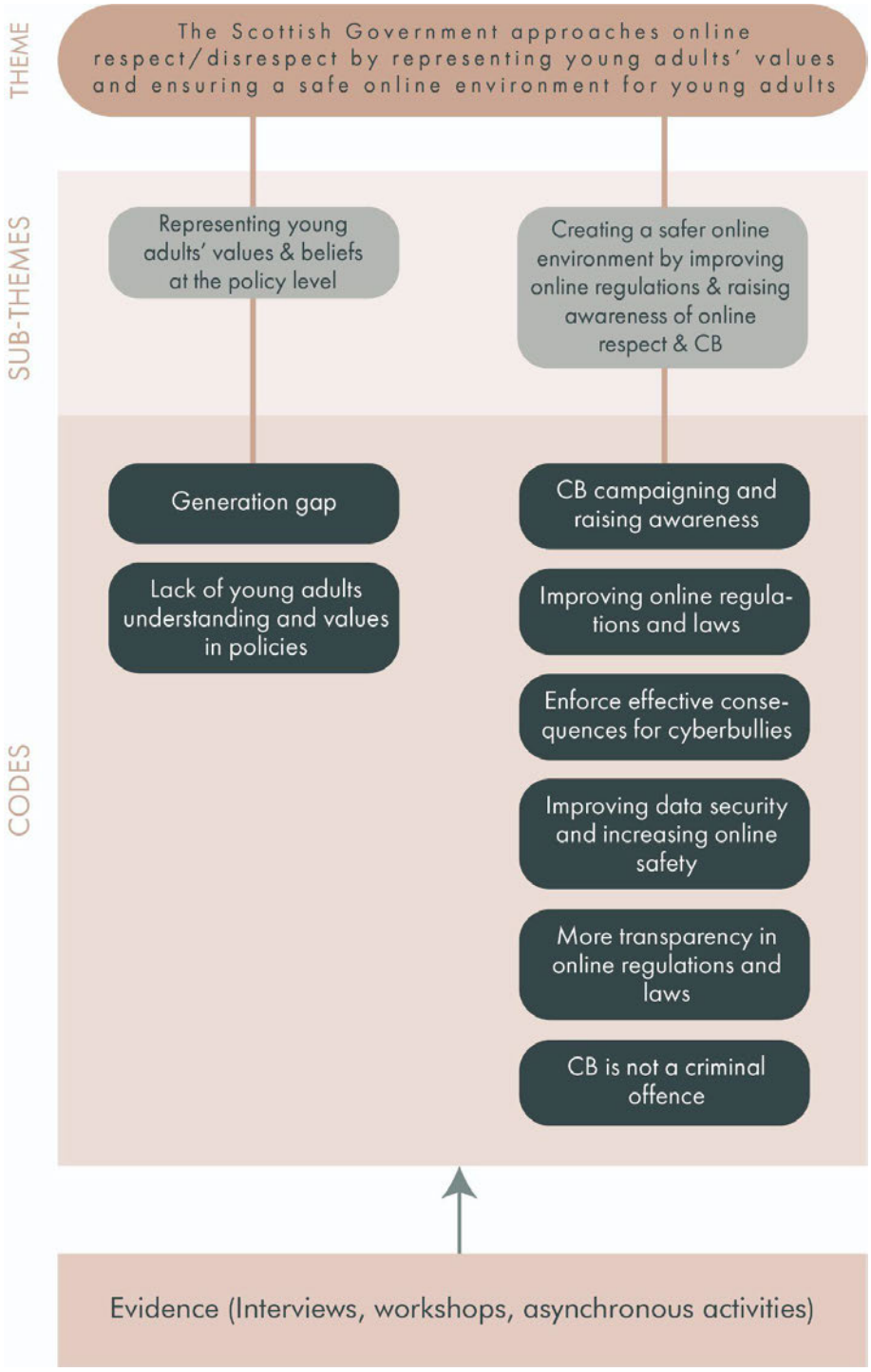

Figure 79. An overview of theme 3, sub-themes and codes

Sub-theme: Creating a safer online environment by improving online regulations and raising awareness of online respect and cyberbullying: The first sub-theme explores how the SG ensures/enforces a safer online space. The responses from **Red**, **Purple**,

Teal, **White** and **Navy** interviews suggested that *raising awareness and educating* young adults should be part of the SG's policy. **Red** and **White** pointed out that the campaign is one of the SG's strategies to raise awareness of cyberbullying among young adults and children. Within the second phase, participants (**Navy**, **Teal**, and **Purple**) elaborated more on the educational materials for raising awareness; they stated that providing updated education about online respect, online safety, and cyberbullying discourages cyberbullying and online disrespect. They noted that current cyberbullying information couldn't enable the SG to prevent cyberbullying incidents or deal with online disrespect effectively.

Another SG's approach to creating a safer online environment could be *improving online regulations and laws*. Within phase two of participation, **Yellow-Green** suggested that the SG should "ensure that things [racist or offensive content] are taken down if they have the opportunity to do that".

Within both phases of participation, certain participants (**Yellow**, **Orange**, and **Teal**) identified that *collaboration between the SG and other stakeholders* might improve online regulations and create a safer online environment. In particular, **Teal** and **Orange** underlined the importance of collaborating with digital tech companies and experts in establishing online regulations and laws to support online respect.

Improving data security and increasing online safety emerged from the first phase of participation findings as one of the SG's approaches to promoting online respect. With respect to increasing online security, both **Yellow** and **White** addressed that the SG should implement better and clear digital rights for young adults in order to increase security in an online environment. Regarding improving data security, **Orange** discussed, "some of the content of cyberbullying is difficult to get removed. Even though there are a lot of laws and a lot of work that the European Union has done towards the right to be forgotten, it is still very unclear...". Similarly, **Yellow** and **Green** stressed that online regulations and laws regarding data ownership are unclear.

Furthermore, **Yellow**, **White**, and **Purple** have discussed that the lack of *serious and effective consequences for cyberbullying* leads to more online disrespect/cyberbullying. For **Yellow**, when victims have been satisfied with the punishment of cyberbullying, the consequence is considered effective. Moreover, **Teal** discussed that *transparency in online regulations and consequences* discourage

cyberbullying behaviour: "if that is open to all, people can see that; then they will be less likely to make these [offensive] comments". Besides, **Yellow** outlined that the SG should be transparent in their "methods and practice".

Sub-theme: Representing young adults' values and beliefs at the policy level: The second sub-theme addresses that policy-makers should represent young adults' values and beliefs in anti-cyberbullying policies and strategies. **Yellow** within the first phase of participation and **Purple** within the second phase of participation criticised policy-makers for establishing anti-cyberbullying policies. **Yellow** and **Purple** believed that *policy-makers couldn't represent young adults' values, beliefs and understanding of digital technologies* at the policy level. **Purple** discussed that given *the generational gap*, policy-makers couldn't understand young adults' perspectives (such as values and experience) to represent in anti-cyberbullying policies.

Theme 4: Digital technology sectors approach online respect/disrespect by ensuring a safe online environment for young adults and developing better and more effective digital technologies/online platforms

The fourth theme addresses the role and impact of digital technologies/online platforms in shaping young adults' understanding of the world (online and offline) and online respect/disrespect. As shown in figure 80, the findings underlined two tech companies' approaches to facilitating online respect: ensuring a safer online environment and developing better and more effective digital technologies/online platforms. In the following, I expand upon each approach as a sub-theme.

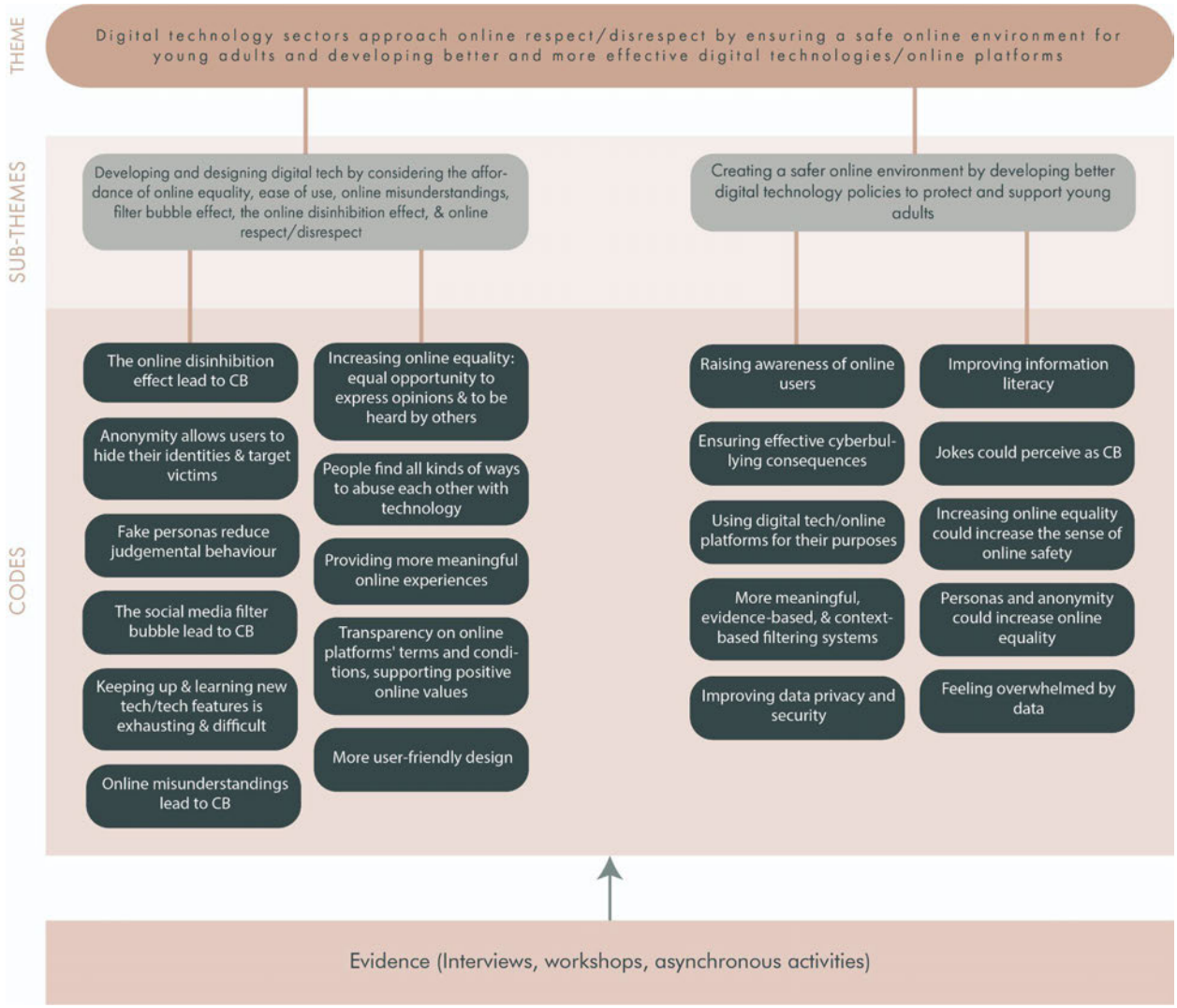

Figure 80. An overview of theme 4, sub-themes and codes

Sub-theme: Creating a safer online environment by developing better digital technology policies to protect and support young adults: The first sub-theme explores creating a safer online space for young adults. Participants in both phases of participation pointed out that the digital technology sector plays a critical role in facilitating online respect among young adults by creating a safer online space. **Teal**, **Green**, **Blue**, **Black**, **Orange**, and **Red** were concerned about technology companies monitoring and tracking online users' activities; they asserted this results in a sense of not feeling respected in an online space. They found that *improving data privacy and security* increase the sense of online respect by enhancing online safety. For instance,

Red suggested that digital tech companies "ensure there is full encryption of messages and data".

Most participants in both phases of participation found receiving unwanted/negative information as one form of cyberbullying or online disrespect; they suggested that *improving information literacy* creates a safer online environment and supports online respect among young adults. They argued that digital technologies should empower young adults to choose the exposed data/information. **Green** described information literacy as one of the essential skills for online users, helping to manage and control the flow of information: “allowing them [online users] to be able to decide what kind of information they want and protecting users from unwanted information…That should not be something they are subject to…they should be able to control”.

Furthermore, the majority of participants discussed that *better data filtering* allows young adults to experience more online respect and less cyberbullying. **White**, **Yellow**, and **Gold** pointed out that given the lack of technology development to filter content appropriately, tech companies should use human resources. **Yellow** and **White** referred to human resources as administrators and moderators for monitoring online activities and removing inappropriate content. However, **Green** argued that not only "relying on humans at any level has lots of risks", but also filtering leads to mental health problems for human resources. **Green** explained that "[a name of social media], in [name of a country], hired people that can spend time flagging pictures that are harmful or have contents that are not clean… they found that these people suffer from mental health [problems]. Because they spent a day looking at [negative content]; a lot of them commit suicide!".

Moreover, **Gold** and **Navy** criticised how tech companies filtered and dealt with sarcasm: "you hear people making a joke about wanting to kill a fictional character, and then they get banned from [a name of social media]!" (**Gold**). Instead, **Gold**, **Yellow**, and **Navy** suggested more meaningful, evidence-based, and context-based filtering systems. **Navy** elaborated that "there is such a blurred line over what crosses the line and what does not…there are things that are more harmful and should be blocked. But you could argue there are two sides to every coin…It is hard to say what is right and what is wrong".

Increasing online equality was identified as another online platform's approach to creating a safer online space and supporting online respect. In the first phase of participation, **Red** and **Yellow** pointed out that *enabling personas and anonymity* could increase online equality and facilitate online respect among young adults. **Yellow** explained that using other identities, such as "place/ fictional setting from the film instead of young adults' profile pictures" could help not to discriminate and prejudge others based on their picture profiles and increase a sense of online equality and online respect.

Moreover, **Blue** and **Purple** noted that *ensuring online users would use online platforms for their purposes* leads to a sense of respect in the space. However, **Green** argued that predicting how people might use digital technologies is challenging: “we can only predict what has already happened…because technology moves so fast. It is difficult to predict what is next”. **Green** stated that “there are too many implications that only come later. A lot of these systems [are] designed for one purpose, but then they end up getting used for other purposes. So you can not really anticipate!”.

Providing effective cyberbullying consequences (such as getting banned, suspended temporarily/permanently, or limiting access to the online platform) is another digital technology approach to creating a safer online environment for young adults. In the second phase of participation, young adults noted that a lack of effective punishment and consequences for cyberbullying on online platforms encourages cyberbullying behaviour. **Purple** explained that "[cyberbullies] know that they can get away with saying stuff [content] that really would not be fine …[as] there are no physical consequences [in an online environment]". In **Teal**'s opinion, money lies at the root of not punishing cyberbullies: "[Big tech companies] want to make money from both groups [cyberbullying and who have experienced cyberbullying]". Similarly, in the first phase of participation stakeholders highlighted the significance of cyberbullying punishments and consequences for discouraging cyberbullying behaviour. They asserted that allowing young adults to "sue [online users] against harmful content" or "criminal tendencies" empower them in an online environment.

Sub-theme: <u>Developing and designing better and more effective digital technologies/online platforms</u>: The second sub-theme is developing and designing digital technologies/online platforms that afford more online respect. In both phases of

participation, findings suggested that digital technology/online platforms facilitate online disrespect and cyberbullying among young adults. As an example, **Red** believed that “a limited amount of characters [on interface design]...[or] because typing is uncomfortable" results in “the brevity of the messages” and cyberbullying. For **Yellow**, online platforms allowing online users to target others could be perceived as supporting cyberbullying. "[Being] responsible for blocking any potential channels of bullying" for **Red** seemed that tech companies blamed victims for experiencing cyberbullying. **Yellow-Green** noted that anonymity and not seeing the impact of online communication on online users support cyberbullies. **Purple**, **Navy**, and **Black** argued that blocking cyberbullies is not effective as cyberbullies could create infinite accounts and abuse the victims again.

On the other hand, it is notable that **White** and **Black** underlined that digital technology/online platforms do not fundamentally alter individuals' behaviours. As **Black** stated, “People are sneaky. They will find all kinds of ways to abuse each other with technology”. However, Goffman (1978) argued that individuals manage and organise several "selves" and seek out the best way to present the most suitable one for a given situation. In his book, *The Presentation of Self in Everyday Life* (1978), Goffman explained how individuals construct and maintain their identities through social interactions. He argued that individuals perform in social situations, using various cues, such as clothing, facial expressions, and body language, to communicate and present themselves to others (Kilvington, 2020). In this sense, Goffman's ideas suggest that individuals may adapt their behaviours and identities to fit the digital environment and online platforms, just as they do in face-to-face interactions.

Furthermore, **White** (policy-maker)did not focus enough on the role of digital technology design in cyberbullying and online disrespect compared to other participants. However, young adults, in the second phase of participation, recognised the importance of digital technology design in minimising the possibility of cyberbullying situations. **Black** also acknowledged the significance of technology design, stating, "I think this idea of technology design is the next frontier...If we want to reduce it [cyberbullying and inappropriate online behaviours], we need to look at that". Therefore, it is crucial to consider the role of digital technology design in promoting online respect and reducing harmful online behaviours.

Participants found that *transparency on online platforms' terms and conditions*, *more user-friendly design*, *supporting positive online values, and providing more meaningful online experiences* facilitate online respect among young adults. Findings also noted that young adults navigate in an online environment with their understanding of "*how the algorithm works [on social media]*". “How the algorithm works” refers to the ways social media publishes and sorts online users' content and how audiences see the content. **Purple** underlined feeling annoyed because "algorithm changes all the time"; as a result, it required being actively aware of changes and updates. In other words, for **Purple**, digital technologies became "difficult to use"; because digital technologies shifted a focus from providing means to communicate with online users to learning how online platform algorithms work!

Furthermore, participants in both phases of participation spoke about *the online disinhibition effect* as one of the properties of online platforms/digital technologies that potentially impact young adults' online respect. **Gold** described the online disinhibition effect as "you do not feel like you are talking to a person. You feel like you are talking to a computer. You can not see how your words are affecting them. There are no immediate consequences. You can turn off your phone and not think about it [consequences] anymore!". **Black** also said that not seeing the impact of cyberbullying on victims can make cyberbullies more vicious.

Additionally, participants addressed that lack of eye contact, anonymity, personas, and limited visual information make it easier to be disrespectful. **Black**, **Red**, and **Blue** outlined that the absence of visual information "makes it much harder to read body language through digital technologies". Visual information allows people to create meaningful connections and convey messages and ideas more clearly. **Blue** outlined: “[in] face to face [interaction], you see the expressions. You have a full grasp of that person. You might have a bit more idea. I might have a look at your hair, have a look at your clothes, and I might have an idea of your situation…I think the online environment is just quite limited”.

With respect to anonymity, **Green**, **Blue**, **Yellow**, **Yellow-Green**, **Purple**, and **Black** outlined that anonymity increases cyberbullying incidents. **Black** and **Purple** stated that anonymity changes people's behaviour because it doesn't allow them to connect to people with real-life experiences. Consequently, they suggested that tech

companies shouldn't support anonymity, fake accounts, and catfishing. However, **Red** suggested that using personas and fake identities help share cyberbullying experiences with others. **Yellow** also pointed out that personas help not prejudge people based on their ethnicity and gender.

The filter bubble effect emerged as another property of online platforms/digital technologies that influence young adults' online respect. Filter bubbles rarely allow online users to exchange different perspectives and broaden their horizons; it is more likely to link to similar-minded opinions and lots of support. Consequently, both sides of the argument never hear each other's opinions; this results in online arguments between two different parties and online disrespect. **Blue** called this "individual's online bubble", created by online platforms attempting to connect similar opinions and values and "restrain people from new perspectives". **Yellow-Green** and **Blue** asserted that connecting to similar-minded networks/groups leads to more online debate/arguments and facilitates cyberbullying behaviour.

Moreover, findings from both phases of participation suggested that *online misunderstanding* is another aspect of online communication that results in cyberbullying and online disrespect. Participants discussed that the cause of these misunderstandings link to the following: A. the online disinhibition effect and limitations of the visual information, such as facial expression, absence of tone of voice, lack of non-verbal cues, and inability to express emotions. **White** described that "the reader can read in a completely different way, depending on the intimation that you put on it; whether or not it is properly punctuated, depending on if it is all written in capital letters". Although, **Navy**, **Teal**, and **Black** stressed that sarcasm and jokes couldn't come across well in an online space. **Teal** explained, "in real life, that person knows that they are joking; they do not mean it. But on social media, that can come across as being nasty because there is no indication of tone unless it is a voice message...so that was disrespectful until someone obviously would realise that not meant to be that way!".

B. At the individual level, cultural differences lead to online misunderstandings. **Green** provided an example of a situation where online users might misunderstand the intention: “[imagine] you are flirting with someone [online]...the person that you are interacting with can misunderstand your intentions because again there are cultural

differences…". C. Lack of clarity of the content was identified as another cause of online misunderstandings. **Red** and **Blue** suggested that more clarification results in fewer assumptions and clear expectations; clear expectations may result in fewer misunderstandings and even less conflict and disagreement. For instance, to say "see you at 10" means 10:00 in the morning or 10:00 in the evening; not making it clear leads to misunderstanding and experiencing online disrespect.

Theme 5: Stakeholders (organisations, parents, bystanders, etc.) approach online respect/disrespect by creating a safer online environment and improving young adults' online communication skills

As noted previously, the surrounding environment and society shape young adults' behaviour and relationships with digital technologies/online platforms and lead to online disrespect/cyberbullying. The fifth theme explores how stakeholders (such as third-sector organisations, universities, parents, and bystanders) affect young adults' behaviour and their relations with the world; in other words, how stakeholders encourage online respect among young adults. The findings found that creating a safer online environment and improving young adults' online communication skills enable stakeholders to facilitate online respect (figure 81). In the following, I elaborate on each approach as a sub-theme.

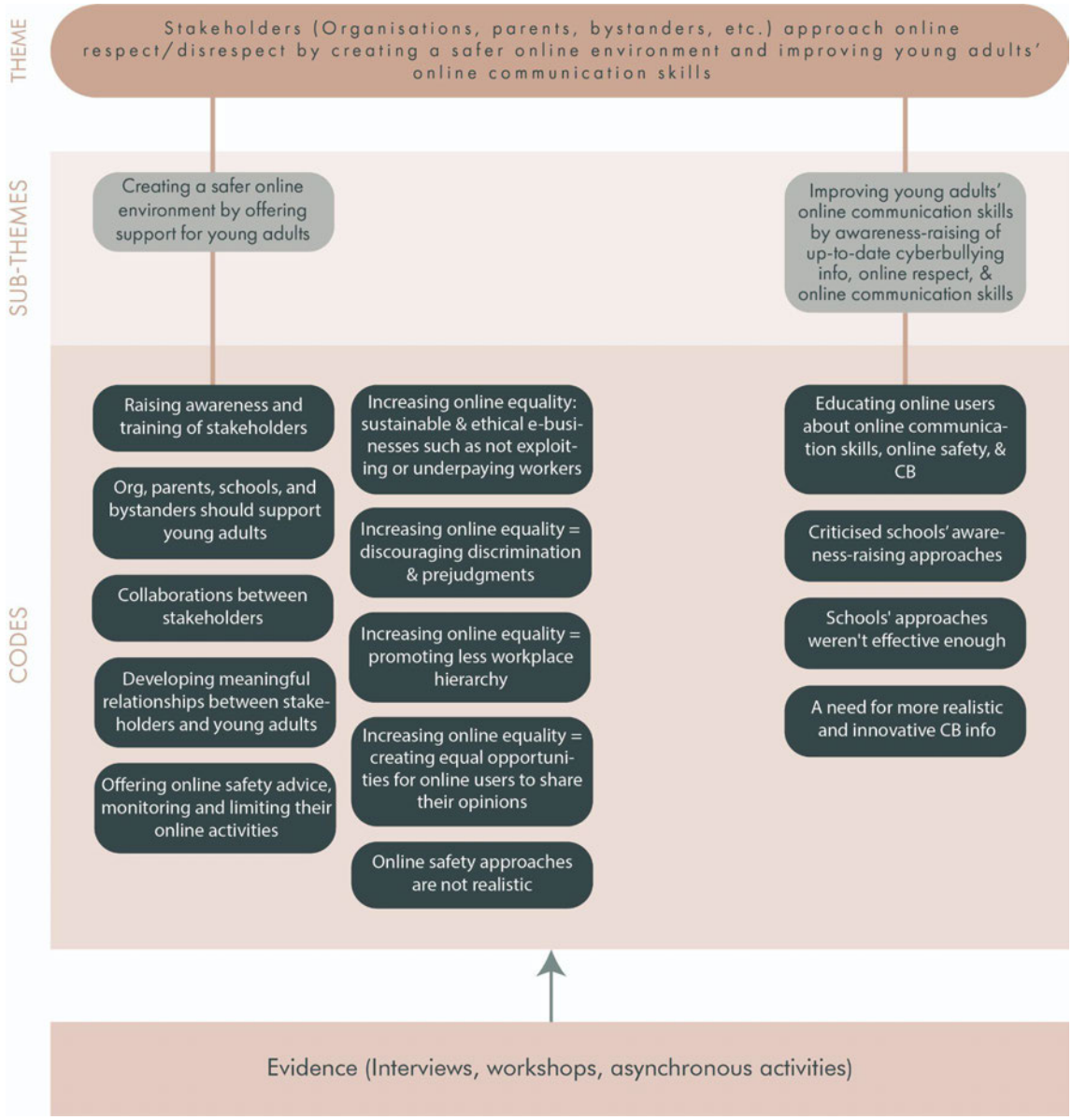

Figure 81. An overview of theme 5, sub-themes and codes

Sub-theme: Creating a safer online environment by offering support for young adults: Findings indicated that participants (in both phases of participation) found that organisations, charities, schools, parents/carers, and bystanders create a safer online space for young adults where they support online respect. **Red** referred to a safe place as a *mediator*: "a model that helps distance the person being abused from the abuser and sort of creates a safe space" and allows young adults to raise their concerns and get support.

Orange, **Gold**, **White**, and **Yellow** asserted that developing *meaningful relationships between stakeholders and young adults* allows stakeholders to create a safe space by providing support. They stressed that meaningful relationships allow young adults to feel comfortable sharing and reporting their negative online experiences with stakeholders. **Orange** and **White** addressed that online supervision, celebrating different cultures, experiences, uniqueness, and values, and not being judgmental contribute to building a better bond with young adults.

Furthermore, **Orange**, **White**, **Black**, and **Blue** discussed that *early interventions* play a chief role in creating a safe space and promoting online respect among young adults. They underlined that *updated training and resources at schools for students and staff* reduce the cyberbullying stigma. **White** also outlined that schools should educate students about online laws and regulations in the context of cyberbullying. With respect to the awareness-raising of stakeholders, **Black**, **White**, and **Teal** suggested that training and educational programmes about cyberbullying and online safety for stakeholders enable them to support young adults.

On the other hand, an online safety representative (**Black**) and young adults in the second phase of participation (**Gold**, **Navy**, and **Teal**) criticised cyberbullying and online safety educational approaches. **Teal** described that their schools were out of depth and didn't know how to support victims. **Black** addressed that these approaches are not realistic; they centred on "risk removal, avoidance, taking away, switching off, getting rid of, [and] don't be there" approaches. Similarly, **Gold** and **Navy** pointed out that their schools' online safety focused on "avoiding getting peer pressured into doing drugs", and "not post pictures of yourself [online]" (**Navy**). Alternatively, **Black** and young adults suggested that schools should focus on *raising awareness* of updated information about online safety, online social and communications skills, and how to debate with others respectfully in an online space.

With respect to university support, **Gold**, **Yellow-Green**, and **Navy** pointed out that their universities didn't offer support for university students to develop their online communication skills. However, **Yellow-Green** and **Navy** outlined that their universities offered courses helping students learn how to navigate their business in an online space.

Furthermore, participants noted that parents/carers and friends create a safer environment for young adults by *offering online safety advice, monitoring, and limiting their online activities*. **White** stressed that parents should "safeguard the children" in an online environment: "what you do need to have is an open and constructive dialogue with your child about things they do online, [and] where they go online...". However, according to **Purple**, **Teal**, and **Gold** (young adults), in spite of parental monitoring, they spoke to strangers and got themselves into inappropriate situations in an online space.

Increasing online equality was identified as another approach of stakeholders to create a safer environment. As discussed in the previous theme, **Red** and **Yellow** identified that ensuring online equality promotes online respect among young adults. They also outlined that stakeholders promote online equality by A. creating equal opportunities for online users to share their opinions and experiences. B. promoting less workplace hierarchy where online users feel comfortable reporting disrespectful incidents. C. discouraging discriminations and prejudgments based on young adults' demographic differences. D. and promoting more sustainable and ethical e-businesses: discouraging "exploit their workers...[nor] underpay their workers" (**Yellow**).

Sub-theme: Improving young adults' online communication skills by awareness-raising of up-to-date cyberbullying info, online respect, and online communication skills: The second sub-theme that emerged from the findings is improving young adults' online communication skills. Participants noted that providing education for young adults benefits their online communication skills and potentially leads to discouraging online disrespect and cyberbullying. As discussed earlier, young adults in the second phase of participation offered critical insights into the importance of these skills for young adults. **Gold**, **Yellow-Green**, and **Purple** argued that schools and universities should centre on helping students think critically before online communication. They also highlighted the importance of raising awareness of updated and realistic cyberbullying information, online communication skills, and online safety for young adults in universities and colleges.

Theme 6: Young adults approach online respect/disrespect by creating a safer online environment and improving their online communication skills and information literacy

The sixth theme explores how young adults facilitate online respect while communicating online. Participants in both phases of participation essentially suggested that creating a safer online environment and improving young adults' online communication skills and information literacy enable young adults to experience online respect (figure 82). In the following, I further elaborate on these young adults' approaches (sub-themes).

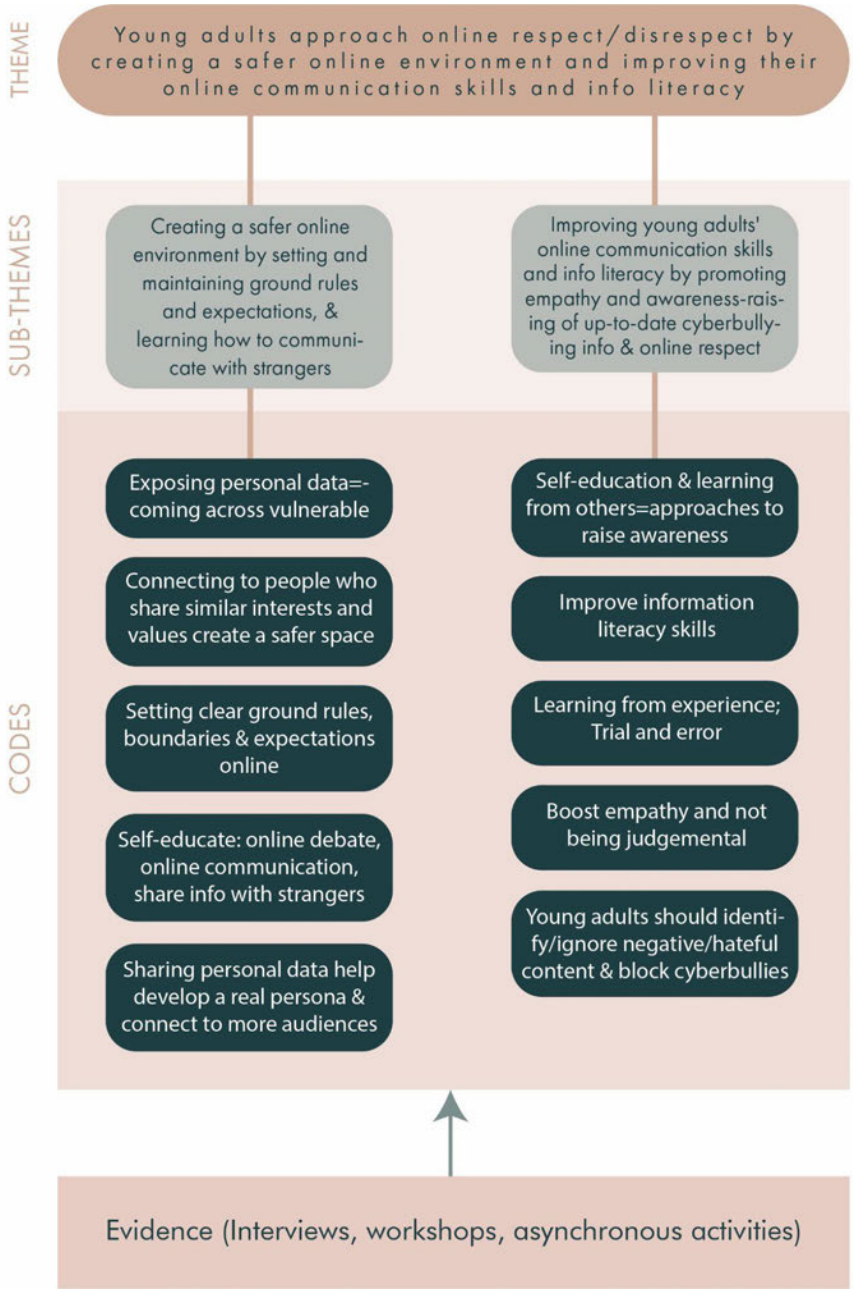

Figure 82. An overview of theme 6, sub-themes and codes

Sub-theme: Improving young adults' online communication skills and information literacy: The first sub-theme that was discovered from the findings is improving young adults' online communication skills and information literacy. Participants in both phases addressed that improving young adults' online communication skills enable them to experience more online respect. As young adults stressed in the second phase of participation, *self-education and learning from others* have been principal approaches to raising awareness of cyberbullying. They outlined that they have learnt about online communication, digital technologies/online platforms, online safety, information literacy, and how to deal with online disrespect/cyberbullying by "being online so early", "learning from experience", or "trial and error". **White**, **Green** and **Yellow** (first phase of participation) also outlined that young adults would learn about online safety and digital technologies from their experiences. However, **Yellow** believed that “young adults should not learn by themselves”; stakeholders should be accountable for raising awareness of online safety, online communication, and cyberbullying.

Regarding awareness-raising of information literacy, **Green**, **Gold**, **Red**, and **Yellow-Green** indicated that young adults could be able to identify and ignore negative/hateful content and block cyberbullies. However, **White** (policy-maker) didn't speak about the significance of improving information literacy at individual levels. It could be on account of believing that cyberbullying occurs among children not young adults and by avoiding strangers, they might not be in a situation of receiving hateful or negative comments.

Furthermore, **Yellow-Green**, **Orange**, **Blue**, **Red**, **White**, and **Yellow** indicated that *empathy, not being judgemental toward online users, and understanding their circumstances* discourage cyberbullying behaviour and result in more online respect. Participants suggested that "not undervaluing others' struggles", "not to be over-demanding /abusing”, and "being on the same page by knowing the person and the context" aid young adults in understanding others' circumstances.

Sub-theme: Creating a safer online environment by setting and maintaining ground rules and expectations, and learning how to communicate with strangers: The second sub-theme addresses how young adults create a safer online space. Participants in both phases of participation asserted that young adults promote online respect by

creating a safer online space. As **Blue**, **Green**, and **Purple** suggested, one of the aspects of creating a safer space at the individual level could be *improving data security and safety*, such as updating passwords. **Green** pointed out that young adults should care about improving their data privacy, being aware of online risks, and not exposing too much personal data in an online space.

With respect to sharing personal information, participants hold different perspectives. Both **Gold** and **Yellow-Green** explained that exposing too much personal data leads to young adults "coming across vulnerable"; it leads to experiencing more harm and online disrespect in the environment. On the other hand, **Navy** said that opening up to the audience in the online community by sharing personal feelings and emotions creates a safe environment for the audience to seek help and a more respectful environment as a result. Similarly, **Yellow-Green** pointed out that sharing personal data helps young adults to seem real (not persona) and connect to more audiences.

Setting and maintaining ground rules, expectations, and boundaries was another young adult's approach to creating a safer online space and promoting online respect. **Red** encouraged young adults' to "set boundaries between work, personal, and academic communication" and "respect others' rights to disconnect [from online platforms]". **Yellow-Green** also addressed that social media expected online users to always be active by "uploading regularly on social media". For **White**, these ground rules could be *a communication checklist*: to pause and consider "who is going to see [the content]? Is it [content] fair? Honest? Hurtful?True?".

Furthermore, **Yellow-Green**, **Navy**, **Teal**, and **Gold** (young adults in the second phase of participation) encouraged young adults to *share their positive values, feelings, boundaries, opinions and interests* in an online space. They believed connecting to people who share similar interests, goals, and values creates a safer online space and results in experiencing more online respect. Likewise, **Purple** encouraged young adults to *investigate individuals/ organisations before collaborating* with them and ensure whether organisations' values and ground rules are according to their ground rules, a "list of things that will and won't stand for" and morals. **Purple** explained that "you don't want to be called out. And in a year's time, because you have worked with someone who has done bad things you don't want that to come back to you. And that's not the example that you want to set".

As noted before, the third section of the Findings Chapter presents the emerging themes, sub-themes and codes from participants' interviews, booklets, Workshop 1, and evaluation workshop. The findings suggested that these themes and sub-themes influence the experiences of young adults' online respect. In the following section, I outline Workshop 1 and 2 outcomes and findings. As discussed in Chapter Four, the analysis of interviews and booklets enabled me to design Workshop 1 activities and the analysis of interviews, booklets, and Workshop 1 resulted in designing the intervention.

5.5. Workshops analysis and design intervention

As noted in the previous chapter, in the first phase of participation, I ran two group workshops where I collected more data and ideas regarding designing the intervention. The purpose of the first group workshops was to collectively discuss the best design opportunities to support or encourage online respect among young adults. Workshop 2 created opportunities for participants to evaluate their intervention that developed from the analyses of interviews and booklets, participants' ideas to promote online respect and their design opportunity in Workshop 1. In this section, I illuminate the findings and outcomes of the workshops' activities.

