

**Youth digital culture co-creation:
measuring social impact in Scotland**

Alicja Pawluczuk

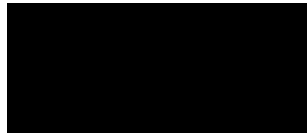
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Doctor of Philosophy

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Declaration

I hereby declare that the work presented in this thesis has not been submitted for any other degree or professional qualification, and that it is the result of my own independent work.

Alicja Pawluczuk (Candidate)



Date 24/09/2019

Abstract

This thesis examines youth workers' and young people's perceptions of social impact and social impact evaluation of youth digital culture co-creation in Scotland. The analysis is made in relation to academic domains including (but not limited) to Human Computer Interaction, Information Science, Social Impact Assessment, Youth Studies, and Community Development. A sequential qualitative methodology was applied to gather data, underpinned by Charmaz's (2014) Constructivist Grounded Theory. The methods utilised included interviews, a focus group, and youth participatory workshops.

The findings provide new insights into how social impact is perceived by digital youth workers and young people, and into the associated challenges of social impact evaluation. It is evidenced that both groups struggle to strike a balance between following externally-imposed social impact definitions and facilitating authentic and meaningful analysis of the social impact of digital youth projects. Resultant tensions between targets and authenticity in the digital youth sector in Scotland might lead to a lack of critical understanding of the actual social impact, and thus young people's real digital needs, aspirations, and skills shortages.

The contribution of this thesis is founded upon an analysis of youth workers' and young people's experiences of digital youth project evaluation. This thesis also provides a summary and analysis of digital youth related literature and policy activities since the year 2000 in Scotland. The findings are used to develop recommendations for academia and practice, policy makers, and digital youth project funders. Findings relating to young people's and youth workers' recommendations with regards to social impact evaluation of youth digital projects in Scotland are presented. It is posited that an improved evaluation approach should be (1) accessible, (2) anonymised, (3) digital, (4) encouraging of critical thinking, (5) independent of funding, (6) informed, (7) participatory, (8) playful, (9) serendipitous, and (10) well-timed.

Publications associated with this research

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Chapter 1: Introduction

1.1 Background and aims

Impact evaluation is considered an essential element of out-of-school digital youth projects facilitation (Harvey, 2016; Lemke *et al.*, 2015). Youth evaluation is a process of inquiry which aims to generate knowledge about project developments and their possible outcomes (Cooper, 2018). The knowledge produced from evaluation of digital youth projects is crucial to understanding young people's relationships with digital culture, their digital skills, needs and aspirations. Young people are described as "the most diverse, dynamic, exciting, and technologically-aware user groups that will soon become be the next generation of adults" (Fitton, Little, & Bell, 2016, p. 1), making their evaluatory input critical to developing human-centered and future-proof technological and cultural solutions.

In recent years, the provision of out-of-school digital youth projects has become prominent in Scotland (Youth Link Scotland, 2018). The importance of informal digital education for young Scots was highlighted in the National Digital Strategy for Scotland, published in 2017. The Scottish Government's aim is to equip "children and young people with the increasingly sophisticated and creative digital skills they need to thrive in modern society and the workplace" (The Scottish Government, 2017, p.24).

However, while youth workers in Scotland have been provided with new funding and new digital tools to facilitate their work, the evaluation approaches utilised have remained largely unchanged. There is limited knowledge of how digital youth projects in Scotland are being evaluated and how youth workers and young people experience the process of evaluation. While literature to date provides approaches for youth development evaluation, digital skills, young people's digital learning and digital literacy, their practical application is largely unexamined. Both scholars (Mackril & Ebsen, 2017) and youth practitioners (Harvey, 2016; Wilson & Grant, 2017) have called for further research into social impact evaluations of the interactions between young people and digital technologies.

The academic discussion of the social value of digital youth participation is complex and, at times, contradictory. The interdisciplinary nature of digital youth participation research means that young people's digital experiences are measured and analysed through different theoretical lenses. Whilst existing studies provide important insights into young people's relationships with

technologies, they rarely focus on (1) being a subject of digital youth culture co-creation evaluation, or/and (2) carrying out an evaluation of digital youth culture. There is an existing distinction between HCI (human-computer interaction) technology-focused evaluation and the human-centred evaluation of digital projects. There is limited knowledge on how to manage a holistic impact evaluation of youth digital projects, whereby human-centred and technology-centred outcomes are taken into consideration. Whilst an increasing amount of information is provided on how to engage young people in digital projects, there remains limited information on how to evaluate their experiences of the process. Currently there is a knowledge gap in the way young people view their experiences of digital youth project facilitation and its evaluation. It is also evident that further research is required to understand youth workers (or digital youth projects facilitators) and their experiences of social impact evaluation.

The purpose of the research outlined in this thesis is to develop knowledge of social impact evaluation of youth digital projects in Scotland. The position taken in this thesis is that in order to comprehend the process of evaluation, it is necessary to examine the perspectives of both digital youth workers (youth workers who implement digital technologies into their youth work practice) and digital youth projects participants. Thus, both groups can provide insights into their experiences of social impact evaluation of digital youth projects and propose future evaluation solutions. The key objectives for this research project are:

Research Objective 1. To identify and review existing literature on digital culture, youth development and social impact, and compare the available data with the current work of digital youth workers.

Research Objective 2. To investigate the potential challenges of social impact evaluation practice in digital youth settings in Scotland, and to represent them within a wider international context

Research Objective 3. To contrast and compare digital youth workers' and young digital projects participants' perceptions and experiences of social impact and social impact assessment.

Research Objective 4. To enrich an existing understanding of evaluation of digital youth projects with insights from digital youth workers and from young digital projects participants.

In this thesis, the term 'youth digital culture co-creation' is used to define the holistic nature of young people's participation in digital, out-of-school settings. This project adopts that of the United

Nations, which defines young people as those aged 15 to 24 (UN Department of Economic and Social & Youth, 2017)

1.2 Theory and method

The project is situated within “the multidisciplinary field of study of youthful digital engagement” (Livingstone, 2010, p.2). The analysis presented in this thesis derives primarily from the academic domains such as Youth Studies and Human Computer Interactions (HCI). The secondary domains examined here include Information Science, Social Impact Assessment, and Community Development.

Grounded theory provides a systematic but flexible strategy for qualitative data collection and analysis and, consequently, for theory formation (Charmaz, 2014). Grounded theory was selected for this project as it provides an efficient framework for rigorous analysis when little is known about a research topic (Jones & Alony, 2011), and where the emphasis is on the participants’ experiences and interactions (Idrees *et al.*, 2011). Grounded theory enables the researcher to capture and analyse the complexity of an emerging socio-technical phenomena (Jones & Alony, 2011) such as digital culture co-creation, the focus of this project. Grounded theory has proven to enable inter-disciplinary knowledge co-creation and a holistic understanding of the relationship between digital technologies and society (Neff, Potts, & Whithaus, 2009).

New knowledge has been established on social impact evaluation of youth digital culture co-creation by a qualitative research approach, using a three-stage exploratory design. To gain new understandings of youth workers experiences of evaluation, interviews and focus groups were utilised. To examine young people’s perceptions, participatory youth workshops and co-operative inquiry were applied.

1.3 Thesis structure

The thesis is divided into eight chapters. Chapter 2 presents a critical evaluation of the extant literature. The literature review covers three main topics; youth participation and digital youth participation, youth digital culture co-creation, and social impact evaluation. The research gap is then outlined. Chapter 3 sets out the research philosophy, theoretical framework and research design, and presents the rationale behind framework and methodology. Chapters 4, 5 and 6 cover the findings from the primary research. In Chapter 4, findings derived from interviews with digital youth workers in Scotland are presented. Twenty interviews were undertaken between May and

July 2017. Chapter 5 details findings from a focus group with digital youth workers, for which data was collected in October 2017. The findings presented in Chapter 6 are drawn from three youth participatory workshops in Scotland. Young people participating in these workshops were aged 16 to 25 years old and had prior experience of participating in digital youth projects and their evaluation. Chapter 7 contains a discussion of the research findings from the preceding chapters, and the means by which they answer the research questions. Their significance is also examined in relation to the literature review presented in Chapter 2. Conclusions, a summary of the research findings and their contribution to existing knowledge are discussed in Chapter 8. The thesis concludes by stating the main contribution of the work and recommendations for academia, practice and policy makers.

Chapter 2: Literature Review and Research Gap

2.1 Introduction

This chapter contains an analysis of the three main themes identified from the literature as having key relevance to the thesis. The themes have been organised into the following sections: youth participation and digital youth participation (2.2), digital youth culture co-creation (2.3), and social impact evaluation (2.4). The literature review provides both analytical and empirical evidence that impacts this thesis, drawn from peer-reviewed publications, policy documents, and industry reports. The literature review findings are then framed within a Scottish context. The research gap is set out in 2.5.

The interdisciplinary nature of the research themes in this project means that much of the relevant academic literature is drawn from multiple domains, ranging from computing and information science, to media and communication studies, to youth studies and evaluation. A meta-synthesis literature review approach was undertaken to combine, evaluate, and interpret findings from multiple research studies. Meta-synthesis aims to integrate results from a number of different but inter-related qualitative studies. Meta-analysis is defined as “a variety of approaches for quantitatively consolidating research findings across studies” (Carlson & Ji, 2011, p. 697). The technique has an interpretive, rather than aggregating intent (Walsh & Downe, 2005). The goal of meta-synthesis is to create new conceptualisations and interpretations of literature review findings.

An examination of non-academic sources (e.g. industry reports, policy documents and blog posts) was also undertaken. The analysis of non-academic sources helped to inform an understanding of professionals’ current perceptions of digital youth culture co-creation and its social impact evaluation with a Scottish context.

Relevant material was accessed from a range of search services, databases, and search engines. These included commercial services such as the ACM Digital Library, IEEE Xplore, ScienceDirect, Sage Journals Online, SpringerLink, Web of Science, and the Wiley Online Library. In addition, Google news alerts and RSS feeds were used to find news articles, blog posts and discussions from online platforms and community users. The main search terms used to identify the materials for this review were “digital youth participation”, “digital culture” and “social impact evaluation”.

2.2 Youth participation: from traditional to digital forms of participation

2.2.1 Youth participation

While various definitions of youth can be found in the literature, this project adopts that of the United Nations, which defines youth as those aged 15 to 24 (UN Department of Economic and Social & Youth, 2017). This definition was formed during preparations for the International Youth Year (1985), and was endorsed by the General Assembly (see A/36/215 and resolution 36/28, 1981). The UN's definition centres on the Convention of the Rights of Children and Young People, which is central to this project. Youth participation is viewed globally as a human right, protected by the Convention of the Rights of the Child, which was established in 1959 and served as the basis for the Convention of the Rights of the Child (CRC), adopted by the United Nations in 1989 (Richards-Schuster & Pritzker, 2016). Articles 12 to 15 are concerned with the specific rights of young people to participate, voice their opinions, freely assemble, and engage in discussions relating to their well-being (McMillan & Simkiss, 2009). It has been argued that through youth participatory initiatives, young people can proactively examine, engage and respond to the societal, institutional, and cultural changes affecting their lives (Checkoway, 2011).

The UN's definition was selected for this project to ensure that the findings are aligned with the prior research on youth participation carried out by the Scottish Government (The Scottish Government, 2018). In their review of the young Scots learners' journeys, the Scottish Government (2018) reported that more research is required to understand youth participation of those aged 15-24.

Nonetheless, the UN's overly broad definition of youth can be problematic. For example, this particular age group holds developmental characteristics of two groups: (1) teenagers (aged 15 to 17 years) and (2) emergent adults (Arnett, 2000). According to Stewart (2003) some of the key developmental characteristics of 15 to 17-year-olds are related to young people who are beginning to accept and enjoy their own uniqueness but are still seeking approval from peer groups, looking for others to validate their decisions, and seeing themselves from the viewpoint of others. Young people's developmental phases between years 18 and 25 are defined as emerging adulthood by Arnett (2000). Arnett's theory of emerging adulthood describes years 16 to 25 as a time [in young people's lives] which is "neither adolescence nor young adulthood" (2000, p.469). Arnett (2000) associated emerging adulthood with the changes that occur in young people's lives in

industrialised societies, such as becoming independent and leaving parents' home, developing career aspirations, and forming independent views and beliefs about the world.

Youth participatory projects vary in their objectives and outcomes. According to Head (2011) examples of youth participation might include volunteering, arts club activity, political activity or student council membership. The European youth portal (Europa.eu, 2019) provides case studies of young volunteers working towards community violence reduction by supporting fundraising events or teaching English. Other examples include young people contributing their time and skills to support political campaigns (McClaverty *et al.*, 2015).

Prior studies have examined personal and social development associated with youth participation (Checkoway, 2011; Head, 2011; Samuelson, Smith, Stevenson, & Ryan, 2013). Checkoway's analysis of youth participation scholarly literature revealed that through active participation, young people might develop their "knowledge and skills; or their academic achievement or performance in school; or their sense of direction, self-confidence, social connectedness, and psychosocial well-being; or their critical thinking, public speaking, and civic competencies" (2011, p.341). Head (2011) emphasised the importance of young people's rights and youth-led approaches in youth participation. Head stated that youth participatory practitioners should strive for the creation of inclusive, accessible and collaborative environments for youth participatory projects. Youth participation is thus described as "an active engagement and real influence of young people, not to their passive presence or token roles in adult agencies" (Checkoway, 2011).

As argued by Richards-Schuster and Pritzker (2015), to facilitate successful youth participation, young people must be perceived not only as vulnerable members of society but also as equal contributors and potential agents of change. Loncle *et al.* (2012) indicate that meaningful involvement of young citizens can lead to social change. However, they emphasise that "helping people to participate must be not restricted to asking their opinions (Loncle *et al.*, 2012, p.3). Meaningful participatory initiatives aim to enhance social competence and responsibility, community development, and political self-determination (Hart, 1992). The process of shared decision-making is the key element of participation (Hart 1992; Loncle *et al.*, 2012). According to the European Commission, it is vital to ensure that young people are "involved in the decisions which concern them and, in general the life of their communities" (Loncle *et al.*, 2014, p.2).

Problems related to youth participation have also been examined in the literature (Alejandro Leal, 2007; Cooke & Kothari, 2001; Hartung, 2017). Cooke & Kothari (2001) critiqued the increasing demands of the application of participation in community development, calling it "the new tyranny".

Cooke & Kothari (2001) described participatory systems as unreflexively and externally governed. In their view, there is limited scope for true reflection and critical examination of how “the [participatory] discourse itself, and not just practice, embodies potential unjustified exercise of power” (2001, p.4). Indeed, Alejandro Leal indicates that the term participation achieved “buzzword status”, meaning that application of participation has become a trend, often not sustained through a meaningful participatory process. Through his analysis of the historical discourses on participation in research and practice, Alejandro Leal argues that participation has become a simple “add-on” or even a neo-liberal requirement of most development projects. In line with Cooke and Kothari (2001), Alejandro Leal suggests that “power is, as it has always been, at the centre of the participation paradigm” (2007, p.545).

In the youth-related literature, issues related to the value and definition of youth participation are also examined (Farthing, 2010; Hartung, 2017; Loncle *et al.*, 2012). Loncle *et al.* indicate that there is an existing youth participation paradox: young people are positioned on a spectrum. In their view, young people are considered as either disengaged subjects or active and empowered participation actors. Similar critiques of youth participation discourse can be found in Farthing’s analysis of political youth participation. Farthing argues that young people are often “chastised as the apolitical harbingers of an incipient ‘crisis of democracy’) while simultaneously heralded as the authors of sophisticated new forms of politics (2010, p.182). The above analysis by Loncle *et al.* (2012) and Farthing (2010) provides evidence of how youth participation discourse and its meaning might often be created by those who are in charge of youth participation – adults. Similarly, Percy-Smith and Thomas (2009) emphasise the limitations of “over-dichotomised models of power” (2009, p.44), youth participation and youth facilitators. Percy-Smith and Thomas (2009) argue that it is essential to strive for balance between an “adults know best” narrative and considering and addressing power structures through which agency arises (such as young people’s autonomy, rights, and constraints).

Another problematic youth participation assumption that needs attention is the need for ‘change’. Youth participation is primarily concerned with young people’s abilities to improve and develop (Checkoway, 2011; Head, 2011; Samuelson *et al.*, 2013). However, Hartung (2017) examines how the notions of children and young people “being the change” and “making a difference” might led to the privileging of notions of self-transformation in youth participation. In her analysis of approaches to youth participation, Hartung (2017) indicates that it is desirable for youth participatory projects to showcase positive social impacts. Hartung refers to a youth participation “change mantra” arguing that:

While certainly very liberating for some children and young people whose articulations coincide with the majority, this also potentially devalues the contribution of other children and young people who for whatever reason do not 'fit'. This approach to change, rather than liberating, can operate as a technology of power that further embeds children and young people within the dominant structures and system (2017, p.107).

Scholars agree that limitations of participation should be carefully studied and addressed when working with young people. As recommended by Hartung, participatory practitioners and activists should view themselves as "active protagonists in the reconstruction and re-dimensioning of the social subject which will frontally engage the world of twenty-first century capitalist society by creating new political and cultural imaginaries and make the push towards transformation" (2017, p.546). To ensure that youth participation is not only an "external concern" manipulated by development agencies and local people for their own interests, scholars (Checkoway, 2011; Richards-Schuster & Pritzker, 2015) advocate the adoption of ethical and reflexive approaches to youth participation.

2.2.2 Digital youth participation

In the 21st century, young people have been provided with online and digital tools to potentially amplify their voices and share ideas. Instant messaging, social media and online streaming have emerged as essential elements of effective youth-centred projects (Harvey, 2016). The concept of "youth participation" has thus further developed since the early 2000s, a period during which young people's everyday lives have become more heavily influenced and shaped by "multimodal, interactive, convergent, and networked media" (Livingstone, 2012, p.1). Young people in the contemporary digital era are described as not only passive consumers of information, but active digital participants, makers, and "doers" (Ito *et al.*, 2013, p.6), who operate in an environment where digital skills have become a necessity.