5.5.1. Workshop 1

Stakeholders' accountabilities to promote feeling respected in an online environment: As noted in the previous chapter, in the first phase of participants' engagement, I ran Workshop 1 in two groups. Workshop 1 aimed to explore the ideas to promote online respect. As explained in the Fieldwork Chapter, the first activity focused on stakeholders' accountability to promote online respect among young adults. Participants first, individually and then collectively discussed which stakeholder would be more accountable for facilitating online respect among young adults. Figure 83 demonstrates Activity 1, where participants were encouraged to think about how stakeholders (the Scottish government, local authorities, universities, workplaces, digital tech developers, teachers, parents, friends, and bystanders) encourage online respect before, during, and after online communication. The following elaborates on the outcome of this activity, as shown in figure 84.

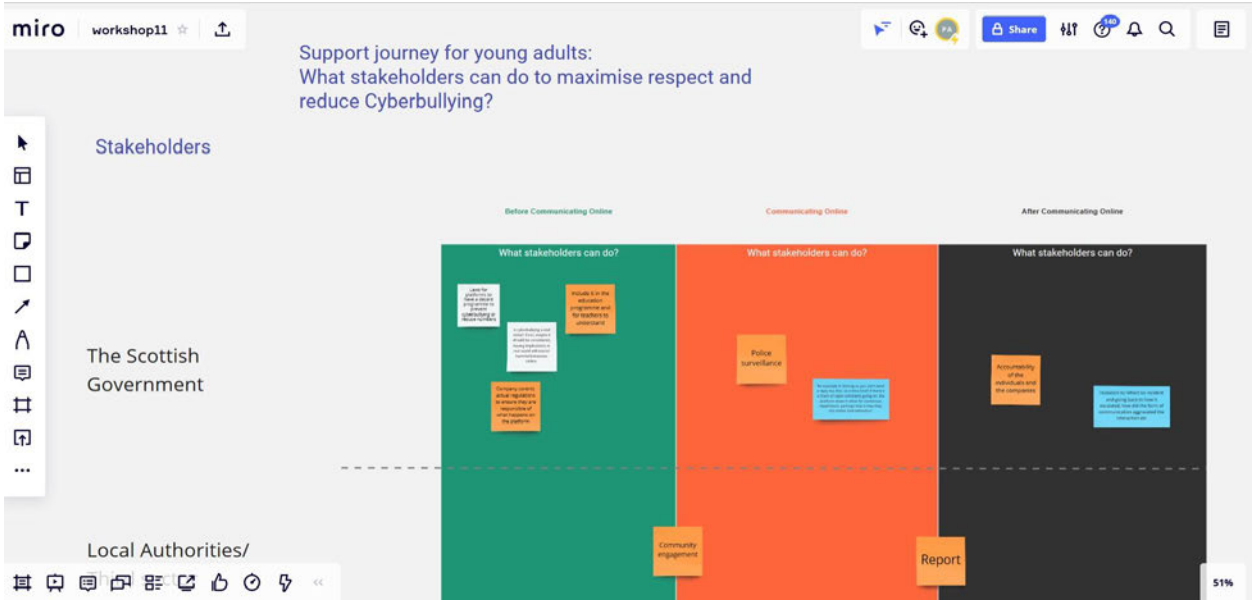

Figure 83. An overview of the first activity in Workshop 1

Participants in both workshops concluded that everyone (all stakeholders) could be responsible for discouraging online disrespectful behaviour. However, participants in the first group stressed that some stakeholders carry more responsibilities. Participants identified that both society/communities and online platforms/digital technologies affect young adults' lives and encourage negative norms (such as online disrespect) in an online environment. With respect to the impact of society on shaping individuals' behaviour, participants perceived that "cyberbullying also happens because there is a group that allows that to happen...and invalidates that is a joke...because if someone calls you something online, a social media platform can identify it. But if twenty people are constantly joking about it, it is more difficult". Participants found that promoting positive attitudes and behaviour in society leads to positive norms and potentially more online respect.

As noted earlier, the second group also believed that all stakeholders could be responsible for promoting online respect among young adults, in particular the stakeholders who have been in close contact with young adults, the SG, and digital technology companies. Within this group, as a policy-maker, a third-sector organisational representative, and a computer scientist were participating in the workshop, the role of the SG in promoting online respect was raised. Participants spoke about the importance of improving online regulations and underlined that "most

of the time people will behave online in some way that they would not be in the physical world because they feel they can be free from any punishment".

Participants in the second group similarly to the first group, identified the negative impact of online platforms/digital technologies and society on online users' behaviour. They described that sometimes wrong behaviours get lots of attention in an online environment because of how the algorithm works. Regarding the role of society on individuals' behaviours, they explained that "the tone [in the chat groups] is poor, the content is rude…[and] to be accepted as part of that group, sometimes young people change their behaviour or adapt and do that shape-shifting to fit in". Participants seem to suggest peer influence as one of the drivers for experiencing online disrespect among young adults. I will elaborate on this matter in the following chapter.

Participants concluded the session by discussing that raising awareness of everyone about cyberbullying and online respect could be crucial. They believed this allows young adults to "reach a common understanding of how online behaviour should look like". To raise awareness among young adults, one of the participants suggested the influence of high-profile people in an online environment. They outlined that it is one of the responsibilities of high-profile people to raise awareness of positive online behaviour.

In summary, all participants in both groups argued that all stakeholders are accountable for promoting positive norms and online respect in online groups. One of the participants noted, "I suppose for things to change, the pressure needs to come from everywhere because otherwise, revenue will continue driving how things [digital technologies] are designed and developed". I will expand on stakeholders' accountabilities in promoting online respect in the following chapter.

The opportunities to promote online respect in an online environment: As addressed in the Fieldwork Chapter, the second activity centres around the opportunities to promote online respect. As demonstrated in the previous chapter, participants were encouraged to consider both digital and physical interventions, ideas, suggestions, and opportunities at personal and social levels to promote online respect. Figure 84 illustrates the completed second activity where participants spoke about their ideas and suggestions to promote online respect individually and collectively. In the following, I discuss the outcome of this activity presented in figure 84.

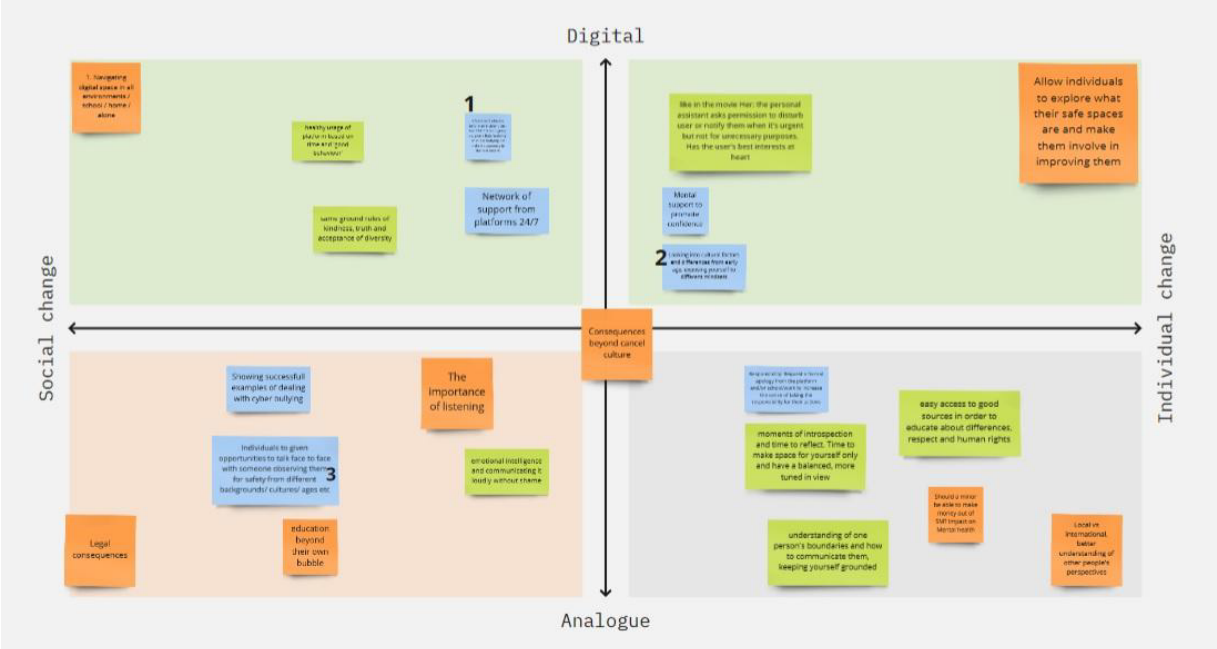

Figure 84. An overview of the second activity in Workshop 1

Both groups developed similar ideas and concluded the workshop sessions by underlining the importance of education in promoting online respect. In the first group, participants outlined that education should focus on cyberbullying, online communication skills, promoting positive online behaviour (such as not being judgemental), online regulations, and the functionality of digital technologies. They suggested that young adults (18-24 years old) raise their awareness in both online and physical environments. They explained: "[as] it is going to be difficult to try to reach every educational institution, maybe the social platforms should take a bit more responsibility on this, and provide almost a little training… It is almost like terms and conditions, [when] you sign up things". With respect to terms and conditions, participants suggested that terms and conditions could be an opportunity to raise awareness of cyberbullying, online safety, and online respect. I further explain this in the following section (Workshop 2).

The second group's approaches to promoting online respect were associated with early intervention and education. For participants, education plays a significant role in discouraging cyberbullying and promoting online respect. Education enables young adults to be aware and use tech features/apps to prevent or cope with cyberbullying incidents. Participants argued that "because young people get an early introduction to

technology. And we see two-year-olds holding iPhones and being competent, and using them much more competent than I am!..so the sooner they learn, the better".

As noted earlier, the second group asserted that early intervention and education promote online respect among young adults. Participants discussed that "[early interventions] ensure that [young adults are] in the right processes to avoid any issues online...that is much easier than trying to reach out to individuals who are victims of maybe bullying or something like that". They underlined reaching out to young adults for offering support is challenging due to the possibilities of: A. lack of equal access to online platforms. B. lack of a supportive environment to deal with cyberbullying. Participants concluded that early intervention by setting a mindset of respect could have "a bigger, and more meaningful" impact on young adults' lives.

5.5.2. Workshop 2: Design intervention

5.5.2.1. Introduction

In brief, after analysing interviews, booklets, and Workshop 1 a total of six themes emerged: 1. Young adults cope with online disrespect by connecting to a support network, further communicating with cyberbullies, using technological solutions and disengaging from disrespectful communication. 2. Society approaches online respect/disrespect by reducing stigma, creating a balance between cyberbullying and freedom of speech, and promoting positive and better dynamics of online social groups. 3. The Scottish Government approaches online respect/disrespect by representing young adults' values and ensuring a safe online environment for young adults. 4. Digital technology sectors approach online respect/disrespect by ensuring a safe online environment for young adults and developing better and more effective digital technologies/online platforms. 5. Stakeholders approach online respect/disrespect by creating a safer online environment and improving young adults' online communication skills. 6. Young adults approach online respect/disrespect by creating a safer online environment and improving their online communication skills and information literacy.

As discussed in the previous section, these themes enable young adults to experience more online respect. As participants addressed in their interviews, booklets and Workshop 1 to support young adults, prevent wrong behaviour, promote online

respect and discourage cyberbullying incidents, online platforms should place moderators. Participants briefly described the intervention as an artificial intelligence system (AI system) that judges online communication and helps young adults improve their online communication skills. They referred this AI system to a moderator, digital assistant, coach, and friend in their booklets and interviews. These terms were associated with particular roles, such as monitoring, judging, creating safe places, filtering unwanted content, raising awareness, and supervising.

Green mentioned digital assistant terminology in the booklet. In **Green**'s opinion, *digital assistants* help to filter the negative and unwanted data/ info. In **Green**'s view, the intervention should allow young adults to control their content and raise awareness of information literacy.

For **Red**, *moderators* provide a safe place, especially for young adults who have experienced cyberbullying. **Red** described the role of the moderator as "a model that helps distance the person being abused from the abuser and sort of creates a safe space". This understanding of moderators (creating a safe place) was also raised by **Black**. **Black** believed that moderators unconsciously offer a sense of safety for young adults: "... [moderators] will give you that sense of an underlying [that] this is a safe and inclusive space".

Yellow was another participant who used the term *moderators*. **Yellow** elaborated on the role of the moderator in the booklet as judging and monitoring. **Yellow** suggested that online platforms should "use moderators for monitoring interactions". Also, **Yellow** outlined that moderators should have "knowledge to handle the platform" and encouraged young adults to "respect the judgement of moderators". Besides, within Workshop 1, participants stressed the importance of moderators "to moderate the behaviour of users".

The term *coach* was used by **Orange**. As noted previously, **Orange**'s third sector organisation used coaches to support young adults and children. **Orange** described that "our coaches are under 25...[**Orange**'s third sector organisation] train our coaches that come from the activity. So they used to be participants, we trained them to become coaches...And they are not just coaches or social workers. [They] facilitate the program". To summarise, coaches in this research project referred to social workers and

facilitators that help young adults engage within the community and improve their social and communication skills in both online and physical environments.

A fundamental aspect of the coaches was the ability to build a meaningful connection with young adults. According to **Orange**'s experience, the key to building a good bond with young adults could be sharing similar experiences, values and understanding. **Orange** further explained that "some of our coaches came when they were [quite young] to [a name of city], so they know racism, and they know how it works. And when a young person who is black and struggling, there is an undertone that they are gonna get". **Orange** asserted that building a meaningful connection allows coaches to change the dynamic of their relationships with young adults and offer effective support.

Hence, in **Orange**'s opinion, the central aspect of providing support for young adults is building meaningful connections. This connection facilitated coaches to assist young adults in accordance with their needs, values, beliefs, and context. These connections improve by knowing the environment and the risks and sharing similar experiences and understanding.

White and **Blue** have raised another term, *friend*. As addressed previously, **White** believed that friends have a significant role in reporting cyberbullying, preventing wrong behaviour, and promoting online respect. One of the strategies of **White**'s third sector was to improve the individuals' bystander behaviour by encouraging them to report cyberbullying in order to keep their friends safe. **White** suggested that "helping [children] to understand the value of friendships" promotes online respect in the context of cyberbullying.

Moreover, **White** saw raising awareness as another role for friends. **White** implicitly outlined the negative impact of the generation gaps between young adults and stakeholders in raising awareness and suggested that Gen Z or Gen Alfa share their understanding of the online platform and help each other learn how to communicate in an online space.

This value of friendship has also been raised by **Blue**. **Blue**'s booklet suggested that friends develop an in-depth understanding of young adults' circumstances as they

might share similar understanding, values, and experiences. It seems that **Blue** saw friends similar to moderators.

In summary, the intervention has emerged from participants' interviews, booklets, and Workshop 1. Briefly, all participants talked about an online intervention that has a great bond with young adults, providing support before, during and after communicating online. They outlined that sharing a similar experience, understanding, and values shapes this bond. They called this intervention a moderator, digital assistant, friend, and coach. As participants suggested, this intervention supports young adults by raising their awareness, supervising and moderating their online interaction and behaviour, connecting to the support network, promoting positive social norms, judging online debate, creating a safe space, and improving their information literacy.

5.5.2.2. How could the intervention provide support?

This section details the collection of ideas/suggestions and concepts to promote online respect among young adults. As discussed earlier, these ideas/suggestions were collected from participants' booklets, interviews, and Workshop 1. As noted in the previous chapter, to present the ideas (intervention), I categorised them into four groups: what is the intervention; before, during, and after online communication.

The intervention was introduced to participants in the final online workshop as a co-design activity, where they reflect, think, evaluate the ideas collectively and discuss other opportunities for promoting online respect (Appendix J). As participants suggested, I refer to the evaluated intervention (outcome Workshop 2) in this research project as a Digital Buddy. In the following, I described participants' reflections on Digital Buddy to fully comprehend how Digital Buddy discourages cyberbullying behaviour and encourages online respect among young adults.

A. Before online communication

Choosing the online platform: One of the concerns raised by participants was selecting and connecting to the online platforms. As detailed in figure 85, participants' findings outlined three considerations for young adults before using online platforms. First, they suggested that "[young adults] should connect to the online platforms that subscribe to a respect pledge" and "connect to the online platforms that promise to take action to

reduce abuse and avoid cyberbullying". It encourages young adults to follow online regulations and promotes online platforms that follow the "respect and cyberbullying pledge".

Secondly, participants encouraged young adults to "connect to the online platforms that don't exploit and underpay their workers". Here, participants outlined that connecting to ethically sustainable companies/organisations results in more online respect among young adults by promoting more positive norms and ethics.

And thirdly, participants encouraged young adults to consider data safety and security before connecting to the online platform: "ensure there is full encryption of msg and data". As discussed earlier, creating a safe place to communicate could be one of the roles of the intervention; participants outlined that online safety and data safety enable young adults to experience less cyberbullying and more online respect.

Within Workshop 2, participants found all their ideas that were gathered from interviews, booklets, and Workshop 1 allow Digital Buddy to offer support and promote online respect.

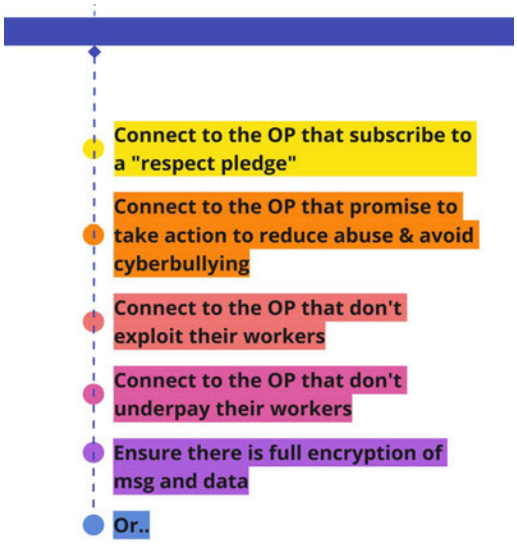

Figure 85. An overview of the agreed ideas/suggestions in the evaluation workshop that could link to choosing the online platform for young adults.

Protect young adults' identity: Participants, within their booklets, suggested very different opinions regarding protecting individuals' identities. Some participants

suggested that anonymity and fake persona promote cyberbullying and online disrespect; anonymity allows online users to hide behind fake personas and feel more comfortable abusing others (read the previous section).

On the other hand, some participants stated that anonymity and fake personas increase online equality and support online respect. In support of this idea, participants suggested “using the picture of places/fictional settings instead of profile picture” and “gender-neutral identity”.

As listed in figure 86, in the evaluation workshop, all participants agreed that online equality implies a sense of online respect among young adults. Participants by adding new ideas to this sub-group discussed that Digital Buddy should “give options [to young adults]: anonymous or reveal identity”; they stressed that these options “depend on the platform whether to allow anonymous content or not”. In other words, participants discussed that “being in control of their [young adults'] online persona” on online platforms links to feeling respected in an online space.

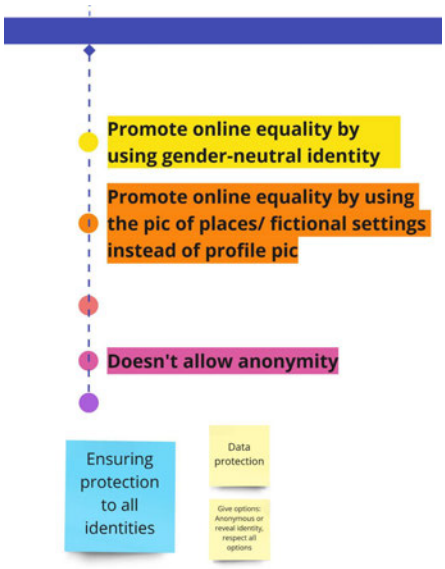

Figure 86. An overview of the agreed ideas/suggestions in the evaluation workshop that could link to protecting young adults' identity.

Sensitive/personal data exposure: As the findings indicated, the core of protecting sensitive data was related to information literacy and having more control over the flow of the data. As discussed in the previous section, participants in the first phase of

participation asserted that protecting sensitive data protects online users and discourages cyberbullying. They underlined that stronger passwords and regular safety updates help young adults protect their sensitive data (figure 87). Participants were also concerned about personal data after deleting their online profiles; from their viewpoint, the ability to delete personal data increases the sense of online respect in the environment.

Figures 87 and 88 presented a list of ideas that participants in the evaluation workshops collectively thought could increase a sense of online respect in the space. They were also ethically concerned about how much Digital Buddy should know about young adults' personal data. Participants concluded that the SG should enforce online platforms to clarify “how the data can be collected/used”.

Figure 87. An overview of the agreed ideas/suggestions in the evaluation workshop that could link to young adults’ data exposure

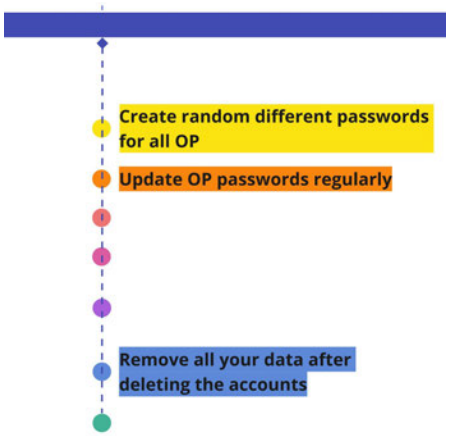

Figure 88. An overview of the agreed ideas/suggestions in the evaluation workshop that could link to promoting young adults' privacy.

Exposure to online platforms data (ex, ads): Participants' raised their concerns about data exposure to online platforms, particularly advertisements. They pointed out that this exposure could overwhelm young adults; this results in experiencing online disrespect in the environment. Participants suggested that filtering the negative and unwanted data (ads) empowers young adults and enables them to control their exposed data. They also highlighted another helpful approach: "linking young adults to the data that they might be interested in (ads)".

In Workshop 2, participants supported the idea of having control over the exposed data. As listed in figure 89, they discussed that limiting young adults' exposure to online platforms and "filtering unwanted data/information (ads)" leads to more online respect in the environment.

Figure 89. An overview of the agreed ideas/suggestions in the evaluation workshop that could link to exposure to ads.

Terms and conditions: Signing the terms and conditions before connecting to online platforms has been a great concern for the participants. They believed that as terms and conditions are too long and not user-friendly, online users agree without reading them. On the other hand, **Green** pointed out that sometimes user-friendly terms and conditions "won't stop the users from skimming. They will just go diagonally because they are there to achieve something". In brief, **Green** addressed two explanations for skimming terms and conditions: A. the limitations of the online environment/digital technologies design and B. online users' choices; it seems that online users' decision-making have roots in their awareness and understanding of data safety and online safety.

Moreover, one of the participants introduced the concept of testing and scoring terms and conditions. The idea briefly suggested testing the terms to ensure young adults understand the terms; if young adults passed the test, they were allowed to use the online platforms. So, the intervention provides a test for young adults to ensure that they have perceived the terms and conditions accordingly. Participants stressed that perceiving the terms and conditions increases online respect in the environment and discourages cyberbullying behaviour.

Participants in the evaluation workshop supported the idea of testing and scoring terms and conditions and stated it encourages young adults to understand the terms before accepting them. Participants also underlined that terms and conditions create an opportunity to ensure young adults are aware of the purpose of online platforms. They believed that this leads to more online respect in the environment. Additionally, during the workshop, they discussed that “the government should have a responsibility on this as well / same as when you sign a contract that you didn't fully understand". Figure 90 listed all ideas that participants supported in Workshop 2.

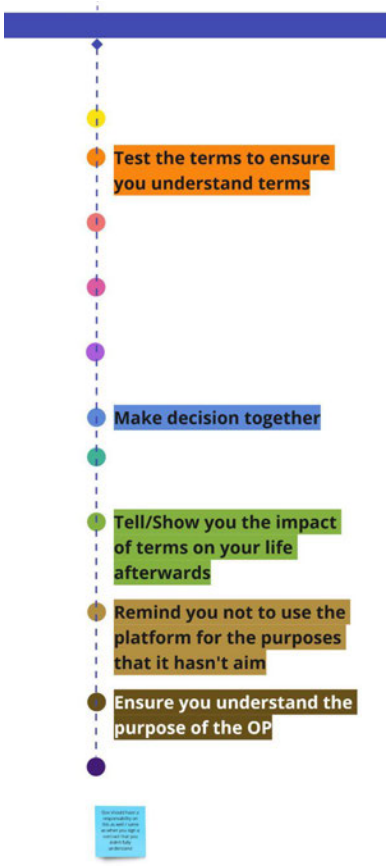

Figure 90. An overview of the agreed ideas/suggestions in the evaluation workshop that could link to terms and conditions on online platforms.

B. During online communication

Promote online respect: As seen in figure 91, participants believed improving information literacy (such as filtering unwanted data) and enforcing effective

consequences for cyberbullies (such as stronger penalties for hate speech) lead to more online respect and less cyberbullying.

During the evaluation session, participants suggested that all of the ideas listed in figure 91 could be effective. However, participants were concerned about scanning young adults' content and their online data safety; they asserted that it results in feeling disrespected in an online environment.

Figure 91. An overview of the agreed ideas/suggestions in the evaluation workshop that could link to promoting online respect among young adults.

Raising awareness: Raising awareness of cyberbullying and online respect generated lots of attention in findings. Overall, participants addressed that awareness-raising supports discouraging cyberbullying behaviour (such as valuing different cultures), improving online communication skills, and promoting positive online social skills and values (such as not spreading rumours in an online environment). In the evaluation workshop, participants discussed how awareness-raising might be essential for young

adults to expand their knowledge regarding online respect, online communication, navigating in digital space, online regulations, and new technologies (figure 92).

Figure 92. An overview of the agreed ideas/suggestions in the evaluation workshop that could link to raising awareness among young adults.

Provide support: Figure 93 lists ideas of how this intervention offers support for young adults to experience less cyberbullying situations and more online respect. In summary, as participants suggested in the evaluation workshop, this support included: helping young adults evaluate and interpret online communication, promoting positive behaviours and norms, and seeking help from young adults' support systems (online and offline). Participants suggested that helping young adults evaluate and interpret online communication enables young adults to experience less online arguments and more online respect as a result.

In Workshop 2, they also supported the idea of seeking support in both online and physical environments when experiencing online disrespect. They addressed that providing a list of supportive people and services before online communication helps young adults when they are experiencing online disrespect. Although, they believed that third-sector organisations and Police provide more cyberbullying support in comparison to young adults' parents.

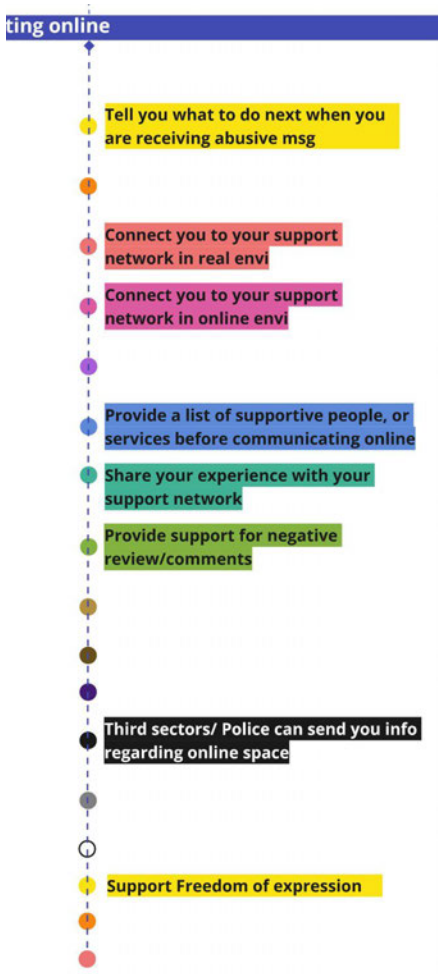

Figure 93. An overview of the agreed ideas/suggestions in the evaluation workshop that could link to providing support for young adults.

C. After online communication

In the evaluation workshop, participants seemed to grasp the magnitude of "respecting [others] to be offline"; they put forward the feature of promoting a balanced offline and online lifestyle. They addressed that respecting others to be offline links to a sense of

online respect, and pressuring others to be available relates to experiencing online disrespect. Figure 94 details all the ideas that were agreed upon in the evaluation session by participants.

Figure 94. An overview of the agreed ideas/suggestions in the evaluation workshop that could link to providing support for young adults after online communication.

5.6. Summary

The Findings Chapter outlines the analyses of the data gathered from the fieldwork (interviews, booklets, and workshops). It presents the findings in four sections; the first section demonstrates participants' understanding of cyberbullying as a context. In general, participants didn't have a similar understanding of cyberbullying. The understanding of some participants has been in contrast with each other. For instance, **Green**'s understanding of cyberbullying was related to information literacy and the design of digital technologies/online platforms. On the other hand, **White** denied any relation to the role of digital technologies/online platforms in cyberbullying definition; in **White**'s opinion, cyberbullying is school bullying that occurs online. In total, nine themes have emerged from participants' understanding of cyberbullying. In the

following chapter (Discussion Chapter), I further elaborate on these findings and try to develop a unique definition for this research project.

In section two, I address participants' voices regarding feeling respected in an online environment. Similar to the definition of cyberbullying, online respect was understood differently by participants. Participants, overall, found defining online respect challenging. They associated the definition of online respect with improving young adults' online communication skills, individuals' interpretations, perceptions and understanding of disrespectful languages/words, the impact of digital technology/online platforms on online communication and online disrespect/respect, and the perception of online respect in an online society. Similar to the previous section, I discuss online respect definitions in the Discussion Chapter.

The third section presents the factors that have affected young adults' experience of online respect in six themes. The first theme addresses the third research question: what coping strategies young adults might adopt in response to not feeling respected in an online environment from the perspective of key stakeholders and young adults? Participants suggested ignoring cyberbullies and disrespectful content, using technological solutions (such as reporting cyberbullying), self-regulating and policing themselves, communicating further with cyberbullies, and connecting to support networks enabling young adults to cope with online disrespect.

The second theme explores how society supports or encourages online respect among young adults. Three sub-themes have been discovered from the findings: A.creating a balance between cyberbullying and freedom of speech. B. reducing stigma. C. and promoting positive and better dynamics of online social groups. With respect to the first sub-theme, participants found that there is a tension between cyberbullying/online disrespect and freedom of speech; they suggested that creating a balance allows young adults to experience more online respect. The second sub-theme addresses reducing cyberbullying stigma resulting in experiencing more online respect. Within the third sub-theme, participants discussed that peer pressure and influence in the groups lead to cyberbullying and online disrespect. They identified that promoting positive social norms, expectations and behaviours, discouraging online shame, and not normalising offensive and abusive social behaviour and norms enable young adults to experience more online respect.

The third theme addresses the Scottish Government's (SG) approach to creating a safer online space for young adults in order to experience more online respect. Two sub-themes have emerged from the findings. The first sub-theme outlines that enforcing effective consequences for abusing others online, improving online regulations and data security by collaborating with other stakeholders, raising awareness, and ensuring safety in an online environment enable the SG to create a safer online space for young adults where they experience online respect. The second sub-theme is representing young adults' values and beliefs at the policy level.

The fourth theme explores the digital technologies/online platforms approach in promoting/encouraging online respect among young adults. Two sub-themes were identified. In the first sub-theme, participants suggested that the digital technology sector create a safer online space for young adults by improving data privacy, security, and information literacy, increasing online equality, ensuring online platforms are being used for their purposes, and providing effective consequences for young adults' reports. The second sub-theme is developing and designing more effective digital technologies and online platforms by considering whether they afford online equality, ease of use, online misunderstandings, filter bubble effect, the online disinhibition effect, and online respect.

The fifth sub-theme addresses how stakeholders (organisations, parents, bystanders, etc.) help young adults to experience more online respect. Two sub-themes were identified. Within the first sub-theme, participants suggested that stakeholders facilitate a safer environment for young adults by: making young adults feel comfortable to share their experiences, educating stakeholders about cyberbullying and online respect, and supporting young adults in an online space. The second sub-theme discusses that stakeholders help improve young adults' communication skills by providing education about online interaction, cyberbullying, and online respect.

The sixth theme explores how young adults help themselves to experience more online respect. Two sub-themes were identified. The first sub-theme addresses young adults who improve their online communication skills and information literacy by boosting empathy and awareness-raising of up-to-date cyberbullying information and online respect. The second sub-theme indicates that young adults create a safer

environment for themselves by improving data security and safety, investigating people and organisations before collaborating with them, and setting and maintaining ground rules.

And finally, the fourth section addresses the intervention called Digital Buddy. Participants addressed how creating a great bond with young adults in an online space with a digital intelligence system (as an intervention) helps them to experience more online respect. They suggested that according to young adults' needs, the intervention adapts to the roles of a friend, moderator, coach, and digital assistant in order to provide support. Participants suggested that Digital Buddy helps young adults experience more online respect before, during, and after online communication. They asserted that Digital Buddy raises awareness of information literacy, online communication, cyberbullying, and online respect among young adults, supervises their online interaction and behaviour, and moderates their online communication.

After introducing the analyses in the Findings Chapter, I would delve into meaning in the next chapter, the Discussion Chapter. The Discussion Chapter will allow me to uncover the importance and relevance of the analyses in this chapter according to the current debate and studies. It will explain and evaluate these analyses, demonstrate how these analyses connect to the Literature Review Chapter and research questions, and make an argument supporting the overall conclusion.

Chapter Six: Discussion

6.1. Introduction

Returning to the overall thesis research question, I have investigated how Interaction Design can be used as an approach to explore promoting feeling respected in an online space (online respect) among young adults (18-24 years old) in Scotland in the context of cyberbullying from the perspective of key stakeholders and young adults. As I demonstrated throughout, cyberbullying studies and Scottish reports place an emphasis on treating cyberbullying similar to in-person bullying. As a result, the policy and strategies are limited to children and school settings in Scotland. Despite the recognition of the increasingly dependent on digital technologies, there is a clear gap in the research on experiencing less online disrespect among young adults in Scotland in response to these challenges.

To address the research question, I developed a series of participant engagements: online interviews, online workshops, and asynchronous activities. After facing difficulties recruiting participants for over five months, I eventually recruited twelve participants: six young adults and six key stakeholders. I recruited young adults (18-24 years old) who were living in Scotland and have been communicating on social media. And I recruited one policy-maker, two third-sector organisation representatives, one online safety representative, one designer, and one computer scientist as Stakeholders. This range of participants enabled me to collect meaningful data about online respect from different perspectives. As outlined in the Methodology Chapter, the co-design approach was employed to engage with participants. The co-design approach by empowering young adults and key stakeholders throughout the design process allowed me to gather data about their understanding, knowledge, and reflections on cyberbullying, online respect, and young adults coping strategies in an online space.

After generating and collecting the data, in the Findings Chapter (Chapter Five), the thematic analysis framework was critically applied to the participants' findings. Using thematic analysis, I established six themes to explore online respect in the context of cyberbullying and implement anti-cyberbullying strategies for young adults in Scotland. These themes investigated the role of the Scottish Government (SG), young

adults, digital technologies/online platforms, organisations, parents, bystanders, and society in facilitating online respect from the perspective of participants in this research project. These themes enabled me to develop knowledge surrounding online respect and anti-cyberbullying strategies for young adults in Scotland. After identifying the themes, in this chapter, I set out a meaning-making process in the light of previous studies, anti-cyberbullying reports, and the theory of affordance.

Overall, this chapter has presented a synthesis of findings and explores the implications of the findings discussed in the previous chapter for their value in responding to online respect, practically and at a policy level. This chapter comprises four sections; each section is an attempt to look at this research project from different perspectives: cyberbullying studies, policy, design and philosophy (affordance theory). First, since, to date, there is a lack of universally accepted cyberbullying definitions, I presented cyberbullying understanding based on participants' (young adults and key stakeholders) understanding of the matter. Additionally, I attempted to demonstrate the definition of feeling respected/disrespected in an online environment as stated by participants in this research. Within the second section, based on the results of the analysis from the previous chapter, I elaborated on six themes that I found associated with feeling respected in an online environment. Within this section, I shared my understanding and reflections on prior studies in relation to these themes.

Then, in the next section, I attempted to extend the analyses and look more closely at the materials and theory of affordance at the philosophical level. Exploring this research project from a philosophical perspective enables policy-makers, psychologists, and digital technology/online platform developers and designers to design interventions, guidelines, and anti-cyberbullying policies that potentially explore feeling respected in an online space for young adults. As I addressed in the Methodology Chapter, I propose that exploring affordances for online platforms and digital technologies offers a thinking model for discouraging cyberbullying incidents and promoting respect in an online environment. Hence, this section allows having a profound understanding of how digital technologies and online platforms would be integrated into establishing a safer and more respectful online space in the context of cyberbullying.

Finally, within the fourth section, considering the existing cyberbullying gaps, participants' intervention, and analyses, I addressed policy recommendations for the Scottish Government (SG) as one of my contributions to knowledge. I suggest policy recommendations in response to the SG research framework, SG reports, participants' engagements, and findings in this research project in order to promote respect in an online space among young adults.

6.2. Unfolding the definition of cyberbullying and feeling disrespected in an online space among young adults in Scotland

As discussed in the Literature Review Chapter, due to the lack of a uniform definition of cyberbullying and online respect, it is necessary to understand what the notions of cyberbullying (as a context) and feeling respected in an online environment mean from the perspective of young adults and stakeholders (participants). In the previous chapter, I presented themes that emerged in relation to online respect and cyberbullying. To analyse the data, I applied Braun and Clarke's (2006) thematic analysis framework to look for patterns and develop codes and themes. In the following section, I draw on participants' views of the terms in the current literature; this enables me to address the second research question: how can Interaction Design be used to investigate the key stakeholders and young adults' understanding of online respect in the context of cyberbullying in Scotland?

6.2.1. Definition of the context of cyberbullying

As I noted in Chapter Two, in the light of technological development, cyberbullying has proven difficult to define and to date, it has numerous definitions (Peter & Petermann, 2018). Previous studies have defined it as deliberate, repeated, aggressive behaviour/actions carried out in the online environment by an individual or group (Peter & Petermann, 2018; Moreno et al., 2018). The Scottish Government (2017b) referred to it as "bullying is both behaviour and impact; the impact is on a person’s capacity to feel in control of themselves…Bullying takes place in the context of relationships; it is behaviour that can make people feel hurt, threatened, frightened and left out. This behaviour happens face to face and online" (p.2).