The emergent dynamic of relationships between young people and digital technologies has provided a fruitful stream of research for a number of scholars (Boyd, 2014; Buckingham, 2008; Ito, Gutiérrez, Livingstone, Penuel, Rhodes, Salen, Schor, Sefton-Green, Watkins, *et al.*, 2013). Scholarly analysis of digital youth participation has steadily increased since the early 2000s. A search for the term "digital youth participation" on the Web of Science reveals that the first academic study referring to digital youth participation was published in 2003 (Appendix 1, Figure 25). This was an article examining young people's online health information seeking behaviour in

Canada, published in the Journal of Medical Internet Research (Skinner, Biscope, & Poland, 2003). Since 2003, 241 additional academic publications have been noted. The largest numbers of publications on digital youth participation come from discourses labelled as “Education/Educational Research”, “Communication” and “Social Sciences/Interdisciplinary” (Appendix 1, Figure 26).

The use of digital technologies among young people has rapidly increased in recent years (Anderson & Jiang, 2018; eurostat, 2017). In 2016, 91% of young people in the European Union (EU) made daily use of the internet, compared with 71% of the whole EU population. In the EU, 83% of young people use mobile phones to access the internet away from home or work (eurostat, 2017). A recent UK report revealed that 99% of young people in the United Kingdom between the ages of 14 and 34 were described as “recent Internet users” (Office for National Statistics, 2018, p. 8). Increasing digital youth access and participation can also be seen in Scotland, where in 2018 “superfast Internet” coverage has increased to 92% of homes and businesses, an increase from 87% in 2017 (Ofcom, 2018). In 2016, the Scottish Household Survey reported that only 1% of young Scots aged 16 to 24 do not use the internet (The Scottish Government, 2016).

The continually evolving relationship between young people and digital technologies has become a central research theme for scholars (Fitton & Bell, 2014; Ito *et al.*, 2015), policy makers (European Commission, 2018), and youth participation and education practitioners (Harvey, 2016; Wilson & Grant, 2017). Some scholarly accounts (e.g. Little, Fitton, Bell, & Toth, 2016) view young people as “[the] most diverse, dynamic, exciting, and technologically aware user groups that will soon become the next generation of adults” (2016, p.1). Within the context of HCI, Little *et al.* emphasise the uniqueness of young people’s digital expertise, which combines the creativity of younger children with the articulation of adults (2016, p.5). Conversely, in other studies (Porat, Blau, & Barak, 2018; Wilson & Grant, 2017), young people’s technological awareness and digital literacy are reported as inadequate. Porat *et al.*’s research into young people’s views of their digital literacy found that young people tend to overestimate their digital expertise. Wilson and Grant’s (2017) report on youth digital inclusion in the United Kingdom presents similar issues surrounding young people’s basic digital skills (such as communicating via email, applying for jobs online and online safety). In Wilson and Grant’s (2017) report, the validity of the “digital natives” narrative (Prensky, 2009) - which assumes that young people born in the digital era will naturally adopt the “digital wisdom” - is challenged. Wilson and Grant (2017) report that many young people still require support to develop their basic digital expertise and digital literacy.

The ambiguity of the narratives surrounding young people's roles and their abilities in the digital times are also reported by Livingstone and Third, who state that "[in the digital times] young people are simultaneously hailed as pioneers of the digital age and feared for as its innocent victims" (2017, p. 658). Helsper defines such narratives as two conflicting myths; the first myth frames young people as digital natives, while the second views young people as "as vulnerable innocents, which positions them as victims of risky [digital] content and interactions" (2016, p. 177). Indeed, in the literature, the spectrum of descriptions of young people's roles in the digital world varies from co-creators and active agents of digital change (Ito *et al.*, 2009) to vulnerable and apathetic users (Hargittai & Marwick, 2015). According to some scholars, it is essential to frame these dualistic narratives of young people's digital participation within a wider context of a youth digital divide and to acknowledge that "crucial issues of the digital divide are not just technological – they are social, economic, cultural and political" (Selwyn, 2010, p. 357). As argued by Livingstone and Third (2017), a holistic examination of young people's digital participation (or lack of it) should investigate the reasons and consequences of youth digital inclusions. Livingstone and Third proposed that youth digital inclusion is "a staged process in which the benefits of internet use depend not only on age, gender and SES but also on amount of use and online expertise (skills and self-efficacy)" (2017, p. 691).

The importance of youth digital inclusion has been debated by scholars and international NGOs. For example, in 2017, the United Nations' specialised agency for information and communication technologies (ITU) and the International Labour Organisation (ILO) initiated a joint Digital Skills for Decent Jobs for Youth Campaign. The purpose of the campaign was to mobilise policy-makers to equip five million young people with job-ready digital skills by 2030 in support of the United Nations' Sustainable Development Goals (SDGs). The campaign emphasised that developing youth digital skills is crucial when working towards Sustainable Development Goal 8: achieving decent work for all and inclusive and sustainable economic growth. In the United Kingdom, the implications of young people's digital exclusion have been examined by the Carnegie Trust. In 2017, Wilson and Grant of the Carnegie Trust reported on the national youth digital inclusion research project. The report revealed that many vulnerable young people in the United Kingdom require extra support to achieve basic digital skills. Wilson and Grant (2017) indicated that digital exclusion might result in young people's social exclusion and consequently lower long-term well-being. To improve young people's digital inclusion, Wilson and Grant (2017) propose a nationwide implementation of youth-centred practical initiatives, action based research and innovative policy interventions.

There is an overall agreement across various disciplines that more research is required to fully understand this area of research (Little *et al.*, 2016, Reich, 2017). For example, Little *et al.* (2016) argue that young people's perspectives are understudied in areas such as HCI and creative computing interactions (CCI). They emphasise that "by understanding teenagers we can gather insights into the behaviours and preferences of the next generation of adults" (Little, Fitton, Bell, & Toth, 2016, p.5). In the context of digital learning, Reich and Ito (2017) argue that further research is needed to understand variations in young people's digital needs, skills, and access across various demographics. To investigate the complex and multi-layered notions of digital youth, Livingstone suggests that "researchers must follow digital media use wherever it takes them" (2012, p. 2).

To understand both the challenges and opportunities of the digital future, and the consideration of young people's views on and experiences of digital culture, collaborative efforts across education, policy development, and research has been advised (Kiviniemi & Tuominen, 2017). Examples of such cross-disciplinary collaborations have been noted in Europe (Harvey, 2016) and in Scotland (5Rights Youth Commission, 2017). Within the European context, young people's digital participation was described as an important element of the Declaration of the 2nd European Youth Work Convention and the wider Europe 2020 strategy (Harvey, 2016), where the need for new and responsive educational and youth development support was highlighted:

Young people are increasingly engaging with new technologies and digital media. There is clearly a role for online youth work practice, in terms of exploiting a new space for youth work in a meaningful way, supporting digital literacy and enabling young people to deal with some of the associated risks (Declaration of the 2nd European Youth Work Convention, Brussels, April 2015)

In recent years, digital technologies have become integral elements of youth participation provision across Europe (Harvey, 2016) and the United States (Ito *et al.*, 2015; Lemke, Lecusay, Cole, & Michalchik, 2015). Out-of-school digital projects provide young people with opportunities to explore new skills, to enrich inquiry for underrepresented groups and to deploy digital technologies as tools for self-expression and empowerment (Ito *et al.*, 2013). Examples of youth-centred digital initiatives include activities such as app co-design (Ashktorab & Vitak, 2016), digital badges (Bell & Davis, 2016; Davis & Singh, 2015), participatory media (Sawhney, 2009) and coding clubs (CoderJojo Scotland, 2018). Social Media have proved to be powerful tools for young activists behind recent campaigns such as #NeverAgain calling for gun control at schools in the

United States (Witt, 2018), and “It’s the Drink Talking” focusing on youth alcohol consumption in the United Kingdom (Alcohol Concern, 2013). Young people can benefit from digital environments where new learning and networking opportunities can be found (Black *et al.*, 2015; Ito *et al.*, 2009). For example, Ito *et al.* (2013) provide a case study of a young girl who, through participation, had an opportunity to develop her writing, creative skills, and critical thinking. In their analysis of informal learning projects in the United States, Lemke *et al.* (2105) indicate that learning through digital gaming can increase young people’s abilities to work in teams and to critically evaluate their work. Scholars agree that “digital youth” are now able to independently obtain and nurture new social and technological skills, which notably aid their abilities to understand society and form collective actions for social change (Buckingham 2008; Robards & Bennett 2014; Ito *et al.*, 2009). It has been argued that so-called “digital youth” (Ito *et al.*, 2009) are characterised by “non-traditional and innovative information behaviour, including activities related to creative production and sharing” (Koh, 2013, p. 1827).

Nevertheless, as online and digital tools became core aspects of young people’s lives, novel challenges have also surfaced in the field of youth work. The emergence of problems such as cyberbullying (Ashktorab & Vitak, 2016), sexting and tech-addictions (O’Keeffe & Clarke-Pearson, 2011) have resulted in the formation of a more sceptical view of the impact of digital technologies on youth activity and agency. Examining these negative societal impacts in the academic domain, Buckingham (2008) has warned that it is vital not to “romanticise” the emancipating qualities of the digital world. It has been argued that the cyber world provides young people with an “illusionary freedom and autonomy” (Herring, 2008, p.73), where adults manage and capitalise on youth’s digital participation. Such illusionary freedom might be reflected in the ways young people’s personal data is collected and processed by online companies (Hargittai & Marwick, 2015). Hargittai and Marwick’s study on youths’ attitudes to online privacy revealed that young people feel anxious about their data but do not have the power or skills to control it. Other issues such as peer-pressure and self-representation have also been examined (Aiken, 2017; Fardouly *et al.*, 2015). Aiken argues that cyber self-obsession and associated manifestations including constant “updating, making friends, making connections, gaining followers, getting likes, and being tagged” (2017, p.174), can lead to identity confusion among teens. Fardouly *et al.* provided evidence of the negative impact of Facebook on young women’s self-image (2015). A recent report published by the National Society for the Prevention of Cruelty to Children (Bentley, O’Hagan, Raff and Bhatti, 2016) notes that counselling support related to young people’s online activity has increased, with cyberbullying-related support increasing by 13 per cent between 2014

and 2016, and a 15 per cent increase related to 'sexting' from 2014 to 2016 (Bentley *et al.*, 2016, p.41).

2.2.2.1 Types of Digital Youth Participation

To examine the evolving relationships between youth and technology, and to gain a better understanding of the notion of digital youth participation, scholars have offered numerous approaches with associated terminology (Cohlmeyer, 2014; Ito *et al.*, 2013; Mihailidis, 2015; Quinlan, 2016). To understand young people's relationship with the digital world, Ito *et al.* (2009) have proposed the term *digital youth*, which broadly defines "the lives of young people in the contemporary society" (Erstad, 2012, p. 25). Emphasising the empowering effect of digital technologies on youths' lives, Ito *et al.* suggest that mediated forms of communication allow younger generations to actively participate in public debate, to amplify their voices, and to influence decision making (2015, p.16). Thus, it can be argued that digital technologies have enhanced youth participation by providing innovative and interactive tools to connect and engage with peers globally. Further, Ito *et al.* suggest that the digital world provides a dynamic infrastructure where young citizens can "exercise their citizenships and create frameworks for activism" (2015, p.10).

The processes of learning and creation have also been analysed by Quinlan (2016) who adopted the term *digital making*. Quinlan's work emphasises active knowledge acquisition while producing and learning digital artefacts (Quinlan, 2016). Likewise, the concepts of knowledge/information seeking, and attainment have been highlighted by the scholars behind the *connected learning* framework (Ito *et al.*, 2013). The core element of this educational framework is to deploy digital technologies to enable youth who otherwise lack access to opportunity (2013). The scholars behind the *connected learning* framework have claimed that to equip youth with skills for the 21st century, it is essential to offer proactive and interest-driven opportunities for learning. Likewise, scholars (Cohlmeyer, 2014; Mihailidis, 2016; Quinlan, 2016; Ito *et al.*, 2013) have acknowledged the importance of youth participation in the digital era. As illustrated by Ito *et al.* "Young people are contributing to the health and growth of civic collective, jointly produced stories, and real world social change" (2013, p.48). Finally, Stornaiuolo and Thomas (2017) have analysed the notion of *youth digital activism*. Debating the role of digital technologies in youth's lives, Stornaiuolo and Thomas (2017) examined the prominence of using online tools when fighting for social justice. Finally, the term *maker space* has been applied to describe "a collaborative work space inside a school, library or separate public/private facility for making, learning, exploring and sharing that uses high tech to no tech tools" (Makerspaces.com, 2017).

There has been an increasing interest in the research on the use of digital technologies in youth work (Harvey, 2016; Leung, 2017). Youth work is defined here as:

a professional practice with young people based on certain core values and principles requiring the establishment of voluntary relationships with young people, links with communities and other relevant organisations, and professional supervision from experienced practitioners. (Sapin, 2012, p. 3).

To analyse youth work in the digital era, Szekely and Nagy examine the notion of *online youth work* and *virtual youth work* in Hungary (2011). Elsewhere, the term *cyber youth work* is applied when studying young people's anti-drug online project in Hong-Kong (Leung, 2017). Digital youth work, a term mostly used in Europe (Harvey, 2016; Kiviniemi & Touvimen, 2017), is perceived as a vital part of youth engagement practices and defined as an area of youth work that implements digital technologies to enhance outcomes of youth centred initiatives (Harvey, 2016). Finally, the term *smart youth work* is an overarching term encompassing the development of digital youth work, associated research practice, quality and policy development. Table 1 sets out a comparative assessment of these terms.

Table 1: Overview of terminology used in the context of digital youth participation

Term	Source	Typical Activities	Focus
Digital Making	Quinlan, 2016	Encompasses a combination of technical and creative skills. Technical digital skills can relate to programming, to electronics, and to physical fabrication.	Technology learning
Youth Digital Activism	Stornaiuolo and Thomas, 2017	Information creation and information sharing using digital technologies.	Advocacy
Connected Learning	Ito, Gutiérrez, Livingstone, Penuel, Rhodes, Salen, Schor, Sefton -Green & Watkins, 2013	A type of learning that integrates personal interest, peer relationships, and achievement in academic, civic, or career-relevant area	Learning, social-equality, critical digital literacy, creativity
Digital Curation	Mihailidis, 2016	A key competency for critical inquiry, aggregation and narrative storytelling, which is embedded in a digital, participatory and connected learning process.	Storytelling, communication, digital literacy

Term	Source	Typical Activities	Focus
Makerspace	www.makerspacers.org, 2017	“a collaborative work space inside a school, library or separate public/private facility for making, learning, exploring and sharing that uses high tech to no tech tools” (makerspacers.org, 2017)	Learning, experimentation, digital and non-digital tools
Digital Youth Work	Cohlmeyer, 2013	Traditional youth work practice which encompasses digital media and technology learning in to the process.	Youth development, learning, informal education
Smart youth work	The Council of the European Union, 2017	Youth work practice development process which includes digital youth work, research, quality and policy development.	Youth development, learning, informal education
Online youth work	Székely & Nady, 2011	Interactive and online solutions, where youth work experts and young people participate in information exchange (for example online forums, social networking)	Youth development, learning, informal education

Term	Source	Typical Activities	Focus
Virtual youth work		Interactive and online solutions, where youth work experts and young people participate in information exchange (for example online forums, social networking)	Youth development, learning, informal education
Cyber youth work	Leung et al., 2017	Online youth-centred practice focusing on web-based interventions involving information dissemination, counselling and support.	Social work, counselling, youth development

2.2.3 Digital Youth Participation in Scotland

Whilst the overall analysis of digital youth participation has become prevalent since the 2000s, the number of scholarly publications explicitly examining Scottish digital youth is limited. At the time of writing this thesis, there is a lack of a comprehensive review of Scottish digital youth landscape and/or history. The brief analysis presented in this section is based on several academic publications (Coates, 2016; Miller, 2015; Mowbray, Hall, Raeside, & Robertson, 2018) and industry reports (5Rights Commission, 2017; Wilson & Grant, 2017).

Literature examining digital youth participation in Scotland includes analysis of examples of youth political participation and citizenship (McClaverty *et al.*, 2015); youth information behaviour and digital literacy (Coates, 2016; Miller, 2015; Mowbray *et al.*, 2018), the impact of digital technologies on young people (Woods & Scott, 2016), digital youth inclusion (Wilson & Grant, 2017), and Scottish youth digital culture (Lyons, McCreanor, Goodwin, & Barnes, 2017).

There is evidence of the positive impacts of youth digital participation in Scotland (Mclaverty *et al.*, 2015; Mowbray *et al.*, 2018). Studies of youth digital engagement during the Scottish Independence Referendum provided evidence of first voters using social media when searching for and sharing political information (Mclaverty *et al.*, 2015). There is an indication that young Scots utilise social media while seeking employment (Mowbray *et al.*, 2018). When engaging with digital technologies, young people in Scotland (aged over 16) spend 17 percent of their time instant messaging, 16 percent on social networks, 33 percent emailing, and 13 percent text messaging (Kennedy, 2017).

In response to the increasing importance of digital technologies in young British people's lives (Office for National Statistics, 2018) many of Scotland's youth-centred organisations embedded digital communication solutions into their work. For example, the LGBT Youth Scotland's digital chat counselling service allows young people to reach youth workers' support confidently online (LGBT Youth Scotland, 2018). Young Scot, the national information and citizenship organisation supported by the Scottish Government, uses a digital application to share information with their young people (Young Scot, 2018).

The relationship between young people and digital technologies has also been explored by Scottish policy makers (European Commission, 2018), youth work practitioners (YouthLink, 2018), and young Scots themselves (5RightsCommision, 2018). In 2018, members of the Scottish Digital Youth Network (YouthLink, 2018) contributed to the publication of the European Commission (EC)'s policy recommendations for developing digital youth work (European Commission, 2018). The EC's recommendations include (1) the development of a common understanding of digital youth work across Europe, (2) strategic development of European digital youth work practice, (3) consideration and incorporation of youth participation and youth rights, and (4) application of evidence-based approaches to digital youth work (European Commission, 2018). The Scottish Digital Youth Network (YouthLink, 2018) is a network of practitioners who utilise digital technologies in their work with young people, which aims to: "facilitate learning about new and innovative approaches in digital and developments within policy" (YouthLink, 2018).

Notable Scottish research has been published in the area of children's and young people's digital rights. In 2016, the 5Rights project was commissioned by the Scottish Government to carry out a youth-led investigation and contextualisation of UNCRC human rights treaty "for digital technologies, and expresses them in five clear and indivisible principles" (5RightsCommision,

2017, p. 9). The 5Rights Commission's work provides a comprehensive overview of young Scots' digital needs, aspirations and barriers to digital participation.

Literature also reveals some evidence of a digital literacy shortage among young Scots (for example Coates, 2016; Wilson & Grant, 2017). For example, a 2016 study suggests that disadvantaged youth from southern Scotland experience "greater barriers to information access resulting from poor technology skills, information literacy, and social structures and norms" (Coates, 2016). Similar digital literacy issues were highlighted in a 2017 report, which suggested that in Glasgow: "one in 10 unemployed young people (10%) cannot send their CV online, while more than one in six (17%) believe they would be in work today if they had better computer skills" (Wilson & Grant 2017, p.31). Issues related to online safety, privacy, data control and digital awareness have also been highlighted (5Rights Commission, 2017). According to the 5Rights Commission, 52.1% of young people in Scotland, the greatest threats in the digital world include anonymity, bullying, and targeting, which encompasses "bullying online, trolling, grooming, and other targeted exploitations caused by anonymous contacts" (5Rights Commission, 2017, p. 39).

The need for a nationwide, inclusive and accessible digital youth citizenship education has been emphasised by scholars (McGillivray, McPherson, Jones, & McCandlish, 2016, p. 721), youth work practitioners (Wilson & Grant, 2017), policy makers (Hyder, 2016; Wright, 2018) and young Scots themselves (5Rights Commission, 2017). For example, the 5Rights Commission has argued that digital literacy should not only be integrated into the Scottish educational curriculum but also should cover topics such as well-being and careers in the digital age (2017, p.32) McGillivray *et al.* stressed the importance of a holistic and critical approach to digital youth engagement:

...critical digital citizenship agenda needs to be embedded in educational narratives [in Scotland], where young people are, through practice, asked to ponder how digitally mediated publics operate in the school setting and beyond. Integrating 'making' and 'thinking critically' about the benefits and dangers of pervasive digital media in and outside of school is imperative (McGillivray *et al.*, 2016, p. 721)

Online accessibility and inclusion in digital youth participation have been cited as crucial elements of effective digital youth participatory interventions in Scotland. The review of Scotland's first National Youth Arts Strategy's digital programme (Time to Shine Digital) revealed that "[Scottish digital youth] projects were challenged to think creatively when delivering in isolated or

disadvantaged areas” (Harvey, 2016, p.1). Online connectivity issues such as lack of mobile phone signal or “patchy internet connection” have also been noted (STEP, 2016 Wilson & Grant, 2016; Harvey, 2016).

To address the digital literacy needs and digital skills shortage in Scotland, youth and educational organisations have been encouraged to adopt young people’s individual digital literacy needs and aspirations, and to consider the digital tools that they have access to (STEP, 2016; Wilson & Grant, 2016). Digital youth and digital inclusion researchers (including young researchers) recommend:

1. Discontinuing of the use of “digital natives” categorisation model of young people’s digital abilities (STEP, 2016; Wilson & Grant, 2016) and focus on individual young people’s needs
2. Embracing innovative methodologies and digital experimentation in formal and informal education to encourage digital learning among young Scots (5Rights Youth Commission, 2017; Wright, 2018)
3. Critical approaches to digital youth facilitation and a consideration of both positive and negative impacts of digital youth technologies (McGillivray et al., 2016).
4. Incorporating free WiFi in public and outdoor spaces across Scotland (5Rights Youth Commission, 2017).

2.2.4 Digital Youth Participation: youth workers

A youth worker’s role is to support, enable, and empower young people to take active roles in shaping their society and their futures. Youth work-related activities and project objectives vary from community arts to political activism. The role of the youth worker is often crucial when establishing “voluntary relationships with young people” (Sapin, 2012, p. 3) and assisting them as they transition into adulthood.

In the last decade, youth work practice has been increasingly influenced by the emergence of digital technologies. Therefore, youth work practice has expanded and evolved to meet the demands of technological development, and most importantly the education and creative digital needs of the young people. Youth work educational settings are increasingly valued as progressive hubs of digital innovation and technological learning (European Commission, 2018; Harvey, 2016).

Digital competencies and creativity are emphasised as key 21st century skills (Ito *et al.*, 2013). Educational technology and research institutions offer funding to youth organisations that facilitate digital youth projects (European Commission, 2018). While youth work projects have become increasingly engaged in young people's digital education (Lemke *et al.*, 2015), youth workers' behaviours in the context of youth-centred digital projects have been largely neglected in the scholarly literature (Mackrill, Thomas & Ebsen, 2017). Youth workers play a crucial role of moderators between young people, society, and digital technologies. Youth work has the potential to address young peoples' digital literacy needs, a topic often omitted at schools or at home (Harvey, 2016, p. 13). For young participants to benefit from their experience, youth workers need to create an environment which facilitates information sharing, collaboration, interest-driven learning, and self-expression (Ito *et al.*, 2013). According to Blum-Ross, digital youth workers work "within a diverse spectrum of engagement, ranging from projects that are youth-led and process oriented to those that are adult-led and overtly geared toward producing a 'high-quality' output, and almost every iteration in between" (2015, p.319). Thus, to co-ordinate youth-centred digital workshops effectively, youth workers require "an agile mind-set, being willing to try new things and learn from both success and failure, and be supported to do so" (European Commission, 2018). As argued by Harvey:

If youth work fails to embrace the use of technology and social media there is a risk of becoming outdated and irrelevant to young people who use youth work services. Youth work has the opportunity to fill the gaps which sometimes occur within the home and school in supporting young people to understand technology and the risks that might be involved (2016, n.d).

Youth workers play a crucial role as moderators between young people, society, and digital technologies. It is claimed that youth work has the potential to address young peoples' digital literacy needs, which are often omitted at schools or at home (Harvey, 2016, p. 13). Indeed, in recent years there have been many successful examples of European digital youth projects (Harvey, 2016, Hunter, 2016). However, at the same time, evidence of scepticism, "tech-fears", and digital insecurities have become visible (Harvey, 2016). For example, a European study of digital youth work (covering Austria, Denmark, Finland, Northern Ireland, and the Republic of Ireland) reported that whilst 77% youth workers utilise social and digital media in their work, 48% of them indicate that their digital expertise is insufficient (Harvey, 2016).

Similar findings have been reported in Scotland, where youth workers describe a problem of limited digital literacy skills and training, and so-called *digital fatigue*, described as “workers using their digital skills to do their work/emails – want digital down time” (Hunter, 2018, p.4). Scottish digital youth workers have indicated that current policy “prevents rather than enables organisations and practitioners [in Scotland]” from catching up with the latest technological solutions (2018, p.4). Hunter’s report also highlights issues related to accessing digital tools and solutions, as some youth workers are “expected to use their own devices” (2018, p.4).

2.3 Youth digital culture co-creation

2.3.1 The origins of participatory practice in research and education

For centuries, traditional top-down approaches in the areas of education, communication and research were considered to be the most efficient systems of analysing and addressing people’s needs (Wicks *et al.*, 2008). Scholars have argued that top-down approaches considered research participants as passive objects of study or recipients of the final research findings (for example Reason & Bradbury, 2001, Sanders & Stappers, 2008; Wicks *et al.*, 2008). Such systems of “vertical, unilateral and authoritarian” (Bordenave, 1996, p.11) models of communication, frequently failed to consider the community’s voice and active contribution in their work processes.

However, since the early 1900s, scholars (Dewey, 1930; Eysenck & Lewin, 1952; Freire, 1970) began to question the value of top-down and technocratic approaches to education and research. For example, progressive educators (Dewey, 1930; Freire, 1970) searched for more inclusive and collaborative processes of knowledge formation. Primarily, Dewey (1930) questioned the traditional and superior position of a teacher. The top-down educational approach was condemned for positioning students as recipients of information and limiting their abilities to learn imaginatively from real life and social experiences (Dewey, 1930). Dewey positioned participation as a crucial aspect of learning. He argued that “not only does social life demand teaching and learning for its own permanence, but the very process of living educates” (1930, p.7). Similarly, Lewin advocated experience-based learning to enhance students’ abilities to discover and co-create new sets of values and behaviours, and “change when they experience the need for change” (Coghlan & Jacobs, 2005, p. 445).

This progressive vision of education was further analysed by Freire (1970). Here, the key goal of education was to enable communities to co-create tools to pursuit “a fuller humanity” (1970, p.47). The traditional approach to education was further criticised and defined as an uncompromising

system, where “containers” (students) are being filled with a meaningless “sonority of words” (Freire 1970, p.72). Freire called for ending the authoritarian teacher-pupil relation, stating that an oppressive formal education model creates “the culture of silence” (1970, p.30). The inclusive and empowering vision of education emphasised the importance of learners’ active participation in knowledge production (Dewey, 1930; Freire, 1968). Scholars advocated a fundamental reconsideration of the oppressor-oppressed, teacher-student relationship. Radical and socially-engaged scholars introduced and embraced the idea of using education as an empowerment tool. It was advocated that individuals should be provided with opportunities to transform their roles from passive spectators to actively participating actors of social change (Freire, 2005).

In the following decades, the work of democratic educators also influenced the creation of collaborative approaches in community and organisational development. The importance of “social progress” and “practical results” (Whyte, 1991, p. 7) have been described as the key motives behind the work of participatory action researchers. Participatory Action Research (PAR) provides an approach which allows for scholarly analysis of people’s knowledge in the context of academic science (Fals-Borda, 2001). The primary aim of PAR scholars has been to use participatory scientific approaches to empower underprivileged communities. In their socially engaged work, participatory action researchers have explored the areas of adult literacy and education, agriculture, and social development (Reason & Bradbury, 2001).

Unlike the traditional and top-down research practice, participatory action researchers have aimed to involve stakeholder in the overall research process of data collection, design, and analysis (Whyte, 1991). The social value of the linear approach to science formation has also been questioned. PAR rejected the “fetish-like idea of science as truth which had been transmitted to us as a cumulative, linear complex of confirmed rules and absolute laws” (Fals-Borda, 2001, p.29). The shift towards an inclusive and holistic research practice provided opportunities for research objects to become equal partners participating in the process and co-constructing knowledge. Thus, scientific knowledge has become enriched through direct “involvement, intervention or insertion in the process of social action” (Fals-Borda, 2001, p.29).

2.3.2 Emergence of participatory design and human-centred approaches

The importance of equal dialogue and participation have been recognised in the fields of design and innovation (Sanders & Stappers, 2008; Yagou, 2005). Like democratic educators and

participatory action researchers, design experts called for a fundamental transformation of traditional professional-user interactions (Sanders & Stappers, 2008; Yagou, 2005) and proposed new collaborative and user-centred approaches in their work (Prahalad & Ramaswamy, 2004). Consequently, design practice has become not only concerned with “*making things*”, but “*making sense of things*” with users (Yagou, 2005, p.258). Scholarly discussion on participatory design began in the 1970s, when a vivid debate around citizens’ collective empowerment and democratic education also flourished (Sanders & Stappers, 2008). The need for a holistic and novel vision for co-creative and collaborative design was outlined at the Design Participation Conference held in England in 1971. “From the blur will come new types of designers and researchers with specialties based more on the purpose of designing as opposed to the products of designing...Co-designing team will be far more diverse than they are today” (2007, p.16).

The participatory approach has been described as *radical change* inspiring design professionals and scholars to involve users in the design processes. This shift towards a people-centred era empowers previously disengaged communities to co-create solutions and challenges the traditional understanding of social divisions (Von Hippel, 2005). The work of the National Health Service (NHS) Institute for Innovation and Improvement in the United Kingdom represents one institutional response where patients have been encouraged to contribute towards the re-design of their services (Freire & Sangiorgi, 2010).

Scholars (Sanders & Stappers, 2008) examining the evolving roles of users in the design process have advocated that users’ experience and expertise ought to be the centre of the participatory design, providing opportunities to “develop knowledge, idea generation and concept development” (2008, p.12). Participation has become an essential element of design research, suggesting that more emphasis should be placed on the quality of the participatory processes in order “to avoid tokenism” (Lee, 2008, p.3).

The importance of re-evaluating the relationship between users and system designers has also been recognised in the fields of human computer interaction (HCI) (Dix, 2009) and information systems (Baskerville, 1999; Benbasat & Zmud, 1999). Systems designers, once mainly concerned about the practical functionality of produced technologies, have become more aware of the advantages of embedding “user’s innovative potential and knowledge” into their projects (Kohler, 2011, p.160). This people-centred approach in HCI further led to development of a socially driven practice called Human Computer Interaction for Development (HCI4D) (Stornaiuolo & Thomas, 2017; Ho, Smyth, Kam & Dearden, 2009). Here, HCI researchers have

worked towards co-creation of technologies to support disadvantaged communities around the world. HCI4D initiatives such as *Media Lab Asia* (Med Lab Asia, 2009) and *Bridging the Digital Divide* (www.bgdd.org) successfully demonstrated that embedding participatory approaches in their work produced positive outcomes for both researchers and users (Ho *et al.*, 2009).

The shift towards inclusive and collaborative approaches to research have also been recognised in the field of information systems (IS) (Baskerville, 1999; Benbasat & Zmud, 1999). Information systems research practice and its outcomes have been described as inaccessible and impractical in the business-oriented context (Benbasat & Zmud, 1999). To produce more accessible data, it has been claimed that “human organizations, as a context that interacts with information technologies, can only be understood as whole entities” (Baskerville, 1999, p.3). To achieve the holistic view of the researched subject, Baskerville has suggested implementation of participatory action research approaches in IS (Baskerville, 1999). It has been argued that any “meaningful investigation” in the field of information systems must therefore be analysed in the context of its practical significance (Baskerville, 1999, p.4).

In the field of cultural heritage, participants’ active contributions have been identified as vital to the exploration of innovation, creating a common understanding and supporting awareness raising (RICHEs, 2015). Here, formerly rigid and top-down models of culture have been altered to a more co-creative practice to reduce the distance between people and culture, as well as heritage professionals and users (RICHEs, 2015, p.3). It has been argued that co-creative approaches are the only effective way to create a holistic and inclusive representation of cultural heritage (RICHEs, 2015).

Many domains have adopted collaborative approaches in the work and research practice, changing the perception of project participants’ roles from passive to active. Table 2 provides a comparative analysis of how the roles of participants have been reframed in different areas of expertise such as research, education, or culture. However, despite the increasing recognition of participation, the limitations of collaborative approaches have also been debated in the literature (Clever, 2011; Cooke & Kothari, 2001). It has been argued that as “empowerment has become a buzzword in development, an essential objective of projects, its radical, challenging and transformatory edge has been lost” (Clever, 2011). Clever argues that participatory approaches frame communities as homogenous groups and romanticise the idea of collaboration, where “communities are capable of everything”. The emancipatory qualities of partaking in knowledge co-creation have also been questioned (Mosse, 2001), as “we seem to use ‘community’ as if it

were an aerosol can, to be sprayed on to any social programme, giving it a more progressive and sympathetic cachet” (Pollock & Sharp, 2012 citing Cochrance, 1986, p.51). It is essential to note, that the participatory process – called *radical* by many (Dewey, 1930; Freire, 1968) – is also frequently managed externally and “shaped by the perception of what the project agency could offer”. Thus, the limitations of participatory practice (for example power imbalance, external agendas and ethics) should always be considered during the process (Pollock & Sharp, 2012).

Table 2: Participatory practice and shifting roles of research participants

Participatory Practice	Source	Shifting Roles	
		From	To
Democratic Education	Dewey (1930) Freire (2005)	passive students	active knowledge co-creators
Participatory Action Research	Reason and Bradbury (2001) Whyte (1991) Hall (2005) McIntyre (2008)	subjects of study	co-researchers
Participatory Communication	Cornish & Dunn (2009) Servaes (2001) Whyte (2003)	information receivers	information co-creators
Participatory Design and Innovation	Sanders & Stappers (2008) Von Hippel (2005) Yagou (2005)	users	co-designers, co-innovators
Co-creation of value	Prahalad & Ramaswamy (2004)	passive consumers	active product and value co-creators
Cultural Heritage Co-creation	RICHS (2015)	culture receivers and users	culture co-creators

2.3.3 Co-creation: defining meaningful participatory practice

The notion of co-creation has been explored and applied within the contexts of educational, social and innovation services (Chowdhury, 2012; Kohler, Fueller, Stieger, & Matzler, 2011; Nambisan & Nambisan, 2013; Su, Lin, & Chen, 2016). The areas in which co-creation has been examined include business (Prahalad & Ramaswamy, 2004), research (Hall, 2005), digital design (Chowdhury 2012; Füller, Mühlbacher, Matzler & Jawecki, 2009), and cultural heritage (RICHERS, 2015). Up until 2019, the largest amount of publications on the topic of co-creation come from the Journal of Business (99), Industrial Marketing Management (93), Journal of Service Management (90) and the book series titled Lecture Notes in Computer Science (77) (Appendix 2). The literature reviewed in this section examines both the meaning and the characteristics of effective co-creation processes. The analysis presented here informed the design of the co-creation model used adopted for the project (Figure 1).