It may be suggested that one possible reason for the ambiguity of definitions is that studies and reports attempt to define cyberbullying by connecting it to the common

characteristics of traditional (in-person) bullying (Brody & Vangelisti, 2017; Thomas et al., 2015). One of the limitations of understanding cyberbullying by common characteristics of in-person bullying is that the online environment has been treated as equivalent to the school environment with a focus on school-age youth (Huang & Chou, 2010; Thomas et al., 2015; White, 2019). However, cyberbullying is not limited to school-age youth (Deschamps & McNutt, 2016); this is not surprising given the explosion in the use of digital technologies and online platforms amongst young adults and older. Moreover, some scholars, such as Thomas et al. (2015) pointed out that in order to develop a meaningful and distinct understanding of cyberbullying, it should be treated as communication technology, not an extension of in-person bullying.

Furthermore, as I addressed in Chapter Two, various scholars outlined the significance of establishing a clear concept of cyberbullying to create valid and reliable measures (Chan et al., 2020). In arguing with this, some of the participants in my research suggested that vague definitions of cyberbullying could be valuable to measure the impact of cyberbullying. This vagueness encourages organisations, parents, universities, and governments to support young adults for any form of online abuse. Similarly to participants, Grigg (2010) reported that vagueness, restrictiveness and ambiguity seem to be useful approaches in defining the cyberbullying terminology. I propose that providing a clear definition of cyberbullying helps to prevent and protect online users and establish effective anti-cyberbullying strategies at local, community, and global levels.

Moreover, regarding the intentional aspect of the definition, some of the participants indicated that cyberbullying could be unintentional; such as telling jokes, or online misunderstandings (see previous sections). It seems that in the light of the design of digital technologies/online platforms and their affordances, digital technologies create the perception of threat/harm by receivers without the senders' intentions or goals. Participants stated that the motivations and intentions of hurting others in an online environment could be difficult to prove. Consequently, the intention to harm is generally interpreted from the receivers' perspective (Chan et al., 2020). Several studies also explained that due to the lack of non-verbal cues, such as facial expressions and gestures, receivers perceive any communication as a threat (Van Hee et al., 2018; Deschamps & McNutt, 2016).

With respect to the repetitive aspect of cyberbullying definition, participants raised different opinions. Some participants understood cyberbullying as a continual event, and some stressed that it could be inclusive of a one-time event. Several scholars also outlined that since content could not easily be removed a single attack considers cyberbullying (Jang et al., 2014; Patchin & Hinduja, 2015). Jang et al. (2014) and Patchin and Hinduja (2015) suggested that as a single attack could be seen by a large audience, it counts as cyberbullying (Ibid).

Another contributing factor to the understanding of cyberbullying, as **White** (policy-maker) outlined is the power imbalance. As discussed in the Literature Review Chapter, prior studies have asserted that power imbalance in cyberbullying links to technical awareness and skills in using digital technologies/online platforms (Menesini et al., 2012a; Ybarra et al., 2012). However, I argue that digital technology affordances also result in a power imbalance. Regarding online shame examples, technical awareness does not simply offer any support for victims.

The relational aspect of cyberbullying was underlined and acknowledged by the policymaker (**White**) and the Scottish Government's definition of cyberbullying (The Scottish Government, 2017b). They noted that cyberbullying takes place in the context of relationships. Prior cyberbullying studies among children have been highlighting the relational aspect of cyberbullying (Wolke et al., 2017; Smith et al., 2008; White et al., 2018). In this case, digital technologies as a new medium of communication amplified the friendship challenge that children have been facing in the physical environment (White et al., 2018). Contrary to **White** and the SG's viewpoint, the number of cyberbullying studies among young adults and some of the participants (young adults) demonstrated that young adults experience anonymous cyberbullying as well. In fact, in 2017, Barlett and Chamberlin reported as users get older, they experience more anonymous cyberbullying.

In summary, as I demonstrated in the previous chapter, themes associated with the definition of cyberbullying were found to be different, in contrast to, or more complex than, themes that emerged from existing cyberbullying literature. For instance, some participants spoke about intentional cyberbullying, some unintentional (see Findings Chapter). Findings also suggested that some participants (mostly young adults) did not have a clear understanding of cyberbullying. Furthermore, the definitions of

cyberbullying among participants (young adults and stakeholders) varied, and more importantly, they haven't been matched by the SG's understanding of cyberbullying. One possible explanation could be that understanding cyberbullying relies on individuals' perceptions, judgments, and characteristics (Gahagan et al., 2016). Returning to this research project, different backgrounds, experiences, and values of stakeholders and young adults might result in various definitions of cyberbullying.

In conclusion, based on analysis in the previous chapter, any form of harassment, abuse, ignorant, or negative/unwanted content that is being used as means to express negative opinions or protest against an individual or community either intentionally or unintentionally in an online environment; experiencing cyberbullying can also be affected by digital technologies/online platforms. Moreover, with respect to policy, legislation needs to carefully consider the uniform definition of cyberbullying as a separate phenomenon from bullying and the age range to protect victims.

6.2.2. Definition of feeling disrespected/respected in an online environment

To address the understanding of online disrespect (feeling disrespected in an online environment), I attempt to establish meanings from participants' contributions. As discussed in Chapter Two, according to the rejection of Skeuomorphism theory, the understanding of online disrespect and in-person disrespect could be varied due to the characteristics of the online environment and digital technologies. Skeuomorphism defines as "design based around elements that are ornamental in make-up and refer to previous, and potentially irrelevant analogues" (Curtis, 2013, p.1). As discussed previously, since users became familiar with interacting and using digital technologies, the need for Skeuomorph objects diminished. Indeed, as this PhD proposes cyberbullying as a digital phenomenon should not be understood and perceived as an extension of bullying as a physical phenomenon that merely occurs online, I suggest avoiding the same mistake and investigating this concept separately.

To this date, the definition of online respect/disrespect hasn't been developed yet. Moreover, cyberbullying reports that addressed respect in an online environment, solely focused on addressing the importance of being respectful toward each other in an online environment (The Scottish Government, 2017b); they haven't provided any guidelines on how to promote or implement respect in an online environment (Ibid). I also stress that since the meaning of online disrespect/respect has been explored in

the context of cyberbullying, the online disrespect/respect definition might be different in another context, age group, or country.

Following the findings in the previous chapter, the definition of not feeling respected in an online environment has several “lenses”. These lenses are individual interpretations, perceptions, and understanding of offensive language, online communication, digital technology/online platform design, and online society (digital civility). Overall, participants experienced respect in an online environment when all of these lenses enable (afford) respect.

Individual lens refers to personal perception, interpretations and understanding of offensive languages or behaviour. Participants argued that often inoffensive language or behaviour could be offensive in other cultures, communities, and languages and result in feeling disrespected in an online space. Moreover, due to the limitations in designing digital technologies, such as the absence of non-verbal cues, online communication highly depends on how receivers perceive and interpret the communication. As I said before, this reliance on the perception of the receiver leads to misunderstandings and feeling disrespected consequently. Therefore, during online communication being mindful of this lens could be valuable.

The next lens is the online communication skill lens. This lens links to experiencing respectful online communication. Participants believed that improving online communication skills could be an approach to maximise respectful online communication. Participants suggested that young adults, for instance, not be judgmental toward each other, improve online debate, respect others' boundaries, think before engaging with others, and avoid abusive and aggressive language. In addition, they emphasised raising awareness of information literacy for young adults as part of improving their online communication skills.

The third lens is the affordance of digital technologies/online platforms. Within this lens, participants underlined to what extent the design of digital technologies affects or supports feeling respected in an online environment. Returning to online misunderstandings, as I mentioned earlier, the design of online platforms/digital technologies leads to misunderstandings; or offers opportunities for online users to find sensitive information about targets and attack them in an online space. I further discuss online misunderstandings in the following section. Furthermore, participants

pointed out that digital technologies empower young adults in the context of information literacy and provide a respectful, transparent and user-friendly interface.

The final lens is the perception of feeling respected in an online society. This lens is associated with how online society develops online users' perception and an understanding of online respect; in other words, how young adults as digital citizens should interact with each other in an online space respectfully. At the online society level, participants raised their concerns about the idea of freedom of speech, online equality, and positive values. They outlined that establishing a clear picture of freedom of expression, online positive values, and equality allow them to develop insights into how to respect others in an online space as part of the online society/community.

6.3. Interpreting emerging themes from participants' responses in relation to online respect in the context of cyberbullying

To address how young adults deal with cyberbullying/online disrespect (as a third research question) and the factors that influence young adults experiencing online respect/disrespect (as the fourth and fifth research questions), I presented six themes that emerged from the participants' findings. The previous chapter presents how I identified and analysed patterns, themes, and codes from findings using Thematic analysis. This section describes current literature and debate regarding online respect to interpret and make sense of emerging themes in a meaningful way.

As addressed in the first chapter, the Interaction Design approach within this research project investigates environmental, sociocultural, and philosophical aspects of digital technologies/online platforms that play a significant role in young adults' feeling respected in Scotland. The second chapter explains how affordance theory allowed me to gain better insights into the impact of digital technologies in experiencing online respect/disrespect at the philosophical level. Regarding this research project, affordance theory refers to what digital technologies/online platforms afford online users to do with it; digital technologies/online platforms interact with online users as much as online users interact with them. Within this section, I began to uncover what digital technologies could afford, and in the following section, I synthesise these findings at the philosophical level.

In addition to affordance theory, my understanding of the Interaction Design approach has been based on the understanding of technological mediation theory. Technological mediation theory helps inform the relationship between digital technologies/online platforms, online users (young adults aged 18-24 years old), environments (physical and online) and online respect in the context of cyberbullying in Scotland. The theory of technological mediation provides a framework to analyse the roles digital technologies/online platforms play in young adults experiencing online disrespect in the context of cyberbullying. In the following, I set out to reveal these relationships to better determine the impact of digital technologies on experiencing online disrespect/respect.

Moreover, as I noted in the Literature Review Chapter, there are limited cyberbullying studies among young adults (18-24 years old). In particular, a large number of anti-cyberbullying reports focused on children and young people (under 16 years old) (Cross et al., 2009; The Scottish Government, 2010). Besides, verifying the age group of some cyberbullying studies has been challenging and time-consuming. I also observed that several studies among young adults developed their understanding based on children's literature (such as Vaill et al., 2021; Cunningham et al., 2014). Given this limitation, I have taken into account both children's and young adults' cyberbullying studies in the meaning-making and synthesising process.

Theme 1: Young adults cope with online disrespect by connecting to a support network, further communicating with cyberbullies, using technological solutions and disengaging from disrespectful communication

As discussed in the previous chapter, the first theme investigated the third research question: What coping strategies might young adults adopt in response to not feeling respected in an online environment from the perspective of key stakeholders and young adults? This theme helped to offer valuable insights into the affordances of digital technologies/online platforms. In the following section, these insights shaped my understanding of the impact of digital technologies/online platforms at the philosophical level.

As discussed, previous scholars reported that online users' coping strategies included problem-focused coping, emotion-focused coping, and cyber-specific technological solutions (Raskauskas & Huynh, 2015; Yang, 2021). Participants' analyses in the

Findings Chapter demonstrated similar coping strategies. Participants outlined that when young adults experience online disrespect, they connect to a support network, disengage from disrespectful communication, seek further communication with cyberbullies, and/or use technological solutions.

Previous research referred to problem-focused coping as changing and controlling the cyberbullying situation by reaching out to the cyberbully, seeking support, or using humour to deter the cyberbully (Alipan et al., 2021; Byrne, 2021; Dinakar et al., 2012). Similarly, the analysis in the previous chapter underlined further dialogue with cyberbullies and connecting young adults to their support networks in both physical and online environments. Participants believed that sometimes further communication between victims and cyberbullies could create opportunities for cyberbullies to apologise.

Emotion-focused coping as another strategy described victims as changing their thoughts and feelings, rather than changing the cyberbullying situation (Alipan et al., 2021; Byrne, 2021). In the case of this research project, the majority of young adults (participants) suggested avoidance coping as an initial approach to dealing with cyberbullying and online disrespect incidents. Participants also did not support the idea of passive coping; instead, they stressed young adults should restructure the situation differently. For instance, **Purple** stated: "people attack you for something and not knowing anything about you...people being ignorant to know you...Do not blame them for being ignorant. Because being ignorant is easy...It is the easiest choice and most comfortable choice". Simply, **Purple** didn't accept the cyberbullying behaviour as deserved (passive coping), instead tried to reduce the emotional distress of cyberbullying victimisation by reframing the situation positively (cognitive reframing).

With respect to technological solutions, such as deleting accounts and reporting cyberbullies, all participants have raised this as a coping strategy and as a way to deal with the cyberbullying incident. However, participants raised their concerns regarding technological solutions; they pointed out that if victims report cyberbullies, cyberbullies could create other profiles and cyberbully the victims again.

As noted in the Literature Review Chapter, Cunningham et al. (2014) also spoke about design opportunities to improve these technological solutions, such as blocking and reporting. It seems that the affordance of digital technologies/online platforms is

beneficial in the design process to ensure that these technological solutions/features could protect online users from cyberbullies, discourage or prevent cyberbullying behaviour, or help online users cope with online disrespect. *Using affordances* as a framework or toolkit in the design process ensures designers and developers that online users undertake the intended actions. For instance, designers and developers take into account whether blocking someone from the online platform could actually afford to protect victims. Or whether suspending online users results in discouraging cyberbullying behaviour.

In summary, Raskauskas and Huynh (2015) reported that "the most effective strategies for stopping bullying were technical solutions like blocking contacts, deleting social networking profiles, and changing profiles. Avoiding the sites where cyberbullying occurred and seeking social support were the most effective non-technical solutions" (p.121). In the case of this research study, the majority of participants noted avoidance coping as their initial coping approach and then technical solutions. As discussed in the previous chapter, they pointed out that the current technical solutions have some limitations and couldn't prevent cyberbullying incidents; after blocking cyberbullies, cyberbullies could create other profiles and attack the victims again. As addressed earlier, these limitations of technical solutions helped to shape the affordances of digital technologies (the philosophical aspect of online respect) in the following section.

Theme 2: Society approaches online respect/disrespect by reducing stigma, creating a balance between cyberbullying and freedom of speech, and promoting positive and better dynamics of online social groups

After exploring how young adults could deal with cyberbullying/online disrespect, I present the following five themes that address the factors that affect young adults experiencing online respect/disrespect. Within the first theme, I set out to investigate the role of society (both physical and online) in shaping norms, environment, cultures, behaviours and beliefs that potentially lead to cyberbullying/online disrespect. This allowed me to explore the environmental and sociocultural aspects of online disrespect. Simply, this theme investigates the role of society in shaping the relationship between young adults and worlds (both online and physical) while using digital technologies/online platforms in the context of online disrespect.

This theme proposed insight into how society/community facilitates online respect or discourages online disrespect. As findings indicated in the previous chapter, society facilitates online respect by reducing stigma, creating a balance between cyberbullying and freedom of speech, and promoting positive and better dynamics of online social groups. These three approaches were demonstrated as sub-themes in the previous chapter. In the following, I elaborated on each of these sub-themes to generate a set of recommendations for the Scottish Government and understand the impact of digital technologies/online platforms at the philosophical level in the following sections.

Sub-theme: Reducing cyberbullying stigma in society: The first sub-theme that emerged in the findings was reducing stigma in society. As noted, prior studies, such as Kowalski et al. (2015), Gahagan et al. (2016), and Moreno and Vaillancourt (2017) acknowledged the stigma around cyberbullying. Previous literature stated that *social stigma* (such as obesity, ethnic discrimination, and gender identity) and *labelling cyberbullying/victim/cyberbully* (Thelwall & Cash, 2021; Gahagan et al., 2016; Thomas et al., 2015) could be a contributing causes of cyberbullying behaviour (Alsawalqa, 2021; Yang, 2021; Angoff & Barnhart, 2021). Similarly, one of the participants of my research project (**White**) outlined that not labelling people could be a valuable approach to changing cyberbullying/bullying behaviour; simply, it helps people change their behaviour without being stigmatised.

Moreover, Thomas et al. (2015) addressed the negative impact of “labelling” cyberbullying/victim/cyberbully in the research process and employed an approach that required participants to respond to a list of behaviours that didn't include the terms cyberbullying/cyberbully/victims. "Labelling is a form of categorization which can have profound effects on individuals. In psychiatric contexts, in which a form of categorization is utilised to discriminate and identify mental disorders, this leads to stigma and other negative consequences" (Delft, 2015, p.12). By avoiding using these terminologies in their approach, they ensured "avoiding individual perception, stigma, or bias associated with using the term bully or victim" (Thomas et al., 2015, p.138). However, they stated that this approach had its disadvantages in their studies, such as "neglecting intention and power imbalance" (Thomas et al., 2015, p.138). In the case of this study, as I discussed in the Fieldwork Chapter while designing participants' engagements (booklet, interview questions, and workshops), I attempted to shape these participants' engagements in a positive language in order to minimise the

negative impact of cyberbullying/cyber bully/victim labelling on my research project; for instance, where it was possible, I avoided the term victim.

However, to my knowledge, I couldn't find any studies explicitly supporting the idea of not labelling young adults as cyberbully/cyberbullying/cyberbully victims in the anti-cyberbullying approaches or recommendations. As outlined earlier, the majority of cyberbullying literature established their studies based on prior bullying studies; "cyberbullying should not be treated any differently from face-to-face bullying" (Waterski & Wakeboard Scotland, 2020, p.5; the Scottish Government, 2017). I suggest these studies failed to provide evidence-based anti-cyberbullying recommendations regarding this sub-theme.

Sub-theme: Reducing the tension between freedom of speech and respect in an online environment: Another sub-theme that emerged in relation to the role of society in supporting online respect was the unbalanced relationship between freedom of speech and online respect in the context of cyberbullying. As discussed in the Literature Review Chapter, scholars found that the balance between freedom of speech and cyberbullying is sophisticated and unclear (Dasgupta, 2019; El Asam & Samara, 2016; Betts, 2016; Briggs, 2018). Posting hateful comments could be seen as a way to express their opinion freely. Additionally, prior studies pointed out that some characteristics of the online environment, such as *the online disinhibition effect* facilitates cyberbullying behaviour (Betts, 2016; Alsawalqa, 2021; Baker, 2014). For instance, fake personas of online users lead to freedom of speech in a harmful way (Betts, 2016); online users can hide their real identities and express their opinions without fear of being caught.

Freedom of speech in an online environment in relation to *online privacy* is another chief aspect of this tension that has emerged from participants' contributions in the previous chapter (Lievens, 2014; Grant, 2012). "Freedom of speech is an essential privacy right in a democratic society", allowing people to express themselves, their values and identity (Grant, 2012, p.189). Grant considered that privacy is closely related to the government's interest in "balancing the privacy rights of anonymous cyberbullies with the personal right to protection of the cyberbullied" (Grant, 2012, p.205). Grant (2012) reported that "the government must intervene and create some form of legislation to address this problem" (p.205). Grant (2012) suggested digital

technology developers should have access to the real identity of fake personas and anonymous online users while allowing anonymous posting when necessary. Grant explained that "this form of legislation will create an opportunity for school and state officials to request the identity of posters when the posts themselves violate the law (i.e. threats, libel, etc.) and prevent the feeling of helplessness that anonymous cyberbullying can cause" (Grant, 2012, p.205).

One of the major problems with Grant's (2012) suggestion could be online geography; the Internet allows people to communicate with anyone around the world. Considering online communication, anti-cyberbullying, and online freedom of speech laws and legislations vary from country to country and tech company to tech company, for the SG seems challenging and complicated to intervene regarding the matter. It appears that the SG should collaborate with other countries and tech companies to establish a clear and uniform understanding of freedom of speech in an online space and cyberbullying.

Furthermore, previous studies criticised monitoring and filtering approaches as anti-cyberbullying interventions (Rosa et al., 2019; Klein, 2017). Rosa et al. (2019) pointed out that monitoring "can be rather negative if they [adolescents] believe their freedom of expression is being jeopardised" (p.344). Moreover, Klein (2017) criticised filtering as a hate speech strategy and pointed out that "rather than restricting the Internet with regulations and filters, each of which could later inhibit other Internet freedoms, we must become more informed about the existence of these racist elements" (p.54). Instead, Klein (2017) proposed education and raising awareness as means to support online respect. Klein (2017) noted that everyone should take social responsibility in preserving democracy and the safety of online space, as "[online platforms/digital technologies] created by, and for, the public, the gatekeepers are us" (p.149). Klein (2017) argued that tech companies should also be accountable for "maintain[ing] a vibrant, diverse, and safe digital environment" and should never turn a blind eye to cyberbullying and hate speech (p.148).

To summarise, to this date, the relationship between freedom of expression and cyberbullying is unclear (Dasgupta, 2019; El Asam & Samara, 2016; Betts, 2016). "A fine line separating each [freedom of speech and cyberbullying] and thus this needs to be considered when assessing a case of potential cyberbullying" (El Asam & Samara,

2016, p. 135). Racist comments could be considered as experiencing online disrespect, and for some count as freedom of expressing opinions. Hence, developing a better picture of freedom of speech in an online space and cyberbullying benefits more respectful online communication.

Sub-theme: Promoting positive and better dynamics of online social groups: Promoting positive and better dynamics of groups was the third sub-theme addressing how society facilitates online respect among young adults. As I noted in the Literature Review Chapter, *peer groups and social pressure* influence people's behaviour, actions and thoughts and lead to cyberbullying behaviour (Sarmiento et al., 2019; Wegge et al., 2016; Bastiaensens et al., 2016; Shim & Shin, 2016). In other words, peer pressure affects bystanders' behaviour and intentions to engage in cyberbullying group attacks (cyber-bystanders) (Bastiaensens et al., 2016; Machackova et al., 2015). Social conformity and influence push bystanders to feel pressure to join the cyberbullying group attack (Ibid). As a result, numerous studies have reflected group attacks in their definition of cyberbullying: Brandau and Evanson (2018), for instance, defined cyberbullying as "an aggressive, intentional act carried out by a group or an individual, using electronic forms of contact" (p.38).

Online public shaming is another property of contemporary society, connected to "unprecedented opportunities to criticise those we consider to have done wrong" in an online environment (Zabielski, 2020, p.8). Online shaming is usually directed at individuals who have been accused of violating moral norms (Klonick, 2016). Klonick pointed out that online shame is problematic due to not only the cyberbullying nature of the incident, but also because it promotes "an inaccurate, indeterminate, and uncalibrated form of punishment" (p.1065).

Moreover, participants in my research project associated *social exclusion* with experiencing cyberbullying and not feeling respected in an online environment. Likewise, social exclusion behaviour identified by various studies as one of the characteristics of cyberbullying behaviour (Menesini et al., 2011; Van Hee et al., 2018; Calvo-Morata et al., 2020; Symons et al., 2020; Watts et al., 2017). Exclusion behaviour is defined as intentionally excluding someone from an online group to make them feel left out (Brown et al., 2019; Palladino et al., 2015).

As outlined in the Findings Chapter, participants spoke about *not normalising wrong behaviour and values* in groups and communities. They outlined that normalising wrong behaviour and values supports cyberbullies and their cyberbullying behaviour. Likewise, Madden and Loh (2018) highlighted that ignoring cyberbullying behaviour and allowing cyberbullies to continue the behaviour result in a climate that was characterised by fear and cyberbullying behaviour as a norm. Scholars suggested that awareness programs and campaigns in the community allow shaping positive norms and values against cyberbullying by organisations (Crosslin & Golman, 2014; Kowalski et al., 2019).

In brief, as discussed earlier, society plays a significant role in developing social norms and behaviour that result in either online respect or disrespect. For instance, as explained earlier, online public shaming, cyberbullying stigma, or peer pressure encourage cyberbullying among bystanders. On the other hand, normalising positive behaviour in society or cyberbullying/online respect campaigns lead to more online respect. These social forms could be seen as social affordances. Social affordances could be defined as "the perceptual cues that connote aspects of social structure to individuals thereby creating a functional difference for the individual" (Fox & McEwan, 2017, p.300). A focus on social affordance enables designers, developers, and scholars to further their understanding of the impact of social interactions and structures on experiencing online respect or cyberbullying. I further elaborate on the relationship between social affordance and online respect and translate the insights from this theme into the philosophical aspect of the online respect section.

Theme 3: The Scottish Government approaches online respect/disrespect by representing young adults' values and ensuring a safe online environment for young adults

Following exploring how society could have an impact on young adults experiencing online disrespect/respect, I elaborated on the Scottish Government's (SG) response to online disrespect in the context of cyberbullying. This theme addresses the role of the SG in shaping the relationship between young adults and online space while using digital technologies/online platforms in order to facilitate online respect.

The SG as one of the key stakeholders plays a chief role in facilitating and encouraging online respect. As discussed in the Findings Chapter, participants in my research

project outlined that the SG facilitates online respect by ensuring a safe online environment by improving online regulations and raising awareness of online respect and cyberbullying for young adults and representing young adults' values and beliefs within anti-cyberbullying policies. These two Scottish approaches to promoting online respect were presented as sub-themes in the previous chapter. This theme played a significant role in offering in-depth insights into anti-cyberbullying recommendations at the policy level.

Sub-theme: Creating a safer online environment by improving online regulations and raising awareness of online respect and cyberbullying: This sub-theme addressed how SG ensures creating a safer online space for young adults to communicate in a respectful manner. A number of studies and reports suggested campaigning and *raising awareness* as one of the fundamental approaches to discouraging cyberbullying (Cross et al., 2009; National Children's Bureau, 2015; Stone, 2014; Chan et al., 2019). In the case of this research, as cyberbullying among young adults was ignored by the SG, the appropriate approach to access and raise awareness of young adults about cyberbullying and online safety in Scotland remained unexplored (The Scottish Government, 2017b; National Children's Bureau, 2015).

As discussed in the literature review, *improving online regulations* and laws has been also shown to help the SG to create a safer space online by several studies (Gilden, 2013; Stone, 2014; The Scottish Government, 2010). Cross et al.(2009) and The Scottish Government (2017b) suggested that online platforms/digital technologies should respect the five digital rights of children in an online space (for more information read Chapter Two). Yet the digital rights of young adults in an online environment remained unclear. Additionally, according to young adults' interviews in my research project, they had a lack of awareness of these digital rights.

El Asam and Samara (2016) also raised their concerns regarding improving online regulations; they asserted that establishing new legislation/modification to existing laws could be challenging due to: "an absence of consistent bullying/cyberbullying definition, a difficulty in determining intention to harm or evidence of this, a lack of surveillance, a lack of general awareness, issues surrounding jurisdiction, the role of technology, and the age of criminal responsibility" (p.127). The findings from this research study appeared to support El Asam and Samara's challenge; participants'

definitions and understanding of cyberbullying and online respect were varied; some suggested that cyberbullying and feeling disrespected in an online space could be unintentional, and some participants stressed the intention of cyberbullies to harm the victims.

Moreover, participants in my research project and previous scholars supported *more transparency in online regulations and laws* (The Scottish Government, 2017b). However, McLoughlin et al. (2013) pointed out that there is "an ongoing struggle for public agencies as they seek to strike a practical balance between the competing demands of transparency and sharing data, on the one hand, and data privacy and civil liberties, on the other" (p.97). They stressed that this struggle has still to be resolved and a need for more transparency in data protection laws and regulations.

Improving data security and *increasing online safety* emerged in the findings as another approach of the SG to create a safer online environment. Academic publications associated with improving young adults' data security to discourage cyberbullying are limited. With respect to increasing online safety, as discussed previously, the majority of cyberbullying studies and reports have historically centred around children and young people (under 16 years old) in the school setting. As expected, prior reports and studies noted that schools and social networks should be accountable for educating those age groups regarding online safety and providing digital rights (National Children's Bureau, 2015; White, 2019; Stone, 2014; Angus Council, 2020). So far, to my knowledge, the legal obligations of stakeholders regarding increasing online safety for young adults have not been explored academically.

Furthermore, participants in my research project indicated that the SG creates a safer online environment by ensuring *effective consequences* for those found to be abusing others in an online environment. Lough Dennell and Logan (2015) argued that since individuals wouldn't face effective consequences for bullying/cyberbullying, "they feel like they can get away with it" (p.60). Consequently, Lough Dennell and Logan (2015) and Pepler et al. (2021) suggested greater consequences to reduce cyberbullying incidents. Overall, cyberbullying is not a criminal offence in UK law; however, discrimination, harassment and threats are considered crimes (Childnet International & Fraser, 2018).

Additionally, the anti-cyberbullying strategies centred on online platforms' guidelines, rules, and terms and conditions in order to enforce effective consequences and punishments for cyberbullies (Childnet International & Fraser, 2018; Long et al., 2020). If cyberbullying content is a breach of online platforms' terms and conditions, it might therefore be removed (Long et al., 2020). However, laws and regulations differ from country to country or online platform to online platform; secondly, the social–political-cultural identity of a generation or citizen could be diverse. For instance, nudity could be part of someone's identity/culture, and for someone else could seem disrespectful.

In brief, to date, there has been little acknowledgement of how the SG facilitates creating a safe online space for young adults in order to experience more online respect in the context of cyberbullying. The greater number of anti-cyberbullying studies and reports at the government level centred around protecting children in an online environment. As discussed earlier, it seems that the SG needs to offer anti-cyberbullying strategies for young adults to ensure a safer online space for them; this could be done by, first, acknowledging that young adults also experience cyberbullying. Then, in collaboration with digital technology companies and other governments try to establish cyberbullying and online respect understanding and definitions at the global level. International conferences and meetings could be established to discuss data protection and online safety laws with all countries and tech companies.

Sub-theme: Representing young adults' values and beliefs at the policy level: The second sub-theme that addressed the role of SG in facilitating online respect would be representing young adults' values and beliefs in anti-cyberbullying policies. Given the anti-cyberbullying policy in Scotland centred on children and young people (under 18), the current policy failed to empower young adults. As noted in the previous chapter, participants (young adults) also raised their concerns regarding the absence of young adults' values, experiences and understanding at the policy level.

In 2019, Vandebosch and Green published a book in which they criticised policy-makers and suggested that "an awareness of the complexities of designing effective traditional regulation encourages policy-makers to act with caution, tending to support self-regulation" (p.234). They questioned whether self-regulation is

ineffective, and "failing young users" (Ibid). They stressed a need for an effective dialogue and agreement between digital technology developers/online platforms and the UK government. "Technological and financial feasibility are also taken into account in this process and these can be crucial to outcome effectiveness" (Ibid, p.235).

Furthermore, as addressed earlier, the emerging insights from this theme (such as ensuring improving data security and increasing online safety, representing young adults' values, and ensuring effective consequences for cyberbullies) were translated into the proposed policy recommendations in the following section.

Theme 4: Digital technology sectors approach online respect/disrespect by ensuring a safe online environment for young adults and developing better and more effective digital technologies/online platforms

After investigating the role of society and the SG in influencing young adults' online activities and behaviours, I addressed the role of digital technologies in mediating young adults' perception of online respect/disrespect and the affordances of digital technologies/online platforms. Although digital technologies have shaped people's lives, behaviours, thoughts, and values, only a few cyberbullying studies explored the influence of digital technology on experiencing online disrespect. As a result, this theme could be valuable in rethinking the role of digital technologies/online platforms in cyberbullying literature to better understand their impact on online users' activities. It explored how digital technologies/online platforms shape online users' perceptions and actions that result in online disrespect. Simply, it addresses the role of digital technologies/online platforms in shaping the relationship between young adults and worlds (physical and online) while using digital technologies/online platforms in order to facilitate online respect. This theme offers insights for technology developers and designers to design digital technologies/online platforms that afford more online respect among online users.

As noted in the Findings Chapter, digital technologies/online platforms in two ways influence young adults' experience of online respect/disrespect: ensuring a safe online environment for young adults and developing better and more effective digital technologies/online platforms; these two ways were demonstrated as sub-themes. Expanding on each sub-themes allowed me to reflect upon anti-cyberbullying recommendations and the philosophical aspect of online disrespect/respect in the

following sections. In particular, this theme played a crucial role in shaping the philosophical aspect of digital technologies/online platforms.

Sub-theme: Creating a safer online environment by developing better digital technology policies to protect and support young adults: The first sub-theme explored how digital technologies/online platforms create a safer online space for young adults in order to communicate with each other in a respectful manner. As noted in the literature review, prior studies suggested that digital tech companies should establish policies and strategies for protecting online users from cyberbullying and offering support for victims (Chan et al., 2019; El Asam & Samara, 2016). Scholars outlined *raising awareness of online users* (Daskal, 2018), *ensuring effective cyberbullying consequences* (Wachs & Wright, 2018; Steffgen et al., 2011) and *improving data privacy and security* (Fox & Moreland, 2015; Bastiaensens et al., 2015) contribute to dissuading cyberbullying behaviour.

Regarding ensuring the punishment of cyberbullies, the majority of participants in my research project supported this approach. Yet, one of the participants (**Blue**) questioned this approach and noted that the rate of accidents in cities with no traffic lights is not higher than in other cities. I suggest that evidence supports that removing any punishments/consequences could be possible in small places (The Guardian, 2015). Yet, in the light of the internet connecting millions of online users with different languages, cultures, values, and beliefs with the ability to share and communicate, removing any punishments for cyberbullies couldn't be a good approach. Imagine a country where racist content (such as N-words) is not a crime, by removing any punishments for cyberbullies online users from that country not only face any consequences for their racist content, but they would even be unaware that their content was racist. As noted in the Literature Review Chapter, the punishment could be a means of raising awareness of the matter.

With respect to improving data privacy and security approach, Choi et al. (2018a) discussed data security fatigue, "in which people become tired of online security issues, leading to loss of daily security practices" (p.43). They stressed that online users tend to accept online terms and policies without reading them, and grow weary of data breach incidents (Choi et al., 2018a). Returning to this research project, some participants in my research project also suggested that the SG should enforce online

platforms/digital technologies to improve the data privacy of online users and some participants outlined data security fatigue; such fatigue and scheming terms and conditions of the online platforms lead to not respecting the guidelines and rules of the online platform and eventually, being disrespectful in an online space.

Moreover, participants found that *using digital technologies/online platforms for their purposes* promotes more online respect in the context of cyberbullying. Likewise, Chan et al. (2019) and Cross et al. (2009) recommended using digital technologies according to their purpose at the policy and technology level. Chan et al. (2019) suggested that online platforms should be "cautious about their core design principles" (p.599); they stated that "such design principles have constantly been abused by perpetrators who seek to involve more accomplices in the incident" (Ibid). Here, it seems that participants in my research project and scholars have both spoken about the affordance of digital technologies; the possible action provided by digital technologies. As noted earlier, designers and developers should be heedful of the affordances of digital technologies (as a toolkit) in the design process.

According to participants in my PhD, *improving information literacy* could be another approach to digital technologies that potentially facilitate online respect (for more information read Findings Chapter). However, little is known about this in the cyberbullying studies and reports. Yet, indirectly several studies addressed information literacy ensure less exposure to cyberbullying (Milosevic, 2017). For instance, it has been suggested to encourage online platforms to employ restrictive policies such as filtering and content removal (Ibid), and "introduce more sophisticated options for users to control their preferences for information disclosure" (Chan et al., 2019, p.598).

Information literacy refers to an integrated set of skills: understanding how to navigate and critically analyse information (Perdew, 2016). In other words, information literacy in an online environment is "recognising a need for information", "locating relevant sources and information", "critically evaluating the information", and "communicating and sharing findings effectively and responsibly" (Ibid, p.8). Perdew (2016) emphasised that "people must be able to efficiently get the relevant information they want. But it is equally important for people to be exposed to other points of view [that challenge their beliefs or values]" (p.45).

With respect to improving data filtering, some contents are difficult to measure in an online environment, such as jokes (Wachs & Wright, 2018). Some studies pointed out that this issue depends on the definition of cyberbullying; "cyberbullies must have the intention to harm in order for it to be defined as cyberbullying, otherwise, the behaviour is perceived as a joke" (Menesini et al., 2012a, p.459; Baas et al., 2013). As discussed in cyberbullying definition section, the intention of cyberbullies is unimportant in the understanding of cyberbullying in Scotland, it is not yet clear how it reflects on the content filtering of online platforms in Scotland (The Scottish Government, 2017b).

In brief, creating a safer online space to discourage experiencing cyberbullying and online disrespect by tech companies is underexplored. A few scholars attempt to uncover the relations between cyberbullying and online disinhibition effect, lack of non-verbal cues, online misunderstandings, and filter bubble theory; however, most studies focused on children, not young adults. I suggest that as digital technologies have helped young adults to stay active and access entertainment, education, culture, dating, and work, they could be well-equipped to deal with digital technology compared to children. Hence, given young adults' needs, values, knowledge, and perceptions of digital technologies are different from children's, the results of studies and anti-cyberbullying recommendations could be different for young adults. By analysing young adults' needs, values, and thoughts, policymakers and tech companies can determine how best to meet their needs, design their initiative or implement anti-cyberbullying policies.

Sub-theme: Developing and designing digital technologies/online platforms: The second sub-theme investigated how digital technologies afford more online respect was developing and designing better and more effective digital technologies/online platforms. As discussed in the Literature Review Chapter, cyberbullying research to date has tended to focus on exploring behaviours rather than the role of digital technologies/online platforms as the means to prevent or reduce the possibility of cyberbullying. However, digital technologies/online platforms either discourage or encourage cyberbullying/online disrespectful behaviour. In other words, online users perceive possible actions based on the design of digital technologies; digital technologies afford both online respect and online disrespect. Chan et al. (2019) elaborated that "accessibility affordance facilitates overcoming barriers of time and

space to connect with potentially suitable targets" (p.585). Other examples of these technological features may involve tagging users in embarrassing photos, excluding someone from seeing profile content, collecting information from social media timelines or profile to create harassing materials, and emailing at unsociable hours, (Chan et al. 2019; Farley et al., 2016; Abell et al., 2019). Similarly, participants in this research project found that sometimes the design of online platforms/digital technologies put users at risk of cyberbullying victimisation.