Table 3: Characteristics of good co-creation processes

Characteristic of effective co-creation process	Meaning	Source
Collaborative	Involves a group of people	(Sanders & Stappers, 2008; Prahalad & Ramaswamy, 2004; RICHES, 2015; Su, Lin, & Chen, 2016)
Innovative	Leads to formation of innovative and unique ideas and solutions	(Nambisan & Nambisan, 2013; Parsons, Guldberg, Porayska-Pomsta, & Lee, 2015; Piller, Vossen, & Ihl, 2012; RICHES, 2015; Su <i>et al.</i> , 2016)
Empowering	Strengthens people's experience of self-determination and self-efficacy.	(Cornish & Dunn, 2009; Füller, Mühlbacher, Matzler, & Jawecki, 2009; Kohler <i>et al.</i> , 2011)
Transformative (challenging power dynamics)	Challenges traditional power dynamics between project facilitators and participants	(Cornish & Dunn, 2009; Füller, 2010; Hall, 2005; Kohler <i>et al.</i> , 2011; RICHES, 2015)
User/Participant Centred	Focuses on and aims to address the needs of participants	(Cornish & Dunn, 2009; Füller <i>et al.</i> , 2009; Hall, 2005; Schäfer, 2011)
Engaging and enjoyable	Provides a playful and experiential experience	(Chowdhury, 2012; Füller <i>et al.</i> , 2009; Schäfer, 2011)

In the field of business, the “co-creation of value” has challenged the traditional perception of the commercial market as “an aggregation of consumers” (Prahalad & Ramaswamy, 2004, p.11). The importance of equal and active dialogue as vital elements of collaborative processes has been

emphasised. Additionally, business innovation scholars (Piller, 2012; Prahalad & Ramaswamy, 2004) argue that co-creation can enhance both users' experiences and products or service development. Businesses could benefit from the customer's active participation by sourcing external knowledge and "accelerating internal innovation" (Piller *et al.*, 2012, p.4).

The term co-creation has been examined in the field of design (Sanders & Stappers, 2008). Design researchers and practitioners have argued that practicing co-creation at the initial stage of project development can have "an impact with positive, long-range consequences" (Sanders & Stappers, 2008, p.9). In the field of design, the term co-creation has often been used interchangeably with co-design. The difference between these two terms can be established as:

- Co-design occurs when a group of people interact with design professionals.
- Co-creation is "an act of collective creativity, i.e. creativity that is shared by two or more people" (Sanders & Stappers, 2008, p.6).

The notion of "co-created knowledge" has also been studied in the literature (Cornish & Dunn 2009; Hall 2005; Reason & Bradbury, 2001). For instance, in the field of participatory communication, Cornish and Dunn (2009) have argued that a co-creative approach has allowed for "traditional information senders, these in power, to be transformed into co-creators of agendas and solutions" (2009, p.665). Hall (2005) refers to co-creation of knowledge as an integral part of participatory research. It has been argued that participatory and co-creative research practice has transformed the traditional "understanding of the creation of knowledge among human beings" (Hall, 2005, p.19). The radical and empowering nature of co-creation has also been examined in the field of cultural heritage, where the co-creation process has been described to reduce the distance between people and culture, as well as heritage professionals and users (RICHEs, 2015). This collaborative and co-creative practice is described to enhance social cohesion and promote "equal partnership" (RICHEs, 2015, p.3).

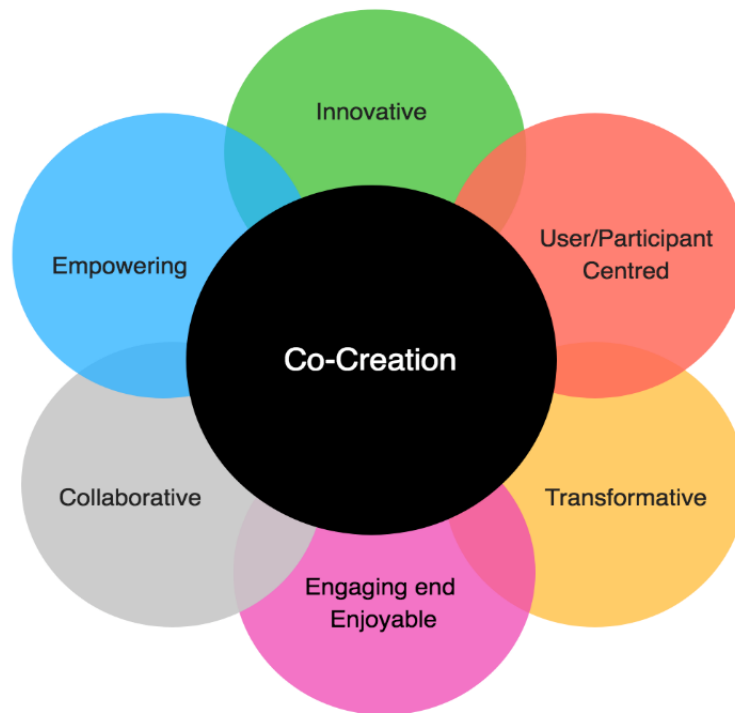
Scholars (Dahan & Hauser, 2002; Füller, 2010; Kohler *et al.*, 2011) have examined co-creation in online collaborative environments. Here, the co-creative experience has been analysed in terms of its attractiveness to the participating users. Füller's study focuses on consumers' motives in engaging in virtual co-creation, such as "feedback, recognition and interaction experience" (2012, p.117). Füller's experiment has proved that a meaningful virtual co-creative experience needs to be compelling, flowing, engaging, and supportive.

In the field of education, Parsons *et al.* (2015) examined digital storytelling tools as knowledge co-creation enablers. A collaborative education experiment has proved that co-creative practice can empower teachers and autistic pupils to “construct their narratives for creative, technology enhanced learning” (Parsons *et al.*, 2015). Co-creative approaches to knowledge formation support risk-taking, and provide space for a “sharable endeavor” of knowledge production (Parsons *et al.*, 2015). Schäfer (2011) highlights the significance of the technological co-creative developments and collaborative online platforms, which aim to enhance “user driven social interactions and user generated content” (2011, p.12). It has been claimed that due to its radical and participatory approach to knowledge co-creation, co-creation can be also perceived as “uncomfortable” and “too risky for educational professionals” (2015, p.267). Therefore it can be assumed that the co-creative process can provide an opportunity to explore more innovative, independent, and genuine approaches to knowledge formation.

Despite the indications (Chowdhury, 2012; Cornish & Dunn, 2009; Füller, 2010; Hall, 1981; Kohler *et al.*, 2011; Nambisan & Nambisan, 2013; Prahalad & Ramaswamy, 2004; RICHES, 2015; Su *et al.*, 2016) that co-creation processes have positive impacts on society, there is no strategy in place to evaluate and understand their social impact. For example, although co-creation has been repeatedly defined as an empowering process, there is also an urgent need for the development “of tools that capture its impact” (RICHES, 2015, p.6). Kohler *et al.* (2011) have recognised the positive aspects of co-creation, such as opportunities to network and exchange ideas, but have clearly advocated for the formation of alternative evaluation approaches. Scholars have also criticised the currently used quantitative methods, stating that “using participants’ rates as a metric” (Kohler *et al.*, 2011, p.161) does not provide holistic data about the social impacts of a co-creative project. The knowledge gap around the social impact evaluation of co-creation is further discussed in Section 2.4.

Figure 1 presents the key characteristics of a good co-creation process as identified through the literature.

Figure 1: Characteristics of a good co-creation process



The primary characteristic of an effective co-creation process is that it provides a collaborative and inclusive experience for the participants and project facilitators or researchers (Lang et al., 2016; Prahalad & Ramaswamy, 2004; RICHES, 2015; Sanders & Stappers, 2008). The importance of meaningful human involvement has been highlighted as one of the key aspects of co-creation (Pralhad & Ramasway, 2004). Using a participatory approach, co-creation initiatives consider multiple insights and diverse expertise. Co-creative projects can also provide organisations, researchers, and participants with a unique opportunity to exchange views and ideas (Pralhad & Ramaswamy, 2004; Sanders & Stappers, 2008).

Secondly, co-creation has been described as an innovative process, which leads to the formation of unique viewpoints and solutions (Dahan & Hauser, 2002; Lang et al., 2016; Nambisan & Nambisan, 2013; RICHES, 2015; Von Hippel, 2005). Thus, co-creative projects can benefit from exploring project participants' innovative potential and their unique knowledge (Dahan & Hauser, 2002). Additionally, co-creative practice has been described as an enabler of the exploratory process, leading to new ideas and innovative solutions (Von Hippel, 2012), creating a common

understanding, and supporting awareness (RICHEs, 2015). Co-created academic knowledge has been described as “more exploratory” (Su *et al.*, 2016).

In the literature, the co-creative process is often defined as an empowering experience (Cornish & Dunn, 2009; Füller *et al.*, 2009; Kohler *et al.*, 2011). Füller *et al.*'s (2009) study examining the impact of co-creative experiences discovered that active involvement in co-creative projects contributes to participants' sense of empowerment. Participation in co-creative initiative strengthens “person's experience of self-determination and self-efficacy” (Füller *et al.*, 2009, p.75). Elsewhere, Kohler *et al.* (2011) have argued that co-creation enhances user interactions, providing opportunities to experience freedom and empowerment.

Co-creation also has the potential to challenge the existing power structures in society (Piller, Vossen & Ihi, 2012; RICHEs, 2015). For instance, in the context of cultural heritage, co-creation as a process aims to reduce the distance between people and culture, as well as between culture curators and culture users (RICHEs, 2015). This collaborative practice is described as enhancing social cohesion and promoting “equal partnership” (RICHEs, 2015, p.3). Embedding co-creation into digital content production diffuses the structure of innovation powers, enhances users experiences, and thus improves the quality of the final product (Piller *et al.*, 2012).

Finally, scholars have argued that the co-creative process must be engaging and enjoyable. For example, Füller *et al.* (2009) stress that the co-creative process can only be effective if it provides enjoyable and meaningful experiences to the individuals. Co-creation participants need to be provided with opportunities “to engage in meaningful and challenging tasks” (Füller *et al.*, 2009, p.76). Elsewhere, Füller categorised the intrinsic motivations behind users' participation in the co-creation process, including playful tasks, curiosity, altruism, and community support and an opportunity to make new friends (2010, p.105).

The following defining characteristics of effective co-creation projects have been identified in the reviewed literature:

1. collaborative
2. innovative
3. empowering
4. transformative (challenging power dynamics)
5. user/participant-centred
6. engaging and enjoyable

2.3.4 Defining Youth Digital Culture Co-creation

Numerous definitions of *culture* can be found in the literature (Jahoda, 2012; Jokilehto, 2005). Jokilehto reports that, in the 20th century, scholars and cultural policy makers viewed *culture* as a concept which “by its very nature is constantly being renewed and enriched” (2005, p. 29). The meaning and interpretations of *culture* have been emerging and altering. The first definition of culture was noted in the “Primitive Culture” by Edward Burnett Tylor (1871):

Culture ... is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society” (Jokiehito, 2005, p.4)

Records dating back to 1952 describe *culture* as “learned behaviour”, “ideas in the mind”, “a logical construct” or “an abstraction from behaviour” (Jokilehto, 2005, p.4). Progressively, the understanding of culture has emphasised the collective and networked nature of culture. In his review of definitions of *culture*, Jahoda emphasises the complex and interconnected nature of culture. He cites to the following definition provided by Hong (2009), “culture as networks of knowledge consisting of learned routines of thinking, feeling, and interacting with other people, as well as a corpus of substantive assertions and ideas about aspects of the world” (Jahoda, 2012).

Jahoda’s review reveals that at present there can be no agreed definition of culture. It is proposed that if a theoretical clarification of culture is required for empirical reasons, then the authors should define the term “culture” according to the context of which it is studied. Thus, for the purpose of this project, the term digital culture is defined and examined later in this chapter.

Emergent digital technologies began to influence culture at the end of the 20th century. The computer was acknowledged as “no longer a tool but a filter for all culture” (Manovich, 2001). In the digital age, a notable analysis of links between culture and digital technologies can be found in the literature (Deuze, 2006; Geber, 2006; Gere, 2012; Murphie & Potts, 2003; Russo & Watkins, 2005). Digital culture has been primarily analysed by Communication, Educational and Culture scholars (Appendix 3, Figure 28). The first publication containing a “digital culture” reference was published in 1996 (Appendix 3, Figure 29). The journal article, “Digital Transformations of Time: The Aesthetics of the Internet”, proposed that the emerging digital culture was “transforming our sense of the aesthetic” as we experience art through the lens of the “World Wide Web” (Corcoran, 1996, p. 375).

Since 1996, a considerable amount of literature has been published on digital culture (Deuze, 2006; Gere, 2012; Lesso, 1996; Meadows, 2012; Russo & Watkins, 2005). Participation and knowledge exchange are described as key elements of digital culture (Hand, 2016 Uzelac & Cvjetičanin, 2008; Ronchi, 2009; Miller, 2011). Digital transformation freed cultural heritage from being “tied to a physical location, as well as time period” (Baker, 2013, p.46). The invention of digital communication tools such as email enabled the utilisation of what was initially seen as “experimental, hands-on mechanism of information transfer” (Ronchi, 2009, p.22). As digital technologies have become embedded into everyday culture, new systems designed to “share symbolic and material resources and relations” (2008, p.17) became easily accessible. Through the use of email, online forums, interactive platforms, and digital applications, culture has become increasingly participatory and inclusive. Russo and Watkins (2009) argue that, in the digital age, the traditional, top-down model of cultural information management practice is challenged by the collaborative nature of digital technologies.

Digital culture is described both as an enabler for co-creation and preserver of human knowledge, values, and beliefs (Hand, 2016; Ronchi, 2009). Availability of accessible technologies and digitalisation “blurs boundaries between production and consumption of culture” (Hand, 2008, p.37). Innovative types of digital co-creation might thus enable meaningful community engagement between cultural institutions and citizens (Russo & Watkins, 2005).

Others have examined the evolving relationship between human and computers (Meadows, 2012; Ronchi, 2009). Meadows has indicated that an individual can have “the experience of freedom from the body” through an extension of the normal process of identity formation (Meadows, 2012, p.168 -169). Online culture allowed for the transformation of rigid connections between computers into meaningful relationships between people (Ronchi, 2009). Ronchi has further argued that digital culture not only accumulates the “creativity of the past”, but also aims to “anticipate and enhance creativity for the future” (Ronchi, 2009, p.15). Thus, digital culture is both “reproductive (replicating the existing) and productive (creating the new)” (Baker, 2013, p.45).

Despite the positive analysis of digital culture, some accounts have highlighted possible negative impacts (Baker, 2013; Hand, 2016; Meadows, 2012). Notions of digital empowerment and disempowerment have been analysed (Hand, 2008; Meadows, 2012). It has been argued that digital culture might threaten the “self-identity and social locatedness” of culture. As culture can be experienced through screen-based devices, it presents viewers with problems of “authenticity, interpretability, guidance and contextuality” (Baker, 2013, p.46). The continuous interactions with

digital culture mean being “always on”, which may result in addictive behaviour leading to social isolation (Miller, 2011). Miller has argued that that constructing online self-narrative lacks any value if it is done in isolation (2011, p.171). Meadows (2012) highlights the importance of face-to-face interactions in digital culture suggesting that, “the bodily intimacy that expresses tangible care between real friends simply cannot be reproduced by virtual means” (2012, p.169).

The social value of participation in digital culture has also been questioned (Baker, 2013; Hand, 2008; Ronchi, 2009). That lack of essential digital skills such as online safety and communication or handling digital information could deepen the *digital divide* (Baker, 2013; Miller, 2011). The digital divide is defined here as “a widening gap between the developed and the developing worlds and the info-rich and the info-poor” (Seaves, 2001, p.11). Furthermore, digital culture could influence social and economic marginalisation by creating participatory but decentralised systems where citizenship responsibly is delegated to an individual.

The value of online knowledge exchange in digital culture has been examined (Hand, 2008; Baker, 2013). Contrasting with optimistic accounts and framing of digital culture as a knowledge formation and exchange enabler (Hand, 2008; Uzelac & Cvjetičanin, 2012), Hand has argued that digital culture provides only “a substitute for authentic knowledge” (2008, p.39). Digital reproductions are described as ineffective copies, which eliminate the original context of a given heritage. Consequently, each individual’s perception of culture is abbreviated (Baker, 2013), and digital cultural communities and identities are less complex than their older offline, traditional forms (Hand, 2008).

The literature review also reveals a variety of terminology to analyse and theorise links between culture and digital technologies (Bell, 2011; Jones, 1997; Poster, 1995; Ronchi, 2009; Uzelac & Cvjetičanin, 2008). For example, the holistic concept of *internet culture* was proposed as “a set of structural norms and possibilities that have arisen exclusively within the sequestered worlds of the Net” (Poster, 1995, p. XVI). Meanwhile, the term *electronic culture* focused on human relations to digital culture and their “continuous process of multiple identity formation” (1995, p.59). The collective, social, and civic aspects of the convergence of culture and technology were further examined by Jones (1997), who proposed the term *virtual culture*. *Virtual culture* facilitated an analysis of how computer-mediated communication technologies could empower socially disadvantaged groups to take part in social change initiatives. The importance of a community’s voices was also outlined in the notion of *cyber culture*, which focuses on “lived culture, made from people, machines and stories in everyday life” (Bell, 2011, p. 2). The collective meaning-making

is also explored by Jenkins (2006), who coined the phrase *convergence culture*. Ronchi's (2009) notion of *eCulture* provided another lens for the analysis of the value of online communication and digital information sharing in the context of cultural heritage. *eCulture* was defined as an umbrella term for online museum portals, virtual museums, electronic art artefacts, and Internet cultural services (Ronchi, 2009). The notion of digital culture has been conceptualised by Deuze, who sees it as, "an emerging set of values, practices, and expectations regarding the way people (should) act and interact within the contemporary network society" (Deuze, 2006, p.63). The proposed model emphasises the roles of digital culture co-creators, and determines its key praxis: participation, remediation, and bricolage (Deuze, 2006). Deuze's concept of digital culture is particularly useful in the context of this work, as it examines the importance of the shifting roles of culture receivers towards digital participants and 'bricoleurs'. The importance of active participation and its cultural values aspects are emphasised. For example, Deuze, writing about the practice of blogging and other forms of 'indymedia' emphasised the importance the norm and values that are associated with digital culture of the that "the act of blogging or open publishing an indymedia web site in itself does not constitute digital culture. According to Deuze, "[digital culture is] an emerging set of values, practices, and expectations regarding the way people (should) act and interact within the contemporary network society" (2006, p.63).

Table 4 provides a summary of the analysis of the terms examined in this section.

Table 4: Comparative analysis of terms used in the literature referring to digital culture

Name	References	Definition
Electronic culture	Poster (1995)	a continuous process of multiple identity formation
eCulture	Ronchi (2009)	an umbrella term for online museum portals, virtual museums, electronic art artefacts, and Internet cultural services
Cyber culture	Bell (2011)	lived culture, made from people, machines and stories in everyday life
Internet culture	Porter (1996)	a set of structural norms and possibilities that have arisen exclusively within the sequestered worlds of the Net
Virtual culture	Jones (1997)	collective, social and civic aspects of the convergence of culture and technology

Digital culture	Deuze (2006)	an emerging set of values, practices, and expectations regarding the way people (should) act and interact within the contemporary network society
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2.3.5 Youth Digital Culture Co-creation: definition

The above literature review substantiates the concept of Youth Digital Culture Co-creation, used for this work. The development of a new definition is motivated by the lack of prior theoretical frameworks specifically examining digital culture co-creation. Whilst a number of digital youth-centred approaches have been identified in this chapter, none of the approaches provided a useful framework for an appropriate analysis of youth digital culture co-creation in Scotland.

The aim of the youth digital culture co-creation framework is to provide a holistic analysis of young people’s participation in the process of co-creation of digital culture and to encompass a wide range of social impact (online and offline) it might lead to.

Thus an understanding of co-creation is based on the European research initiative RICHES (Renewal, Innovation & Change: Heritage and European Society): “a practice where different stakeholders come together collaboratively to create future-oriented perspectives and enrich cultural experiences” (2015, p.1). The defining characteristics of a good co-creative process derive from the reviewed literature and have been discussed in Section 2.3.3. The following definition of youth digital culture co-creation is proposed in this project:

Youth digital culture co-creation describes young people’s participation in projects which aim to collaboratively create a set of values, practices, and expectations. Youth digital culture co-creation covers both the practical use of digital technologies in youth participatory setting (e.g. coding, digital storytelling), as well as a collaborative examination of digital technologies (e.g. discussion about online safety or cyberbullying).

To encompass a broad range of impact that can be achieved through co-creation, Deuze’s definition of digital culture is selected to reflect changes in the emerging set of values, practices, and expectations regarding the way people might interact within the contemporary network society. According to Deuze, participation is a key and defining element of digital culture. Thus at

the centre of youth digital culture co-creation is youth participation. (For analysis of youth participation and digital youth participation see Section 2.2.)

In this thesis, digital culture co-creation is primarily reflected in the way young people collaboratively engage in formation of new ideas, values and practices. In practice, examples of youth digital culture co-creation might cover previously examined types of digital youth engagement (see section 2.2.2) such as digital youth work (Cohlmeyer, 2013), digital making (Quinlan, 2016) or youth digital activism (Stornaiuolo & Thomas, 2017).

2.4 Social Impact Evaluation

2.4.1 Social Impact and Social Impact Assessment and Evaluation

While the main aims of Social Impact Assessment (SIA) are to analyse, monitor, and manage the social consequences of development (Esteves *et al.*, 2012, p.6), the terminology used in the field requires attention. The literature reveals that a number of scholars have referred to their practice as Social Impact Assessment (Akpofure & Ojile, 2003; Becker, Harris, McLaughlin, & Nielsen, 2003; Burdge, 2003), while elsewhere, Monitoring and Evaluation has been used (Adams & Garbutt, 2008). The term Social Impact Evaluation has also been identified in several studies (Checkoway & Richards-Schuster, 2005; Walker, 2007). In order to gain a better understanding of these terms, Streatfield and Markless propose that impact evaluation is “largely dependent on qualitative research evidence about effectiveness and as broadly complementary to ‘traditional’ performance measurement” (Streatfield & Markless, 2009, p. 135). Social Impact Assessment (SIA) is the most common term used in communicating the process of understanding the way “human communities change as a result of either an intended or unintended action” (Burdge, 2003). SIA is defined as “a field of research and practice, a discourse, paradigm, or sub-discipline in its own right” (Esteves *et al.*, 2012, p.34). This “overarching framework” covers the evaluation of all impacts on communities and individuals and their interactions with the society. Evaluation is defined here as the “systematic assessment of the operation and/or the outcomes of a programme or policy” (Weiss, 1998, p.4). SIA is described as both an interdisciplinary and a transdisciplinary field of research and practice (Esteves *et al.*, 2012). SIA can be applied in various disciplines such as anthropology and to sub-disciplines or further areas of inquiry, such as cultural impacts, impacts of social and human capital, and gender impacts (Esteves *et al.*, 2012).

Literature analysis shows that social impact is mainly associated with a change in peoples’ or communities’ livelihoods. According to Burdge (2003) social impact can be viewed as a

consequence of public and private actions. Social impact is defined as an understanding and articulation of “how communities change” (Burdge, 2003). The importance of change as a defining element of social impact is also outlined by Vanclay (2003). Vanclay provides eight types of changes which define social impact: changes to (1) health and well-being; (2) people’s environment; (3) people’s way of life (life, work, day to day activities); (4) culture (shared beliefs, customs, values); (5) community (community cohesion, stability); (6) political system; (7) people’s personal and property rights; (8) fears and aspirations.

While a variety of definitions and types of social impact can be found in the literature, the definition outlined by Burdge and Vanclay’s research is most relevant to this project:

...all social and cultural consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to another, organise to meet their needs, and generally cope as members of society (1995, p.59).

Burdge and Vanclay’s all-encompassing and necessarily broad definition of social impact provides a theoretical foundation for this research. Burdge and Vanclay’s definition emphasises the importance of both social and cultural elements of social impact, and provides defined and concise theocratisation which can be built upon in the later stages of the project. Burdge and Vanclay’s definition of social impact is expanded later in the context of digital culture co-creation. (See chapters 4, 5, 6 and 7.)

2.4.2 A Short history of Social Impact Assessment and Evaluation

A considerable amount of literature has been published on the importance of Social Impact Assessment (SIA) and Evaluation concerning adult and youth groups (Adams & Garbutt, 2008; Akpofure & Ojile, 2003; Becker *et al.*, 2003; Belfiore & Bennett, 2007; Burdge, 2003; Cousin & Whitmore, 1998; Douthwaite *et al.*, 2007; Dufour, 2015; Esteves *et al.*, 2012; Gawler, 2005; Ito *et al.*, 2015; Lockie, 2001; Merli, 2012; Morris *et al.*, 2011; Rietbergen-McCracken & Narayan, 1998; Vanclay, 2003). The field of Social Impact Assessment originated in the 1950s and was primarily incorporated into the standard guidelines for Environmental Impact Assessment in the United States (Esteves *et al.*, 2012; Pant 2015). As stated by Barrow, the origins of SIA “lie, in part, in research carried out since 1950s by anthropologists and sociologists who feared that proposed developments might have serious negative side-effects...” (Barrow, 2004, p.2). In 1969, the National Environmental Policy Act embedded SIA as a legal requirement into project

implementation processes (Esteves *et al.*, 2012). Consequently, over the years, SIA became a core element of community development initiatives. Many international national governmental organisations initiated their experiments with social impact evaluation (Adams & Garbutt, 2008). In the United Kingdom, the importance of impact evaluation was noted in 1985. This year was also described in literature as “the Birth of the Performance Indicator” (Fraser, 2015, p. 6). In 1985, the UK Government introduced Performance Indicators (PIs) to plan and evaluate and control the quality of the NHS, education and local government (Fraser, 2015).

As SIA frameworks gained more popularity, practitioners began recognising some of the methodological issues affecting the practice (Adam & Garbutt, 2008; Esteves *et al.*, 2012; Lockie, 2001; Pant, 2015; Vanclay, 2003). Firstly, SIA techniques were described as mainly technocratic and serving solely to help organisations to meet their funding criteria and management expectations (Adams & Garbutt, 2008). For instance, Lockie argued that technocratic evaluation methods are mainly about “measuring, predicting and reporting” the impact (2001, p.278). Attempts to foresee the outcomes of an intervention not only impose “unstated goals and values”, but also “pre-empt the outcomes of debates and decision-making processes” (Lockie, 2001, p. 281). Fraser argues that the primary motivation of the introduction of Performance Indicators in the United Kingdom was to oversee “where is the money going and what are we getting for it” (Fraser, 2015, p.4). In the voluntary sector, evaluation has been viewed as an evidence-gathering task that aimed to “silence the voice of practitioners” (Cooper, 2018, p.37). Contemporary SIA practice has been criticised for being “colonised by a technocratic language obsessed by ‘outcomes’, ‘outputs’, ‘impacts’, ‘targets’, ‘actions plans’, ‘cost improvements’, ‘best practices’, ‘income generation opportunities’” (Fraser, 2015, p. 5).

Scholars have claimed that too much emphasis has been placed on setting specific social impact goals and objectives instead of trying to understand the dynamic of social change as a collective and individual process (Adams & Garbutt, 2008, Becker *et al.*, 2003; Belfiore & Bennett, 2007; Burdge 2003; Esteves *et al.*, 2012). Belfiore and Bennett state that “considerably more time and resources have been spent on looking for ‘proof’ of impacts than actually trying to understand them” (2007, p.137). Cooper indicates that top-down evaluation is an intrusive recording system, where the “real-picture” of social impact is re-edited to fit with funders’ evaluation criteria (2018, p.37-39). The validity of metrics-driven evaluation is also questioned by Muller (2018), who refers to a tendency to overly rely on performance indicators in evaluation as “the metric fixation” (2018, p. 27). In his view, technocratic and externally governed evaluation systems might not only lead

to false reports of impact but may also “lead to distortion, since making things comparable often means that they are stripped of their context, history, and meaning” (2018, p.33).

2.4.3 Social Impact Assessment and Evaluation of youth participation

The limitations of the traditional approach towards social impact assessment have also been noted in the context of youth participation (Checkoway & Richards-Schuster, 2005; Cooper, 2018; De St Croix, 2018; Flores, 2007; Gawler, 2005; Walker, 2007). An overreliance on traditional and top-down evaluation methods such as questionnaires, surveys, structured interviews, or focus groups has been noted (Checkoway & Richards-Schuster, 2005; Flores, 2007). Flores has argued that too often, young people are framed as passive “respondents of [evaluation] methods” (2007, p.4). While some evaluation approaches frame young people as problem holders (Checkoway & Richards-Schuster, 2005; De St Croix, 2018; Flores, 2007), there has been a tendency to report stories of improvement (Cooper, 2018). The complex nature of evaluation of young people’s learning has also been studied in the context of out-of-school digital educational programmes (Lemke *et al.*, 2015). In their review of digital youth project assessments in the United States, Lemke *et al.* (2015) argue that both anticipated and unanticipated outcomes should be documented in evaluation.

In the United Kingdom, social impact evaluation has been examined in the context of ongoing financial pressures in the youth sector (Cooper, 2017; De St Croix, 2018). Due to the austerity measures imposed by the government in the last two decades:

all public spending is under scrutiny ... As a consequence, there is increasing pressure to assess and articulate the value that services produce, both for the young people who use them and for society as a whole ... The financial pressures also make it ever more essential that all services working with and for young people focus on identifying the approaches that will have the greatest impact in improving outcomes and reducing calls on the public purse. (De St Croix, 2018, p.421 – referring to *Framework of Outcomes for Young People* published by the British Government in 2012).

Due to the UK’s governmental funding cuts in the last two decades, youth services have become valued by “the extent to which their ‘outcomes’ can be monetised, ‘proven’ to reduce notional future spending in more expensive areas of public service” (De St Croix, 2018, p. 421). De St Croix argues that this youth ‘impact’ agenda has brought forward the idea that youth projects “get

paid for numbers” as “funding agencies reward organisations that are able and willing to measure their effectiveness in numerical and monetary terms” (2018, p.422). Thus, top-down and technocratic evaluation procedures in youth-centred contexts (such as youth-work and informal education settings) have been viewed by youth practitioners as an “absolute pain” and “a necessary evil” (Cooper, 2018, p.38). De St Croix talks about, “young people’s resistance to [evaluation related] paperwork and computerised monitoring systems” (2018, p. 425). As outcomes-driven approaches to evaluation have been supported by the national youth funding bodies, youth organisations have been, “urged to predefine programme outcomes and adopt standardised tools to measure changes in young people’s behaviour and attitudes between the beginning and end of an intervention” (De St Croix, 2018).

The idea of “monitoring outcomes from a distance” (De St Croix, 2018) has also been critiqued as an external control mechanism for youth work delivery (Cooper, 2018). Researchers (Cooper, 2018; De St Croix, 2018) suggest that British youth workers feel under pressure to work against their core youth-centred values, as they are required to “manipulate” young people to work towards pre-set outcomes. For example, Cooper suggests that when working with outcome-driven evaluations, youth workers feel “simultaneously under pressure, guilty and inadequate” (2018, p.40). De St Croix argues that the technocratic nature of evaluation is “undermining the voluntary, respectful and informal nature of their relationships with young people” (2018, p.424).

2.4.4 Technocratic versus Participatory Evaluation

Since the 1970s, as a response to the problematic, technocratic use of evaluation methodologies, SIA professionals and theorists began to search for a more inclusive and holistic approach to monitoring and evaluating social change (Adam & Garbutt, 2008; Akpofure & Ojile, 2003; Becker *et al.*, 2003; Burdge, 2003; Douthwaite *et al.*, 2007; Esteves *et al.*, 2012; Merli, 2010). It was agreed that to fully comprehend the complexity of social impact it is desirable to move beyond “narrowly conceived ideas of performance measurement and target setting” (Belfiore & Bennett, 2007, p.138). SIA professionals collectively opposed the technocratic implementation of evaluation approaches in the evaluation process and called for “a more adequately ‘socialised’ impact assessment” (Douthwaite 2007, p.279). While traditional evaluation tools (e.g. surveys and questionnaires) were largely seen as useful research and evaluation methods, their possible technocratic use was critiqued. As a result, SIA methodology became more concerned with the evaluation process, rather than just the resulting outcome.

When defining good SIA practice, Esteves *et al.* (2012) emphasise the active role of participants in the process. The aim of an effective SIA is to provide stakeholders with a safe environment in which their needs and aspirations can be analysed and understood (Esteves *et al.*, 2012). This shift towards a more community-centred approach introduced new core attitudes in the SIA community (Vanclay, 2003). Consequently, SIA was perceived not solely as a tool used to assess goals and objectives, but as a “process of managing the social issues associated with planned interventions” (Vanclay, 2003). The emphasis on the process was further reflected in the development of more participatory evaluation methodologies. Numerous commentators agree that active community collaboration in social impact assessment provides a more critical and informed view of the process (Adams and Garbutt, 2008; Becker *et al.*, 2003; Cousins and Whitmore, 1998; Douthwaite *et al.*, 2007; Pant, 2015).

This debate on the importance of participatory of evaluation is also associated with a wider philosophy paradigm shift (Cooper, 2018). As indicated by Cooper, technocratic use of evaluation tools is aligned with a positivist paradigm, which views knowledge creation process as linear, closed, and objective. On contrary, participatory evaluations can be aligned with the constructive paradigm, where knowledge is perceived as a social construction (Cooper, 2018).

2.4.5 Dimensions of Participatory Evaluation (PE)

Cousin & Whitmore’s (1998) study of participatory evaluation (PE) has produced a model for reviewing types of social impact assessment practice. To examine forms of collaborative evaluation methodologies, the following defining characteristics of PE have been proposed:

- **Control of the evaluation process** (Who oversees the evaluation process? Are the technical decisions managed by the participants or evaluation experts?)
- **Stakeholders selection for participation** (Who is involved in the process? Primary users or all legitimate groups?)
- **Depth of participation** (Are evaluation participants actively involved in the process and responsible for decision-making? Is their participation or control of the process limited?)

The model shown in Figure 2 is particularly useful in the context of this thesis because it provides a set of guidelines for revising existing social impact evaluation frameworks. Cousin and Whitmore’s model allows for a systematic analysis and categorisation of “any evaluation approach that purports to be participatory and for grouping it with similar approaches that came before” (King, Cousins, & Whitmore, 2007, p. 85).