As discussed in the Literature Review Chapter, *the online disinhibition effect* leads to cyberbullying or online disrespect. Mason (2008) referred to online disinhibition as "normal behavioural restraints can become lost or disregarded" (p.328). Given the social distance, fake personas, and anonymity, online users feel disconnected from the consequences of their actions and potentially engage in cyberbullying behaviour (Mason, 2008; Halpern et al., 2017). It is suggested that digital technologies/online platforms afford the online disinhibition effect and potentially result in cyberbullying behaviour or discourage this form of behaviour. For instance, anonymity encourages online users to report the cyberbullying incident; as participants in my research suggested, fake personas reduce judgemental behaviour among online users and increase a sense of online respect. On the other hand, as noted earlier, anonymity allows online users to hide their identities and target their victims without facing any consequences.

Additionally, the design of digital technologies/online platforms contributes to a lack of shared meaning in the content and relational meaning and consequently misunderstandings of words, phrases, and tone (Kelly & Miller-Ott, 2018). It could be a result of "[a] lack of richness for expressing tone and emotion", delivering criticism (Brewer, 2010, p.338) or "the brevity of texts" (Kelly & Miller-Ott, 2018, p.273). In other words, the design of digital technologies/online platforms results in online misunderstandings; consequently, online users experience online disrespect/cyberbullying. I suggest that digital technologies/online platforms designers and developers should be more mindful of how the design of the interventions potentially afford online disrespect and cyberbullying.

Moreover, recent scholars discussed the *impact of the social media filter bubble on online users*; the social media filter bubble means connecting people who share similar

beliefs, values, and thoughts (Bailey, 2021). As noted in the Findings Chapter, participants have also been concerned about social media algorithms connecting young adults to similar-minded people; they pointed out this leads to more online arguments. On the other hand, according to the data science team of [one of the social media], friend choices plays a significant role in the filter bubble, rather than the algorithm (Bailey, 2021). I suggest that the result of this study could be biased in favour of their funds [one of the social media], and requires more study about the relationships between filter bubbles and cyberbullying/online disrespect.

Some participants in my research project suggested connecting with online users with similar values creates a safer online space. On the other hand, some participants believed that connecting to a network with similar values intensifies online political arguments. I propose more transparency in the network structure allows young adults to be more mindful of how their opinions have shaped in relation to their online space, networks of people, the topic, and physical environment and develop a better picture of their opinions in relation to the whole system (see technical meditation theory). In other words, it helps young adults see how their network (surrounding environment) shapes their opinions and enables them to access opposite points of view.

As noted in the Findings Chapter, some participants in my research project pointed out that digital technologies/online platforms should design *more user-friendly and easy-to-use interfaces*. Participants (young adults) explained keeping up and learning new technology/technology features could be exhausting and difficult; they suggested that user-friendly digital technologies enable young adults to use technological tools more easily. Scholars have also stressed that sometimes individuals might feel exhausted and stressed using online platforms and encouraged online platforms/digital technology companies to design more user-friendly interfaces (Cao et al., 2020; Lupton, 2015; YoungMinds and The Children's Society (2018). Lupton (2015) stated that "people may feel overwhelmed by the sheer mass of data conveyed by their digital devices and the need to keep up with social network updates" (p.184).

With respect to developing more effective digital technologies to promote online respect, a few scholars suggested *reflective user interfaces* (Dinakar et al., 2012; Ferreira et al., 2021). Ferreira et al. (2021) defined reflective interfaces as "another digital resource in the form of a social network developed to address cyberbullying

from a self-regulation approach and involves using messages to encourage self-reflection in online behaviour" (p.3). Dinakar et al. (2012) added that "oftentimes, people need only very subtle cues to help them understand how their behaviour affects others". For example, the intervention (Digital Buddy) suggested when online users post racist comments, a message could notify them that the content is harmful and encourage them to edit the post (for more information read the Findings Chapter).

Increasing online equality in the findings has emerged as another digital technologies approach to discourage online disrespect. In Scotland, equality referred to the following protected characteristics: "Age, Disability, Gender reassignment, Marriage and civil partnership, Pregnancy and civil partnership, Race, Religion or Belief, Sex, Sexual orientation" (Argyll and Bute council, 2019, p.10). It has been suggested that ensuring equality could benefit cyberbullying prevention strategies (Lough Dennell & Logan, 2015; Argyll and Bute council, 2019). However, the understanding, implications, evaluations, and supervision of equality in an online environment in the context of anti-cyberbullying remained unclear (Ibid). In addition, online equality could link to the ability to use and access digital technologies/online platforms (Nguyen et al., 2020). Nguyen et al. (2020) suggested that "different online abilities may influence the social implications of their Internet uses, putting especially those with lower Internet skills at a disadvantage" (p.4).

As I addressed in the Findings Chapter, some participants (**Yellow** and **Red**) associated online equality with A. equal opportunity to express opinions and the opinions to be heard by others on online platforms; B. less social and workplace hierarchy in an online space allows online users to express their opinions and enable them to report disrespectful incidents; C. not to discriminate and prejudge online users based on their demographic differences; D. sustainable and ethical e-businesses, such as not exploiting or underpaying workers. It seems that online platforms/digital technologies afford to promote both online equality and inequality. Fake personas and anonymity in online platforms/digital technologies promote online equality by not allowing online users to judge and discriminate against each other based on their demographic differences. Anonymity also helps online users to report their disrespectful incidents at the workplace in an online space. Providing equal online space for online users to communicate with each other could also be perceived as online equality. On the other hand, online platforms/digital technologies promote online inequality. For instance,

allowing online users to mute others leads to not hearing what others have shared in an online space. Or, online platforms and social media by connecting similar-minded people couldn't create an equal opportunity for everyone to share their opinion and be heard by everyone. To summarise, the academic evidence for the relations between online equality and cyberbullying is still inconclusive.

Overall, I suggest that designers and developers should consider the affordance of online platforms/digital technologies from ethical aspects, such as online equality and online respect/disrespect as a toolkit in the design process. In other words, taking into account the possible actions provided by online platforms/digital technologies (such as facilitating online misunderstandings, online equality, and online disinhibition effect) in the design process perhaps lead to more online respect. As noted earlier, the insights from this theme played a significant role in shaping the philosophical aspect of online respect as well as the anti-cyberbullying recommendations in the following sections.

Theme 5: Stakeholders (organisations, parents, bystanders, etc.) approach online respect/disrespect by creating a safer online environment and improving young adults' online communication skills

As discussed in the Literature Review Chapter, stakeholders, such as organisations, charities, parents, bystanders, and universities play a significant role in both helping young adults deal with cyberbullying/online disrespect and encouraging more online respect behaviour among young adults. This theme addresses the role of stakeholders in shaping the relationship between young adults and the world (physical and online) while using digital technologies/online platforms in the context of online respect.

As discussed in the Findings Chapter, participants in my research project indicated that stakeholders facilitate online respect by creating a safer online environment for young adults and improving their online communication skills; these two ways were presented as sub-themes. In the following, I further explained these sub-themes and reflected them on the SG policy recommendations.

Sub-theme: Creating a safer online environment by offering support for young adults: As noted earlier, participants in this research study spoke about how organisations, parents, schools, and bystanders support online respect among young adults. The first sub-theme explored how stakeholders create a safer online environment for young

adults. As I discussed in the literature review, previous scholars pointed out that stakeholders, such as parents, schools, universities, third-sector organisations, organisations, and bystanders create a safer online environment for young adults in order to experience less cyberbullying (Myers & Cowie, 2017; Broll & Reynolds, 2021; Pepler et al., 2021; Madden & Loh, 2018). Scholars emphasised the importance of *raising awareness and training both online users and stakeholders* about online safety and cyberbullying as a principal approach to creating a safe online environment (Pepler et al., 2021; Zurcher et al., 2018). They underlined that educating stakeholders about cyberbullying and online safety allows them to offer effective support to young adults (Ibid).

Similarly, participants in my research project based on their experiences stressed the significant role of awareness-raising of both stakeholders and young adults in experiencing online respect. Participants in my research project also pointed out that stakeholders create an online environment where *young adults feel comfortable sharing their experiences*; this facilitates online respect by encouraging young adults to report cyberbullying and online disrespect.

Sub-theme: Improving young adults' online communication skills by awareness-raising of up-to-date cyberbullying info, online respect, and online communication skills: Improving young adults' online communication skills was the second sub-theme that emerged from the findings. As society becomes increasingly dependent on digital technology, the ability to communicate effectively and clearly in an online space could be one of the fundamental skills of young adults. Developing strong online communication skills enable young adults to communicate and share info/data with others more effectively. This skill could be valuable in establishing connections with others, showing empathy, and communicating information more clearly and accurately. The ability to communicate information clearly leads to reducing the possibility of online misunderstandings in online arguments/debates and more online respect.

As discussed in the literature review, several studies indicated that stakeholders (such as organisations and universities) help young adults improve their online communication and social skills (Nguyen et al., 2020; Wong-Lo & Bullock, 2014; Argyll & Bute council, 2019). Scholars suggested that *awareness-raising* among online users regarding updated cyberbullying information and online safety benefit young adults'

online communication skills (Lievens, 2014; Wong-Lo & Bullock, 2014; Bauman et al., 2015).

Similarly, participants in my research project underlined the importance of educating online users about online communication skills in discouraging cyberbullying behaviour. Some participants (young adults) criticised their schools' awareness-raising approaches; they asserted that their schools' approaches weren't effective enough and suggested more realistic and innovative cyberbullying scenarios. Baek and Bullock (2014) were also concerned about the effectiveness of cyberbullying education. They emphasised that since cyberbullying is an international issue, educational approaches to address cyberbullying do not take account of an international perspective such as cultural characteristics (Baek & Bullock, 2014).

Furthermore, the insights that emerged from this theme (such as improving young adults' online communication skills and training stakeholders, more innovative cyberbullying and online safety educational approaches) translated into both the philosophical aspect of online respect and the policy recommendations sections.

Theme 6: Young adults approach online respect/disrespect by creating a safer online environment and improving their online communication skills and information literacy

As discussed in the Findings Chapter, young adults could have an impact on experiencing online disrespect/cyberbullying. Besides, as discussed in the previous section, participants in my research project outlined that online respect should also be understood through the lens of individuals (young adults). Hence, this theme attempted to address the role of young adults in experiencing more online respect while communicating with others in an online space. The analyses in the Findings Chapter indicated that young adults by creating a safer online environment and community, and improving their online communication skills and information literacy experience more online respect. This theme offers insights into how to promote online respect at the individual level. These insights have been valuable in providing policy recommendations and the philosophical aspect of online respect in the following sections.

Sub-theme: Creating a safer online environment by setting and maintaining ground rules and expectations, and learning how to communicate with strangers: The first

sub-theme explored how young adults create a safer online environment while communicating with others. As discussed in the Literature Review Chapter, academic scholars and reports have seen cyberbullying as an extension of school bullying in an online environment for children (under 18) and suggested the avoidance of communicating and sharing personal data with strangers as a principal preventative measure at the individual level (Department for Education, 2019; Chan et al., 2019). Online users "who did not restrict access to their online profiles or who disclosed too much sensitive personal information online were considered more attractive and vulnerable by perpetrators" (Chan et al., 2019, p.585).

One of the potential limitations of treating cyberbullying similar to school bullying is that anti-cyberbullying interventions failed to investigate *how young adults (over 16 years old) connect, communicate with strangers/organisations, share their data with others safely, and* create a safer online community. It appears that cyberbullying literature ignores the fact that online platforms/digital technologies have intertwined with many aspects of individuals' lives. Online platforms/digital technologies enable online users to promote their services and connect to potential customers globally.

In the case of this research project, some participants (especially stakeholders) raised their concerns about communicating and sharing data with strangers. However, some participants (young adults) stressed the reliance on developing their businesses by communicating and sharing data with strangers. For instance, **Yellow-Green** pointed out that sharing personal data helps young adults develop a real persona and connect to more audiences. **Yellow-Green** thought that sharing personal information could lead to a safer online space by allowing "audiences to understand your values and the background behind them".

Moreover, as the findings indicated in the previous chapter, participants in my research project found that setting *clear ground rules* and *expectations in an online space results in online respect*. Prior cyberbullying scholars indicated that parental expectation (Zurcher et al., 2018; Fox & Anderegg, 2014; Elsaesser et al., 2017), social expectation in an online environment (Muirhead, 2000), and peer expectation for in-group members (DeSmet et al., 2014; Patterson & Allan, 2017) result in discouraging cyberbullying behaviour among young people (under 16 years old).

With respect to setting ground rules, Bailey (2021) suggested that young adults and online platforms by setting clearer ground rules minimise the possibility of political online debate. In other words, the absence of clear ground rules leads to experiencing more online debate and eventually results in more online disrespect. Bakar et al. (2018) also stressed setting safe boundaries as one of the online users' approaches to prevent cyberbullying in the workplace; for instance, not revealing personal information in an online space with work colleagues (Bakar et al., 2018). However, the role of social boundaries, such as personal values and needs in experiencing cyberbullying and online disrespect remained unexplored. As discussed in the Findings Chapter, participants underlined young adults should set and maintain boundaries and expectations with others in an online space. For example, some participants outlined they expect their friends not to email personal matters to their work email addresses; otherwise, they feel disrespected in an online space.

Sub-theme: Improving young adults' online communication skills and information literacy: Improving young adults' online communication skills and information literacy were identified as a second sub-theme. In the previous chapter, participants in my research indicated that young adults have been learning about online communication skills themselves. Young adults have been encouraged by various studies to share their knowledge and expertise online, especially with the younger generation (Cassidy et al., 2009; Daskal, 2018). Cassidy et al. explained, "youth generally are more knowledgeable about digital technology, [and] have experienced firsthand the effects of cyber-bullying" (Cassidy et al., 2009, p.396). However, other means that help young adults raise their awareness in an online environment remained unexplored, as researchers have not treated cyberbullying among young adults in much detail.

Participants also found that improving young adults' information literacy skills lead to experiencing more online respect. As I discussed earlier, previous cyberbullying studies have not dealt with information literacy explicitly. In general, most scholarly attention has highlighted some aspects of information literacy indirectly, such as removing unwanted or hateful content or disengaging the conversation (Wohn & Spottswood, 2016; Choi et al., 2018a). Consequently, as participants suggested there is a need for more discussion about improving information literacy skills at the individual level. As discussed earlier, information literacy skills would enable online users to think critically and communicate with others wisely. Simply, it enables young adults to effectively and

critically engage in online communications and arguments. It helps young adults enhance their online safety by minimising online risks, avoiding potential online harm and disrespectful communications, and consequently leads to more online respect.

Furthermore, participants underlined empathy toward others in an online space as one of the chief online communication skills. As outlined in the Literature Review Chapter, studies associated cyberbullying behaviour with low empathy (Doane et al., 2014; Ang & Goh, 2010). They encouraged online users to be more *empathetic* toward each other and discouraged *judgmental* behaviours in an online space (Mishna et al., 2014; Department for Education, 2019; Doane et al., 2014). Participants in my study, similarly pointed out that not judging others' feelings and experiences encourages them to report and share their online disrespect and cyberbullying experiences and seek help. However, no studies have been found to encourage young adults not to be judgemental toward each other as an intervention to reduce cyberbullying incidents.

The ideas and insights of this theme have brought together both the philosophical aspect of online respect and the anti-cyberbullying recommendations sections. For instance, information literacy skills have been raised in the philosophical aspect of online respect as information literacy affordance and raising young adults' online communication skills have been addressed within the anti-cyberbullying recommendations.

6.4. Philosophical perspective: feeling respected in an online environment in the context of cyberbullying, and the notion of affordances

As noted before, I suggest the SG strategic anti-cyberbullying interventions should also be based on philosophical studies, in which the notions of online action skills (online social and communication skills) and affordances play a critical role. As discussed, online social and communication skills could be crucial for experiencing more respect in an online environment. Relevant affordances do not ignore these online skills, but rather prepare users for action (Rietveld et al., 2019). In other words, it appears that carefully designed digital technologies/online platforms provide young adults with affordances that discourage cyberbullying by supporting a respectful online environment. By applying the affordances of digital technology perspective, cyberbullying studies move beyond investigating cyberbullying behaviour, and attempt to explore means to prevent cyberbullying (Bastiaensens et al., 2015).

As addressed in Chapter Two, I presented affordance theory as one of the theoretical frameworks that offer an in-depth understanding of how young adults interact with others in a more respectful environment. Briefly, affordances might be considered as "possibilities for action offered by the environment" (Rietveld et al., 2013, p.2). And technological affordances could be defined as "the mutuality of actor intentions and technology capabilities that provide the potential for a particular action" (Majchrzak et al., 2013, p.39). In the context of this PhD, the online environment and online platforms offer many affordances; some of these affordances could invite and support a respectful and safe space, and others threaten and promote online disrespect or cyberbullying behaviour.

Kiverstein (2015) argued that "the question of which affordances stand out as being relevant to a person will depend on how the person appraises a situation" (p.537). Evaluating the situation consists of individuals' judgement on the context, environmental factors, concerns, and the purpose of the online activities (Kiverstein, 2015; Chan et al., 2019). In this research study, the results of participants' booklets indicated that young adults evaluate the situations [online disrespect/respect] based on their experience, personality, "intuitive appreciation of the communication/ relationships" (**Red**), environmental factors, and social factors (**White**: "the group agreement (dynamic), especially when the majority opinion is in agreement"). Participants in my research project suggested that environmental factors encompass non-verbal cues (choices of words, emojis, tones, etc.) and the judgement of moderators (reporting tools). Therefore, investigating and understanding the relationships between the online environment, physical environment, young adults, and digital technologies/online platforms (technological mediation theory) could be crucial in exploring online respect.

Furthermore, participants in the research activities raised this relational view of technological affordances as a challenge. In particular, they stressed that predicting the capabilities of digital technologies and users' goals and actions could be a challenge for technology developers. Participants explained that digital technology supports various goal-oriented actions for members of different social groups. For instance, the majority of participants (young adults) spoke about X [a name of social media] where they connect to the communities which haven't been available in the physical world. They also found that X turned into a space for older generations to

group-attack/cyberbully others (their opposite point of view). In other words, here, older and younger generations used certain social media for different purposes. Consequently, "it is individuals' goals that shape what they come to believe the technology can afford them" (Chan et al., 2019). Similarly, some participants underlined that if people want to abuse someone online, they find ways to do so.

Acting on this perspective, the actualisation of technological affordance is possible when users take advantage of online platforms' affordances to accomplish their immediate goals. According to participants, sometimes users intentionally use hashtags (#) to find their opposite political viewpoints to cyberbully others. However, for general users, the actualisation of hashtags happens when they use them to explore content that catches their eyes or filters information. On the other hand, Rietveld et al. (2019) argued that "we cannot understand intentionality (and the collective patterns of behaviour that form sociocultural practices) without taking into account the affordances offered by the material environment [online platforms and digital technologies]".

Technological systems and devices (such as PCs, laptops, smartwatches, smartphones, and online platforms) afford a certain form/forms of sociability between users. As noted in the previous section, social affordances as a subcategory of affordance referred to the "possibilities for social interaction offered by the environment" (Rietveld et al., 2013, p.2); these social interactions over time, if engaged with a sufficient number of individuals, lead to transforming patterns of behaviour and sociocultural practices (Rietveld et al., 2019). Social affordances in an online platform could be tagging someone on photos, excluding someone from a group, or sharing content with others that result in online disrespect. Besides, online platforms extend the social affordances of communication beyond the dialogue itself, enabling individuals to share their opinions, values, and beliefs in a variety of digital formats (such as text, photo, and audio) with proximate and distant others. In other words, Kavanaugh et al. (2014) pointed out that social affordances allow people to be aware of other opinions, thoughts, and feedback, and in so doing, encourage/discourage engaging with others and building online communities. Simply, social affordances lead to encouraging/discouraging online respect.

Additionally, Rietveld et al. (2013) addressed that it is crucial to take into account that *these possibilities for actions* take place in a broader context: "any relevant possibility for social interaction is embedded in a field of other soliciting possibilities for action" (p.3). They pointed out that shifting affordances from the foreground to the background and vice versa would depend on context, environmental factors, and the needs of users (Ibid). I argue that as freedom of speech in an online environment hasn't been defined uniformly, social media afford freedom of speech. And, reporting features on online platforms afford to be respectful toward others in an online environment. Hence, cyberbullies switch from being respectful toward others to freedom of speech, and back to being respectful toward others on social media.

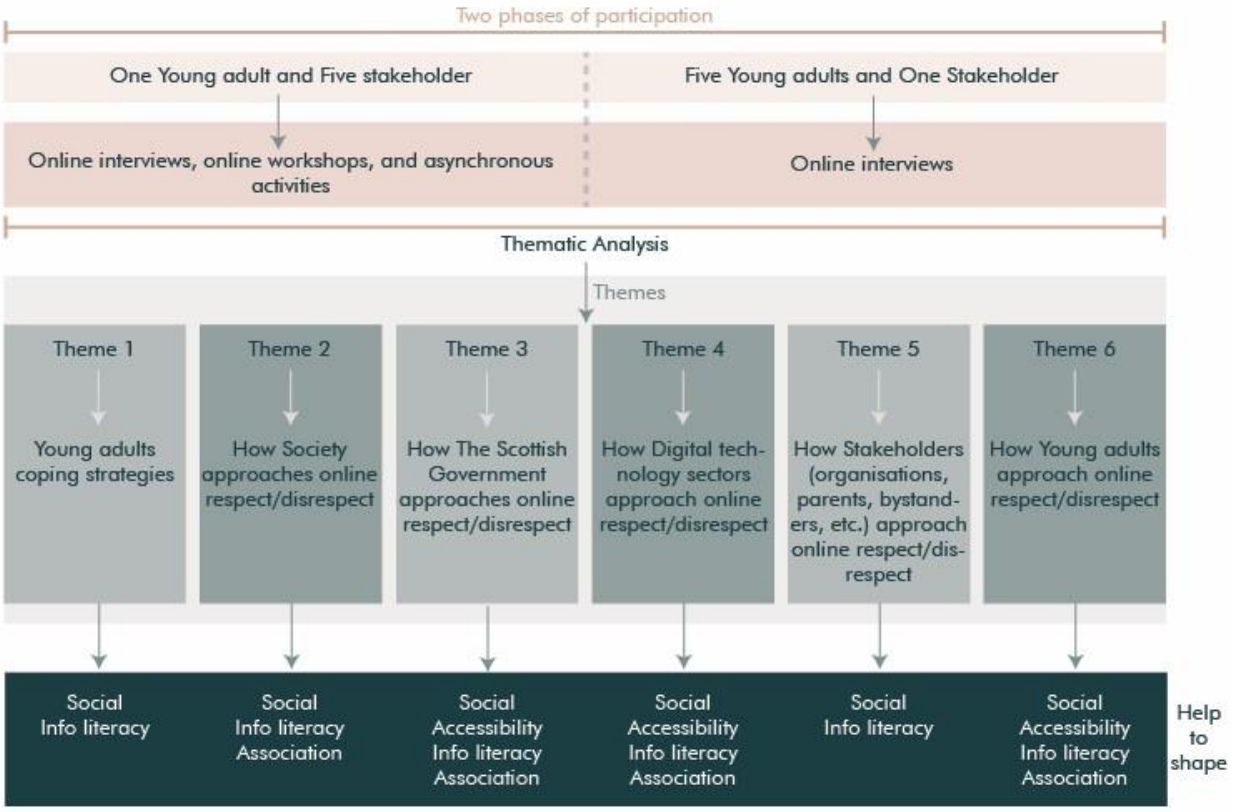

Figure 95. An overview of how themes shaped the understanding of affordances in this research project.

Moreover, as different online platforms could have various functionalities, Quintero et al. (2019) concluded that they may offer different affordances. As a result, in the following, I discuss, in general, to what extent potential affordances influence the design of online platforms and digital technologies. Based on the review of the

literature on affordances and social media research (Chan et al., 2019; Treem & Leonardi, 2013; Majchrzak et al., 2013) and emerging themes, I propose the following potential affordances. These affordances as a toolkit for designers support a more respectful online environment and online communication in the context of cyberbullying. Figure 95 demonstrates how the research process enabled me to explore the affordances of digital technologies.

Accessibility Affordance: Chan et al., (2019) defined accessibility affordance as "the extent to which a user believes that an SNS [Social Networking Sites] offers the opportunity to connect to another user on the platform" (p.581). Consider the example of Hashtags; they not only allow users to connect to shared-values communities, but facilitate cyberbullies to reach potential targets. Chan et al., (2019) suggested that network transparency plays a significant role in allowing users to understand their connections in the network, and enhance their communication evaluation.

On the other hand, participants stated an absence of accessibility affordance to some extent: they pointed out that current online platforms network connect users to similar-minded communities (filter bubble effect). As noted in the previous section, they believed this encourages hatred and online disrespectful behaviour because of the limited exposure to opposing viewpoints. On the contrary, Bail et al. (2018) indicated that introducing people to opposing political perspectives on some social media could be ineffective and counterproductive. Overall, the finding suggested that the consideration of accessibility affordance enables designers and developers to develop a safer online environment for young adults where they experience more online respect.

Information literacy affordance: In accordance with participants' analysis, *information literacy* affordance refers to the extent to which users believe that online platforms offer the opportunity to control, manage, use and communicate the flow of information and data about users on the platform. In the context of cyberbullying, this affordance allows cyberbullies to access materials created by potential targets, which offer information about targets. For example, the majority of online platforms' profiles provide cyberbullies easy access to information about victims' content/information, in which they could use the materials to cyberbully the targets.

Prior studies showed that online platforms' access restrictions (such as blocking cyberbullies) as a design feature could be a simple cyberbullying coping strategy (Alipan et al., 2021; Byrne, 2021). In contradiction to this view, some participants in my research project pointed out that they have shared their personal information due to the nature of their activities in an online space. They explained that sharing personal information publicly allows them to create a safer online community by connecting to similar-minded people. Another participant explained that disclosing personal information could add value to their online business by creating more realistic personas and connecting to audiences.

Moreover, participants argued that they feel disrespected in an online environment when online platforms access, use, and process their data without their acknowledgement. Also, they felt disrespected when they couldn't access their personal information published by others in an online environment. In general, it seems that information literacy affordance could be associated with data ownership and require more attention at the international level.

Association affordance: This affordance refers to "the extent to which a user believes that an SNS [Social Networking Site] offers the opportunity to share responsibility for his or her post with other users who interact with the post on the platform" (Chan et al., 2019, p.586). In other words, it develops connections between users, between users and content, or between users and audiences (Treem & Leonardi, 2013). For instance, as noted earlier, participants in my research project indicated that excluding young adults from an online group or not tagging them on photos could contribute to experiencing online disrespect in the context of cyberbullying.

In addition, participants stressed that one of the aspects of feeling respected in an online environment links to the extent to which the audience engaged with their content positively. It seems that this affordance depends on the definition of cyberbullying; like whether exclusion considers cyberbullying. Yet still, association affordance facilitates online shame or group-attack by inviting other users to participate in cyberbullying.

Social affordance: As mentioned earlier, social affordance links to the extent to which users believe that online platforms might offer the opportunity to address social communication and facilitate social memory, group identity, dynamics, and cohesion

(Sutcliffe et al., 2011). It is apparent that digital technologies and online platforms facilitate a social purpose in their frameworks; "the dominant design goal is [the] support of social interaction in relationships, groups, and communities'' (Sutcliffe et al., 2011, p.1051). For instance, as noted before, peer pressure/influence of online shaming encourages bystanders to cyberbully the target. Or promoting positive social norms and behaviours result in more online respect.

As explained in the previous section, in the context of cyberbullying, participants in this research demonstrated that sometimes group identity and dynamics support cyberbullying by allowing members to normalise offensive behaviour and create negative social norms. In addition, digital technologies are constrained by non-verbal cues (online disinhibition) enabling users to understand, interpret, and act on their social groups.

6.5. The anti-cyberbullying recommendation in order to encourage online respect in the context of cyberbullying among young adults in Scotland (Teal Paper)

Participants' interviews, workshops, and analyses contribute to avenues for prevention recommendations at the policy level that haven't been explored previously (figure 96). As discussed in the Findings and Discussion Chapters, far too little attention has been paid to reducing cyberbullying tailored specifically to target young adults in Scotland. To address this gap, this study has developed a number of recommendations for policymakers to establish and implement better strategies that support online respect among young adults.

I present the following policy recommendations as a Teal Paper, inspired by White Papers. "White papers are policy documents produced by the Government that set out their proposals for future legislation" (UK Parliament, 2019). Teal Paper is a document issued by the author to promote online respect among young adults in Scotland. It aims to help policymakers to gain a profound understanding of feeling respected in an online space and offer recommendations to address the current gaps in the literature, such as the lack of anti-cyberbullying policies for young adults in Scotland. Below are several recommendations for policymakers that help organisations, universities, and online platforms/digital technologies providers offer a safe online space for young adults to communicate with each other in a respectful environment and manner.

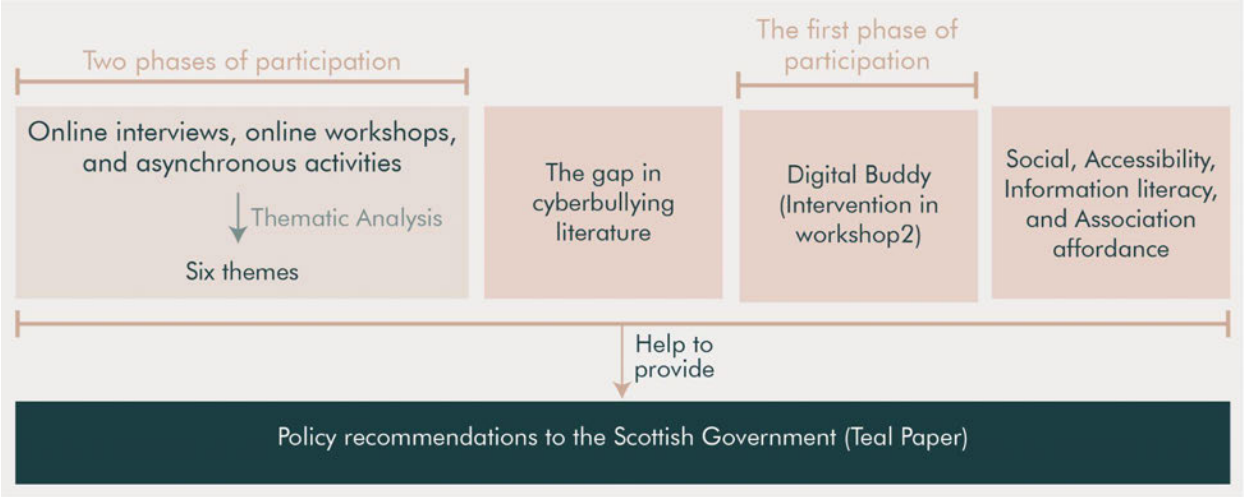

Figure 96. An overview of how this research project has provided policy recommendations

A. Methodology recommendation

As outlined in the Methodology Chapter, there is limited evidence of applying co-design in cyberbullying academic studies. Yet the SG has developed policies within the framework of co-design in order to empower children according to participant **White** (policy-maker) and Department for Education (2019). Briefly, key benefits of the co-design approach include the possibility to engage and empower children to become active participants in the development of the anti-cyberbullying policy. In the following, I propose five recommendations regarding how policy-makers conduct research about cyberbullying and offer anti-cyberbullying policies and strategies.

1. One limitation of the current SG approach is that since they address cyberbullying similar to school bullying, children and young people (under 16 years old) are identified as potential participants/victims/perpetrators. Consequently, anti-cyberbullying recommendations don't seem reasonable for young adults, as their needs, values, and understanding of digital technology/online platforms and cyberbullying vary among children. Considering the rapid development and adoption of digital technologies in people's lives, the relations between individuals and digital technologies may get more complicated as they get older. Moreover, in the light of the COVID-19 pandemic, using digital technologies in many aspects of lives is undeniable. Hence, cyberbullying should not solely be associated with students in schools. At the policy level, I propose

that the SG should rethink cyberbullying for older adults (more than 16 years old) by involving them in the design of anti-cyberbullying interventions.

2. The co-design approach made it possible for participants to share their experiences; it is beneficial to ensure the anti-cyberbullying policies and interventions would be based on participants' needs, values, and understanding. Clearly, to make sense of individuals' experiences and meet their needs, more attention should be placed on the online environment and digital technologies. The SG reports followed in the cyberbullying studies' footsteps and treated cyberbullying similar to bullying and focused more on the behaviour of cyberbullying rather than the technological aspect of this phenomenon. I suggest a lack of experience and knowledge of expertise (computer scientists) in anti-cyberbullying strategies in Scotland. It seems necessary to promote the voices of expertise in the co-design approach.

3. Another limitation of Scottish anti-cyberbullying policies is the absence of non-school and non-home settings in their principles. The SG noted that their principles were adopted to children's lifestyles, focusing on parents and school interventions (The Scottish Government, 2017a; The Scottish Government, 2017b). However, various stakeholders play a significant contribution in not only shaping cyberbullies' behaviours, but helping to cope with and detect the situations. For instance, as noted in the social affordance section, homophobic slang from 80s movies promotes the idea of these languages as the norm and acceptable for young people and children and perhaps results in cyberbullying behaviour. At the community level, another example could be statues linked to slavery that support the idea of racism in the community and lead to online disrespect by normalising celebrating slavery and racism. As a response, anti-cyberbullying policies should reflect the collaboration between various stakeholders, such as the media and tech companies in the community.

4. The anti-cyberbullying reports stated that schools should regularly evaluate and monitor the implications of these guidelines and policies (National Children’s Bureau, 2015; The Scottish Government, 2017b). What is not yet clear is regarding these evaluations, why there are various definitions of cyberbullying among stakeholders (such as third-sector organisations) (The Scottish Government, 2017b; Cross et al., 2009; Pedersen, 2013). Besides, none of the participants (young adults and

stakeholders) in this research study understood cyberbullying similarly. I suggest a need for formal and transparent evaluation, and in-depth analysis of the impact of anti-cyberbullying in SG reports in non-school settings.

5. As I noted in the previous recommendation, according to the reports and participants' interviews, there is a lack of uniformity regarding the definition of cyberbullying in Scotland (The Scottish Government, 2017b; Cross et al., 2009). The lack of unique understanding in Scotland seems to be difficult for young adults to identify and report the incidents. In addition, it seems challenging for organisations to precisely capture the extent to which cyberbullying affects young adults, hence their ability to support evidence-based interventions to experience more respect in an online environment in order to discourage cyberbullying situations.

B. Prevention recommendations: before online communication

1. Another important finding is the absence of communicating anti-cyberbullying strategies and policies between organisations, companies, and institutions. This poor communication might lead to various understanding of cyberbullying among stakeholders and young adults in Scotland. The Government should support more collaborative approaches; it seeks the most appropriate and efficient approach that encourages organisations to connect, share, and co-create their anti-cyberbullying strategies from the sociocultural, environmental, and philosophical aspects of digital technologies.

2. As addressed, many Scottish reports emphasise ensuring equality of children's characteristics (like race and sex) in their environments (Equality Act 2010), such as schools (Argyll & Bute council, 2019; The Scottish Government, 2010). However, there are few reports regarding cyberbullying from a cross-cultural perspective in Scotland. Overall, Baek and Bullock (2014) outlined that prior studies about cyberbullying from a global perspective are limited.

Furthermore, the SG key approaches focused on monitoring, controlling, limiting Internet access, and avoiding strangers (The Scottish Government, 2017b). They neglected to educate young adults on communicating with strangers from different cultures respectfully. Yet, I suggest that international online safety and data protection conferences and meetings provide international perspectives on anti-cyberbullying

policy; a collaboration between all stakeholders from across the world seems necessary. This could begin with analysing each country's anti-cyberbullying policies, laws and guidelines.

3. In supporting the previous recommendation, I also suggest updated cyberbullying educational approaches. As noted in the Findings Chapter, participants (young adults) criticised the cyberbullying teaching approaches in schools and found them ineffective and unrealistic. The SG ensures that the educational programs should take into account cyberbullying, real scenarios, digital culture, and sociocultural differences in the perception of cyberbullying and feeling disrespected in an online environment. Moreover, as participants suggested in the evaluation workshop, these educational programs should be offered from various means, online and offline. It is worth mentioning that young adults who participated in this project emphasised online platforms as a chief format to link to young adults to raise their awareness.

3.1. The educational programs and training should cover how to use technology safely and respectfully in detail. Supporting safety usage and respectful communication should be reflected in all institutions and organisations (such as universities, and third-sector organisations) awareness strategies and targets through their staff development programmes.

4. Adjusting to the new normal paves the way for more cyberbullying situations, due to the unique characteristics of technology-mediated communication. The Government should ensure all organisations and companies play a proactive role in addressing and preventing cyberbullying; it could be possible by monitoring anti-cyberbullying strategies of organisations and companies. Therefore, organisational actions must be implemented to create a safe online environment for communication respectfully and extend support and protection to victims. Such a safe climate is likely to promote the well-being of individuals and enhance organisational performance.

4.1. According to the analyses, I also suggest a need to address the dynamic of cyberbullying problems and potential strategies for managing the situations in universities and institutions. In addressing the issue, the SG should develop comprehensive guidelines and regulations about the digital rights and identity of students in the context of feeling disrespected in an online environment and cyberbullying situations. The guidelines and regulations should precisely address the

level of responsibilities for universities due to the tension between freedom of speech and the need for restrictions or censorship.

5. The findings suggested that the Government in collaboration with other countries should also offer clear laws and legislation on freedom of speech in an online environment and when it crosses the lines and turns into cyberbullying or any other online harassment (Grant, 2012; El Asam and Samara, 2016; Alsawalqa, 2021). And the Government should ensure all online platforms and organisations are consistent with these laws and legislations.

6. Encourage organisations and institutions to create a safer online environment by reducing organisational hierarchy. As participants in this research project suggested, this encourages young adults to report their cyberbullying and online disrespect incidents and share their negative experiences in an online environment.