Figure 2: Distinguishing characteristics of Participatory Evaluation (Cousin & Whitmore, 1998)

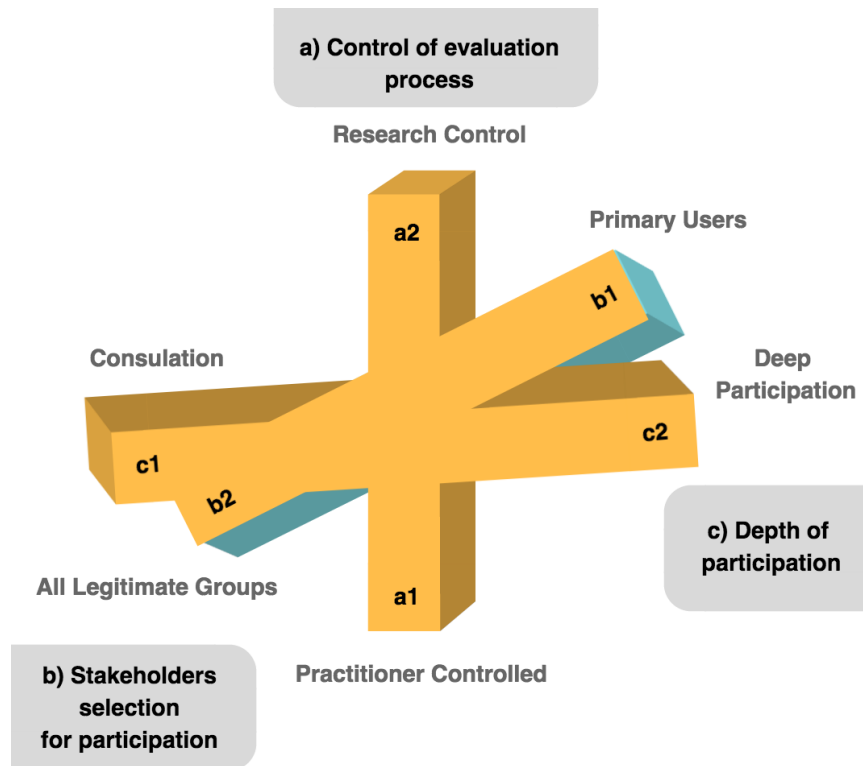


Table 5 illustrates a comparative analysis of participatory evaluation approaches, using criteria derived from Cousin and Whitmore’s model (1998, pp. 12-13). For the purpose of this thesis the following questions were added to extend Cousin and Whitmore’s analysis:

- Is the evaluation framework youth centred?
- Is it considering the role of technologies in the evaluation process?
- Are quantitative tools applied?
- Are qualitative tools applied?

Table 5 examines currently dominant evaluation approaches that are linked to the research gap examined in this doctoral research project (discussed in Chapter 3). The aim of the comparative analysis is to review and compare existing evaluation frameworks that specifically consider youth participation or/and digital participation. The key criteria considered for their selection included: (1) young people’s participation in the evaluation, (2) evaluation of digital technologies in the social context, and (3) youth-centred evaluation models. The following terms were used when searching for evaluation frameworks suitable for this review: “digital youth evaluation”, “digital culture evaluation”, “youth culture evaluation”, “digital evaluation”, “youth evaluation”, “youth

participation evaluation”, “youth development evaluation”, “digital culture co-creation evaluation”, “co-creation evaluation”. Ten frameworks were selected for analysis based on their relevance to the three criteria earlier outlined in this section.

The purpose of Table 5 is to examine the following aspects of these evaluation approaches:

- To measure the degree of participation involved, using Cousin and Whitmore’s (1998) model (Table 5, columns C-G)
- To determine whether the approach evaluates the role and/or impact of using of digital technologies in a project (Table 5, column I)
- To determine whether the approach involves young people as co-evaluators (Table 5, column H)
- To determine whether the approach adopts quantitative and/or qualitative methods (Table 5, column I and J)

Ten evaluation frameworks have been included in Table 5 (Becket *et al.*, 2003; Fetterman, 1994, 1995; Just Economics, 2015; Patton, 1994; Rietenberg-McCracken & Narayan-Parker, 1998; Sabo Flores, 2008; Simster, 2015; Tanner, 2012). Although nine of these approaches (Becket *et al.*, 2003; Fetterman, 1994, 1995; Just Economics, 2015; Patton, 1994; Rietenberg-McCracken & Narayan-Parker, 1998; Sabo Flores, 2008; Simster, 2015) include participatory evaluation practice, only two have positioned young people as active co-partners in the evaluation process (Sabo Flores, 2008). All the approaches utilise a mixture of quantitative and qualitative methods. Only two of the approaches (Just Economics, 2015; Tanner, 2012) utilise techniques and methods to assess the impact of digital projects.

As noted from the above comments and the analysis illustrated in Table 5, none of the approaches specifically consider the social impact assessment both of youth-centred initiatives, and their use of digital technologies in the project.

Table 5: Comparative assessment of evaluation approaches using Cousin and Whitmore's (1998) model

Evaluation Frameworks	Source	Primary Technical Goals/ Functions	Control of Decision Making	Selection for Participation	Depth of Participation	Position on Cousin & Whitmore's model	Youth centred	Considers Use of Technology	Quantitative Methods	Qualitative Methods
Youth Participatory Evaluation (YPE)	Sabo Flores (2008)	Practical: empowerment, self-determination, program improvement	Participants: almost complete control, facilitated by evaluator	Primary users: participants involved in the project	Extensive: participation in all phases of evaluation	a2, b1, c2	yes	no	yes	yes
Interactive Community Forum	Becket <i>et al.</i> (2003)	Practical: empowerment, self-determination, program improvement	Participants: almost complete control, facilitated by evaluator	Unspecified: most often participants or stakeholders	Extensive: participation in all phases of evaluation	a2, b1, c2	no	no	yes	yes
Participatory Monitoring & Evaluation	Rietenberg-McCracken and Narayan-Parker (1998)	Practical: empowerment, self-determination, program improvement	Participants: almost complete control, facilitated by evaluator	Primary users: all stakeholders involved	Extensive: participation in all phases of evaluation		no	no	yes	yes

Evaluation Frameworks	Source	Primary Technical Goals/ Functions	Control of Decision Making	Selection for Participation	Depth of Participation	Position on Cousin & Whitmore's model	Youth centred	Considers Use of Technology	Quantitative Methods	Qualitative Methods
Empowerment Evaluation	Fetterman (1994, 1995)	Political: empowerment, self-determination	Participants: almost complete control, facilitated by evaluator	Primary users: usually key program personnel, sometimes wider groups included	Extensive: participation in all phases of evaluation	a1, b1, c1	no	no	yes	yes
INTRAC Approach	Simster (2015)	Practical: empowerment, self-determination, program improvement	Participants: almost complete control, facilitated by evaluator	Primary users: participants involved in the project	Extensive: participation in all phases of evaluation	a1, b1, c1	no	no	yes	yes
Youth Empowerment Evaluation	Walker (2007)	Practical: empowerment, self-determination, program improvement	Participants: almost complete control, facilitated by evaluator	Primary users: participants involved in the project	Extensive: participation in all phases of evaluation	a1, b1, c1	yes	no	yes	yes

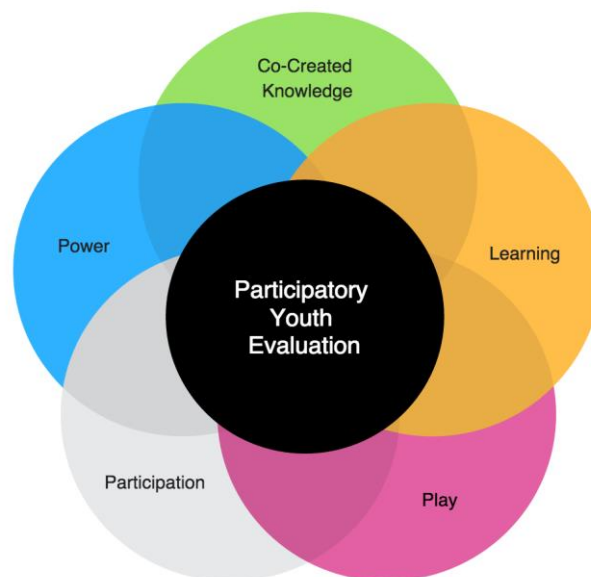
Evaluation Frameworks	Source	Primary Technical Goals/ Functions	Control of Decision Making	Selection for Participation	Depth of Participation	Position on Cousin & Whitmore's model	Youth centred	Considers Use of Technology	Quantitative Methods	Qualitative Methods
Developmental Evaluation	Patton (1994)	Practical: empowerment, self-determination, program improvement, evaluation utilization	Balanced: evaluator and participants work in partnership	Primary users: mainly program developers and implementers	Substantial: ongoing involvement and participation	a1-a2, b1, c2	no	no	yes	yes
Digital Inclusion Outcomes Framework	Just Economics (2015)	Practical: empowerment, program improvement, evaluation utilization	Balanced: evaluator and participants work in partnership	Primary users: all stakeholders involved	Substantial: ongoing involvement and participation	a1-a2, b1, c2	no	yes	yes	yes
The Balanced Value Impact Model	Tanner (2012)	Practical: evaluation utilization, program improvement	Limited: process mainly coordinated by evaluation practitioners	Primary stakeholders: all stakeholders might be involved	Limited: stakeholders might be involved or included in the process	a2, c1, b1	no	yes	yes	yes

2.4.6 Participatory Youth Evaluation: key areas for consideration

In the fields of both Social Impact Assessment and Youth Participation, practitioners have recognised a participatory approach as an appropriate methodology to assess the impacts of youth-centred initiatives (Checkoway & Richard-Schuster, 2003; Cooper, 2018 Gawler, 2005; Sabo, 2003; Walker 2007). Checkoway & Richard-Schuster claim that “youth participation in evaluation community research is desirable”, and that there is need for more knowledge of this approach (2003, p.22). Consequently, youth evaluation scholars called for an alternative approach that effectively fosters social equity and validates youth expertise in the process (Checkoway & Richard-Schuster, 2003; Sabo, 2003; Walker, 2007). According to Participatory Evaluation principles “all stakeholders were supposed to be involved in participatory evaluation” (Sabo Flores, 2007, p. 6). However, Sabo Flores (2007) reports that none of the evaluation involved the affected youth as evaluation participants. Consequently, researchers agree that young people ought to be provided with meaningful roles, full understanding of the initiative, and co-ownership of the process and its outcomes (Checkoway & Gutiérrez, 2006; Loncle *et al.*, 2012).

Acknowledging that there is “no single tool or method that can capture the whole range of impacts or that can be applied by all” (Dufour, 2015, p.5), this thesis identifies key areas of consideration when considering SIA, as shown in Figure 3. These areas are discussed both in adult and youth evaluation settings.

Figure 3: Dimensions of participatory youth evaluation



2.4.6.1 Participation

One of the most significant changes in SIA has been the implementation of participatory and inclusive monitoring and evaluation methods into practice. Lockie highlights the importance of “shared understanding of problems and collective efforts to solve them” (2001, p.109). It is vital that SIA process goes beyond a tokenistic “public relations exercise” (Lockie, 2001, p.278). The International Principles for Social Impact Assessment, created by the International Association of Impact Assessment, identify participation as a key element of effective evaluation frameworks. One of the core values of SIA community is that “people have a right to be involved in the decision making about the planned interventions that will affect their lives” (Vanclay, 2004, p.9). Additionally, Akpofure and Ojile (2003) claim that by adapting participatory and interactive methodologies in social impact assessment, projects can improve their social-economic results (p.212).

The shift towards a more inclusive methodology is also noted in the area of youth participation and social impact evaluation (Checkoway & Richard-Schuster, 2003; Gawler, 2005; Holden *et al.*, 2004; Sabo, 2003; Sabo Flores, 2007; Walker, 2007). To more effectively address the needs of youth, scholars call for “a radical move to flatten hierarchies” and development of a more participatory evaluation system (Sabo Flores, 2007 p.13). Collaborative methodologies allow youth to define and examine their own projects and to create their own methods to measure their development (Checkoway & Richard-Schuster, 2003). Only through active participation in the social impact assessment processes are young people able to critically analyse and reflect upon their experience and its social impact. As Jennings *et al.* suggest, youth participation is not just concerned with “adults allowing children to share their perspective” (2006, p.23), but also with nurturing an environment where young people can actively and independently implement social change. To grasp the holistic value of youth collaborative projects, researchers need to move beyond the autocratic perception of young people as “human potential, moulded and shaped by positive and negative influences” (Percy-Smith & Thomas, 2010, p. XXI).

2.4.6.2 Co-created knowledge

One of the key criticisms of traditional SIA is the fact that its top-down methods “have largely failed in the exercise of social explanations and prediction” (Lockie 2001, p.281). Technocratic methods implemented by external evaluators might often fail to consider the unique knowledge of the participants of the evaluated initiatives. In order to address this issue, the International Principles for Social Impact Assessment outline the importance of local knowledge in their SIA Core Values (Esteves *et al.*, 2012). The International Association of Impact Assessment suggests that a community’s expertise is a vital element of the evaluation

process and can indeed positively affect a project's design, implementation, and evaluation (Vanclay, 2003). Inclusive and participatory methodologies consequently influence "a common and shared understanding of problems and collective efforts to solve them" (Pant, 2015, p.109). As Becker *et al.* suggest, "not only group members identify more diverse ideas, but also their identification of issues reflect a wider range of perspectives and greater cognitive processing" (2003, p.373). Consequently, due to their situated expertise and point of view, community members are defined as the evaluation experts (Pant, 2015).

To gain a better understanding of the social impact of youth participatory projects, it is essential to use young people's skills, attitudes, and knowledge (Holden *et al.* 2004, p.615). It is vital to acknowledge that youth possess vital and unique perspectives when evaluating the initiatives that serve them (Checkoway & Richard-Schuster, 2003). Through collective reflection, all evaluation stakeholders are provided with opportunities to create a shared understanding of "the nature and purpose of the service being delivered" and agree on "the most appropriate means of evaluating it" (Cooper, 2018, p.105). Only meaningful participation can tap into youth's unique expertise and encourage them to "develop knowledge for their own social action and community change" (Checkoway & Richard-Schuster, 2003, p.22).

2.4.6.3 Power dynamics

The problematic notion of power in the context of social impact assessment ought to be analysed in two ways. Firstly, the control imposed by the governing and funding bodies can have a significant impact on the quality of SIA. As previously discussed in this chapter, SIA was primarily implemented to meet projects' funding criteria and evidence-based policy-making demands. Among many of the issues affecting the quality of the evaluation process, conflicting interests, funding criteria, power inequities and experts' subjectivity can be outlined (Adams & Garbutt, 2008; Lockie, 2001; Pant, 2015). Belfiore and Bennett (2007) critically examine the conventionally-used top-down evaluation approach, describing it as "the cult of measurable" (p.137). However, economic and statistical tools are unable to capture the full depth of social impact. It is therefore essential to "move beyond narrowly conceive ideas of performance measurement and target setting" (2007, p.138). Lockie (2001) further questions the value of externally imposed understandings of impact. He states that technocratic rationality is often favoured by SIA practitioners, who dismisses the view of "an ill-informed public" as "subjective, emotional and irrelevant" (2001, p.279). Certainly, the externally imposed desire to predict the outcomes of an intervention can have a negative impact on the progress and evaluation of youth as well as adult initiatives.

Secondly, the power of the evaluation expert needs to be acknowledged. Scholars agree that the distance between researcher and research needs to be addressed (Cousins & Whitmore,

1998). Recognising participants as active co-creators of social impact assessment results in “relocating power in the production of knowledge” (Cousins & Whitmore, 1998, p.5).

2.4.6.4 Learning

Traditional SIA approaches aim to collect data effectively and disseminate them to interested parties. Consequently, this process of technocratic information extraction excludes the researched community from the evaluation process. Conversely, inclusive and participatory SIA methods aim to nourish learning and critical reflection (Pant, 2015). As “evaluation makes little sense unless it is understood as part of a learning process” (Cooper, 2018, p.102), community participation is essential to identify reliable social impacts (Burdge, 2003). The use of local expertise is defined as a key element of balancing the “technocratic bias with critical social learning” (Burdge, 2003, p.226). Evaluation design, process and outcome, dialogue, and critical reflection provide opportunities for enhanced learning for everyone involved (Cooper, 2018, p.102). Highlighting the importance of a participatory approach in evaluation, UNICEF published a set of Ethical Approaches to involving children and young people in evaluation. In the context of its learning opportunities, these protocols state that “if the information gathering will not directly benefit the children and adolescents involved or their community the evaluation process should not proceed” (Gawler, 2005, p.3).

2.4.6.5 Play

Youth evaluation studies encourage the use of a range of creative methods (Gawler, 2005; McCabe & Horsley, 2008; Sabo, 2003; Sabo Flores, 2008; Feinstein & O’Kane, 2008). Traditional methods of evaluation (such as questionnaires, surveys, or focus groups) often expect participants to have basic literacy or numeracy skills (McCabe & Horsley, 2008). However, McCabe & Horsley suggest that many individuals prefer to express themselves in alternative ways such as storytelling, painting, photography, and other media (2008, p.1). Play and creative methods can indeed encourage both adults and youth to become curious evaluators. Sabo claims that play helps to “level the playing field so that staff and youth can begin to see evaluation as something everyone can do” (2008, p.25). Sabo, in outlining the importance of role play in collective evaluation process, states that in the process of projecting possible project outcomes, young people get an opportunity to “break out of their socially fixed identities” (Sabo, 2003, p.17). During the participatory evaluation process, young people enter the Zone of Proximal Development, where they equally improvise and become the experts of their experiences. Consequently, participatory youth environments should aim to encourage youth to play with their identities instead of being defined by them (Sabo, 2003, p.22). In the context of digital co-creation, scholars claim that “game-like learning” enhances youth’s participatory experience (Ito *et al*, 2013). Play and experimentation are therefore defined as

key elements of digital learning (Buckingham, 2008). The element of digital play not only enriches the form of group inquiry but also can function as an empowerment tool (Black *et al.*, 2015, p.4). A review of practical resources for youth evaluation reveals the richness of creative and playful social impact evaluation tools (McCabe & Horsley, 2008; Sabo, 2003; Sabo Flores, 2008; Feinstein & O’Kane, 2008). Such evaluation guides aimed at youth and children tend to focus primarily on the use of visual tools, covering a wide range of artistic and playful approaches including video and illustration (Sabo Flores, 2008; McCabe & Horsley, 2008). The implementation of play in participatory youth programs enriches the experience and turns it into “an experience which is enjoyable by all those participating in the process, rather than being something alien and imposed” (Not in refflist).

2.5 Knowledge Gap

2.5.1 Introduction

The academic discussion of the social value of digital youth participation is complex and, at times, contradictory. The interdisciplinary nature of digital youth participation research means that young people’s digital experiences are measured and analysed through different theoretical lenses. Whilst existing studies provide important insights into young people’s relationships with technologies, they rarely focus on (1) being a subject of digital youth culture co-creation evaluation, or/and (2) carrying out an evaluation of digital youth culture.