7. Participants in this research project raised concerns about the safety of their data on online platforms. They pointed out that the Government should reflect on "how the data can be collected/used" in the laws and regulations (evaluation workshop). According to the intervention (Digital Buddy), the Government enhances data safety and security by clearly outlining that all online platforms allow young adults access and control over the data that have been collected from young adults. As participants suggested, enhancing data safety and security leads to experiencing respect in an online space.

7.1. Participants, in their intervention (Digital Buddy), stressed that sometimes removing all the personal data after deleting the profile is challenging. They addressed that the Government should ensure all information/data after deleting the profile must be removed immediately. The online platforms should be pushed by the Government to design more user-friendly interfaces for young adults to navigate themselves and access support quickly.

7.2. With respect to empowering young adults in an online environment and enhancing their data safety and security, participants raised their concerns regarding spam, and unwanted information and adv. They stated that the Government should enforce the ability of young adults to control and filter unwanted data/information they have been exposed to.

7.3. Another aspect of increasing data safety and security is terms and conditions. Participants in my research project collectively argued that the terms and conditions of the online platforms should be provided with more user-friendly and innovative interfaces to ensure that young adults understand the guidelines of the online platforms. The laws and regulations of the SG should reassure that terms and conditions explicitly entail the purpose of using online platforms as well as demonstrating the impact of gathering and/or analysing users' data in their lives. Furthermore, Participants noted that if users didn't fully understand the terms and conditions, the Government should be accountable to provide support for young adults.

8. According to the intervention (Digital Buddy), participants found that the Government should verify the online platforms' purposes and legislation before young adults access them. Governments should ensure that online platforms protect users' data, offer support for users to feel respected, support anti-cyberbullying policies, and sustain an online business model. In addition, as noted earlier, participants feel respected in an online environment, when they are reassured that the business model of the online platforms is sustainable, transparent, and ethical.

C. During online communication

1. As discussed earlier, there is a lack of clarity on young adults' digital rights in Scotland in the context of cyberbullying. The SG should establish more comprehensive and coherent laws and regulations about different forms of online harassment, such as cyberbullying. Participants suggested that the SG could enforce the strong commitment of online platforms/digital technologies to offer more transparent guidelines and holistic models according to digital rights in Scotland.

As noted before, I suggest that the SG should enforce online platforms and digital technologies to offer more effective technical solutions to prevent, identify, and reduce the possibility of disrespectful situations in an online environment. However, the SG should ensure that online platforms and digital technologies offer more innovative and user-friendly targeted educational materials about the technical features to protect young adults against cyberbullying incidents. Proposed affordances in the previous section as a toolkit enables digital technology developers and designers to design more respectful interventions and spaces for online users.

1.1. As discussed earlier, holistic models, such as interface feedback interventions, improve the overall online climate to create safe, positive online social norms and a respectful environment. A personalised interface feedback model that supports online respect and online values is required while users interact with each other through digital technologies. The interface feedback model discourages cyberbullying and online disrespect among online users. The online platforms' interfaces, for instance, should quickly notify users when they break any guidelines or disrespect others' digital rights.

Another aspect of such interface-level feedback could be decreasing online misunderstandings; for example, as participants in this study suggested, it slows down the speed of communication and encourages users to ponder before responding to a comment. The feedback also discourages exclusion among young adults; as an example, it reminds them not to deliberately exclude someone from the group.

1.2. With respect to interface feedback, participants in this study argued that interface feedback also provides an opportunity for awareness-raising and educating young adults' understanding of cyberbullying, online communication, online regulation/digital rights, online respect, information literacy, fake news/information, and how they could navigate themselves in an online platform such as how to find personal data on online platforms. As participants' analyses outlined, this interface-level feedback enables young adults to strengthen their online social and communication skills respectfully. Furthermore, it assists young adults to be more mindful of their online communication and online environment by raising their awareness.

Regarding helping young adults to navigate on online platforms, interface feedback offers support after experiencing disrespect or cyberbullying in an online environment; for example, how to report the incident or connecting to a support group either online or offline count as forms of support.

<u>D. After communicating online</u>

1. Participants in my research project suggested that the SG should promote young adults to develop a healthier relationship with technologies as well as create a balance between online and physical environments. In other words, young adults should establish a better understanding of the whole picture of their relationships between

digital technologies, themselves, the online environment, and the physical environment to achieve their goals. The SG in their campaigns should shift their focus from limiting online exposure to how to create a balance between online and physical environments. This could be achievable by ensuring that young adults would be more mindful of both advantages and disadvantages of the online environment and digital technologies as means to accomplish their goals. Simply, young adults should be more mindful of what digital technologies/online platforms afford.

2. The SG should ensure that digital technology/online platform developers clearly inform young adults about the positive and negative impacts of the online environment and digital technologies on their mental health and wellbeing. This enables young adults to be more mindful of their relationships with digital technologies/online platforms and the physical environment.

3. As discussed earlier, the SG should encourage and educate young adults to respect each other's boundaries (E.g. personal and work boundaries) and expectations of not being available online or being disconnected from social media; as participants outlined this results in online respect among young adults. In other words, young adults should be advised not to put pressure on or influence others to be online/available on online platforms or at certain times.

6.6. Summary

This research project within the framework of Interaction Design attempted to explore environmental, sociocultural, and philosophical aspects of digital technologies/online platforms that have an impact on young adults' experiencing online respect/disrespect. As discussed earlier, a large number of scholars investigated individual traits and characteristics leading to cyberbullying; yet, the technical, environmental, and philosophical aspects of cyberbullying were not treated in much detail, such as improving information literacy skills.

In this chapter, I began from the position of design that the thematic analysis approach identified and critically analysed the patterns (themes) that emerged from participants' findings. In order to make sense of the analyses, I interpreted themes based on current studies and debates. As a small body of cyberbullying research has developed

prevention and intervention strategies for young adults, the majority of themes haven't been explored before.

The first theme addressed how young adults deal with online respect and cyberbullying. Participants in my research project spoke about connecting to a support network, further communicating with cyberbullies, using technological solutions and disengaging from disrespectful communication as coping strategies for young adults in Scotland. They underlined that avoidance strategy could be young adults' initial strategy to deal with disrespectful incidents. Participants also criticised the current technological solutions for cyberbullying and stressed that these solutions could be ineffective. For instance, if victims block cyberbullies; cyberbullies could create other accounts and attack the victims.

The second theme explored how society encourages or facilitates online respect. In general, society plays a chief role in shaping the norms, cultures, behaviours and beliefs of individuals. For instance, peer influence and pressure were found to encourage young adults to cyberbully or publicly shame others. The findings identified that reducing stigma, creating a balance between cyberbullying and freedom of speech, and promoting positive and better dynamics of online social groups could be effective approaches for society to create a safer and more respectful online environment for young adults.

Investigating the role of the Scottish Government (SG) in encouraging online respect was the third theme that emerged from the findings. The findings suggested that the SG should represent young adults’ values in anti-cyberbullying policies and ensure a safe online environment for young adults. The analyses found that improving online regulations, raising awareness of online respect and cyberbullying, enforcing online platforms/digital technologies to increase online safety and improve data security, and ensuring effective consequences for cyberbullies could be effective approaches for the SG to create a safer space for young adults that leads to more online respect.

The fourth theme addressed how digital technologies/online platforms promote online respect among young adults. As discussed, ensuring a safe online environment for young adults and developing better and more effective digital technologies/online platforms were found to encourage online respect. Regarding creating a safer online space, findings indicated that digital technologies/online platforms should provide

effective consequences for cyberbullies, improve information literacy, ensure online platforms afford their purposes and improve the data privacy and security of young adults. With respect to developing more effective digital technologies/online platforms, this theme highlighted that designers and developers should be mindful of the affordances (action possibilities) of digital technologies in the design process. For instance, whether digital technologies/online platforms afford online misunderstandings and online disrespect as a result.

The fifth theme explored the role of stakeholders (such as organisations, charities, parents, bystanders, and universities) in encouraging online respect or discouraging online disrespect. This theme aimed to understand how stakeholders influence young adults' behaviours, values and attitudes while communicating in an online environment in the context of online respect. The findings indicated that offering support, raising awareness, and improving young adults' online communication skills might be valuable approaches to promoting online respect among young adults; these approaches enable young adults to prevent and cope with online disrespect situations.

The sixth theme addressed how young adults facilitate online respect. The findings suggested that as cyberbullying among young adults hasn't been a centre of attention for stakeholders (such as the SG, third-sector organisations, and universities), young adults educated themselves about online communication skills, updated cyberbullying info, online safety, and information literacy. The findings also pointed out that young adults learn to create a safer online space by setting and maintaining ground rules and expectations, and learning how to communicate with strangers in an online space.

Furthermore, to establish a better understanding of online respect from an interaction design perspective, I investigated how digital technologies and online platforms shape or prevent cyberbullying behaviour and online respect at the philosophical level. To do so, I presented affordance theory as a theoretical framework which describes possibilities for action. The review of both participants' analysis and previous studies of technological affordance uncovered four forms of affordances that enable/afford cyberbullying and online disrespect behaviour: accessibility, information literacy, association, and social affordance. I suggest that the activation of some combination of these affordances as a toolkit for designers minimises young adults' cyberbullying

behaviour and perhaps creates a safer environment for them to interact with each other.

As I noted in the previous chapters, providing anti-cyberbullying recommendations for Scotland has been one of the ambitions of this PhD. Both participants' findings and insights into the philosophical aspect of online respect/disrespect enabled me to generate these anti-cyberbullying policies. Briefly, I propose that since cyberbullying and bullying are different phenomena, preventions and strategies need to reflect upon each one separately. The Scottish Government should ensure a uniform understanding of cyberbullying in Scotland. The Scottish Government should develop a clear policy statement on cyberbullying for young adults in collaboration with other countries. The Scottish Government should enforce a strong commitment to digital technologies to create a safer environment and enhance data security.

Within the next and final chapter, I present a summary of this research project and draw conclusions from the study as a whole. It also entails research project limitations, recommendations for recruiting participants, and future research.

7.1.1. Summary and Conclusion

Although online platforms and digital technologies have evolved and transformed the way individuals communicate and interact, they have also given rise to phenomena such as cyberbullying. Cyberbullying has been the subject of research and preventive interventions for governmental, non-governmental organisations, schools, and third-sector organisations to protect against this form of misusing digital technologies and online platforms. In 2017, the Scottish Government (SG) underpinned the value of *respect* as one of the approaches to anti-cyberbullying and anti-bullying at national and local levels in Scotland. What is not yet clear is how to implement respect in an online environment and what it would mean to be respectful toward each other in an online environment (the Scottish Government, 2017). In regards to the SG approach, this PhD research aimed to investigate promoting feeling respected in an online environment (online respect) in Scotland.

Furthermore, despite increased access to and use of digital technologies and online platforms by the general population, the SG centred the anti-cyberbullying interventions and strategies on children and young people (under 16 years old) (the Scottish Government, 2017; Cross et al., 2009; The Scottish Government, 2010). This reveals the Scottish Government's conception that cyberbullying is bullying that occurs in an online environment; cyberbullies extend their bullying behaviour from school grounds and follow the targets into their homes. On the contrary, Waldersee (2019) stated that young adults (age range of 18 to 24 years old) in comparison with children (under 16 years old) experience more cyberbullying incidents. To address this misconception relating to both the likely age group of those suffering from online abuse and the form and nature that such abuses might take, specifically the demonstration of a lack of "feeling respected", I developed my original research question. Rather than explore an unformulated definition of cyberbullying, I employed a design research approach focused upon the tenets of Interaction Design to explore how to promote or engender online respect among young adults (18-24 years old) in Scotland in online environments.

Similar to the SG understanding, academic studies have asserted that cyberbullying is in-person bullying (a real-life activity) that moved into the online environment (Wade & Beran, 2011; Festl et al., 2017). As researchers from the field of psychology have dealt with the understanding of cyberbullying behaviour, their knowledge and understanding of digital technologies/online platforms were often limited; school grounds have been considered equivalent to online platforms with some additional online specific characteristics added, such as anonymity (permitting online disinhibition to emerge as a particular characteristic). Hence, the majority of cyberbullying studies fail to reflect upon the role and impact of digital technologies and online platforms in cyberbullying and the attendant issue of respect in an online environment.

Additionally, in previous cyberbullying studies, the relations between digital technologies/online platforms, individuals, online environment, physical environment, and context (cyberbullying) are poorly understood in cyberbullying literature. A great number of cyberbullying studies have investigated the relations between individuals and the physical environment (Fanti et al., 2012; Calvete et al., 2010); such as the negative impact of cyberbullying behaviour on students' lives in the physical environment. Hence, much uncertainty still exists about how digital technologies and online spaces have co-shaped individuals' not feeling respected in an online environment.

To address both the role of digital technologies and explore those relations, I developed a research question investigating how Interaction Design can be used as an approach to explore promoting *feeling respected* in an online space (online respect) among young adults (18-24 years old) in Scotland. Central to this research was the elicitation of the perspective of key stakeholders and young adults, who either experienced this “lack” of respect or worked with those who did, or who worked with organisations in this area. The thesis utilised Interaction Design techniques, processes and terminology, born of the digital age, to investigate experiences and interactions amongst the key stakeholders’ and young adults' understanding of online respect in Scotland.

As discussed previously, evidence from this research project couldn't suggest that feeling respected in an online space minimises cyberbullying among young adults. In other words, the hypothesis that "maximising online respect will minimise

cyberbullying situations" should be tested and evaluated by a larger pool of participants (young adults and stakeholders) as part of this research project. Considering the resource limit to access a large pool of participants, I couldn't examine this hypothesis over the course of four years and focused on investigating online respect among young adults. Consequently, this research project focuses on exploring online respect in the context of cyberbullying. Additionally, in the light of the lack of online respect definitions and understanding, I have investigated the current debate and literature surrounding cyberbullying as a context. However, this research project hasn't discussed other online behaviour (such as trolling and online hate speech) since these forms of online behaviours haven't been relevant to the understanding of online respect among young adults.

I propose that the Interaction Design approach, in this research project, offers a unique perspective on exploring digital technologies by putting digital technologies/online platforms at the heart of investigating online respect and so attempting to establish meanings, insights, and understanding specific to the online digital environment, rather than an extension of the physical site of bullying associated with “real life”. This approach suggests an involvement of a wide range of users and stakeholders with different perspectives and backgrounds in the design process and exploring online respect. The combination of Interaction Design and Collab Design methods was key to the user research, and thematic analyses of their responses in facilitating online respect among users, digital technologies, context, and surrounding environment (online and offline). It relies on an iterative design process not only when users interact with digital technologies, but also before and after online communication. This methodological framework permitted the research to address online users' interpretations and evaluations of their online communication, shape their relationships with digital technologies and detail the impact of their following interactions with others in a novel manner, in particular, when applied to the context of online experiences of social interaction and the role of “respect”.

The Interaction Design approach offers sociocultural and environmental perspectives to critically understand and investigate online respect among young adults in Scotland who are interacting with each other in online environments and utilising digital networks to do so. In other words, this approach proposes the consideration of these aspects of online disrespect/respect when exploring online respect. Crucially, by

extending the concept of *environment* to acknowledge online spaces and their difference from physical spaces, this research highlighted both the connections between online and physical spaces, their differences, and how these shaped the experience of interaction amongst individuals in the demographic being studied; for instance, experiencing online disrespect results in depression and anxiety in the physical environment.

In adopting an Interaction Design approach to the research of this area, certain philosophical and terminological aspects of digital technologies/online platforms and their discussion in the literature became central. Specifically, the application of this terminology to the area of research was entirely novel, and so permitted a discussion of the experiences of young adults in online environments utilising a theoretical and discursive language previously unavailable to researchers in this domain, colloquially, *cyberbullying*. The reliance upon Interaction Design as a form of practice, within the research dimension of the thesis project, led to a philosophical perspective on digital technologies and the forms of experience that these made available to users and participants, I utilised *affordance* and *technological mediation* theories to offer an understanding of feeling respected in an online space. Yet, before elaborating on these philosophical perspectives in this research study, in the following, I should address the definition of online respect from the perspective of participants.

To generate an appropriate definition of online respect for discussion in this project, I employed both a co-design approach and a thematic analysis technique; thematic analysis is a flexible and useful method for working within a participatory research paradigm, such as co-design. Combining these methods enabled me to analyse a large number of data by applying inductive (based on participants' experiences, thoughts, and values) and deductive (based on prior research and theoretical framework) approaches to research. A large number of cyberbullying studies have relied on a traditional survey method due to ease of access, low cost, and flexibility to obtain and analyse information (such as Mowbray & Hall, 2020; Aizenkot & Kashy-Rosenbaum, 2018; Song & Oh, 2018; Brody & Vangelisti, 2016). However, one of the major drawbacks of surveys would be inaccuracies and a degree of vagueness in responses; "wording of surveys causing misunderstanding, and issues in self-reporting" (Corliss, 2017, p.75). "Participants may have been less than truthful or frightened to answer truthfully for fear of retaliation, despite the anonymity of the survey" (Ibid). Therefore,

rather than collecting a large number of potentially inaccurate datasets, co-design enabled me to collect data that reflects participants' knowledge, experiences and values. In addition, academic cyberbullying studies that use co-design methods are limited.

Co-design, in brief, is the active incorporation of the participants within the design process to accommodate their opinions, values, needs, and beliefs. Co-design by empowering participants aims to expand the set of ideas, concepts, insights, and opportunities that emerge when they create a meaningful intervention. One of my chief roles at the practical level, in this PhD, was to plan and design innovative and creative tools for participants to communicate, engage, and share their insights and opportunities in order to support online respect for young adults in Scotland.

The lack of time allocated for this research project (five-hour) was one of the great barriers for participants. To overcome this barrier, access more participants, and collect more data, I reduced the time commitment from five-hour to one hour. I further elaborate on this challenge in the following. Another limitation of co-design in this research project was professional power hierarchies in group workshops. To overcome this challenge, I created a space for sharing experiences and knowledge where young adults and stakeholders could come together as equals and look at online respect, outside their professional roles and potentially shift their mindset to more openness and collaboration. During the workshop sessions, I also ensured to offer equal opportunities for all participants to express their opinions and ideas.

First, I set out to recruit participants. Participants were recruited in two phases over the course of six months. Within the first phase, I developed different recruiting strategies to access the pool of potential participants. Initially, I aimed to recruit young adults (18-24 years old) who were living in Scotland and familiar with online communication. However, recruiting participants was challenging, given the COVID-19 pandemic situation, the sensitivity of the context (cyberbullying), and committing to the five-hour participation. As I recruited one young adult in four months, I shifted the focus from young adults to stakeholders on account of the existing gap in investigating online respect from the perspective of stakeholders in Scotland. I propose that various stakeholders with different understanding, knowledge, experience and values bring together unique perspectives on online respect. This strategy enabled me to recruit six

stakeholders: one policy-maker, two third-sector organisation representatives, one online safety representative, one designer, and one computer scientist. Within the first phase, six recruits contributed to four stages of online engagement, and one contributed to a one-hour interview.

Within the second phase of participation, I propose a new strategy in order to recruit more young adults (18-24 years old). With respect to five-hour participation as one of the challenges of recruitment, I reduced the time commitment to one hour to access more participants. I reached out to young adults (18-24 years old) who were living in Scotland and running small online businesses. Regarding the sensitivity of the context, I made it clear that I wasn't looking for a cyberbully or victim, but young adults who have been communicating with others in an online space. I aimed to recruit young adults who were interested in sharing their understanding of cyberbullying and online respect and how they navigated themselves in an online environment. In this phase, I recruited five young adults for a one-hour Zoom interview in one month.

It is also important to stress that this PhD didn't aim to recruit victims due to the risk factors for the participants and myself; I couldn't offer professional support to victims due to the lack of knowledge and expertise. Liu et al. (2018) noted when participants are at high risk or have a history of self-harm, recruitment by community health centre staff or clinical research staff is suggested. Additionally, since cyberbullying is a stigmatise topic (Gahagan et al., 2016; Moreno & Vaillancourt, 2017; Kowalski et al., 2015), some victims might conceal or deny their cyberbullying experiences; consequently, choose not to participate in this research project (Mitchell et al., 2021; Liu et al., 2018). Moreover, to further support participants, I have shared a list of mental health and anti-cyberbullying services and hotlines with participants in case any help or support is needed (Appendix F).

Following participants' recruitment, I conducted one-hour Zoom semi-structured interviews. The interview questions for stakeholders in the first phase of participation concentrated on their role to provide support for young adults in an online space, their understanding of online respect and cyberbullying for young adults, and the ways to promote online respect in the context of cyberbullying. The interview questions for young adults in both phases were slightly different from stakeholders; the questions focused on young adults' experiences in an online environment and online

communication and how they deal with any disrespectful situations in an online space. The interviews were recorded and analysed with the thematic analysis technique. In addition, it is worth noting that despite trying to not introduce my biases; still, I might have encountered subtle biases.

One of the limitations attached to qualitative research practices, especially mixed methods incorporating participant interviews, was time limitation. This was particularly impactful, especially in the second phase, as online interviews were the only means to collect data from participants; to recruit young adults, I had to reduce the time commitment from five hours to one hour. As a result, in the second phase of participation, it has been challenging to ensure discussing research project scopes (understanding of online respect and cyberbullying) and interview questions as well as the rationale behind participants' answers in just one hour. However, as discussed earlier, the interview still provides a large amount of rich data, which can be time-consuming to analyse compared with the survey. Overall, the Interaction Design approach in this research project has been qualitative, interactive, adaptive, and extended in time.

In addition, it is notable to mention that online interviews didn't afford to capture non-verbal cues such as body language. Capturing non-verbal cues helps create a safe environment for participants to discuss uncomfortable topics. By keeping all the questions clear and ensuring that their opinions matter, I attempt to keep an online environment as safe as possible.

On the other hand, conducting online interviews wasn't as costly and time-consuming as in-person interviews. It allowed me to gather data from participants who were living in other cities in Scotland or offer another opportunity for participants who missed their appointment at no additional cost or time. It was also easier to arrange a meeting with participants as they just needed to commit to one hour.

Within the first phase of participation after the online interviews, participants contributed to asynchronous activities (booklets). I used asynchronous activities as a qualitative research tool, where I designed four activities to learn more about participants' understanding of online respect and the roles of different stakeholders in facilitating online respect. These remote activities were reflected in my understanding of both affordance and technological mediation theory. Affordance theory allowed me

to consider young adults' evaluation and interpretation of the situations (online respect) and the affordances of digital technologies. Technological mediation theory also enabled me to design activities that demonstrate the relationships between young adults, worlds (online and offline), digital technology and online respect. These remote activities aimed to offer additional time for participants to think and reflect upon online respect. It allowed them to share their values, thoughts, understanding, ideas and insights. The activities were engaging, playful, easy to understand, and designed to be completed in one hour.

The booklet was inspired by cultural probes. “[Cultural] probes are collections of evocative tasks meant to elicit inspirational responses from people—not comprehensive information about them, but fragmentary clues about their lives and thoughts.” (Gaver et al., 2004, 53). In other words, it seeks to engage and understand participants in open-ended and inspirational activities in their homes (Hemmings et al., 2002). Since the activities in the booklet weren't open-ended and aimed to explore certain questions and topics expecting to gather specific answers, cultural probes wouldn't count as a technique for designing the booklet.

Asynchronous activities have been beneficial for participants with busy schedules, as the booklet offered complete control over their time. Participants could also contact me whenever they had any questions or concerns regarding the booklet. On the negative side, the lack of live interaction made it difficult to follow up on the answers and explore the rationale for their understanding or ideas. Another drawback of the booklet was the lack of motivation to complete it. Despite sending reminder emails both before and after distributing the booklets, not all participants managed to complete and return them within the requested timeframe.

The third and fourth participant engagement in the first phase was online group workshops. The first workshops attempted to collect the opinions of the groups (two groups) about the design opportunities for promoting online respect and explore the accountability of stakeholders in promoting online respect. Workshops occurred on Miro (an online platform for running workshops) and Zoom (a video communication platform) in one hour. The final group workshop built on Workshop 1 aimed to evaluate the design intervention. Simply the intervention was designed based on the findings, gathered from all participants' opinions, insights, and ideas in booklets,

interviews, and Workshop 1. The evaluated intervention in the final workshop enabled me to offer recommendations to the Scottish Government (SG) about implementing and supporting online respect. In addition, the outcome of this workshop provided valuable insights into online respect from the perspective of affordance theory.

Overall, the series of workshops was a means to collect more data about the factors that have an impact on experiencing online respect in the context of cyberbullying from new perspectives. By creating a positive collaborating online environment, I encouraged participants to negotiate the meanings, understanding, ideas, and design opportunities collectively. The advantages of online workshops similar to online interviews were time efficiency and the low cost of the workshops.

Following the generation and collection of data from both phases of participation, I subjected the data to thematic analysis. Thematic analysis was selected as the method of analysing the qualitative data produced by the research engagements and activities. It allowed me to identify, analyse, and report meaningful patterns (themes) from a large amount of data gathered from twelve interview transcripts, five booklet transcripts, and four workshop transcripts and activities. Using the phases of thematic analysis as demonstrated by Braun and Clarke (2006) enabled me to analyse, code, and develop the corresponding sub-themes and themes that emerged from the findings. Eventually, I accomplished six themes through the rigorous thematic analysis process (see Chapters Five and Six).

Data analysis has been conducted precisely, consistently, and rigorously through recording and detailing in Chapters Five and Six to generate contributions to knowledge. The process of conducting a thematic analysis is demonstrated through the presentation of findings and interpretation and representation of data in Chapter Five. And Chapter Six addresses how my interpretations of findings (Chapter Five) are clearly derived from and connected to the literature (Chapter Two).

One of the chief drawbacks of using thematic analysis for this research study was the time-consuming process. The flexibility of the method leads to a quick analysis of the findings; however, creating rich and meaningful codes, themes, and sub-themes for this research project resulted in reviewing the analyses six times. Another major issue of the thematic analysis revealed in this research study was the inability to retain a sense of continuity and contradictions. The absence of the sense of continuity and

contradictions across themes, sub-themes, and codes seems like a demonstration of lists of themes, sub-themes, and codes in Findings and Discussion Chapters. However, as noted previously, technological mediations theory enabled the Interaction Design approach in this research project to describe themes and sub-themes in relation to the roles digital technologies play in young adults experiencing online respect. Technological mediation theory as a framework demonstrates how themes and sub-themes shaped the relationships between online users and the world when they are experiencing online respect.

Following analysing data through the rigorous thematic analysis process as described in the Methodology Chapter, the understanding of online respect began to unfold. The context of cyberbullying has been challenging to understand, recognise, and define (Brody & Vangelisti, 2017). There are various definitions of cyberbullying in the cyberbullying literature. In addition, rapid digital technology development has led to difficulties in understanding and recognising this phenomenon. Therefore it was all-important to explore participants' knowledge of cyberbullying.

As stated in the Literature Review Chapter, cyberbullying is a deliberate, repeated, aggressive behaviour/action carried out in the online environment by an individual or group (Moreno et al., 2018). Cyberbullying was seen as an extension of traditional school bullying by prior studies and the Scottish Government (SG). The SG defined cyberbullying as bullying behaviour that occurs online; bullying is harmful behaviour that has a negative impact on individuals' lives and takes place in the context of relationships (The Scottish Government, 2017).

Participants' understanding of cyberbullying seemed to be different, in contrast to, and more complicated than the understanding of cyberbullying suggested by literature and the SG. Besides, some of the analyses indicated that not all participants had a clear understanding of cyberbullying. As noted earlier, the SG and **White** (to protect participants' identities, their names replaced with colours) asserted that cyberbullying occurs in the context of relationships similar to school bullying. On the other hand, some participants in my research project argued that cyberbullying could be anonymous. In supporting these participants, Barlett and Chamberlin (2017) stated that as online users get older, they face more anonymous cyberbullies.

Traditionally, scholars have described cyberbullying as based on the following criteria or characteristics: repetition, power imbalance, harm, and intent (Thomas et al., 2015; Brody & Vangelisti, 2017). However, participants in my research project had different positions on attributes like repetition, some referred to it as a continual event and some as a one-time event. Regarding the deliberate aspect of cyberbullying, participants in this research project outlined that sometimes it could be unintentional; a receiver could perceive a joke in an online environment as offensive and experience cyberbullying.

Moreover, prior studies suggested that the power imbalance in an online space is associated with online users' technical awareness and skills (Langos, 2012; Menesini et al., 2012a). On the contrary, I discussed that having technical knowledge could be helpful to protect and prevent experiencing cyberbullying, yet it doesn't keep the person from experiencing cyberbullying incidents. For instance, blocking cyberbullies on an online platform might not lead to stopping future cyberbullying incidents; cyberbullies could make infinite profiles and cyberbully the victim again. It doesn't imply that the cyberbullies have more knowledge and technical skills, yet it suggests digital technologies couldn't afford to offer support for victims in this situation.

The possible explanation for these contrasts between cyberbullying literature and participants' definition should be seen as linked to the tendency to view cyberbullying as an extension of school bullying, that merely happens in an online space. For these scholars, online platforms and digital technologies appeared to be a tool with some additional characteristics such as the disinhibition effect; their definition and understanding of cyberbullying failed to reflect the influence of digital technologies/online platforms on experiencing cyberbullying.

It is worthwhile mentioning that since participants (young adults and stakeholders) had different backgrounds, experiences, and knowledge, their understanding of cyberbullying were different; as for **Green** (computer scientist), cyberbullying links to information literacy. Additionally, Gahagan et al. (2016) noted that understanding cyberbullying depends on online users' perceptions, judgments, and characteristics. In conclusion, based on participants' analysis, cyberbullying refers to any form of harassment, abuse, ignorant, or negative/unwanted content that is being used as means to express negative opinions or protest against an individual or community

either intentionally or unintentionally in an online environment; experiencing cyberbullying could also be affected by digital technologies and online platforms.

Following exploring the definition of context (cyberbullying), I developed an online respect definition from the perspective of participants as one of the contributions of this research study. As addressed in the Literature Review Chapter, I rejected the skeuomorphism theory. Briefly, skeuomorphs are objects which imitate the design of similar artefacts in other materials (Moggridge, 2007). For instance, the trash can icon on the PC is a skeuomorph object; or the pre-recorded shutter noises on smartphones are a skeuomorph object representing the original design of mechanical cameras. As online users become more familiar with using digital technologies/online platforms, the need for using skeuomorph objects could be diminished (Ibid); children would probably first use file icons on PCs before using the physical ones! Skeuomorph objects certainly benefit users to get accustomed to the following new digital technologies; yet, I argue that understanding and defining online respect according to the feeling respected in a physical environment could result in incorrect understanding of the term. The online environment encompasses different rules, structures, society, regulations, environmental factors, etc. that might not be constrained by physical environment forms of structures and organisations.

Similar to cyberbullying definition, participants in my research project didn't define online respect uniformly. Given their lack of ability to express their understanding of online respect, most participants have defined online respect in comparison with in-person respect. As the analysis suggested, online respect has several lenses. The lenses encompassed: A. individual understanding of offensive language; B. improving online communication skills; C. the affordances of digital technology/online platform; D. society's perception of online respect. Participants (stakeholders and young adults) in my research project asserted once all of these lenses afford respect, they feel respected in an online space.

The first lens of online respect would be personal perception, interpretations and understanding of offensive languages/words, actions or behaviour. Due to the lack of non-verbal cues in an online space, feeling respect in an online space relies on the perceptions, evaluations, and interpretations of online users; for example, receivers might perceive a joke as offensive content. Besides, as people with different cultures

and languages communicate with each other in an online space, some content could seem to be offensive in some cultures or communities. Nudity, for example, could be part of someone's culture and for others could seem disrespectful in an online space.

Within the second lens, improving online communication skills, participants in my research project outlined that young adults don't have sufficient skills to communicate with each other respectfully in an online space. In the Findings Chapter, I detailed all of their recommendations about how young adults improve their online communication skills in a respectful manner. In brief, they encouraged young adults to learn how to debate online, respect others' boundaries and expectations, think before engaging with others and avoid abusive and aggressive language.

The affordance of digital technology/online platform lens outlined to what extent the design of digital technologies influences online respect. Returning to the joke, as a result of online space's limitations (such as lack of tone and facial expression), receivers find it hard to understand it as a joke. In the following, I elaborate on the affordances of digital technologies and how they facilitate online disrespect.

The final lens described how young adults as part of their society understood the idea of online respect, freedom of speech, online equality, and positive values. Participants in my research project indicated that societies and communities influence how young adults interpret and evaluate online communication. For instance, naked pictures could seem inappropriate in some countries/communities, but forms of expression and freedom in others.

After obtaining a picture of understanding of online respect and cyberbullying, this PhD addresses the factors (themes) that potentially affect experiencing online respect among young adults. In the Discussion Chapter, these themes have drawn on the current cyberbullying studies and reports, not online respect studies, in the light of the absence of online respect literature. In addition, since cyberbullying has been understood as school bullying among most scholars, cyberbullying among young adults has not been explored enough. Consequently, given the limited cyberbullying studies among young adults, cyberbullying among children has also been considered while making sense of the identified themes.

Furthermore, to address the research questions, I investigated young adults coping strategies (as a third research question) and stakeholders' approaches to encourage online respect/discourage online disrespect among young adults in Scotland (as the fourth and fifth research questions). Six themes emerged from the analysis of data collected through interviews, booklets, and workshops from six young adults and six key stakeholders in two phases (see Findings and Discussion Chapters). These themes attempted to address the roles of various stakeholders in shaping young adults' relationships with worlds (online and physical environments) and digital technologies/online platforms in the context of online respect while using digital technologies. In other words, the Interaction Design approach enabled me to investigate how digital technologies/online platforms mediate the relations between individuals and their surrounding environment (online and offline) within the framework of technological mediation theory.

As noted earlier, the findings originally began with exploring the factors that influence online respect; however, in the design process, other concepts have started to emerge, such as online equality and creating a safe place in an online space. Given that the purpose of this research project is not to explore these concepts, they could be the focus of future studies. In the following, I underline these concepts.

The first theme explored how young adults deal with online disrespect. Participants in my research project discussed disengaging from disrespectful communication, connecting to a support network, seeking further communication with cyberbullies, and/or using technical solutions (Ex. reporting, blocking cyberbullies) that help young adults to deal with online disrespect. Previous studies identified similar coping strategies for children and young adults (Alipan et al., 2021; Raskauskas & Huynh, 2015; Yang, 2021).

Moreover, most participants in my research project believed that young adults' initial coping strategy would be avoiding cyberbullies and/or disengaging from disrespectful communication. It seems that using technical solutions could be ineffective in coping with cyberbullying incidents; after blocking cyberbullies, cyberbullies could create other profiles and cyberbully the victims again. The affordances of digital technology/online platforms play a significant role in supporting victims or

discouraging online disrespect. Accessibility, availability, and ease of use of digital technology could also affect whether young adults could use these technical solutions.

The second theme addressed how society facilitates online disrespect. It investigated the role of society in shaping young adults' relationships with their environment in the context of online respect. Three sub-themes emerged from the findings: reducing cyberbullying stigma, creating a balance between freedom of speech and online respect, and promoting positive and better dynamics of online social groups. The findings indicated that social and cyberbullying stigma has a negative impact on online users' behaviour and results in more online disrespect and cyberbullying. Participants in my research project noted that awareness-raising is one of the chief approaches to reducing cyberbullying stigma.

Young adults (participants in my research project) acknowledged the importance of freedom of speech and raised their concerns about whether speaking freely could be offensive and abusive to others in an online space. Prior studies also recognised the tension between freedom of speech and cyberbullying (El Asam & Samara, 2016; Alsawalqa, 2021); however, scholars still failed to unravel this tension. Given the rapid technological development, individuals' lives are intertwined with digital technologies more than ever; therefore, looking at different approaches to reduce this tension to experience more online respect is one of the chief concerns globally.

With respect to the impact of the dynamics of online social groups, both participants in my research project and prior cyberbullying studies outlined the influence of peers on cyberbullying behaviour (Shim & Shin, 2016; Wegge et al., 2016; Sarmiento et al., 2019). Prior scholars discussed that the dynamic of online social groups enforces the bubble effect of opinions that lead to cyberbullying behaviour (Wegge et al., 2016; Sarmiento et al., 2019; Bailey, 2021). Participants in my research project suggested that the following approaches facilitate a more positive dynamic of groups and lead to more online respect: discouraging online public shaming, discouraging social exclusion, and *not normalising wrong behaviour and values* in groups and communities.

The third theme explored the role of the SG in facilitating more online respect among young adults. This theme addressed how the SG helps young adults experience more online respect. In general, cyberbullying in Scotland is not a crime, unless it is related to sexual exploitation or child pornography (Childnet International & Fraser, 2018). The

findings indicated that the SG facilitates more online respect by representing young adults' values in anti-cyberbullying policies and ensuring a safe online environment for young adults. Young adults (participants in my research project) noted the importance of an effective dialogue between the SG and young adults. They discussed that on account of the generation gap, policy-makers failed to empower young adults and reflect their perspectives on online regulations in the context of cyberbullying and online respect.

With respect to creating a safer online environment, analyses in this project suggested that the SG supports more online respect by improving online laws and regulations at Westminster parliament and raising awareness of up-to-date online respect and cyberbullying info. Participants in my research project outlined that the lack of effective consequences for cyberbullies results in more online disrespect and cyberbullying incidents. They suggested that the SG should enforce digital technologies/online platforms to punish cyberbullies effectively and improve data safety and security in order to support victims and discourage online disrespect. It can start with annual conferences and international meetings to establish and negotiate online rules and regulations that involve governments from all over the world, influential and big tech companies, and huge numbers of representatives from young adults for discussion of online safety matters.

The fourth theme addressed the role of digital technologies/online platforms in experiencing online respect/disrespect among young adults. As discussed earlier, the Interaction Design approach enabled me to investigate digital technologies as part of young adults' relations with spaces (online and offline) when experiencing online respect/disrespect. The findings indicated that digital technologies facilitate more online respect by ensuring a safe online environment for young adults and developing better and more effective digital technologies/online platforms; each approach presented as a sub-theme.