The aim of this section is to review scholarly debates related to social impact evaluation of youth digital projects. The discussion presented in Section 2.5.2 examines youth-centred evaluation in the area of Human Computer Interactions. This is followed by an interdisciplinary analysis of evaluation of digital youth projects. In Section 2.6, the research gap is presented.

2.5.2 Social impact of digital youth culture co-creation

2.5.2.1 Youth-centred projects evaluation in Human Computers Interaction

The consideration of empowerment and positive social impact are often among the elements of youth-centred HCI projects. For example, young people’s participation has been noted in the context of health-care app design (Lang *et al.*, 2016), co-design of cyberbullying prevention tools (Ashktorab & Vitak, 2016), intergenerational game design (Romero & Ouellet, 2016), and development of social justice apps and services (Fawcett, Fisher, Bishop, & Magassa, 2013; Woelfer, 2014). Whilst the contexts of the projects vary, the underlying aims informing deployment are often linked to young people’s well-being (Lang *et al.*, 2016), social inclusion (Fawcett *et al.*, 2013; Woelfer, 2014), and education (Black, Castro, & Lin, 2015).

Thus, it can be argued that young people's digital worlds are often examined through a lens that sets out to incorporate ethical consciousness and a sense of social purpose.

Whilst examples of HCI research with young people can be found in literature, until recently this group of users has been under-examined within the HCI community (Fitton, Bell, *et al.*, 2016). The transition period between childhood and adulthood, and the biological and cognitive development changes associated with it, provide a challenging yet valuable area of research (Fitton, Bell, *et al.*, 2016). Scholars examining HCI with young people, in some cases referred to as *Teen CI* (Fitton & Bell, 2014), emphasise the importance of the social implications of youth participation *in* and *on* their research projects. When analysing the purpose of HCI with young people, it has been argued that HCI workshops provide young people with opportunities to bring about social impact (Black *et al.*, 2015), gain autonomy, and claim their voice (Lang *et al.*, 2016). Democratic and collaborative in their nature, HCI projects study young people as design partners (Fitton & Bell, 2014), active participants (Lang *et al.*, 2016), and equals (Gaye & Tanaka, 2011).

In the field of HCI, social impact evaluation of youth participatory projects has been highlighted as a problematic and unexplored research area (Balestrini, Rogers, & Marshall, 2015; Buccieri & Molleson, 2015; Guha, Druin, & Fails, 2010). Despite extensive research on young people's HCI and digital design, many participatory projects still "do not explore the impact the process has on its participants, and rather focuses on the process itself" (Guha *et al.*, 2010, p. 199). Likewise, little is known about the impact of digital technologies on youth work (Mackrill & Ebsen, 2017) or young people's and youth workers' experiences of the process.

The most commonly used methods of evaluation while working with young people and children in HCI include tools such as surveys, focus groups, and observations including digital surveillance, logging, and data collection (L. Hall, Hume, & Tazzyman, 2016). Young people's meaningful participation frequently ends when the evaluation stage is reached - clearly distinct from the engaging and fun part of the project. Hall *et al.* (2016) report that over two thirds of recent studies researching children's internet use implemented only quantitative evaluation methods. Whilst conventional interactions around HCI evaluation are perceived as unappealing for users (Hall & Hume, 2011), creative HCI youth project evaluation approaches (e.g. video diaries) fail to provide sufficient evidence (Lang *et al.*, 2016). The quantitative nature of many evaluations, as well as an over-emphasis on "success and failure" models, and a concentration on "proof of impacts" (Lockie, 2001, p.137) often results in young people becoming over-evaluated (Checkoway & Richards-Schuster, 2003; Cooper, 2018) and consequently disengaged from the assessment process. It is argued that gathering social

impact data of HCI projects is still “a tokenistic fashion instead of contributing to meaningful participation into service innovation” (Dow, Vines, Lowe, Comber, & Wilson, 2017, p. 5813).

The limited understanding of the evaluation process (and/or definitions of social impact of youth-centred digital projects) can also cause anxiety and confusion among the youth workers themselves (or those facilitating HCI projects) (Mackrill & Ebsen, 2017; Wilson & Grant, 2017). It is often unclear which aspects of youth-centred digital projects should be measured and how best to do so. For example, a lack of digital or technological literacy on the part of facilitators has been identified as a barrier to effective evaluation: “how could you assess digital projects if [as an adult] you do not have digital skills yourself?” (Carnegie UK Trust, 2017). Conversely, youth workers argue that “standard methods of digital skills measurement are not always appropriate and may not capture the varied types of [young people’s] progression” (Wilson & Grant, 2017).

The motives and intentions behind impact evaluation have been questioned in HCI literature (Bossen *et al.*, 2016; Dow *et al.*, 2017; Følstad, 2017). What is the purpose of the evaluation exercise? Whose story should be conveyed through the evaluation process: funders, researchers, designers, or workshop participants? Socially-driven HCI scholars argue that evaluation should provide project participants with opportunities to reflect and learn about the development of the project as well as the impact it has on the local community (Ho, Smyth, Kam, & Dearden, 2009). As argued by Balestrini *et al.*, “Technology should be participative and transfer power to the wider community rather than creating technical elites, and that enabling community empowerment requires that users take ownership of and appropriate the resulting tools and practices for their own situated purposes” (2015, p. 35).

Currently, because youth community groups in the United Kingdom are under financial pressure to deliver pre-agreed project outcomes and deliverables (Pope, 2016), there are also examples of “hoovering up feedback” and using evaluation evidence primarily for new funding bids (Dow *et al.*, 2017, p. 5821). Therefore, it is essential not only to address the lack of “methods to assess the social impact of the resulting technologies and emerged practices” (Balestrini *et al.*, 2015, p. 35), but also to provide a better understanding of how participants and youth workers (as well as project facilitators) experience the process of evaluation.

2.5.2.2 Youth-centred project evaluation of Digital Youth

Outside the HCI domain, digital media are also frequently cited as tools for youth participation (Erstad, 2012; Livingstone & Sefton-Green, 2016). Digital media have been used to enhance communication, self-expression, and advocacy, within and between youth projects (Black *et al.*, 2015). Discussion of the social value of digital technologies in young people’s lives has

been examined by media and communication scholars (Livingstone & Sefton-Green, 2016; Mills, 2016), information science scholars (Mowbray *et al.*, 2018; Tripp, 2011) and youth work practitioners (Harvey, 2016; Wilson & Grant, 2017). Digital youth participation information has been collected through various disciplinary and methodological lenses (Black *et al.*, 2015; Fawcett, Fisher, Bishop & Magassa, 2013; Koh, 2013). It emphasises different aspects of technology used by young people, such as communication (Bucciari & Molleson, 2015), informal learning (Erstad, 2012), information behaviour (Koh, 2013), identity development (Boyd, 2014), and on-line safety (Ashktorab & Vitak, 2016).

Whilst externally funded digital youth projects and organisations are required to evaluate the effectiveness of their work, it is unclear as to what counts as evidence of positive impact of digital youth work projects (Wilson & Grant, 2017). In the context of traditional/non-digital youth work projects, youth participation (Cooper, 2018) and empowerment frameworks (Wilson, Minkler, Dasho, Wallerstein & Martin, 2008) have been proposed as effective tools to analyse the value of such projects. To analyse and evaluate the digital skills essential in the 21st century, scholars propose theoretical frameworks examining media and information literacy (Mackey & Jacobson, 2011), basic digital skills (Mcgillivray, Jenkins, & Mamattah, 2017), and digital literacy (Helsper, 2016). However, the terms digital skills and digital literacy can change meaning according to the learning context or the geographical location. In 2017, G20 policy makers (the group of finance ministers and central bank governors from 19 of the world's largest economies and the European Union) argued that it is essential not to introduce a universal indicator to measure digital literacy, but instead implement a "standardized, multidimensional [set of measures] of digital literacy" (Chetty *et al.*, 2018). The uncertainty surrounding the value of digital literacy is also noted in the digital youth work context (Harvey, 2016). While basic digital skills are continuously developing, it has become increasingly challenging to classify a young person as a "digital literate" (Wilson & Grant, p.57). A basic digital skills framework is designed to primarily "capture the more tangible and objective quantitative elements of digital skills development", and thus does not illuminate other elements of the youth development journey. Moreover, as outcomes of media-rich informal learning environments are often "rich in contributions to social and emotional development, to identity and motivation, to developing skills of collaboration and mutual support", the analysis of their social value might require use of new, complementary and long-term approaches to evaluation (Lemke, Lecusay, Cole, & Michalchik, 2015, p. 5).

2.5.3 Knowledge gap: digital youth impact evaluation

As demonstrated by this review, there is a broad consensus that participatory and co-creative approaches offer effective tools to design, facilitate and evaluate youth participation. Since the

early 2000s, young people's participation in digital media and computing projects has risen, and multiple methods have been generated to contextualise this type of youth engagement. As illustrated in this chapter, the analysis of young people's active participation in digital culture co-creation can be noted across various academic disciplines.

In the context of youth-centred HCI, evaluation tools are primarily utilised to assess the efficiency of technology-based solutions. There is a tendency to seek young people's feedback with regard to their interactions with a given technology or its design. It can be argued that teen HCI projects are largely evaluated for their technology-focused outcomes. The literature review reveals that young people's critical input is used during participatory HCI projects and digital co-design projects, with little analysis of how their participation might impact young people. Thus, while young people's roles are defined as technology-experts and co-designers (Little et al., 2016), the knowledge of how to evaluate the value and impact of their participation in HCI is limited.

In contrast, the interdisciplinary analysis of digital-youth studies revealed that there is an emphasis on the importance of evaluation of young people's participation and their development during their participation. Digital youth scholars who position their work outside the HCI research tend to emphasise human-centred outcomes (e.g. young people's self-development). As already indicated in this review, to analyse the impact of young people's digital participation, scholars reviewed areas such as communication (Buccieri & Molleson, 2015), informal learning (Erstad, 2012), information behaviour (Koh, 2013), identity development (Boyd, 2014), and on-line safety (Ashktorab & Vitak, 2016).

There is an existing distinction between HCI technology-focused evaluation and the human-centred evaluation of digital projects. There is limited knowledge on how to manage holistic impact evaluation of youth digital projects, whereby human-centred and technology-centred outcomes are taken into consideration. Whilst an increasing amount of information is provided on how to engage young people in digital projects, there remains limited information on how to evaluate their experiences of the process. Currently there is a knowledge gap around the way young people view their experiences of digital youth project facilitation and its evaluation. It is also evident that further research is required to understand youth workers (or digital youth projects facilitators) and their experiences of social impact evaluation.

2.6 Research questions

To address the deficiencies identified in this review – and to provide digital youth practitioners with new knowledge – it is imperative that more is learned about the perceptions of social impact evaluation of digital youth projects. Any new knowledge must demonstrate, in

descriptive terms, young peoples' and youth workers' experiences and perceptions of social impact and social impact evaluation. To this end, four research questions will be examined in this thesis.

RQ1: What is the current understanding of the social impact of youth digital culture co-creation?

The aim of the first research question is to investigate the discussion on the impact of youth digital culture co-creation. This question aims to examine the wider scholarly analysis of the social impact of the use of digital technologies in youth participatory projects. Research Question 1 will therefore examine a wider, international research and compare it with the Scottish perspective.

RQ2. What are the approaches used to evaluate the social impact of digital youth culture co-creation in Scotland?

Research Question 2 will focus on the Scottish perspectives of digital youth culture evaluation. The aim of this question is to examine evaluation tools used by digital youth workers and young digital projects participants in Scotland.

RQ3. What are the experiences and perceptions of social impact evaluation among digital youth culture co-creation projects participants and digital youth workers in Scotland?

The aim of Research Question 3 is to examine how the two groups – (1) digital youth workers and (2) young digital projects participants in Scotland – perceive their experiences of (1) managing social impact evaluation; (2) participating in the process of evaluation. This research question will examine the Scottish perspective.

RQ4. To what extent could digital youth practitioner-led and youth-led social impact evaluation recommendations alter current evaluation practices?

The final research question aims to examine if and to what extent Scotland based, digital youth practitioner-led and youth-led social impact evaluation recommendations could alter wider evaluation practices. Therefore, to address this question, the Scottish evaluation will be presented and contextualised within a wider, international research context (Table 6).

Chapter 3: Theoretical Framework and Research Philosophy

3.1 Introduction

This chapter examines the theoretical and methodological considerations applied in this project. As demonstrated in the literature review (Chapter 2), evaluation of youth digital culture co-creation is an emerging and largely unexplored area of scientific research. The scarcity of prior studies on young peoples' and youth workers' perspectives on the evaluation of digital culture had an important impact on the selection of the research methodology. The chapter begins with an overview of theoretical considerations guiding this project. Subsection 3.2.1 examines the constructivist approach to grounded theory proposed in this research. Section 3.3 discusses the participatory paradigm (Reason & Bradbury, 2001a) and its associated epistemological, ontological, and axiological positions. The research design is presented in Section 3.4. Whilst data collection methods and sampling strategies are introduced here, the detailed description of methods is presented in the individual chapters devoted to each of the empirical studies that were undertaken in the course of the research (Chapters 4, 5 and 6).

3.2 Theoretical Considerations

3.2.1 Grounded Theory

Grounded theory consists of systematic but flexible strategies for qualitative data collection and analysis and, consequently, for theory formation (Charmaz, 2014). Described as a methodology that “seeks to construct theory about issues of importance in peoples' lives” (Mills, Bonner, & Francis, 2006, p. 2), grounded theory emphasises the importance of research participants' views and their involvement in the emergence of data, and in its analysis. This research project is guided by grounded theory because it provides an efficient framework for rigorous analysis when (1) little is known about a research topic (Holloway, 1999; Jones & Alony, 2011), and (2) where the emphasis is on the participants' experiences and interactions (Idrees *et al.*, 2011). Moreover, grounded theory enables the researcher to capture and analyse the complexity of an emerging socio-technical phenomena (Jones & Alony, 2011) such as digital culture co-creation, which is the focus of this project. Grounded theory has been proven to enable inter-disciplinary knowledge co-creation and a holistic understanding of the relationship between digital technologies and society (Neff *et al.*, 2009). Neff *et al.* argue that:

Grounded theory and contextual inquiry can bridge the gap between humanities-and social-science-based understandings of writing and genre, and they hold p based articular promise for studies of new media literacies. (2009, p.12-13)

Grounded theory has proved a prevalent choice of methodology for scholars examining youth culture (McInroy & Craig, 2017) as well as digital education and evaluation (Dracup, Cronenwett, Meleis, & Benner, 2005; Oaks, 2001). Examples of studies guided by grounded theory can be found in information science (Alemu, Stevens, Ross, & Chandler, 2015; Mansourian, 2006), media and communication (Bertel, 2013), computing (Burrell, 2010), and youth studies (McInroy & Craig, 2017). Research projects utilising grounded theory are characterised by both inductive and reactive approaches to data collection, where the “multiplicity of perspectives and truths” are continually analysed during the research process (Charmaz, 2014; Mills *et al.*, 2006). The theorising practice involves researchers’ ongoing critical analysis and comparisons of the collected data, leading to the development of the *theory* (Charmaz, 2014). The key components characterising the application of grounded theory include theoretical sampling, coding, theoretical saturation, and constant comparison (Bryman, 2016, p.573).

Grounded theory was originally constructed by in 1967 by sociologists Barney A. Glaser and Anselm L. Strauss. Glaser and Strauss theorised a qualitative data analysis and interoperation system that provided a new and systematic way for qualitative research practice. The key focus of grounded theory was (1) to address “an embarrassing gap between theory and empirical research” in qualitative research, and (2) to provide a scientific approach for theory generation which is grounded in data (Idrees, Vasconcelos, & Cox, 2011, p. 1). At a time when the positivist paradigm was perceived as predominant in the scientific world, the publication of *The Discovery of Grounded Theory* (Glaser & Strauss, 1967) was labelled as revolutionary:

[Grounded Theory] came forward ... in response to the extreme violations brought to data by quantitative, preconceived, positivistic research using forcing conjectured theory (Glaser, 2001, p. 6).

In the 1960s, grounded theory “punctured notions of methodological consensus and offered systematic strategies for qualitative research practice” (Charmaz, 2014, p.7). Grounded theory provided qualitative researchers with methodical approaches where theory could be created from data, providing a better and richer understanding of “interaction processes and social change” (Staruss, 1987, p.6). The key principle of grounded theory is the development of iterative conceptualisation rather than description (Alemu *et al.*, 2015).

Over the years, Glaser and Strauss created two separate schools of grounded theory: the Glaserian School and the Straussian School (Jones & Alony, 2011). The key differences between the two schools could be noted in the direction and implementation of the primary research. Glaser aligned his work with the positivist paradigm and saw grounded theory as “a method of verification” (Charmaz, 2014, p.11). The Glaserian school of systematic approaches, which took in quantitative methods as its ground theory, was characterised with “dispassionate empiricism, rigorous codified methods, emphasis on emergent” (Charmaz, 2014, p.9). The Glaserian version of grounded theory emphasises the importance of the objective, neutral, and passive roles of the researcher, and data in the generation of the theory. In his approach, Strauss proposed that researchers play an active role in the research process in order to have a direct impact on the interpretation of the final theory (Charmaz, 2014, Jones & Alony, 2011).