Regarding developing and designing better and more effective digital technologies/online platforms, analyses from this project underlined the consideration of affordance in the design process. I propose that designers and developers should be mindful of the influence of the online disinhibition effect, the filter bubble effect, and online equality in either encouraging or discouraging online respect as a toolkit in the

design process. The findings also suggested that user-friendly and reflective interfaces assist designers in facilitating online respect. It appears when digital technologies offer additional feedback (help/info), they help young adults not only navigate themselves in an online space ethically but experience more online respect.

With respect to the online disinhibition effect, participants in my research project held very different opinions about anonymity and fake personas; some believed that this characteristic of digital technology is helpful when young adults report online disrespect or cyberbullying because anonymity protects and supports them throughout the reporting process. They also argued that fake personas facilitate online equality in an online space by reducing unconscious demographic biases. On the other hand, some participants discussed that anonymity and a sense of invisibility encourage cyberbullying behaviour by offering the cyberbullies to hide their real identities. Previous studies also stressed the negative aspect of anonymity in promoting cyberbullying (Mason, 2008; Halpern et al., 2017). It seems that anonymity and fake personas similar to other properties of digital technologies support either online disrespect or online respect. I suggest innovative collaboration between digital tech companies and Governments could clarify and detail online regulations, laws and guidelines regarding data and identity.

Another sub-theme identified in the findings was creating a safer environment for young adults. Raising awareness, ensuring effective cyberbullying consequences, improving data privacy and security, and improving information literacy were found in this project to help digital technologies create a safer online space. Participants in my research project criticised online platforms and digital technologies that couldn't recognise the cyberbullying incidents to offer effective consequences due to the lack of meaningful filtering algorithms. Similarly, I suggest a need for more complex filtering systems and algorithms to create a safer online space where young adults communicate with each other in a more respectful environment. It seems that digital technology companies benefit from independent organisations mediating and supervising online disrespect or cyberbullying situations to offer effective solutions and consequences.

The fifth theme explored the role of other key stakeholders, such as organisations, charities, parents, bystanders, and universities in supporting online respect among

young adults. The findings indicated that creating a safer online environment and improving young adults' online communication skills enable stakeholders to facilitate more online respect; these approaches were demonstrated as sub-themes. Creating a safer environment for young adults was the first sub-theme that emerged from the findings. The findings in this project underlined the importance of educating stakeholders about online respect and cyberbullying by the SG. As I said earlier, young adults (participants in my research project) highlighted a need for educating school staff on updated cyberbullying info. Participants in my research project argued that stakeholders (schools, parents, and organisations) should be concerned about environmental, norm-based, and sociocultural aspects of online disrespect in order to support young adults and encourage more positive behaviours and values.

As findings in this project pointed out, providing education about online communication skills, cyberbullying, and online respect improve young adults' online communication skills and result in more online respect. The young adults who participated in my research project criticised the cyberbullying materials provided by their schools and underlined the absence of meaningful and up-to-date information about cyberbullying. Some stakeholders who participated in my research project suggested that online safety teaching approaches should aim at, first, understanding young adults' norms and values and helping them to develop more positive values and norms correspondingly. This enables stakeholders to establish rapport with young adults, understand their dilemmas and needs, and offer appropriate online safety recommendations.

The sixth theme addressed the roles of young adults in facilitating more online respect while using digital technologies/online platforms. The findings in this project indicated that creating a safer online environment and improving online communication skills and information literacy facilitate young adults to experience more online respect; each of these approaches was presented as sub-themes.

Regarding improving online communication and information literacy skills, participants in my research study raised their concerns about the lack of online communication skills among young adults, in particular how to communicate, debate and share data/information with strangers. It appears that stakeholders have encouraged young adults to avoid strangers in an online space instead of educating them on how to

communicate with strangers more safely. Participants in my research project also noted that information literacy skills enable young adults to identify and find negative or hateful content; this allows them to manage their data and results in experiencing more online respect. The second sub-theme demonstrated how young adults create a safer online environment. The findings suggested that respecting others' circumstances, clarifying expectations and values, and setting and maintaining ground rules and boundaries in an online space assist young adults in creating a safer online space and result in more online respect. It seems that educating young adults about how to communicate effectively with others in an online space can be a valuable means to address this matter.

After data analysis, I brought together the ideas and insights that I found through the research and design process to address how the Interaction Design approach could help promote online respect among young adults in Scotland. As noted earlier, the Interaction Design approach enabled me to investigate how digital technologies/online platforms allow young adults to experience online respect/disrespect from sociocultural, environmental, and philosophical aspects. From the perspective of the environment, this research project investigated the role of online space in experiencing online respect and the influence of experiencing online respect in the physical environment. As discussed previously, most cyberbullying studies failed to investigate the role of online space in experiencing online respect. The sociocultural context enabled me to examine how social and cultural norms and expectations encourage online respect among young adults in Scotland. And the philosophical perspectives (affordance and technological mediation theories) allowed me to gain insights into how digital technologies shaped young adults' behaviours that lead to online respect. Based on participants' contributions, I draw conclusions from two perspectives: A. From the philosophical perspective (affordance of digital technologies) of online respect; B. From the sociocultural and environmental perspective of online respect in the framework of policy recommendations.

Elaborating on the philosophical aspect of this research (affordances of digital technologies) enables digital technologies/online platforms designers and developers to be more mindful of the role of digital interventions in supporting online respect or online disrespect. This perspective also helps policymakers and psychologists establish a better understanding of the relations between digital technologies and

online respect, particularly similar types of problematic online behaviours. At the philosophical level, I offer in-depth insights into online respect within a framework of affordance theory. Affordances, briefly, are actionable possibilities offered by digital technologies/online platforms. I addressed the consideration of accessibility, social, information literacy, and association affordances that add value to facilitating online respect.

As discussed, *accessibility affordance* refers to what extent online users connect to others using online platforms. *Information literacy affordance* is defined as the extent to which online users are able to control, manage, use and communicate data with others on online platforms. *Association affordance* speaks about to what extent and how it is possible for online users to share responsibility for their content on online platforms. And *social affordance* refers to the extent to which online users are able to address social communication and facilitate social memory, group identity and dynamics. These affordances could be used as a toolkit or guidelines for designers, policy-makers, and psychologists. This toolkit provides insights into how digital technologies influence young adults' experience of online respect and how to facilitate online respect. It ensures designers, policy-makers, and psychologists that the design of digital technologies affords online respect.

Within the next section, I presented the ideas and insights into online respect and translated them into policy recommendations (Teal Paper). The *Teal Paper* is inspired by the White paper that sets out this research project's ambition to facilitate more online respect and create a safer online space for young adults. Teal Paper, as a designed outcome generated by this design research process, develops a mechanism for tech designers and policymakers to understand the data produced by this investigation. It responds to how the SG and tech designers and developers implement, define, understand, and conduct research about online respect. Teal Paper sets out this research project's ambition to facilitate more online respect and create a safer online space for young adults. It empowers young adults to manage their online safety and data by raising awareness of information literacy. It ensures that stakeholders (such as parents, organisations, bystanders, and universities) support young adults to encourage more online respect or discourage online disrespect by raising their awareness and improving their online communication and social skills.

To conclude, I have employed an Interaction Design approach and conceptual framework alongside collaborative design methods to explore the way in which design-led inquiry can contribute to a better understanding of cyberbullying and the associated absence of feeling respected in online environments and interactions. In particular, this research project focused upon

1. A better definition of cyberbullying and online respect reflects the role of digital technologies and online space and their affordances in shaping these forms of online behaviour.
2. The investigation of young adults (18-24 years old) cyberbullying as an unaddressed demographic with significant exposure to cyberbullying situations.
3. The design process employs as a tool of research inquiry that involves an iterative process of exploring digital artefacts (online respect) and complex questions.
4. Make coherent and communicable insights from the research engagement to produce “design outcomes”; such as the Teal paper and digital technology affordance toolkit.
5. Develop novel, fresh, and contemporary insights into online respect from young adults (18-24 years old) and stakeholders' perspectives that haven't been available in the current literature.
6. The design outcomes have created a means by which digital technology designers and policymakers can share information, ideas, and concepts.

This research project makes a fundamental contribution to the realms of Interaction Design, policy, and psychology. It lies at the intersection of digital sociology, cyberpsychology, and design ethics, providing valuable insights into the intricate web of sociocultural and environmental influences that shape the landscape of online respect among young adults. The findings shed light on the psychological aspects of online respect and cyberbullying and emphasised the ethical considerations in designing digital technologies. The research highlighted the role of digital technologies in shaping online behaviours and emphasised the importance of information literacy and online communication skills. The Teal Paper and digital technology affordance

toolkit provide practical guidance for Interaction designers and policymakers to promote online respect and create a safer online environment. Overall, this research fills gaps in the current literature and provides valuable insights for designers, psychologists, and policymakers in addressing online respect and cyberbullying among young adults.

To address my research question of how Interaction Design can be used as an approach to explore promoting feeling respected in an online space (online respect) among young adults (18-24 years old) in Scotland and draw insights from sub-research questions, I present the following contributions to knowledge. These contributions relate to the design process and understanding of online respect at philosophical and policy levels. I also acknowledge that these contributions are based on my reflections, insights, and experiences within a single-case study.

A. My first contribution to knowledge is the definition of both online respect and cyberbullying. To date, the understanding of feeling respected in an online space (online respect) is underexplored. According to the findings and insights, this research project offered a unique definition of online respect (see the Discussion Chapter). It proposes that the affordances of digital technologies, individuals' perceptions, society's perceptions, and online communication skills play a major role in the definition and understanding of online respect. It also offered a unique definition of cyberbullying that demonstrated the role and impact of digital technologies on experiencing online respect.

B. The second contribution to knowledge focuses on environmental and sociocultural factors (themes) that impact online respect among young adults; they either facilitate or discourage online respect. As most prior scholars and policy-makers have treated cyberbullying similar to school bullying, they have failed to capture the complex nature of online respect and cyberbullying among young adults. Prior scholars and policy-makers have been fixated on their own experiences and perspectives on children (under 16 years old). For instance, most literature has ignored the role of digital technologies' affordances on online respect and cyberbullying. However, this research project offered an opportunity that brought together the knowledge, understanding, experiences, and values of various key stakeholders and young adults. Themes have been used to communicate the factors that impact online respect among

young adults and novel ideas and insights about the matters raised by stakeholders and young adults (see Findings and Discussion Chapters). Themes expanded beyond each stakeholder's perspective and created a greater picture that unlocks the potential of key stakeholders in supporting online respect among young adults collectively.

C. The third contribution to knowledge is policy recommendation to the SG in the context of online respect (Teal Paper). This PhD provides a series of policy recommendations for the SG that contribute to supporting online respect among young adults (Discussion Chapter). Governments should enforce/ensure these considerations on stakeholders (such as local authorities, digital technology companies, and universities) to encourage online respect. Such recommendations were developed from a holistic perspective, which recognises the interplay of social, environmental, cultural, and technological dynamics. I plan to share the findings of this research project with policy-makers as a contribution to the policy-making process.

D. The fourth contribution to knowledge addresses the Interaction Design approach in this research project. This Interaction Design approach is a qualitative and iterative approach from a non-neutral digital technology viewpoint that developed from my understanding of affordance and technological mediation theories. It acknowledges that digital technologies shape and influence users' behaviours and actions. In other words, it not only centres around participants' experiences, knowledge, thoughts, and values but also acknowledges the role and affordances of digital technologies/online platforms in shaping online users' behaviours and activities. This approach attempts to investigate online respect by understanding how digital technologies mediate the relationships between online users, digital technologies/online platforms, and the surrounding environment (both online and offline) from a sociocultural and philosophical viewpoint.

This Interaction Design approach goes beyond improving users' experiences when using digital technologies; it attempts to create a meaningful dialogue between users and digital technologies, the surrounding environment (both online and offline), and the context. It doesn't focus on the moment interaction occurs; it focuses on before, during, and after the interaction and how this interaction shapes users' understanding of the world and how it influences their following interactions.

7.2. Limitations of the research project

There are some limitations to this research project that needs to be borne in mind. These limitations include: A. The majority of cyberbullying articles discussed this phenomenon among children and adolescents (under 16 years old), I included cyberbullying among adolescents as well as young adults (18-24 years old); this enabled me to shape the literature review and have an in-depth discussion about the context of cyberbullying.

B. As noted before, I recruited participants who were 18-24 years old, living in Scotland and have been active on online platforms. Due to cyberbullying stigma and my lack of knowledge in supporting victims, I aimed to recruit young adults who were willing to share their understanding of cyberbullying and online disrespect. As a result, online users who were affected by cyberbullying may be under-represented in this research project. However, this doesn't negate the value of the findings as the study offers insights into the understanding of online respect, how young adults deal with online disrespect, and how stakeholders support young adults feeling more respected in an online space.

C. Participants' discussions about online respect and cyberbullying could be unavoidably subjective to a certain degree, despite the confidentiality and anonymity of participants. Participants might have provided answers they thought could help the research project or were socially more desirable/accepted. Or they might attempt to appear better/smarter in their participation. Besides, given the sensitivity of the context (cyberbullying), participants might avoid sharing the truth. However, this PhD may produce less amount of social desirability bias in comparison with the majority of cyberbullying studies that adopted the self-report method (completing the survey). As one of the strengths of this research project, I attempted to collect more meaningful data through various means (interviews, workshops, and remote activities) by employing the co-design approach.

D. As discussed previously, the COVID-19 pandemic, the sensitivity of context, and a five-hour commitment have challenged the recruitment process. As a result, I recruited twelve participants. When studying sensitive contexts (cyberbullying), it has been challenging to access participants (young adults and stakeholders) who hold valuable information about online respect and are willing to participate. Under such participant

recruitment challenges, “a small number of cases or subjects may be very valuable and may represent a proper number for the research project” (Baker & Edwards, 2012, p. 9). Rusu Mocănașu (2020) elaborated, "no clear methods and rules are given for qualitative investigation in order to guide researchers in establishing the sample’s proper size. Size determination is a matter of consideration, as the researchers follow various guidelines in order to assess whether their own research sample is proper or not" (p.181). Baker and Edwards (2012) and Braun and Clarke (2016) suggested a small sample of six-twelve participants within the academic environment context in the case of interview-based qualitative research and a moderate size of thirty participants. Considering Baker and Edwards (2012) and Rusu Mocănașu (2020) suggestions, this single-case sample size (twelve) seems sufficient for the qualitative analysis. However, initially, I intended to access thirty participants and five case studies as it appears to be an ideal sample size for qualitative research (Baker & Edwards, 2012; Braun & Clarke, 2016).

E. Although I had a relatively small number of participants (twelve participants), a large number of data was collected from their engagements. I believe the sample describes the opinions, values, knowledge and experiences of young adults (18-24 years old who have been living in Scotland) and stakeholders (policy-maker, third-sector organisation representatives, online safety representatives, a designer, and a computer scientist). However, the transferability of these findings to other stakeholders and other age groups' online users' populations is to be determined.

F. The ultimate efficacy and effectiveness test of the design intervention (Digital Buddy), recommendations to policy-makers, and to what extent emerged themes could have an impact on experiencing online respect could be a prospective long-term study that might require follow-up assessments over time.

G. And finally, engaging with participants and collecting data could have been influenced by the online environment (Zoom and Miro). Future studies could therefore examine whether in-person participation and data collection could result in a different outcome for this research project.

Yet despite these limitations, as discussed in the first section, this PhD contributed to the knowledge regarding online respect in the context of cyberbullying and factors that potentially influence online respect from a sociocultural and philosophical aspect.

7.3. A recommendation for future research

The research project that has been undertaken for this thesis has underlined a number of topics on which further investigations would be valuable. Several areas where academic information is absent were highlighted in the Discussion Chapter. The following demonstrated areas as recommendations for future work.

- As discussed throughout the thesis, given everyone's accessibility to digital technologies and the raising cyberbullying incidents among young adults (Waldersee, 2019), there is a need for more discussion about cyberbullying among young adults (over 16 years old) in non-school settings. Further work should investigate whether findings from this research could be generalised to young adults.

- There is abundant room for further investigations into the understanding of online respect in other contexts and cyberbullying. It seems necessary to establish more understanding of cyberbullying that reflects the role of digital technologies/online platforms as part of a bigger picture of online communication from the perspective of computer scientists and experts. The bigger picture here refers to the relationships between online users, digital technologies, online platforms/online environments, and the physical environment in the context of online communication. In addition, further work is required to capture the relations between online respect and digital technology affordances among young adults.

- As this thesis has been mainly focused on online respect in the context of cyberbullying, leaving the study of online respect in other contexts outside the scope of this research project. As a result, future work concerns the understanding of feeling respected in an online space in other contexts, such as online workplaces and online gaming.

- Due to the existing gap in information literacy, future studies on the role of information literacy in supporting online respect and minimising the possibility of cyberbullying incidents are recommended at individual and digital technology/online platform levels.

- Further academic work is required to establish more innovative, engaging, and effective teaching approaches about online safety, online respect, cyberbullying, and online communication for young adults by various stakeholders, such as universities, third-sector organisations, and the media.
- More attention should be paid to the relations between freedom of expression and cyberbullying and/or online disrespect. Future lines include investigating how to create a balance between freedom of expression and cyberbullying (or other negative online phenomena, such as online harm) in an online space globally.
- Demonstrating the impact of consequences and punishments for abusive online behaviour to discourage cyberbullying behaviour are important issues for future empirical research. For instance, it is not yet clear whether banning someone from online platforms as a form of punishment discourages cyberbullying behaviour among young adults.
- Future empirical research should investigate the effectiveness of the current technological interventions and solutions in dealing with cyberbullying incidents. For instance, the effectiveness of reporting cyberbullying incidents in coping with cyberbullying experiences.
- Further cyberbullying research should be done with a focus on the influence of digital technologies/online platforms on facilitating cyberbullying among online users. The impact of the online disinhibition effect, online misunderstandings, affordances of digital technologies, and filter bubble effect in promoting cyberbullying behaviour should be investigated in collaboration between psychologists and computer scientists.
- Online equality as one of the factors that influence young adults to feel respected in an online space required future research. Future research investigates how online platforms/digital technologies, organisations, and institutions in an online space implement, understand, measure, and facilitate online equality among young adults.
- As this research project suggests, being judgmental toward other online users influences feeling respected in an online space. Hence, future research should

design and evaluate cyberbullying and online disrespect interventions that discourage being judgmental toward each other among young adults.

- According to this research project, social isolation plays a role in young adults' experiences of online disrespect. Future empirical research should design and test interventions that discourage social isolation among young adults.
- Further empirical research should investigate online debate in the context of cyberbullying and freedom of speech among young adults. As this research project suggests, the online debate could influence online disrespect among young adults.
- As discussed in this research project, "Digital Buddy" as a conceptual prototype enabled me to gain insights into participants' (stakeholders and young adults) values, needs, and beliefs and how to encourage and facilitate online respect among young adults in Scotland at the policy level. Yet, further prototyping and testing would be needed to ensure that "Digital Buddy" works in practice and supports online respect among young adults.

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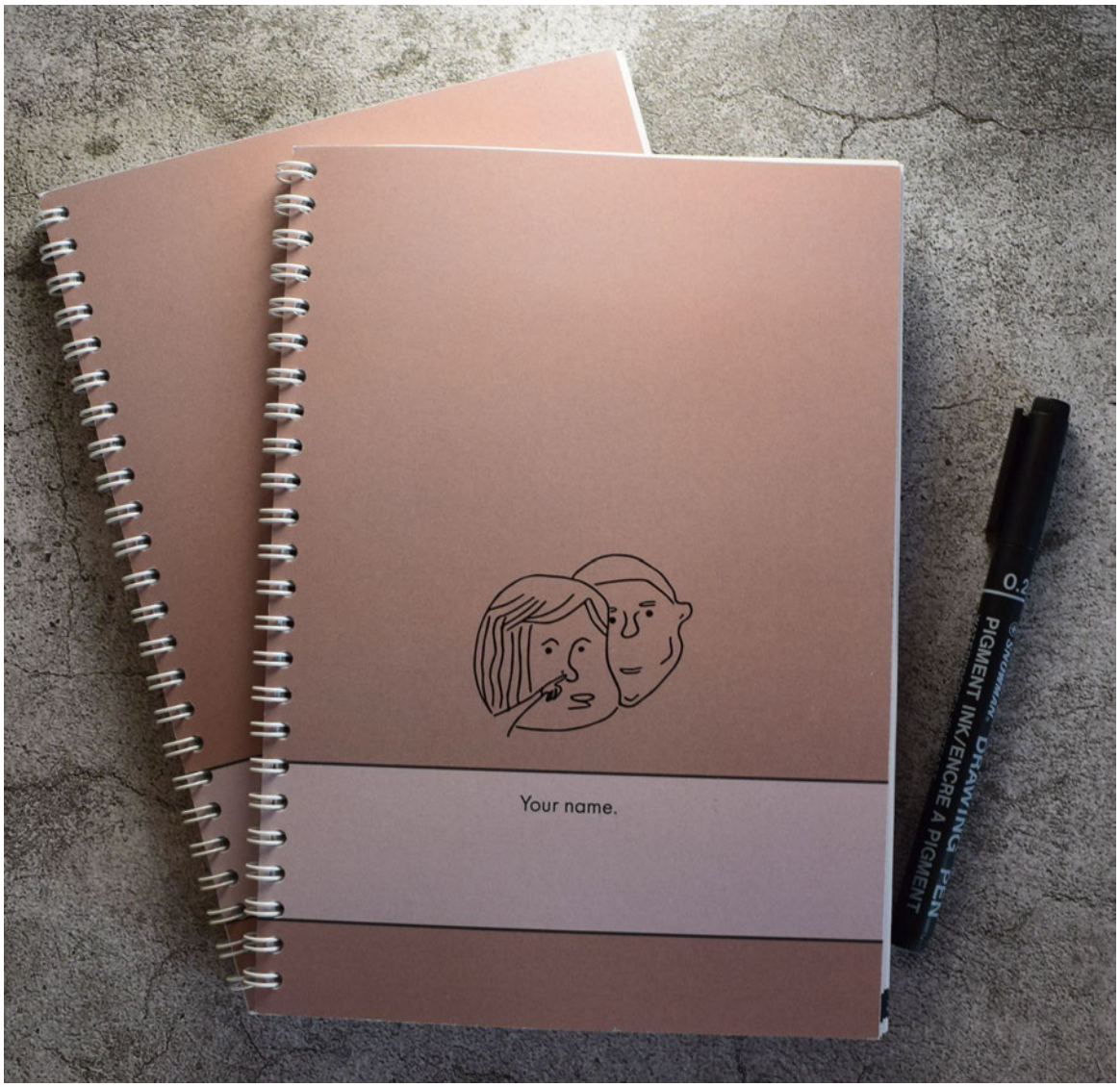
Appendices

Appendix A. An overview of the asynchronous activities (booklets)



to tools we might use if we were meeting in a physical workshop. Before the workshop sessions, I will send you a Miro invitation link. During the interview, I will explain how to use Miro. Miro is user-friendly and easy to use. Also, Miro similar to Zoom has a smartphone app where you can join the sessions.

1. First, please complete this booklet, individually at home.

   You can use any of the starter-kit materials. The Starter-kit contains all the materials necessary to complete this booklet; such as pens, markers, post-it-notes.

2. You will then be invited to join a workshop where you will be asked to share your understanding of respect in an online environment.

   In this workshop, we will develop a shared understanding of cyberbullying and respect in an online environment and brainstorm to generate ideas for new anti-cyberbullying interventions.

3. After the workshop, you will be asked to post the completed booklet as soon as possible.

   Prepaid envelopes are available in your starter-kit. Simply put this booklet in the envelope, and it is ready to be mailed.

4. I will analyse the data gathered from interviews, the workshop session, and the booklets and update you on the findings.

5. You will receive a digital or physical prototype of the idea(s) that we develop before the evaluation session is to give you time to evaluate and reflect on the prototype.

6. Finally, you will be invited to attend an evaluation workshop with people from academia, policy, third sectors, and young adults to share your feedback and consider how the prototype could help promote respect in online environments.

ACTIVITIES

ACTIVITY 1 — Create Your Own Story

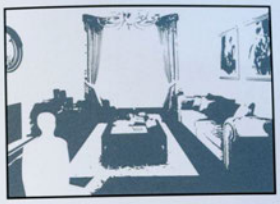
Activity 1 aims to help you express feelings of being respected in an online environment by developing a 'character' and their story, based on your own experiences, or those of someone that you know. This activity also asks you to consider the impact of online communication on different levels of individual everyday life. The key prompts to consider when developing your character's story are:

- When do your characters feel respected in an online environment?
- After feeling respected in an online environment, what is the impact of this at the personal and social level?
- When your characters feel disrespected in an online environment, how do they protect themselves and others?

In the following pages, before sharing your character's story of feeling respected in an online environment, please:

A. Introduce your character; a person who has experienced respect while engaging online.
B. Identify
- Digital technology: the device that was used for online communication.
- Online platform: where your character has felt respected.

C. Physical places: where your character is when engaging online, for instance: home, restaurant, Uni, public transportation.



Where does it happen?

(Workplace, Public space, School, Home, Public transportation)

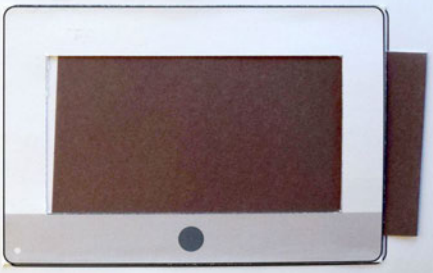
INTRODUCE Your Character

Who is she/he?
What is her/his name?

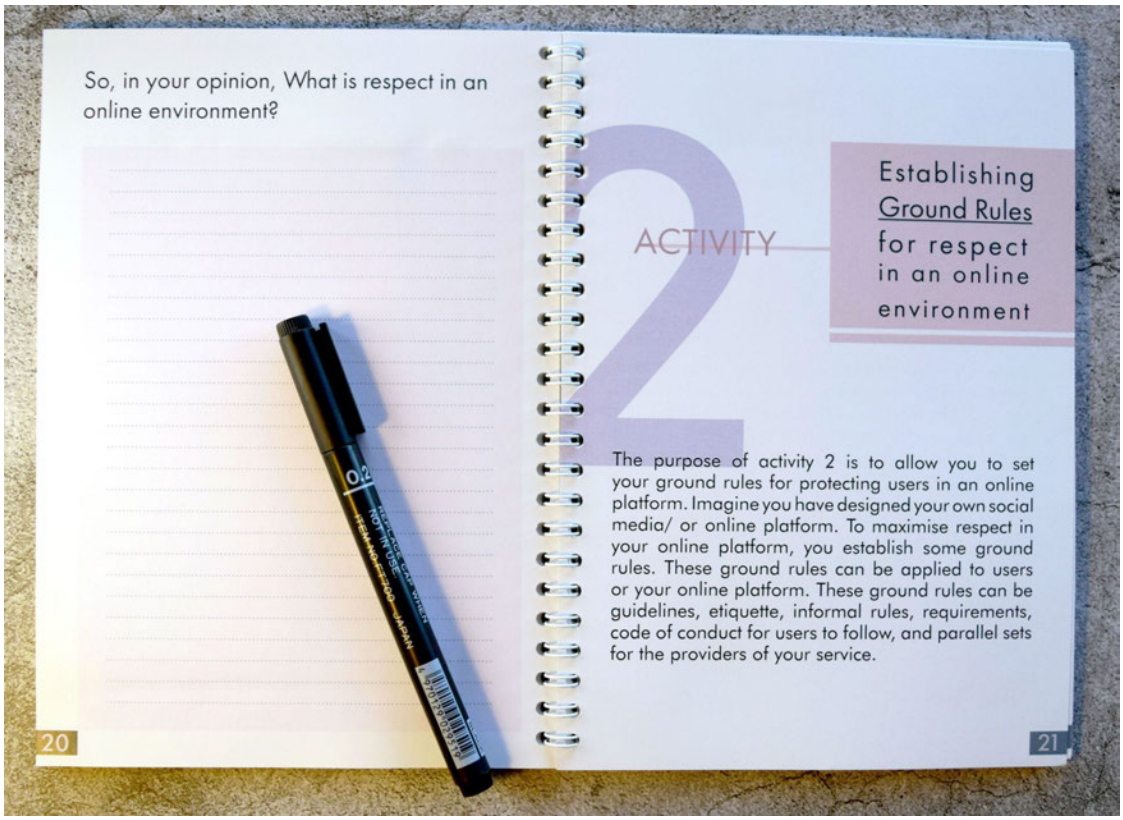
What digital technology and online platform your character has used while the incident occurred?

Online platforms

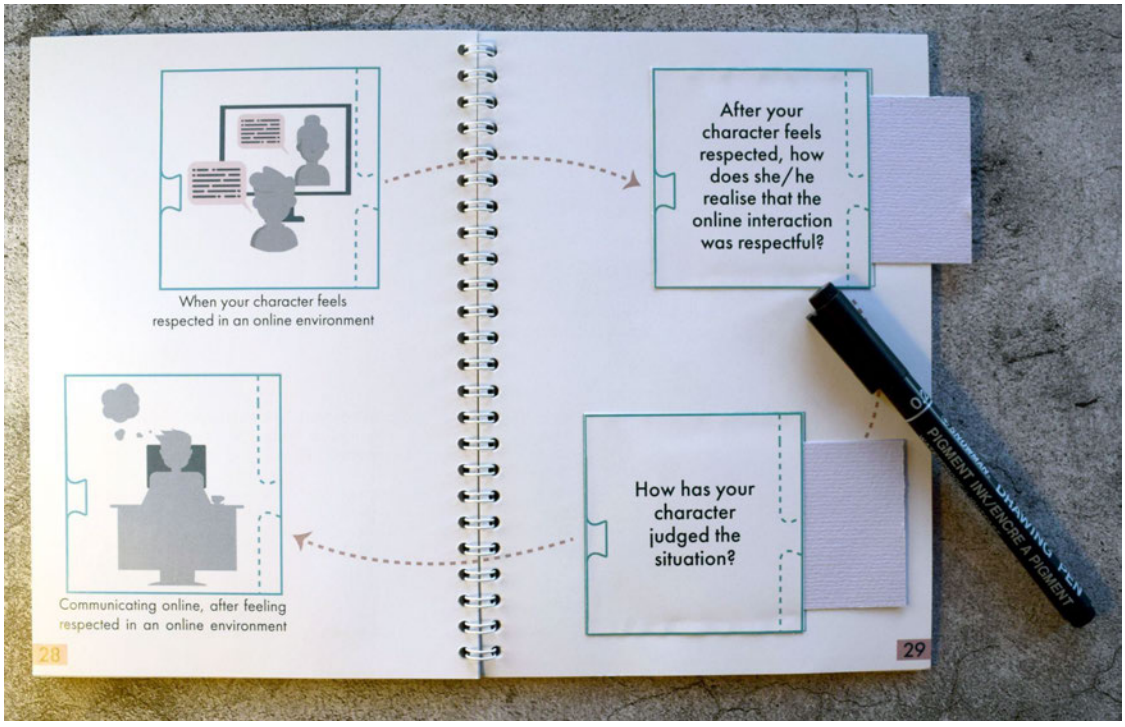
Digital technologies

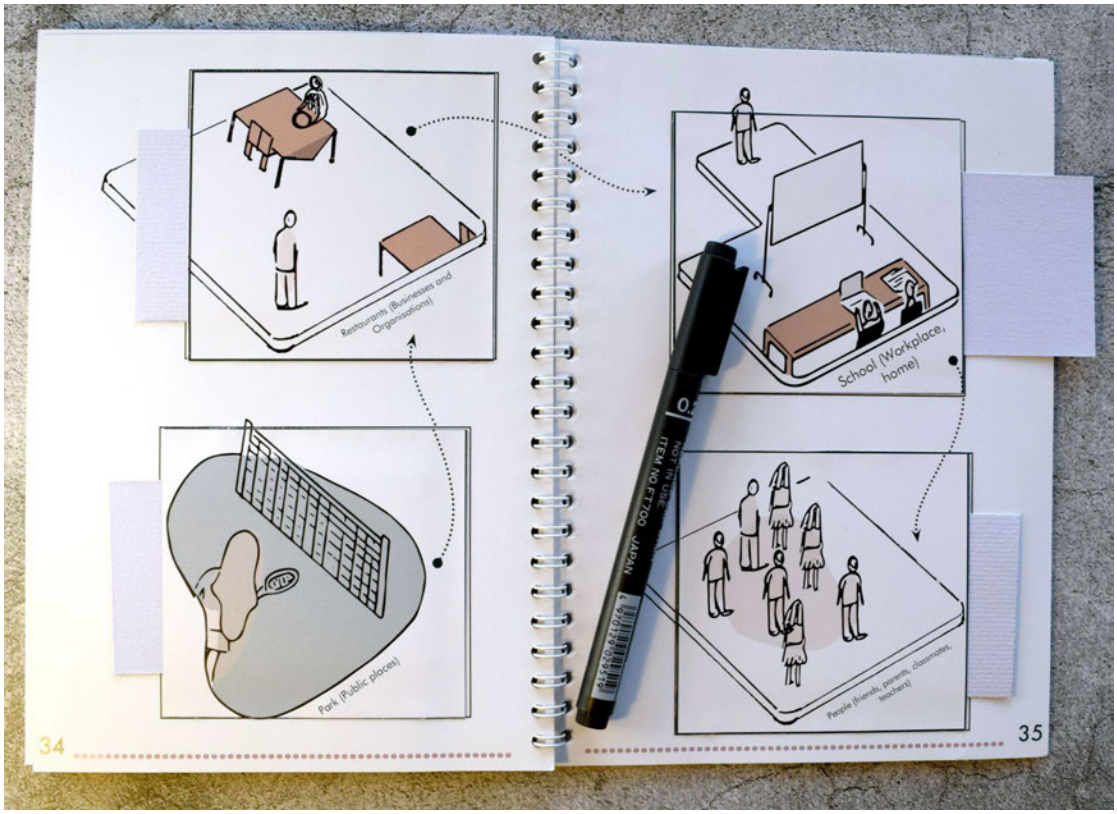


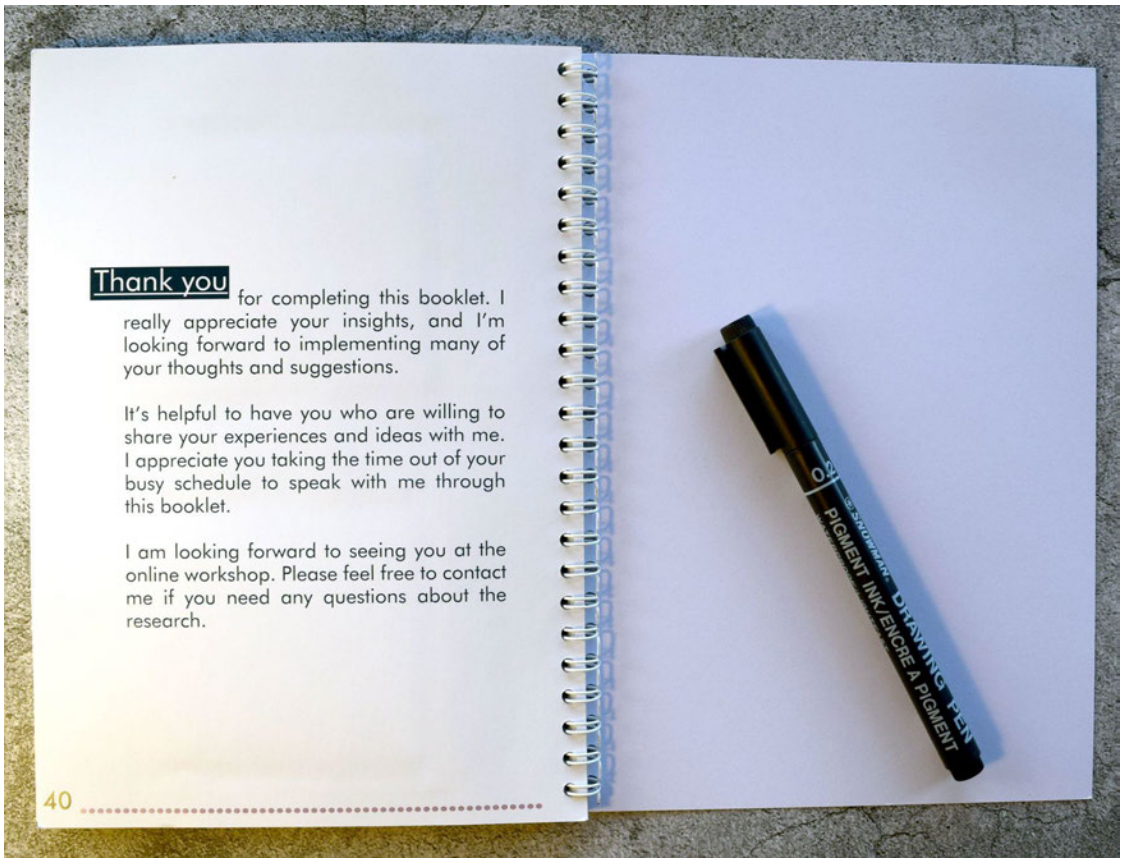

Describe
How does this experience impact your character relationship with other people? This relationship can be with your partner, family, friends, colleague, flatmates, etc.
Please draw here.
16
17


So, in your opinion, What is respect in an online environment?
2
ACTIVITY
Establishing Ground Rules for respect in an online environment
The purpose of activity 2 is to allow you to set your ground rules for protecting users in an online platform. Imagine you have designed your own social media/ or online platform. To maximise respect in your online platform, you establish some ground rules. These ground rules can be applied to users or your online platform. These ground rules can be guidelines, etiquette, informal rules, requirements, code of conduct for users to follow, and parallel sets for the providers of your service.
20
21


What are the ground rules for users?
What are the ground rules for your online platform?
24
25


When your character feels respected in an online environment
After your character feels respected, how does she/he realise that the online interaction was respectful?
Communicating online, after feeling respected in an online environment
How has your character judged the situation?
28
29


Restaurants (Businesses and Organisations)
School (Workplace, home)
Park (Public places)
People (Friends, parents, classmates, teachers)
34
35


Thank you for completing this booklet. I really appreciate your insights, and I'm looking forward to implementing many of your thoughts and suggestions.
It's helpful to have you who are willing to share your experiences and ideas with me. I appreciate you taking the time out of your busy schedule to speak with me through this booklet.
I am looking forward to seeing you at the online workshop. Please feel free to contact me if you need any questions about the research.
40
PIGMENT INK/ENCRE A PIGMENT

Appendix B. An overview of Interview questions for stakeholders

Green 1/4

- First of all, thank you for taking part …

Familiar with Zoom + Disable the video + record

- Yourself

Introduce yourself… job, why, background

Knowledge, training…… mental health, communication online

- Computer engineering role

What are the roles of the computer engineer in designing digital technology?

What is your position/ perspective on online communication?

Any study about ethics?

Who is responsible?

When you are designing how people communicate/ or use digital tech, What Is the first priority?

What does it mean to have better communication online? Fast? Understandable?

The impact of media/digital technology?

What are the challenges to design in an ethical way?

Measure the impact of digital tech? How?

- Cyberbullying

Define cyberbullying....Why

Cyberbullying vs. bullying

The ways people can protect themselves/ can prevent CB?

How can digital tech provide support and reduce CB?

The impact of CB on people's everyday life

- Disrespect in an online environment

Define....Why

How do you know it is disrespectful?

Online vs. face-to-face

What are the different aspects of respect?

How to evaluate if the communication was disrespectful

- Next

Tuesday 6th April at 5 pm

Starter kit two group meeting (Zoom/Miro) + Start with Zoom + email info about Miro/ how to join beforehand

- Hand you the starter kit...this weekend

Any questions

Appendix C. An overview of Interview questions for young adults

Teal

- Thank you for agreeing to participate

Not be able to identify any info about you

Share transcribe after the interview

Can I record? Use colour instead of names

- Yourself

Introduce yourself… job, why, background

Knowledge, training…… communication online, digital technology, running a business online

- Online business

Describe the journey of getting into social media?

Different from personal social media? In what aspects?

Do you like to promote yourself online? What if there was another option? Offline?

How did you create a safe place? Is it your/tech responsibility?

Have you ever promoted respect online? What does it mean for your business?

- Cyberbullying

Define cyberbullying….Why

Example of CB…witness? Heard?

Cyberbullying vs. bullying

The impact of CB on people's everyday life

Do you think the relationship is a factor in an online space?

- Respect in an online environment

Define....Why

Examples when you have heard someone feeling disrespected in an online space

Online vs. face-to-face

The ways people can protect themselves/ can prevent

- Factors to promote respect and reduce CB

Which one is important? Why?

Which one is not important? Why?

- Thanks again

Any questions?

Appendix D. An overview of ethical documents

Form 2: Full ethical assessment

THE GLASGOW SCHOOL OF ART

Please complete all sections unless advised otherwise by Research and Enterprise. Questions highlighted in **bold** and *italicised* are particularly important and answers must be detailed or there will be a delay in obtaining ethical approval.

Upon completion, please email to research@gsa.ac.uk. Your application will then be sent for review by members of the GSA Research Ethics Sub Committee.

1. APPLICANT DETAILS

Name of researcher (Applicant):	Poopak Azhand
School:	Innovation School
Project Title:	Cyberbullying through the lens of Interaction Design
Funder:	
Date work is scheduled to begin:[1]	28st of September

2. RECRUITMENT

a)

Number of participants required:	Five to six
Will recruitment be direct (led by the researcher) or indirect (led by an organisation / third party)?	Indirect

b) If your study involves INDIRECT recruitment, please detail the recruitment plan covering: i) organisation / institution / individual in charge of identifying possible participants; ii) how they will recruit individuals (letters, phone calls etc.); iii) any individual who has direct contact with participants; iv) any ethical protocols the third party has in place; v) level of permission that third party has to disseminate information on behalf of the participants (append any documents if necessary)

Two different groups of participants will be recruited in this study. First group of participants are six young adults who living in Scotland. The recruitment of this participants will be possible through TRIUMPH Network, SICSA and GSA student association. The participants will be recruited with the help of both these gatekeepers within their Network. They can access to young people (18-24 years old), academics, health practitioners, and policy-makers aiming to improve youth mental health and wellbeing of young adults. They allow me to connect to participants who have been interested in involving in mental health studies. Within their network will include a short summary of this project and details of which young people would be eligible to take part and how potential participants can get in touch.

The second group of participants are four to six key stakeholders. And, they will participate in one workshop. The key stakeholders will include policy-makers and

[1] We will endeavor to return a speedy response to applicants but you are advised to send us your application as soon as possible to ensure your research timetable is not compromised

academics. They will be recruited in a targeted approach of sending emails to already potentially interested ones.

c) If your study involves DIRECT recruitment (i.e led by the applicant / research team):

Who is in charge of recruitment:

Poopak Azhand

What is the method of identifying participants:

The interested participants will be advised to email me. Within their email, they should address their gender; their city; their age; their ethnicity; their university of study; And whether they can be available for one month _ to two months.

How will participants be invited to take part: (e.g. letters, phonecalls, door to door):

After choosing the participants, I email the participants individually and double-check if they are still available and interested in contributing to my study.

d) Regardless of method of recruitment, what is your exclusion / inclusion criteria for this study:

The age group of participants is 18-24 years old. They should live in Scotland, but not necessary Scottish or British nationality. This study invites young adults who spend lots of times online and have knowledge about online-bullying or have an interested in this project. Also, I will encourage young adults from all over Scotland, with different ethnicity, and gender to take part in this study.

In all cases, append a copy of i) information sheet for participants; ii) consent form; iii) copies of any other documents distributed to participants

3. CONSENT

a) Give a detailed account of the steps taken by the researcher to obtain informed consent from the participants (regardless of method of recruitment):

I email the consent forms to the participants before the first meeting _ one week in advance. I ask them to email the completed forms to me before the first meeting. Then, before the interview, first, I make sure he/she has sent a consent form; and then we read the consent form together in order to make sure that She/he has understood the form. And finally, ask if they have any either concerns or questions about the consent form.

b) How will researchers ensure the participant has capacity to consent:

I make sure that I have given, enough time (about one week) for the participants to make a decision. She/ he has the capacity to consent if she/he understands the information relevant to the decision. Besides, we read the consent form together to make sure that she/ he understands the form.
Hence, if she/ he can make decisions, communicate the decisions, understand decisions, and retain the memory of decisions, then I ensure that the participants have the capacity to consent.

c) If your work requires participants belonging to vulnerable groups (children under 16, adults unable to give consent, prisoners, individuals in dual relationships), what additional steps will be taken to gain consent:

The participants are not vulnerable.

d) If your work requires the consent of a gatekeeper, please detail the steps you will take to ensure participants are not coerced by their gatekeeper. State also whether you plan to obtain additional signatures from participants and if not, why

The gatekeeper is not involved in making decisions for participants' recruitment. Gatekeepers will help to raise awareness of this study as an opportunity for young adults to take part and connect to the suitable participants.

Moreover, gatekeeper might be invited for evaluation workshop as one of the key stakeholders, where participants would not be attended.

e)

How much time will be given for the participant to decide whether or not to take part:	One week, also during workshops, they can change their mind at any stage of their engagement and to not to be part of this study.
By what method will you seek to obtain consent (written, oral, video etc) and why: NB: please be aware of any Data Protection issues here	Due to the pandemic, consent forms send digitally via email and the format of the forms are Microsoft word (.docx). Besides, I can capture verbal consent as part of the recordings of the interviews and workshops.
Will copies of consent be given to participants:	YES
For how long will the copies of consent be retained by the researcher and where will the consent form be stored:	I store the completed forms digitally in GSA One Drive till the end of this PhD.

4. LOCATION

a) If the research activities take place in a third party location (i.e. not on GSA premises), please explain the choice with reference to the study. Append confirmation of permission to use

location given by the owner and confirm that all researchers have been made aware of any local rules and regulations (append if necessary).

The research activities occurs online. So, it doesn't take place in a third party location.

b) If the research activities take place in the participants' home, please CLEARLY explain the choice with reference to the study and why no other location is possible. Detail all measures taken to minimise the risk to both participants and researchers entering the home.

Due to the COVID-19, the research activities occurs online and participants take part in their own accommodations.

5. INCENTIVES

a) Reasonable reimbursements for time and travel compensation are acceptable as incentives to participate in a research study. An acceptable level of reimbursement would be no more than £50 (approximately).

Do you plan any of the following:

Travel reimbursement only	NO
Small incentive only (e.g. gift voucher)	YES, £50 worth of voucher gifts to appreciate their participations.
Travel and small incentive	NO

b) If the incentive exceeds £50, please state the reasons why (note a large financial incentive, whilst appearing generous, could be deemed unethical on the grounds of coercion. See also, the Bribery Act 2010):

6. METHODOLOGY AND ACTIVITIES

a) Please state the methodology employed within the study and give references (literature or any previous work by the researcher) to support their use:

I outline the involvement of users (participants) in this study within the framework of Co-design. Sanders and Stappers (2008) addressed that co-design approach has been used for nearly 50 years under the name of participatory design. Initially, it has "built on the workers' own experiences and provided them with the resources to be able to act in their current situation" (Sanders and Stappers, 2008, p.7). According to Sanders and Stappers (2008) the term co-design "refers to the creativity of designers and people not trained in design working together in the design development process" (p.7). In other words, the co-design approach enables a "wide range of people to make a creative contribution in the solution but critically also in the formulation of a problem, a task that has been predominantly led by designers." (Tsekleves et al., 2018, p. 917). The co-design process goes beyond the traditional designer-user relationship and deepening equal collaboration and contribution between users and designers. The nutshell of co-design is that users, as experts of their needs and experience, become central to the design process (Visser et al., 2005). In the process, the role of designers is a facilitator providing creative ways for users to engage with each other as well as "providing ways to communicate, be creative, share insights and test out new ideas" (figure 5) (Sanders and

Stappers, 2008; Tsekleves et al., 2018, p. 918). Although, Sanders and Stappers (2008) stressed that the role of designers is still crucial in giving form to the ideas.

In the recent decade, considering, the relations between people, digital technology, and the world has become very complex (for more information read technological mediation theory), technology-driven companies have been interested in paying more attention to users' experiences and behaviours, and user-centred approaches (Moggridge, 2007). Since digital technology plays an important role in this study, I would argue that involving people in the process of co-design might lead to interventions that are more acceptable and relevant to users. Besides, this approach builds and deepens equal collaboration between users and designers that has been suggested in technological mediation theory.

b) For each activity employed please detail: i) its purpose; ii) direct correlation to the research outcomes; iii) how any analysis will be performed. **Copies of all material given to participants must be appended to this form wherever possible.**

ACTIVITY 1: (e.g. questionnaire, focus group, interview etc),

Activity 1: Semi-structured interview

A semi-structured interview is a qualitative data collection strategy and commonly used in health services research and beyond. This method consists of a series of open-ended questions, guided by a flexible interview structure and supplemented by follow-up questions, and probes (Remler and Van Ryzin, 2015; Cooper et al., 2014). It allows exploring participants' perceptions, thoughts, feelings and the reasons underlying their decisions (Remler and Van Ryzin, 2015). Also, the semi-structured interview assures the researcher all the interviews cover substantially the same topics. Moreover, the interview method helps to build a stronger relationship with the participants and make them feel more comfortable.

Interviewing participants as a first activity helps me to build relationships with the participants. In addition, it will allow them to feel more comfortable rather than joining a workshop first.

The interviews will take place 26th-31st October via Zoom. The interview method allows me to understand participants and key-stakeholders understanding of cyberbullying and online communication respectfully. Participants' interviews would be focused on the definitions of cyberbullying and respectful/disrespectful online communication in their opinion. And key-stakeholders interviews would be centred on their cyberbullying studies, and cyberbullying strategies.

Zoom is a video conferencing platform where I can virtually interview participants. I will send the Zoom meeting link before the meeting and participants can join the Zoom meeting by clicking on the join link. Besides, if participants want to remain anonymous on the group sessions, Zoom allows them to disable their camera and change their name. According to the participants' consent form, I will use Zoom to record the interview in form of video and audio, if it is possible. After the interview, I ensure to store the data _excluding sensitive participants data_ on GSA One-drive where only myself and my supervisors can access to the data.

Purpose: The purpose of the semi-structured interview in this stage is to clarify participants' understandings of cyberbullying and respectful online communication.

Direct correlation to the research outcomes: Both activity 1 and 2 address the first sub-question: how can Interaction Design be used to investigate the young adults' (18-24 years old) understanding of respect in the context of cyberbullying in Scotland? And the outcome of this activity will be analyse in order to answer the research question.

Analysis: After collecting qualitative data through workshop 1 and interviews (next activity), I would look for patterns and themes. To arrive at consolidated descriptions, I would employ the Thematic Analysis (Braun and Clarke, 2006). Thematic Analysis method helps to generate insights on participants' perceptions of online communication in a respectful way (Ibid). Data sets in this study will be participants' behaviour surrounding their online communication, their motives, perceptions, and interpretations from workshops and interviews. Table 1 demonstrates the brief description of six phases of thematic analysis.

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

Table 1. Phases of Thematic Analysis with the description; source (Braun and Clarke, 2006, p. 87).

ACTIVITY 2: (e.g. questionnaire, focus group, interview etc),

Activity 2: Conduct Workshop 1

Six young adults (18-24 years old) will participants in workshop 1. The first part of the group workshop, each participant complete diagram 1 individually using the starter kit, and then they brainstorm the ideas in a group. For the brainstorming, I will make a digital format of diagram 1 and I ask participants to write their opinion on the diagram, using digital sticky notes.

In workshop 1, before the activity starts, I explain diagram 1 to the participants. Then, as their first (individual) activity, I would ask participants to complete diagram 1 by providing different examples of cyberbully incident. They can use their starter kit to complete the map. Afterwards, they should present their maps to others on Miro.

The next activity associated with their understanding of respectful communication. In diagram 1, they should identify where they think respectful communications are happening and the challenges they face. So, I ask participants to first identify the network of communication between elements, for instance, participant's friends (element) call (communication) the participants (element) via mobile phone (element). Then, by two different colours, I ask them to show if the communication is respectful or disrespectful: red for disrespectful communications and blue for respectful communications. Finally, I ask

them to present their maps and explain the reasoning behind the colours. If participants didn't fully explain their maps and the reasoning behind it properly, I would ask for the follow-up interview for clarification.

The workshops occur on Miro and Zoom. Miro is a virtual tool for the engaging workshop. It enables everyone on the workshop to actively participate and facilitates remote team collaboration. Miro's features include video chat, pre-built template, sticky notes, online whiteboard platform, and voting. Before workshop 1, I will send a Miro invitation link. For joining the workshop session, participants need to make a Miro account. During the interview, I will help participants to sign up and I will explain how to use Miro.

Besides, if participants want to remain anonymous on the group sessions, Zoom and Miro allow them to disable their camera and change their name. According to the participants' consent form, I will record the session in form of video and audio, if it is possible. After the session, I ensure to store the data _excluding sensitive participants data_ on GSA One-drive where only myself and my supervisors can access to the data.

Purpose: It enables me to collect qualitative data related to participants' thoughts, and beliefs regarding their understanding of cyberbullying and respectful online communication and its relation to the physical world.

Direct correlation to the research outcomes: Both activity 1 and 2 address the first sub-question: how can Interaction Design be used to investigate the young adults' (18-24 years old) understanding of respect in the context of cyberbullying in Scotland? And the outcome of this activity will be analyse in order to answer the research question.

Analysis: I will employ the Thematic Analysis. Please for more information read Activity 1.

ACTIVITY 3: (e.g. questionnaire, focus group, interview etc),

Activity 3: Conduct Workshop 2

Workshop 2, similar to workshop 1 is a group workshop and has two sessions. Six young adults (18-24 years old) will participants in workshop 2 as well. Also, the workshop occurs on Miro and Zoom as well. For more information about Miro and Zoom read activity 2.

Participants for their individual activity can use the starter kit. For the group activity, I will digitalise diagram 2 and 3 on Miro. So, After their individual activity, they will brainstorm the ideas on diagram 2 and 3 with the help of digital sticky notes.

The first session focuses on how to support and enable respectful online communication as well as its challenges and the second part of the workshop focussing on the key actions of respectful online communication.

First session: By exploring the factors that challenge respectful online communication, it will demonstrate the principle issues that influence cyberbullying and provide opportunities for interventions to have more respectful online communication.

Before workshop 2, I send diagram 2 as tools for this workshop. In workshop 2, first, I ask the participants to identify the challenges surrounding respectful online communication from workshop 1. Then, by asking two questions, participants will be encouraged to

complete the diagram in two steps. The questions are: 1. Have you ever experienced a negative online interaction/time? When you felt dis-respected online or someone they know had this experience? How do you decide whether it is a negative interaction? Why? What is your impression of the situation? And why?

2. How do you judge this type of interactions? What was your response/reactions to the situation in an online platform? Does this interaction change your experience of online communication? Would you consider it, before communicating online? Will you change anything to protect yourself or others?

Then each participant presents their diagram by answering two questions. And finally, by addressing the third research question, we will brainstorm the factors and issues. And discuss the relationship, similarity, and differences between the presented diagram to develop a shared vision about the factors promoting disrespectful online communication and cyberbullying and to answer the research question.

Second session: In the first session, participants were asked to look at the first diagram they have generated from workshop 1. In the part of their activities, they have identified different respectful online communication. Then for each identified respectful online communication, I will ask participants to complete diagram 3 in three steps by asking these questions: 1. What are the possible actions provided by online platforms, _such as social media_ that determine how you should have respectful communication? 2. What are the possible reactions or pieces of information provided by online platforms while you have respectful communication? 3. What are the online platform feedbacks about your respectful communication?

Next, I focus on the challenges of respectful online communication. Participants will be encouraged to consider challenges of respectful online communication _from workshop 2_ and think about solutions, or opportunities before, during, and after communication to promote respect in an online environment. Within this activity, participants would be asked to complete diagram 3 by asking three questions: 1. what are the possible actions provided by online platforms, _such as social media_ that determine how you should not have respectful communication? 2. What are the possible reactions or pieces of information provided by online platforms while you have disrespectful communication? 3. What are the online platform feedbacks about your disrespectful communication? Finally, this workshop will end with a discussion about the factors that can promote respectful online communication. It is an opportunity to evaluate their factors and develop more factors in greater depth.

Purpose: The first session of this activity aims to understand the factors facilitating respectful online communication, using the insights gathered in previous activities and the second session aims to explore the factors that both promote cyberbullying and challenge respectful online communication.

Direct correlation to the research outcomes: Activity 3 address the second and third sub-question: What are the factors that promote cyberbullying and disrespectful online communication from the perspective of young adults (18-24 years old) living in Scotland? What are the factors that facilitate online communication respectfully from the perspective of young adults (18-24 years old) living in Scotland? And the outcome of this activity will be analyse in order to answer the research question.

Analysis: I will employ the Thematic Analysis. Please for more information read Activity 1.

ACTIVITY 4: (e.g. questionnaire, focus group, interview etc),

Activity 4: Conduct Workshop 3

I will organise a feedback/validation workshop with key stakeholders. Academics and cyberbullying organisations (such as Respectme and SAMH) would be invited to this workshop. This workshop has three sessions: The first session focuses on how to support respectful online communication and the second part of the workshop focussing on key actions/ requirements of online platforms. And the third session provide feedback in relation to the outcome of the previous workshops with participants. This workshop also occurs on Miro and Zoom. For more information read activity 2.

First session: In the first session, I will ask participants to complete diagram 3 in three steps by asking these questions: 1. What are the possible actions provided by online platforms, _such as social media_ that determine how you should have respectful communication? 2. What are the possible reactions or pieces of information provided by online platforms while you have respectful communication? 3. What are the online platform feedbacks about your respectful communication?

Second session: Participants will be encouraged to think about solutions, or opportunities before, during, and after communication to promote respect in an online environment. Within this activity, participants would be asked to complete diagram 3 by asking three questions: 1. what are the possible actions provided by online platforms, _such as social media_ that determine how you should not have respectful communication? 2. What are the possible reactions or pieces of information provided by online platforms while you have disrespectful communication? 3. What are the online platform feedbacks about your disrespectful communication? Finally, this workshop will end with a discussion about the factors that can promote respectful online communication. It is an opportunity to evaluate their factors and develop more factors in greater depth.

Third session: Within workshop 3, I present the findings gathered from the previous workshops with participants. The findings would be in form of recommendations and guidelines. And then the workshop will follow with brainstorming this recommendations. This activity allows validating the study and providing feedback from key stakeholders for further development.

This workshop will evaluate the potential impact of this study and the possibility of the implementation of the proposed recommendations and guidelines _as strategies_ at governmental, community and academic level. It investigates whether these guidelines and recommendations can be applied within the key stakeholders' role at community and governmental level; and the possibility of future research or strategies to cyberbullying at the academic level. Besides, they will give feedback on whether these recommendations and guidelines can apply to wider groups of participants or this approach may lead to different results compared to other forms of research.

Purpose: This activity aims to provide an opportunity for stakeholders to review the study and provide feedback.

Direct correlation to the research outcomes: Activity 5 address the research question: how can Interaction Design be used as an approach to explore promoting respect among young adults (18-24 years old) in Scotland in an online environment in the context of cyberbullying? **Analysis**: I will employ the Thematic Analysis. Please for more information read Activity 1.

If there are any further activities, please continue and append to this form.

c) State how harm, distress or anxiety to the participants will be minimised during the study

In order to manage these potential risks to psychological wellbeing, first of all, I will provide a brief explanation of each workshop beforehand which describe the aim of the workshop and reasoning behind the questions and diagrams. Secondly, I will provide a list of cyberbullying services and help-lines to support beyond their participation in case of any distress. And finally, whenever participants feel distressed they can leave the study at any time.

d) Please state the time commitment of the participants and whether you plan repetitive testing as part of the study

Participants should be available for one month_ to two months_, a maximum of four hours per month. In interview activity, I allow participants to choose to have all two workshops in one day (2:30 hours including breaks), or separate days in one week, or separate days in separate weeks. Participants engagement within this study is iterative, therefore, I might need to repeat the workshops (cycle); and two months commitment will cover the next workshops if it needed.

e) What is the statistical power of the study:

Not applicable

If you plan to leave participants with information at the close of the study (e.g. leaflets with further information, details of support groups etc), please append to this form.

7. PARTICIPANT DATA

All researchers must abide by the Data Protection Act 1998 and the GSA Data Protection Policy – it is the responsibility of the researcher to familiarise themselves with each.

Here we make the distinction between personal data (anything that identifies a participant such as name, address, phone number) and research data generated by that participant (interview, photos of etc) as each requires a different for handling and storage.

	Personal Data	**Research Data**
Who is the custodian of the data:	Poopak Azhand	Poopak Azhand
Where will the data be stored:	GSA One Drive	GSA One Drive
Who has access to the data:	Poopak Azhand and supervisors	Poopak Azhand and supervisors

Will permission to identify the participants be sought as part of informed consent	YES	
What methods will be undertaken to guarantee anonymity (e.g. coding, ID numbers, use of pseudonyms)	I will use pseudonyms. After finishing the interview and workshops transcriptions, I find and replace all the actual names in my computer word processor to ensure that all participants' names have been changed to pseudonyms. Moreover, I ensure that any data containing identifying information such as names are stored securely, and I will password protect files in both Microsoft word.	
How will the link be broken between participant details and information given as part of study?	Consent form is the only document that links the subject to the study.	Consent form is the only document that links the subject to the study.
How long will the data be stored for? (Participants must be made aware of this at point of consent).	The data will be stored for the duration of the PhD and then destroyed securely afterwards.	The data will be stored for the duration of the PhD and then destroyed securely afterwards.
How will the security of the dataset in its entirety be secured?	In accordance with Data Protection Act (2018), all data which is stored at GSA One Drive will be held in a secure database and used solely for School purposes. The information provided will not be passed to any third party.	In accordance with Data Protection Act (2018), all data which is stored at GSA One Drive will be held in a secure database and used solely for School purposes. The information provided will not be passed to any third party.
How will the data generated by analysed and used?	I will not use the personal data for analysis.	As I described in Activity 1, data will be generated from all workshops and interviews and the gathered data will be analysed by the Thematic analysis method.
Who will have access to the data beyond the project (if the data is being retained, not destroyed)	No one	Supervisors, GSA staffs and participants
Does the research funder require the participant data generated be lodged with them upon conclusion? If yes, give details	No	No

8. SAFETY

All researchers must abide by the GSA Health and Safety Policy (http://www.gsa.ac.uk/about-gsa/key-information/occupational-health-and-safety/) – it is the responsibility of the researcher to familiarise themselves with this.

a) How will the safety of the participants be ensured during this study?

Because interviews and engagement would happen online. Participants would be safe physically.

b) If your work requires participants belonging to vulnerable groups (children under 16, adults unable to give consent, prisoners, individuals in dual relationships), what additional steps will be taken to ensure their safety:

c) If the study involves work on non-GSA premises, how will the safety of researchers working off site be ensured?

I will let my supervisors know the exact dates and times of the workshop sessions and interviews. Moreover, if all two workshops occurs in one day, in terms of ergonomics and screen time I make sure to have 5 minutes breaks after 45mintes of workshop.

9. DECLARATION

Please ensure you have answered all the questions herein and have appended the following documents:

Consent form YES Participant Information Sheet YES: for participants and key stakeholders

Follow up information YES Any other relevant documentation (please state): A list of Mental health services for support; Feedback questions; e-newsletter adv

I certify that the information contained in this application is accurate. I understand that should I commence research work in absence of ethical approval, such behaviour may be subject to disciplinary procedures.	
Name of Principal Investigator:	
Signed:	
Date:	

Please email the completed form and associated documents to Research and Enterprise (research@gsa.ac.uk).

For office use only:

Approved (Convenor of GSA Research Ethics Committee) YES / ~~NO~~	Declined (Convenor of GSA Research Ethics Committee) ~~YES~~ / NO

Signature:

[redacted]

Comments?

I confirm that ethical approval has been granted for these project activities.

Please note that as the Triumph network includes young people with experience of mental health issues, it is possible that some participants could be vulnerable, particularly given the potentially emotive discussion topic. Particularly care should therefore be taken when assessing ability to give informed consent, and to being very clear about the right of a participant to withdraw if distressed (as you have already indicated).

Approved (Member of GSA Research Ethics Committee) YES	Declined (Member of GSA Research Ethics Committee) NO

Signature:

[redacted]

Comments?

Diagram 1

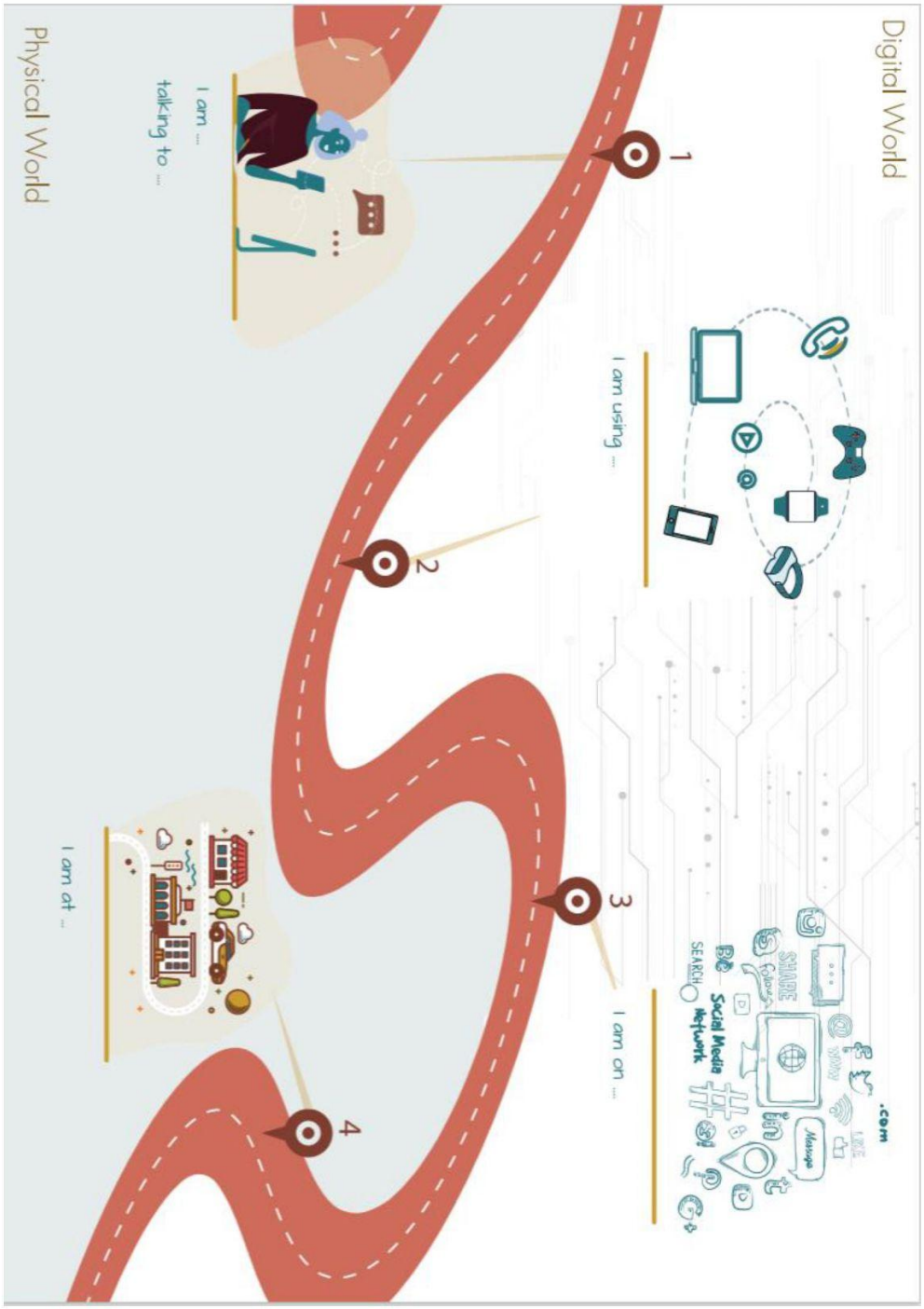


Diagram 2

Examples of Online Communication	How do you judge cyberbully situation? what was your response/reactions to the situation in an online platform?	How do you decide whether cyberbullying occure? Why? What is your impression of the situation? And why?

Diagram 3

Examples of Online Communication	What are the possible actions provided by online platforms that determine how you should have respectful communication?	What are the possible reactions or pieces of information provided by online platforms while you have respectful communication?	What are the online platform feedbacks about your respectful communication?

Form 1: Preliminary Research Ethics & Risk Form

Introduction The Glasgow School of Art has a duty to ensure its research and knowledge exchange projects undergo appropriate ethical review before commencement. This includes both internally and externally funded projects executed by GSA staff and postgraduate research students. In addition to basic institutional requirements, main research funders (e.g. Research Councils) now require assurances that projects have been through an appropriate ethical review and that the research will be conducted within a research governance framework embedded within the institution.

Who needs to complete this? Any staff or research student: i) beginning a new piece of work; ii) uncovers an arising issue in a current piece of work; iii) submitting a grant application

What happens to this form? Upon completion please send to research@gsa.ac.uk for review by Research and Enterprise. It will either be signed off at this stage or, if the project is more complex, or carries higher risk, you may be asked to provide a more detailed assessment of ethical issues and justification of your proposed approach.

Do I need to provide anything else? Yes, a description of the research the form pertains to, this could be a grant application, few paragraphs or doctoral student application, just something that sets the answers in context.

PART A: Preliminary Research Ethics Assessment

Applicant	Poopak Azhand
Project Title	Cyberbullying through the lens of Interaction Design
School / Research Centre	Innovation School
Collaborators	
Supervisor (if student)	Dr Gordon Hush and Dr Tara French and Dr Cara Broadley
Anticipated project start date:	28st of September

VULNERABLE GROUPS	YES	NO
Children under 16	☐	☑
Adults unable to give consent under the Adults with Incapacity Act (2000) Scotland	☐	☑
Prisoners (incl those convicted under UK law, detainees or asylum seekers)	☐	☑
Individuals in dual relationships (e.g. students, staff, family members of GSA staff etc)	☐	☑
SPECIAL PERMISSION	**YES**	**NO**
Do you use animals or other organisms covered by the Animals (Scientific Procedures) Act?	☐	☑
Does the research involve the use of human tissue?	☐	☑
RESEARCH IN CLINICAL SETTING	**YES**	**NO**
Will any of your participants have connections to the NHS? (staff, patients etc)	☐	☑
Do you plan to recruit using NHS data or by advertisement on NHS premises?	☐	☑
Does your project qualify under the NHS definition of 'research'?	☐	☑
PARTICIPANTS & CONSENT	**YES**	**NO**
Are your participants member of the public?	☑	☐
Are your participants professional / peer in a similar capacity to the researcher?	☐	☑
If you have answered 'yes' to either of the two preceding questions, will you take informed consent?	☑	☐
Do you need to use a gatekeeper to access or recruit participants to your project?	☑	☐
Is the research covert, deceptive or misleading to participants?	☐	☑

Will participants receive payment for their time (exclude travel / refreshments) ?	☐	☑
METHODS AND DATA	**YES**	**NO**
Does your research involve interviews / workshops / questionnaires at any point?	☑	☐
Will participant responses be kept anonymous at the point of data **collection**?	☐	☑
Do you plan to use anonymity in **reporting** of data?	☑	☐
Will you need to store participants' personal information?	☑	☐
Could any data you source / generate / disseminate be deemed security sensitive under Counter Terrorism Security Act) ?	☐	☑
Does your research require you to take photographs of participants, film participants or record their voice?	☑	☐
Will you use a third party to process your research data (e.g transcriber)?	☐	☑
Will your research require you to source data protected by copyright (e.g images, archives)?	☐	☑
Do you require participants to sign over any intellectual property rights to the institution?	☐	☑
Will you alter a participant's contribution (beyond anonymising / blur faces on a photo etc) ?	☐	☑
Are you conducting internet only research or similar, where the identity of participants cannot be verified?	☐	☑
SAFETY & WELLBEING	**YES**	**NO**
Does your research involve access to third party premises (e.g participant's home, community centre) ?	☐	☑
Could the study result in distress to the researcher beyond that which could be reasonably expected?	☐	☑

Will the project involve discussions of sensitive topics that could induce upset, anxiety or harm? If so, state:	☑	☐
Does the research involve using any kind of equipment, heavy lifting or sharp objects? (A Health and Safety Assessment must be carried out if 'yes')	☐	☑
Has the researcher considered any impairments participants might have and made adjustments?	☐	☑
Will the research take place out with the UK? If so, state location:	☐	☑
DISSEMINATION	**YES**	**NO**
Will there be a public exhibition of research outcomes?	☑	☐
Will you use social media to report on your project while still in progress? (e.g blogging, Facebook page)	☐	☑
Will there be a de-brief or report sent back to participants?	☑	☐
RESEARCHER INTEGRITY	**YES**	**NO**
Is there any conflict of interest within the work, from collaborators or sponsors?	☐	☑
Could any issues of conflict arise in the reporting of the results?	☐	☑
Has the project undergone peer review?	☑	☐
Can you remain neutral as a researcher in the pursuit of the project?	☑	☐
(STUDENTS ONLY – IN CONFIDENCE) Could any element of the supervisor – student relationship adversely affect or undermine the project?	☐	☑

Acknowledgement: This form was developed from work within the Miriad Ethics Research Project, J Spencer, Manchester Metropolitan University and Manchester School of Art, 2015.

Please feel free to add further details on the project relevant to this application:

I will record both interviews and workshops and I might screenshot the proces

Researcher checklist	Yes	No
I have read each of the following i) GSA Research Ethics Policy; ii) GSA Health and Safety Policy; iii) GSA Data Protection Policy	☑	☐
For projects that include participants, I have provided i) sample information sheet; ii) sample consent form, I intend to use	☑	☐

I certify that the information contained in this application is accurate. I understand that should I commence research work in absence of ethical approval, such behaviour could be subject to disciplinary proceedings.

Signed:	Date: 28/05/2020

PART B: Insurance Research Risk Assessment

The purpose of this section is to identify any risks early in the research development process such that they can be mitigated for and, if required, additional due diligence can be carried out or additional research insurance can be obtained. With the increase in diversity of research at GSA, it has brought challenges for our research governance processes which this section is attempting to clarify.

Note this section does not draw out all possible risks in a research project only those mist pertinent to our insurance policy. You are strongly encouraged to have a project specific research register to capture all possible risks within your project.

Please answer yes or no to the following questions:

ACTIVITY	YES	NO
Does your research involve the NHS in any way (e.g. access to buildings, staff or records etc)?	☐	☑
Does any of your research involve health or social care in any capacity (e.g working at a care home, interviewing due to health condition or profession etc)?	☐	☑
Does your work involving medical devices or any kind or in any capacity including those commercially available?	☐	☑
Does any aspect of your research involve working with animals or working with human / animal tissue or products (e.g. hair, skin, blood samples or use of animals in artwork etc)?	☐	☑
Will you be operating drones or any aerial devices?	☐	☑
Will you or anyone else be participating in what could be described as extreme activities (e.g. visiting remote locations, working in unsafe environments etc)?	☐	☑
Does the research require you or participants to work alone in any way or at any stage of the project?	☐	☑

If you answered YES to any of the questions above please proceed to the next page

If not, please **Save As** and return to research@gsa.ac.uk

For each activity you have said YES to on the previous page, please outline what you feel are the risk(s) (note there could be more than one risk per activity), what you feel the risk score might be (ie how bad would an outcome be) and what the likelihood of that risk occuring might be. You are also asked what mitigating actions you can put in place to avoid the risk coming to pass.

Risk	Risk score (H / M / L)*	Likelihood (H / M / L)*	Mitigation
e.g. experiment needs to be carried out in participants home without researcher present	M	L	i) Screen participants using inc / excl criteria; ii) give health and safety details incl what is expected vs unexpected; iii) give information about what to do in case of an adverse effect

* H = High; M = Medium; L = Low. We are looking for your best judgment in your perception of any risk(s) identified.

Please **Save As** and return as an attachment to research@gsa.ac.uk

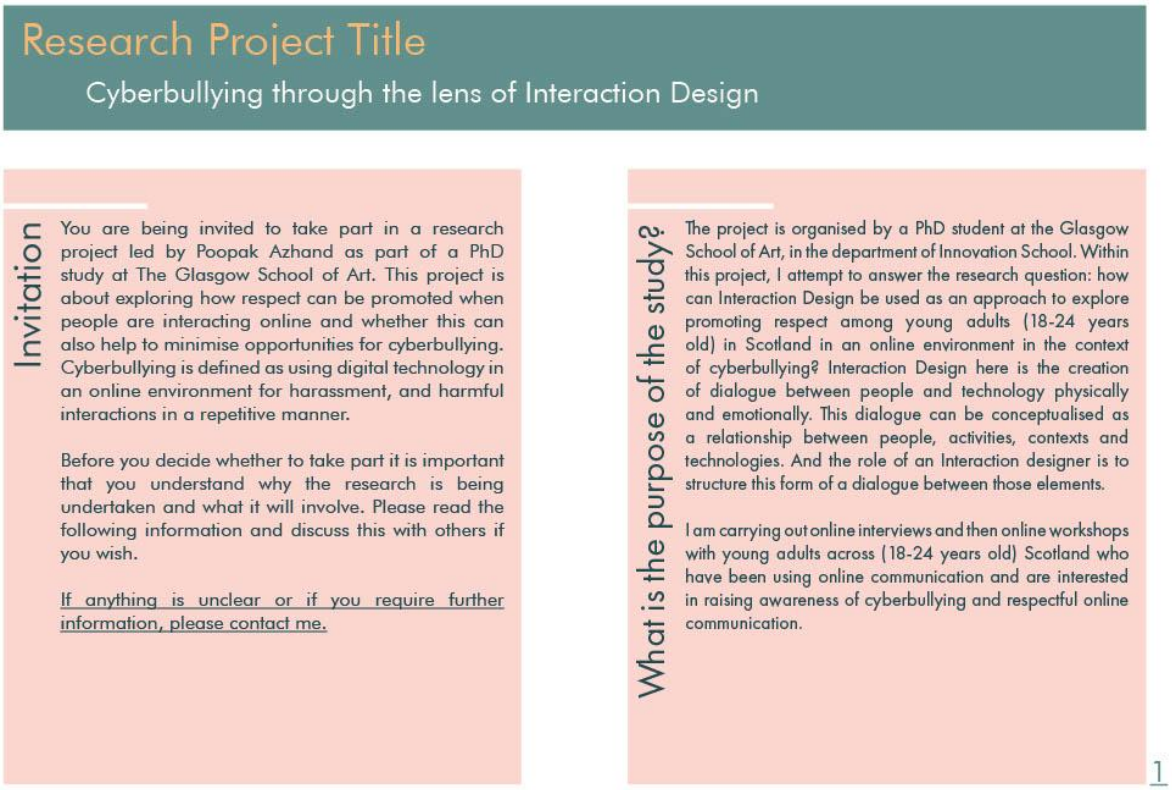
Appendix E. An overview of the recruitment advert

You are being invited to take part in a research led by a PhD student at The Glasgow School of Art. This project explores how respect can be promoted when people are interacting online and whether this can help to minimise opportunities for online-bullying. Online-bullying defined as using digital technology in an online environment for harassment, and harmful interactions. The information I gather will help to identify opportunities for inventions in anti-cyberbullying which are based on real-life experiences of young adults living in Scotland.

I am inviting any young adults (18-24 years old) who are living in Scotland to take part in one online interview and two online workshops sessions and within one month; each session will last approximately 1 hour. The sessions will involve sharing your (or someone you know) experiences of online communication, and ideas for strategies on promoting respectful communication.

Please contact p.azhand2@student.gsa.ac.uk for further information.

Appendix F. An overview of participant's information sheet: Young adult's version



Research Project Title

Cyberbullying through the lens of Interaction Design

Invitation

You are being invited to take part in a research project led by Poopak Azhand as part of a PhD study at The Glasgow School of Art. This project is about exploring how respect can be promoted when people are interacting online and whether this can also help to minimise opportunities for cyberbullying. Cyberbullying is defined as using digital technology in an online environment for harassment, and harmful interactions in a repetitive manner.

Before you decide whether to take part it is important that you understand why the research is being undertaken and what it will involve. Please read the following information and discuss this with others if you wish.

If anything is unclear or if you require further information, please contact me.

What is the purpose of the study?

The project is organised by a PhD student at the Glasgow School of Art, in the department of Innovation School. Within this project, I attempt to answer the research question: how can Interaction Design be used as an approach to explore promoting respect among young adults (18-24 years old) in Scotland in an online environment in the context of cyberbullying? Interaction Design here is the creation of dialogue between people and technology physically and emotionally. This dialogue can be conceptualised as a relationship between people, activities, contexts and technologies. And the role of an Interaction designer is to structure this form of a dialogue between those elements.

I am carrying out online interviews and then online workshops with young adults across (18-24 years old) Scotland who have been using online communication and are interested in raising awareness of cyberbullying and respectful online communication.

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Why have I been invited to take part?

I am looking for young adults (18-24 years old) who are living in Scotland. You must be active on either social networking sites or any other online communication such as Skype or online gaming. You have been invited because you have valuable experience to share regarding online communication and cyberbullying. Your experiences could help investigate the factors both promoting and challenging respectful online communication where information and support can be made better.

Since interviews and workshops occur via Zoom and Miro, you need to have access to either computer or smartphone.

Do I have to take part?

Taking part is in this project is completely voluntary and it is your decision. You can withdraw at any time, without giving a reason.

If you would like to be involved, you will be asked to sign a consent form confirming that you understand what is going to happen and are happy to participate.

What will happen to me if I take part?

In this part of the study, I am inviting you to take part in one online interview and two online workshops sessions and within one month; each session will last approximately 1 hour. If you agree to take part, I will both email you the Participant Consent Form and send you the starter kit one week before workshop 1. You will have a week to read the consent form and email it back.

The workshop will involve sharing your (or someone you know) experiences of online communication, your thoughts on cyberbullying and ideas for strategies on ways of promoting respect online in the sessions. In the workshops, you will meet four or five other young adults who have been interested in this project as well. The group sessions will be relaxed and informal. Although, if you wish to remain anonymous on the group sessions, Zoom and Miro allow you to turn off your camera and change your name. During the interview, I provide advice on disabling the camera and changing the name.

There are three stages involved in your participation:

Stage 1

I will post you a starter kit, containing materials that you might need for workshops. Following the recent outbreak of Covid-19, I wear gloves while boxing up the starter kit. The items would be sanitised and sealed. In addition, the amount of infectious virus on

any contaminated surfaces is likely to have decreased significantly by 48 hours. Therefore, to maximise your health and safety, after receiving the parcel do not touch it for 72 hours.

The starter kit includes pens, markers, postal envelopes, post-it-notes, and workshop activities for the workshops. This starter will help you to complete the diagrams at your home and we also brainstorm and conclude the session in an online workshop platform (Miro online workshop). Besides, this will be helpful to prepare yourself for taking part in the online workshop.

Stage 2

Online Interview (approximately 1 hour): The interviews will take place via Zoom at a suitable time for the participants. The interviews will be focused on your definitions and understanding of cyberbullying and respectful/disrespectful online communication.

Zoom is a video conferencing platform where we can talk online. I send you the Zoom meeting link and you can join the Zoom meeting by clicking on the join link. In order to join the Zoom meeting, you do not need to create a Zoom account. You can also download the Zoom app on your smartphone and then join the meeting on your phone.

Stage 3

Two Workshops (approximately 1 hour)- I will use a range of creative activities to support you to share your experiences and ideas of how online communication now and how this communication could become more respectful in order to prevent cyberbullying. In addition, it provides an opportunity for young adults to share their online experiences.

The workshops occur on Miro and Zoom. Miro is a virtual tool for the engaging workshop. It enables everyone on the workshop to actively participate and facilitates remote team collaboration. Miro's features include video chat, pre-built template, sticky notes, online whiteboard platform, and voting. Before the workshop sessions, I send you a Miro invitation link. For joining the sessions, beforehand you need to make a Miro account; signing up to the Miro is free. During the interview, I help you to sign up and I explain how to use Miro. Miro is user-friendly and easy to use. Also, Miro similar to Zoom has a smartphone app where you can join the sessions.

What are the possible benefits and risks of taking part?

Participating in the research is not anticipated to cause you any disadvantages or discomfort. However, In order to manage these potential risks to psychological wellbeing, I will provide a list of cyberbullying services and help-lines to support beyond their participation in case of any distress.

In addition, this study by empowering you allows identifying opportunities for inventions in anti-cyberbullying which are based on your experiences. It is hoped that this study will have a beneficial impact on preventing cyberbullying in Scotland at the community level.

Will my taking part in this project be kept confidential?

All the information that I collect about you during the interview and workshop sessions will be kept strictly confidential. You will not be able to be identified in any reports, videos or publications. Any data collected about you will be stored at Glasgow School of Art One-drive. In accordance with the Data Protection Act (2018), all data which is stored at GSA One Drive will be held in a secure database and used solely for School purposes. The information provided will not be passed to any third party.

What will happen to the results of the study?

Your input will help me to understand cyberbullying and respectful online communication in Scotland. The information you provide will be included in my thesis which will be shared with my supervisors, GSA researchers, other academics, policymakers, and public. A short copy of the outcome will also be made available to you.
The information may also be used in the exhibition, publication, journal article, conference paper and presentations, lectures or broadcasts; therefore, this will be shared online.
Your information will be held in accordance with The Glasgow School of Art Data Protection Policy and no personal identifiable information (such as your name) will be used in any publication without your consent.

Who should I contact for further information?

Poopak Azhand
Email: p.azhand2@student.gsa.ac.uk

Supervisors:
Prof. Gordon Hush
Email: g.hush@gsa.ac.uk

Dr Cara Broadley
Email: c.broadley@gsa.ac.uk

Dr Tara French
Email: t.french@gsa.ac.uk

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What if I have further questions, or if something goes wrong?

If you have any complaints about the project in the first instance you can contact either me or any of my supervisors.

Thank you for taking part in this study.

Need Someone to Talk to?

Please contact one of the services below.

respectme
Scotland's Anti-Bullying Service

Respectme, Scotland's Anti-Bullying Service: 0344 800 8600

YOUNGMiNDS

Call the Parents Helpline:
0808 802 5544

Are you a young person in crisis?
If you need urgent help, text YM to 85258.

shout
for support in a crisis

For support in a crisis, Text Shout to 85258.
If you're experiencing a personal crisis, are unable to cope and need support.
Shout can help with urgent issues such as: suicidal thoughts, abuse or assault, self-harm, bullying, relationship challenges.

BullyingUK
Part of family lives

It supports to anyone affected by bullying.
Helpline: 0808 800 2222

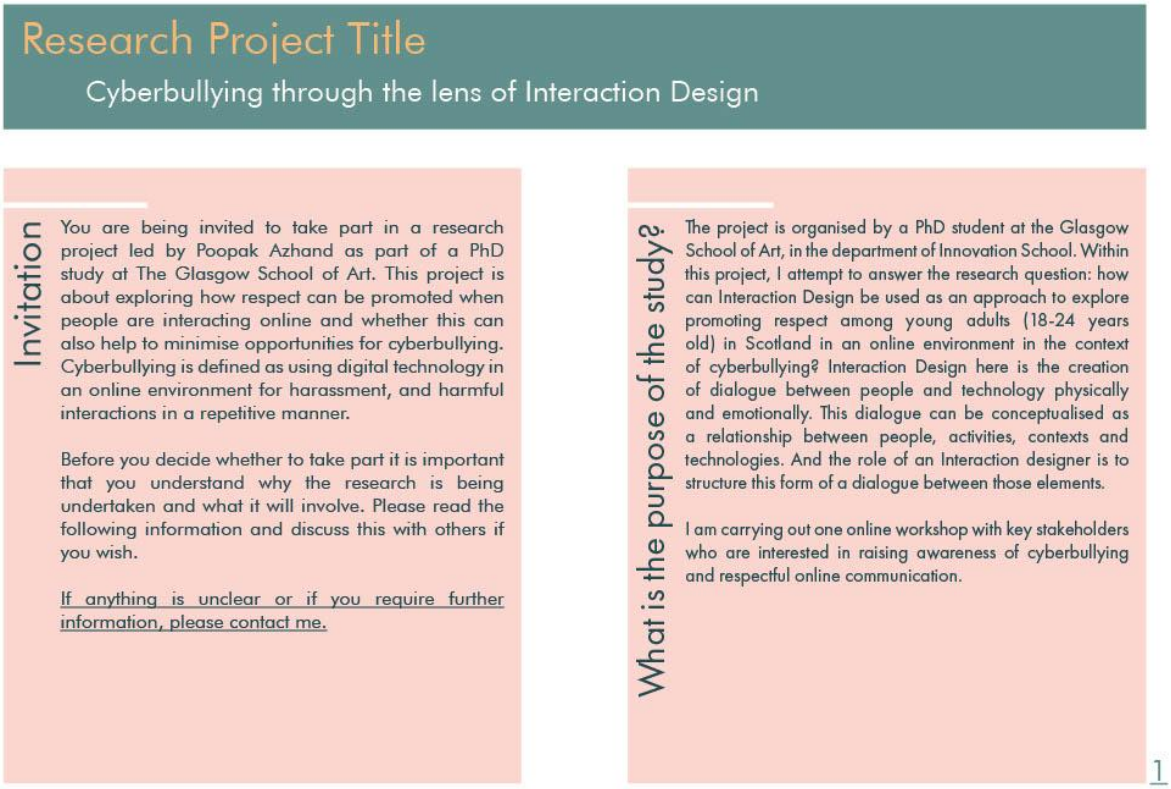
SAMARITANS

Samaritan supports to anyone affected by mental health problems.
Helpline: 116 123

mind
for better mental health

If you need legal advice, you can speak to Mind about: mental health, mental capacity, community care, human rights and discrimination/equality related to mental health issues.
Helpline: 0300 466 6463

Appendix G. An overview of participant's information sheet: Stakeholder's version



Research Project Title

Cyberbullying through the lens of Interaction Design

Invitation

You are being invited to take part in a research project led by Poopak Azhand as part of a PhD study at The Glasgow School of Art. This project is about exploring how respect can be promoted when people are interacting online and whether this can also help to minimise opportunities for cyberbullying. Cyberbullying is defined as using digital technology in an online environment for harassment, and harmful interactions in a repetitive manner.

Before you decide whether to take part it is important that you understand why the research is being undertaken and what it will involve. Please read the following information and discuss this with others if you wish.

If anything is unclear or if you require further information, please contact me.

What is the purpose of the study?

The project is organised by a PhD student at the Glasgow School of Art, in the department of Innovation School. Within this project, I attempt to answer the research question: how can Interaction Design be used as an approach to explore promoting respect among young adults (18-24 years old) in Scotland in an online environment in the context of cyberbullying? Interaction Design here is the creation of dialogue between people and technology physically and emotionally. This dialogue can be conceptualised as a relationship between people, activities, contexts and technologies. And the role of an Interaction designer is to structure this form of a dialogue between those elements.

I am carrying out one online workshop with key stakeholders who are interested in raising awareness of cyberbullying and respectful online communication.

1

Why have I been chosen?

You have been invited because as key stakeholders, you have valuable experience to share regarding online communication and cyberbullying. Your experiences could help investigate the factors both promoting and challenging respectful online communication where information and support can be made better. The key stakeholders are policy-makers and academics.

Since interviews and workshops occur via Zoom and Miro, you need to have access to either computer or smartphone.

Do I have to take part?

Taking part is in this project is completely voluntary and it is your decision. You can withdraw at any time, without giving a reason.

If you would like to be involved, you will be asked to sign a consent form confirming that you understand what is going to happen and are happy to participate.

What will happen to me if I take part?

In this part of the study, I am inviting you to take part in one online interview and two online workshops sessions and within two months; the sessions will last approximately 1 hour. If you agree to take part, I will both email you the Participant Consent Form one week before the workshop. You will have a week to read the consent form and email it back.

The workshop will involve sharing your knowledge and experiences of online communication, your thoughts on cyberbullying and ideas for strategies on ways of promoting respect online in the sessions. In the workshops, you will meet four or five other key stakeholders who have been interested in this project as well. The group sessions will be relaxed and informal.

Although, if you wish to remain anonymous on the group sessions, Zoom and Miro allow you to turn off your camera and change your name. I will provide advice on disabling the camera and changing the name.

What do I have to do?

Stage 1

I will post you a starter kit, containing materials that you might need for workshops. Following the recent outbreak of Covid-19, I wear gloves while boxing up the starter kit. The items will be sanitised and sealed. In addition, the amount of infectious virus on any contaminated surfaces is likely to have decreased significantly by 48 hours. Therefore, to maximise your health and safety, after receiving the parcel do not touch it for 72 hours. The starter kit includes pens, markers, postal envelopes, post-it-notes, and one booklet which contains workshop activities. This starter enables you to complete the booklet individually, at your home. Besides, this will be helpful to prepare yourself for taking part in the online workshop.

Stage 2

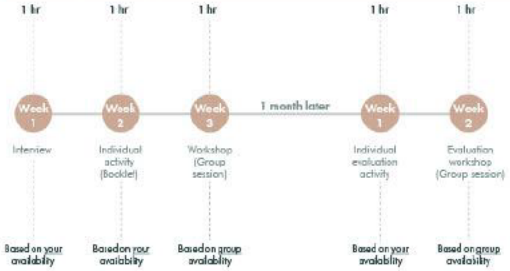
Online Interview (approximately 1 hour): The interviews will take place via Zoom at a suitable time for the participants. The interviews will be focused on your definitions and understanding of cyberbullying and respectful/disrespectful online communication.

Zoom is a video conferencing platform where we can talk online. I send you the Zoom meeting link and you can join the Zoom meeting by clicking on the join link. In order to join the Zoom meeting, you do not need to create a Zoom account. You can also download the Zoom app on your smartphone and then join the meeting on your phone.

Stage 3

Two Workshops (approximately 1 hour)- I will use a range of creative activities to support you to share your experiences and ideas of online communication and how this communication could become more respectful in order to prevent cyberbullying. In addition, it provides an opportunity for young adults to share their online experiences.

The workshops occur on Miro and Zoom. Miro is a virtual tool for the engaging workshop. It enables everyone on the workshop to actively participate and facilitates remote team collaboration. Miro's features include video chat, pre-built template, sticky notes, online whiteboard platform, and voting. Before the workshop sessions, I send you a Miro invitation link. For joining the sessions, beforehand you need to make a Miro account; signing up to the Miro is free. During the interview, I help you to sign up and I explain how to use Miro. Miro is user-friendly and easy to use. Also, Miro similar to Zoom has a smartphone app where you can join the sessions.



What are the possible benefits and risks of taking part?

Participating in the research is not anticipated to cause you any disadvantages or discomfort.

This study by empowering you allows identifying opportunities for inventions in anti-cyberbullying which are based on your experiences. It is hoped that this study will have a beneficial impact on preventing cyberbullying in Scotland at the community level.

Will my taking part in this project be kept confidential?

All the information that I collect about you during the interview and workshop sessions will be kept strictly confidential. You will not be able to be identified in any reports, videos or publications. Any data collected about you will be stored at Glasgow School of Art One-drive. In accordance with the Data Protection Act (2018), all data which is stored at GSA One Drive will be held in a secure database and used solely for School purposes. The information provided will not be passed to any third party.

What will happen to the results of the study?

Your input will help me to understand cyberbullying and respectful online communication in Scotland. The information you provide will be included in my thesis which will be shared with my supervisors, GSA researchers, other academics, policymakers, and the public. A short copy of the outcome will also be made available to you.

The information may also be used in the exhibition, publication, journal article, conference paper and presentations, lectures or broadcasts; therefore, this will be shared online.

Your information will be held in accordance with The Glasgow School of Art Data Protection Policy and no personal identifiable information (such as your name) will be used in any publication without your consent.

Who should I contact for further information?

Poopak Azhand
Email: p.azhand2@student.gsa.ac.uk

Supervisors:
Prof. Gordon Hush
Email: g.hush@gsa.ac.uk

Dr Cara Broadley
Email: c.broadley@gsa.ac.uk

Dr Tara French
Email: t.french@gsa.ac.uk

What if I have further questions, or if something goes wrong?

If you have any complaints about the project in the first instance you can contact either me or any of my supervisors.

Thank you for taking part in this study.

Appendix H. An overview of the consent form for the first phase of participation

Participant Consent Form

Research Project Title: Cyberbullying through the lens of Interaction Design
Researcher: Poopak Azhand p.azhand2@student.gsa.ac.uk

Please read each question carefully, tick the boxes and write your initials in the final column.

I have read and understood the project information sheet and have had the opportunity to ask questions.	Yes ☐ No ☐	
I agree to be a participant for the purposes of the above research project.	Yes ☐ No ☐	
I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason. Any information I have given will be used with my permission or may be withdrawn from the research.	Yes ☐ No ☐	
I agree that I will participate with other people in workshops.	Yes ☐ No ☐	
I agree that other participants may identify me during the workshop sessions.	Yes ☐ No ☐	
I understand that the data I provide will remain anonymous and only identifiable by pseudonym.	Yes ☐ No ☐	
I agree that the interview and workshops will be recorded.	Yes ☐ No ☐	
I agree to photographs and videos being made publicly available in publications, presentations, reports or examinable format (dissertation or thesis) for the purposes of research and teaching.	Yes ☐ No ☐	

I understand that I will be identifiable in the photographs (screenshots) and videos. If I tick No, then no photographs of me will be used and videos will be edited to make myself unidentifiable.	Yes ☐ No ☐	
I agree to the results being used for future research or teaching purposes.	Yes ☐ No ☐	
I give my permission to be contacted in the future using the details provided below regarding upcoming research activity and to be invited to future research projects.	Yes ☐ No ☐	
Please select your availability for interview and group sessions. Morning 09:00am-12:00am Afternoon 01:00 pm-05:00 pm Evening 05:00 pm-09:00 pm	• Monday Morning ☐ Afternoon ☐ Evening ☐ • Tuesday Morning ☐ Afternoon ☐ Evening ☐ • Wednesday Morning ☐ Afternoon ☐ Evening ☐ • Thursday Morning ☐ Afternoon ☐ Evening ☐ • Friday Morning ☐ Afternoon ☐ Evening ☐ • Saturday Morning ☐ Afternoon ☐ Evening ☐ • Sunday Morning ☐ Afternoon ☐ Evening ☐	
Do you wish to add any other instructions or restrictions in relation to your contribution?	Yes ☐ No ☐	

If yes, please give details

Signed Date

Name (Block caps)

Researcher signed Date

2

Appendix I. An overview of the consent form for the second phase of participation

Participant Consent Form

Research Project Title: Cyberbullying through the lens of Interaction Design
Researcher: Poopak Azhand p.azhand2@student.gsa.ac.uk

Please read each question carefully, tick the boxes and write your initials in the final column.

I have read and understood the project information sheet and have had the opportunity to ask questions.	Yes ☐ No ☐	
I agree to be a participant for the purposes of the above research project.	Yes ☐ No ☐	
I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason. Any information I have given will be used with my permission or may be withdrawn from the research.	Yes ☐ No ☐	
I understand that the data I provide will remain anonymous and only identifiable by pseudonym.	Yes ☐ No ☐	
I agree that the interview will be recorded.	Yes ☐ No ☐	
I agree to photographs and videos being made publicly available in publications, presentations, reports or examinable format (dissertation or thesis) for the purposes of research and teaching.	Yes ☐ No ☐	
I understand that I will be identifiable in the photographs (screenshots) and videos. If I tick No, then no photographs of me will be used and videos will be edited to make myself unidentifiable.	Yes ☐ No ☐	

I agree to the results being used for future research or teaching purposes.	Yes ☐ No ☐	
I give my permission to be contacted in the future using the details provided below regarding upcoming research activity and to be invited to future research projects.	Yes ☐ No ☐	
Do you wish to add any other instructions or restrictions in relation to your contribution?	Yes ☐ No ☐	

If yes, please give details

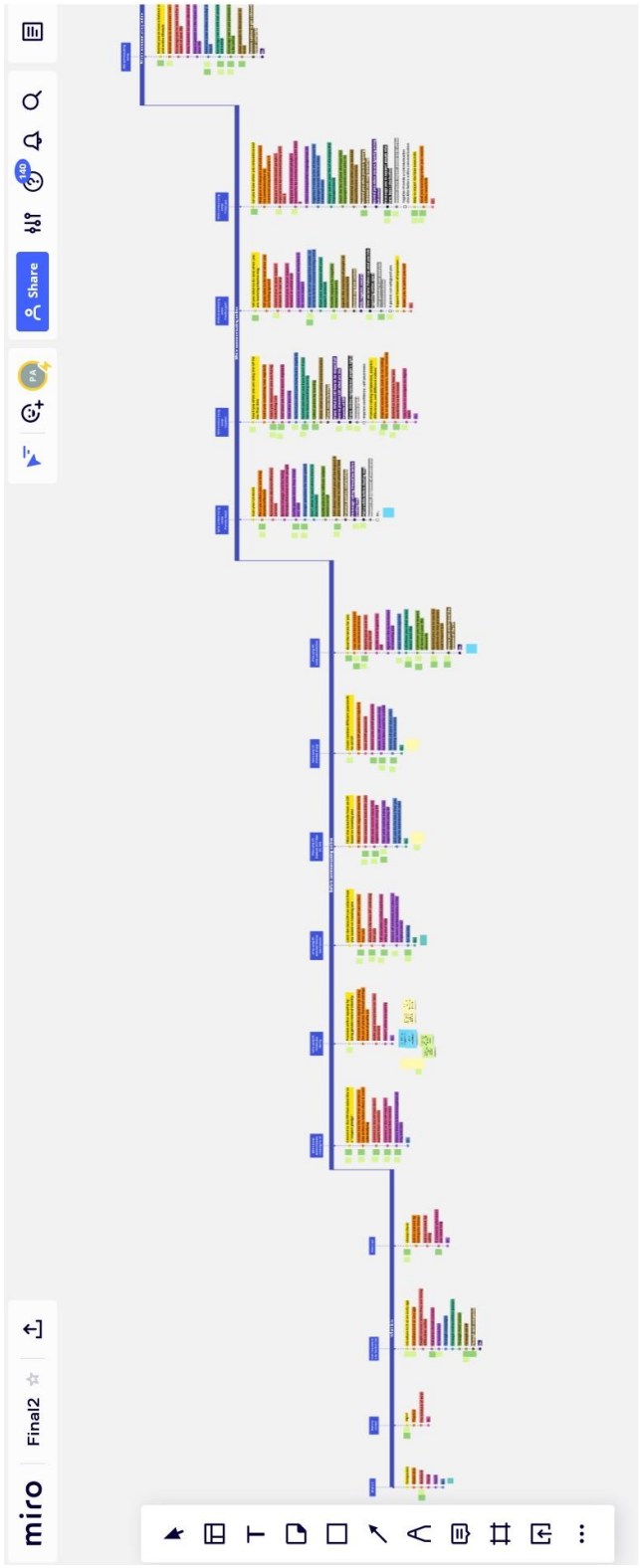
Signed Date

Name (Block caps)

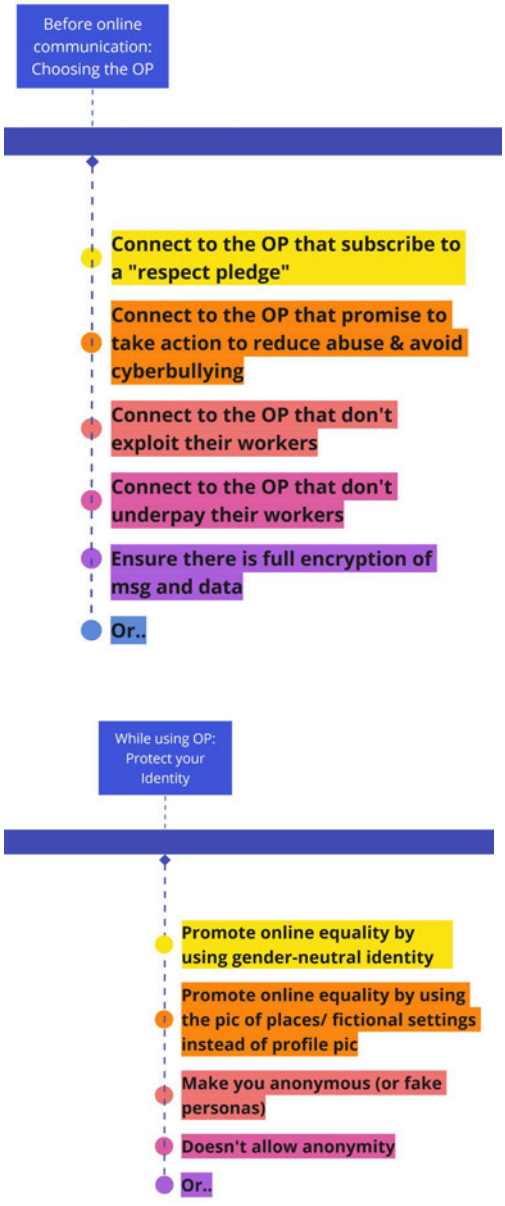
Researcher signed Date

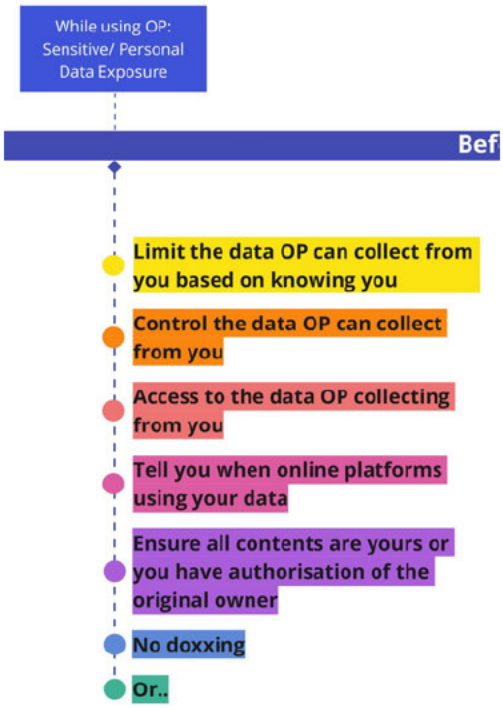
2

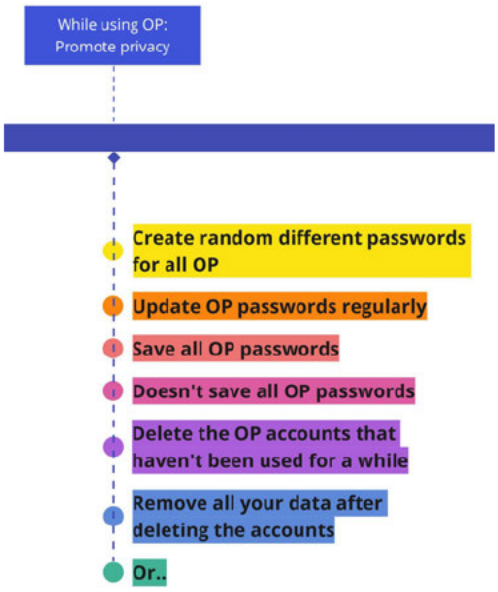
Appendix J. An overview of the intervention before participants' evaluation in Workshop 2.

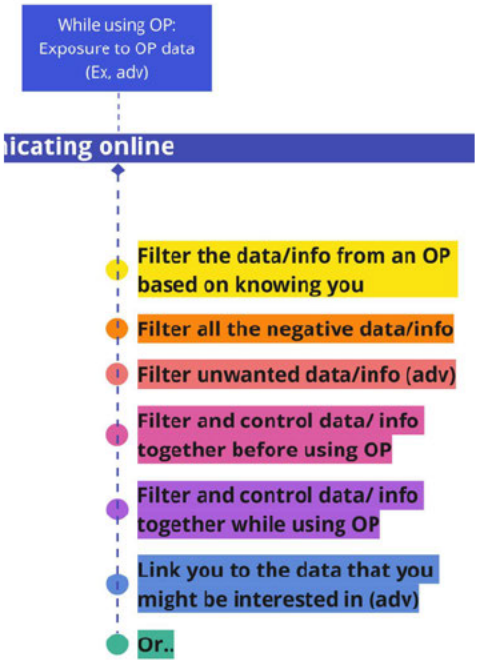


An overview of each step of the intervention




While using OP: Sensitive/ Personal Data Exposure
Bef
Limit the data OP can collect from you based on knowing you
Control the data OP can collect from you
Access to the data OP collecting from you
Tell you when online platforms using your data
Ensure all contents are yours or you have authorisation of the original owner
No doxxing
Or..


While using OP: Promote privacy
Create random different passwords for all OP
Update OP passwords regularly
Save all OP passwords
Doesn't save all OP passwords
Delete the OP accounts that haven't been used for a while
Remove all your data after deleting the accounts
Or..

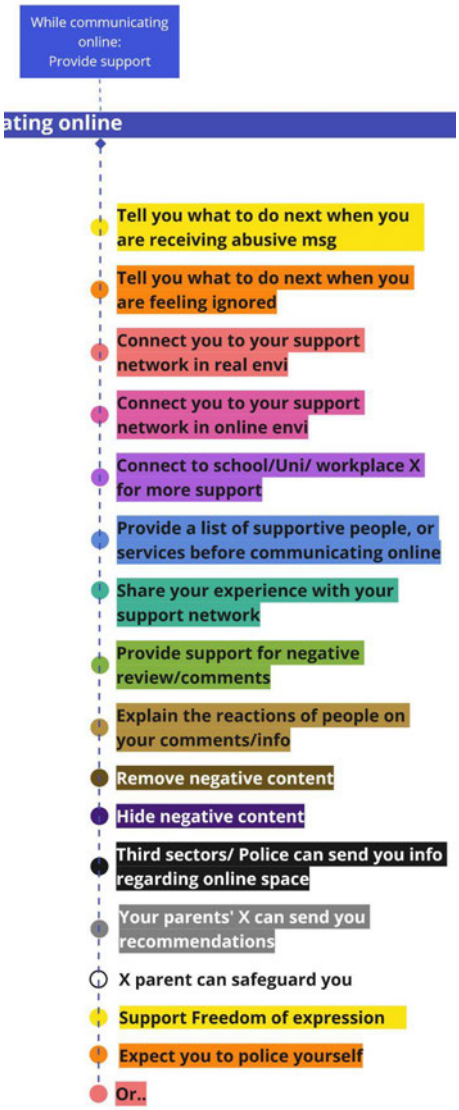

While using OP:
Exposure to OP data
(Ex, adv)
icating online
Filter the data/info from an OP based on knowing you
Filter all the negative data/info
Filter unwanted data/info (adv)
Filter and control data/ info together before using OP
Filter and control data/ info together while using OP
Link you to the data that you might be interested in (adv)
Or..


While using OP:
Terms and Conditions
Read the terms for you
Test the terms to ensure you understand terms
Require good score for using the OP
Decide what is good for you
Agree on the terms based on knowing you
Make decision together
Tell/Show you what terms mean/ look like
Tell/Show you the impact of terms on your life afterwards
Remind you not to use the platform for the purposes that it hasn't aim
Ensure you understand the purpose of the OP
Or..


While communicating online:
Promote respect
Scan your contents
Warn you when you are being abusive/offensive
Remove your abusive/offensive contents
Receive Orange card for being disrespectful toward other people
Notify people when they break any rules
Stronger penalties for hate speech
Don't allow to post where there is discrimination
Notifications for difficult subject matters on OP
Tell/ show/ remind you of the impact of your contents on other people's lives
Promote positive relationships
Encourage taking 3 breathes before sending msg
Wait a while before chasing msg
Respect the judgement of moderators
Or..


After communicating online
After communicating online
Remind you to have a balance offline and online lifestyle
Remind you to disconnect from tech
Encourage you to use tech for every aspect of your life
Keep X posted on your Mental Health
Keep X posted on the impact of tech on your life
Generate your online activity/ behaviour report
Encourage not to left out people who are not online
Encourage not to put pressure on peers to be online
Allow people to disconnect at home
Receive options to get online/offline info/ poster campaign
Or..


While communicating online: Education
While
Teach you when you are using the OP for the first time
Teach you something new regularly
Teach you whenever you are facing something new
Test what you have learnt regularly
Test after learning
Remind you what you have learnt regularly
Remind you what you have learnt if you have done something wrong
Collect points by learning
Share: what is an online communication
Share: new technology
Share: What is CB? how to be respectful? how to prevent CB? what are the impacts of CB?
Share: Online regulations/ people's rights
Reduce stigma
Improve confidence, self-awareness
Promote valuing uniqueness, people's differences, and different culture
Improve social skills, such as not telling lies, or spreading rumours, hurtful remarks
Remind to treat others how you would like to be treated
Teach how to navigate on digital space
Or..


While communicating online:
Provide support
ating online
Tell you what to do next when you are receiving abusive msg
Tell you what to do next when you are feeling ignored
Connect you to your support network in real envi
Connect you to your support network in online envi
Connect to school/Uni/ workplace X for more support
Provide a list of supportive people, or services before communicating online
Share your experience with your support network
Provide support for negative review/comments
Explain the reactions of people on your comments/info
Remove negative content
Hide negative content
Third sectors/ Police can send you info regarding online space
Your parents' X can send you recommendations
X parent can safeguard you
Support Freedom of expression
Expect you to police yourself
Or..


After communicating online
After communicating online
Remind you to have a balance offline and online lifestyle
Remind you to disconnect from tech
Encourage you to use tech for every aspect of your life
Keep X posted on your Mental Health
Keep X posted on the impact of tech on your life
Generate your online activity/ behaviour report
Encourage not to left out people who are not online
Encourage not to put pressure on peers to be online
Allow people to disconnect at home
Receive options to get online/offline info/ poster campaign
Or..