3.2.2 Constructivist Grounded Theory

In the 1990s, many scholars shifted away from the positivistic assumptions in qualitative research advocated by both Glaser and Strauss (Charmaz, 2006). Subsequently, constructivist grounded theory was proposed as a:

Contextual inquiry actively [which] seek participant perspectives and willingly construct research subjects as co-investigators during data collection and analysis, they are collaborative by definition as well as by design. (Neff *et al.*, 2009, p.13)

Whilst constructivist grounded theory implements the “inductive, comparative, emergent and open-ended approach of Glaser and Strauss’s (1967) original statement” (Charmaz, 2014, p.12), it acknowledges the social and personal agency of the researcher as well as the project participants. Thus, the process of data collection is perceived as a co-creative and dynamic practice, where social interactions cannot be viewed as neutral. Constructivist grounded theory connects theorising and research practice (Charmaz, 2014). In line with the constructivist philosophical approach, Charmaz states that constructivist grounded theory embraces “data and analysis as created from shared experiences and relationships with participants and other sources of data” (Charmaz, 2014, p.239). Charmaz’s (2014) constructivist grounded theory (CGT) was selected as a guiding theoretical approach for this project for the following reasons:

1. CGT is well suited for examination of multi-layered phenomena consisting of human behaviour, technologies, and culture (Alemu *et al.*, 2015).

2. CGT emphasises the importance research participants have as active agents and co-creators of knowledge (Charmaz, 2014). CGT “brings people and their perspectives into the foreground” (Charmaz, 2014 p.41).
3. CGT is particularly useful in the social-change and social-justice driven studies, as it “attends to context, positions, discourses, and meanings and actions and thus can be used to advance understandings of how power, oppression, and inequities differentially affect individuals, groups, and categories of people” (Charmaz, 2011, p.362).
4. CGT theorising is a non-static and flexible process of social action, which results in a formation of a theory - described as an interpretation. Charmaz emphasises that CGT theory “depends on the researcher’s view; it does not and cannot stand outside” (2014, p. 239).
5. CGT enables and supports critical inquiry processes (Charmaz, 2014). (Collaborative critical action drive inquiry is adopted in this project and examined later in this chapter).

This project adopts CGT in accordance with Keane’s (2015) guidelines, whose practical implementation of constructivist grounded theory provided a set of procedures involving:

1. Conduction of self-reflection throughout the research
2. Active involvement of participants in the research process using participatory methods (Study 2 and Study 3)
3. Constitution and presentation of the grounded theory

In line with Keane’s guidelines, this researcher kept a self-reflection journal during the research planning, data collection, and its analysis. A critical autobiographical section is presented in Chapter 8, where the constitution of grounded theory is also presented.

3.3 Research Philosophy and Approach

3.3.1 Participatory Paradigm and Participatory Action Research (PAR)

A research paradigm provides an understanding of “*what* one can know about something and *how* one can gather knowledge about it” (Grix, 2010, p. 79). A research paradigm “inherently reflects the researcher’s beliefs about the world that s/he lives in and wants to live in” (Kivunja & Kuyini, 2017, p. 26) and provides a set of set of norms and beliefs that guide her scientific action. In the context of this project, the researcher had an extensive professional experience of informal learning and participant-centred workshops facilitation prior to commencing academic research in 2016. The researcher’s professional work previously involved

participatory, socially-driven and community-centred approaches. Thus, in an academic setting, her research practice is best aligned with the Participatory Paradigm (Heron & Reason, 1997) and Participatory Action Research (PAR) approaches (McIntyre, 2008).

The participatory paradigm is an overarching framework for action researchers and participatory action researchers – academics who dedicate their work to examining power structures and influence social change (Creswell, 2008; Heron & Reason, 1997). The participatory paradigm aims to analyse the needs of socially excluded and underrepresented groups (Creswell 2008, Reason & Bradbury, 2001). PAR is also defined as an alternative approach to traditional social or scientific research because it “moves social inquiry from a linear cause and effect perspective, to a participatory framework that considers the contexts of people” (MacDonald, 2012, p. 35). This project adopts McIntyre’s definition of PAR as:

... an approach characterized by the active participation of researchers and participants in the co-construction of knowledge; the promotion of self- and critical awareness that leads to individual, collective, and/or social change; and an emphasis on a co-learning process where researchers and participants plan, implement, and establish a process for disseminating information gathered in the research project. (2008, p.5)

PAR scholars have examined the notions of social impact (Abma *et al.*, 2017) and evaluation (Zornes, Ferkins, & Piggot-Irvine, 2016). Examples of participatory approaches in research with young people can be found in the literature, both in traditional/non-digital (Bland & Atweh, 2007; Cammarota & Fine, 2008) and digital contexts (Ashktorab & Vitak, 2016; Bell & Davis, 2016). Scholars showed that participatory and socially-driven research can empower young people to carry out “collective analysis of power” (Cammarota & Fine, 2008) and develop critical analysis skills for its transformation (Mind, 2014, p.37). PAR methods have delivered rich qualitative data while co-working with youth workers (Wilson *et al.*, 2008), educators (Cammarota & Fine, 2008) and proved to not only enrich critical thinking but also to generate participant-driven actions resulting in real social impact (McIntyre, 2008).

To create a meaningful contribution both to the research groups of this study (young people and youth workers in Scotland) and the existing scholarly work, the PAR approach was employed. The roles of research participants were defined as active co-creators and equal partners, in which they would “engage together in democratic dialogue as co-researchers and co-subjects” (Heron & Reason, 1997, p.283). A participatory paradigm provides scope for people to research *with each other*, rather than researchers conducting research on or about them (Heron & Reason 1997, p.284). This inclusive form of inquiry aims to co-produce

knowledge enriched through “direct involvement, intervention or insertion in process of social action” (Fals-Borda, 2001, p.27).

Within a philosophical research context, the Participatory Worldview is contextualised as a bridge between Positivism and Constructivism due to its holistic understanding of knowledge as an interactive and ongoing process (Fals-Borda, 2001). The notions of interactivity, flexibility, and co-creation are particularly important in the context of this project, where people’s perceptions and experiences of social impact and social impact evaluation of youth digital culture co-creation are examined. The continually developing relationship between society, culture, and digital technologies requires responsive and interdisciplinary approaches to research (Jewitt, 2013). Thus, participatory paradigm scholars aim to:

1. embrace the concept of knowledge creation as “grounded in its experiential participation in what is present’ is” (Heron & Reason, 1997);
2. perceive knowledge as non-static, but an ongoing co-creative and interdisciplinary process of “academic accumulation plus people’s wisdom” (Reason & Bradbury, 2001, p.33);
3. acknowledge a multiplicity of perspectives (further discussed in the ontology section of this chapter).

Participatory paradigm research agrees with the positivist view of the external reality, a world which impacts all human actions. Secondly, it draws on constructionism, claiming that “as soon as we are trying to articulate it, we enter human language and cultural expression” (Reason & Bradbury, 2001, p.7). The participatory form of inquiry rejects the constructivist idea that reality is solely “a construction within an individual mind” (Heron 1996). The researched reality is internally and externally co-created and constantly evolving. As Reason and Bradbury claim:

Wherever scientists look and whatever they look at, they see nature acting and evolving not as a collection of independent parts, but as “an integrated, interacting, self-consistent, and self-creative whole” (2001, p.7).

Acknowledging this intersection of self-reflexive and participatory visions of social reality and knowledge allowed for a realistic and holistic analysis of social impact and social evaluation in Scotland’s youth digital culture co-creative context. Using a Participatory Paradigm research method enabled a collaborative research process with an emphasis on study participants’ views and experiences.

The following five characteristics define Participatory Paradigm (Creswell & Creswell, 2008):

1. Participatory forms of inquiry aim to influence practice and consequently advance social change;
2. Participatory Paradigm aims to help communities to explore and challenge the hierarchical power structure in the society, education, language and media;
3. This collaborative paradigm is - at its core - emancipatory and empowering;
4. Participatory forms of inquiry influence social self-development and self-determination;
5. Participatory research provides a practical and collaborative research experience, whereby participants co-investigate issues and co-create solutions.

3.3.2 Subjective-objective ontology

Ontology is concerned with the form and nature of reality and what can be known about it (Guba & Lincoln, 1994). Ontology can be described as the philosophical study of being, which focuses on “the nature and structure of things per se, independently of any further considerations, and even independently of their actual existence” (Guarino, Oberle, & Staab, 2009, p. 2). Participatory ontology advocates a subjective-objective position that emphasises the interactive nature of reality and its ongoing interactions with the social actors and their minds. According to participatory scholars, a given reality cannot be fully studied unless this “participatory mind” is taken into consideration. The participatory mind believes that “to experience anything is to participate in it, and to participate is both to mould and to encounter; hence the experiential reality is always subjective-objective” (Heron & Reason, p. 1997, p. 279). The participatory ontology, as described by Heron and Reason, means that the “worlds and people are what we meet, but the meeting is shaped by our own terms of reference” (1997, p.11).

3.3.3 Extended epistemology: Critical Inquiry and the Four Ways of Knowing

Epistemology addresses questions regarding “the relationship between the knower or the would-be knower and what can be known” (Heron & Reason, p.276). Extended epistemology states that there is a knower with “an intrinsic developmental challenge”, defined as *the critical inquiry*. Participatory inquiry is described not only as an academic pursuit but also as “the everyday practices of acting in relationship and creating meaning in our lives” (Reason & Bradbury 2001, p.9). PAR scholars insist that knowledge cannot be static, and that instead we should focus on the active and interconnected action of knowing. The participatory paradigm primarily focuses on practical knowledge that “arises in the process of living, in the voices of ordinary people in conversation” (Reason & Bradbury 2001, p.9). The extended epistemology consists of four ways of knowing:

1. experiential knowledge (face to face);
2. presentational knowing (story, picture, art);
3. propositional knowing (concept, ideas);
4. practical knowing (knowing in action in the world) (Reason & Bradbury 2001, p.9).

3.3.4 Axiology

Axiology, the study of value, makes up the defining characteristics of the participatory inquiry paradigm. The axiological question is concerned with “what is intrinsically valuable in human life, in particular what sort of knowledge, if any, is intrinsically valuable” (Heron & Reason 1997, p.276). In line with the ontological and epistemological positions, the participatory inquiry paradigm focuses on the importance of human flourishing “as an end in itself” in the process of knowledge creation (p.10). Contrary to the academic tradition of concentrating exclusively on the intellect, Heron and Reason advocate for the recognition of human qualities such as feelings, imagination, and action. The axiological questions of how people perceive, define, and interact with the notion of social impact of youth digital culture co-creation was considered in this study.

3.4 Research Design

Research design is the overarching “structure of an enquiry” (Broadhurst, Holt, & Doherty, 2012, p. 16) for this project. The selection of research design was imperative in determining how the research questions would be addressed and how social phenomena would be studied. Through consideration and selection of research design, the researcher sought to identify a way to “determine the validity of a hypothesis and how best to discover evidence to either accept or reject it” (Miller & Salkind, 2018, p. 2).

As illustrated in this section, the structure of this project was composed of three key studies. Each study was undertaken through a distinct data collection method. The overall methods for the project were guided by PAR and underpinned by constructivist grounded theory (Charmaz, 2014).

3.4.1 Qualitative Participatory Action Research (PAR)

Qualitative and inductive research approaches were selected to address the research questions of this project. The qualitative research process allows for a holistic examination of focus on “the meaning that the participants hold about the problem or issue, not the meaning that the researchers bring to the research or writers from the literature” (Creswell, 2007, p. 39). Qualitative research studies are characterised by “bottom-up” and proactive approaches

to data analysis and data categorisation. Creswell (2007) argues that qualitative researchers often work “back and forth between the themes and the database until they establish a comprehensive set of themes”, and often involve study participants to co-analyse the data (2007, p.39). Qualitative research approaches have been implemented to examine young people’s relationships with technologies (Ferreira & Pantidi, 2017; Fitton, Bell, *et al.*, 2016b) and young people’s evaluation experiences (Chen, Weiss, & Nicholson, 2010; Morton & Montgomery, 2013). Fitton *et al.* (2016) suggests that qualitative and youth-centred approaches might better tap into young people’s developing cognitive abilities and subsequently enhance age-appropriate data into the research process. Qualitative research approaches (focus groups, interviews) have been also utilised to examine youth workers’ experiences of evaluation (Cooper, 2018; De St Croix, 2018). De St Croix’s (2018) qualitative mixed methods approach produced an in-depth and holistic analysis of youth workers’ evaluation in England.

The research methodology was underpinned by the Participatory Action Research (PAR) principle, which emphasises the active role of research subjects – “questioning and sense making that informs the research, and in the action which is its focus” (p.2). The data collection process was divided into three consecutive stages. The first stage sought to gather information about youth workers’ (or youth project facilitators) perceptions of evaluation practice in 20 semi-structured interviews. The analysis of stage 1 informed the design of the empirical stage 2, which involved focus groups (and a card sort exercise) with youth workers. The aim of stage 3 was to involve young participants in participatory youth action research workshops (PYAR). The three-stage data collection process is illustrated in Figure 4.

Figure 4: Three stage data collection process

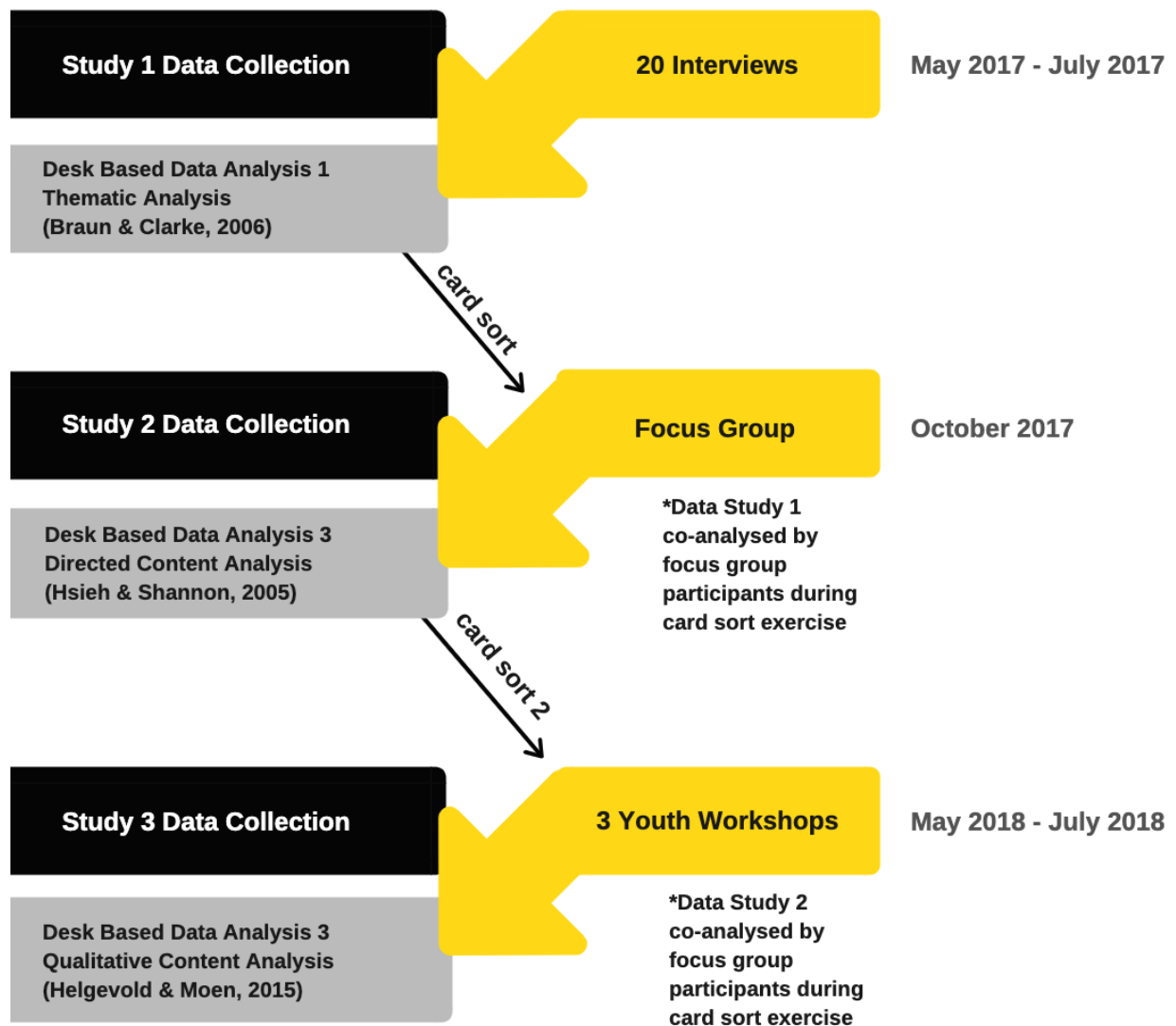


Figure 4 outlines the data collection process from May 2017 until July 2018. The process was divided into three consecutive stages – Study 1, Study 2, and Study 3. Data collection began in May 2017; Study 1 involved twenty semi-structured interviews with digital youth workers in Scotland. The data collected in Study 1 was analysed using Thematic Analysis and subsequently used in Study 2. The data in Study 2 was collected during a focus group with digital youth workers from Scotland. During the focus group, a card sort was carried out. These cards were specially designed for the study by the researcher. (See chapter 5 for further information on this.) In Study 3, three youth participatory workshops were carried out. The

workshop design was influenced by the results of Study 1 and Study 2. The design of each study is outlined in Tables 6,7 and 8.

Table 6: Study 1 research design

<p>Study 1 20 Semi-structured interviews with Digital Youth Culture Co-creation projects facilitators in Scotland</p>	
<p>Research questions addressed</p>	<p>(RQ1) What is the current understanding of the social impact of youth digital culture co-creation? (RQ2) What are the methods and approaches currently used to evaluate the social impact of digital youth culture co-creation? (RQ3) How do youth digital culture project facilitators and participants perceive and experience social impact evaluation in Scotland? (RQ4) To what extent could digital youth practitioner-led and youth-led social impact evaluation recommendations alter current evaluation practice?</p>
<p>Number of participants</p>	<p>20</p>
<p>Participants recruitment and sampling strategy</p>	<p>The information about the study was distributed through the Scottish Digital Youth Work Network and via social media. A purposive sampling strategy was implemented to recruit participants who were “especially knowledgeable about or experienced with a phenomenon of interest” (Palinkas <i>et al.</i>, 2015, p. 2) and to ensure that particular characteristics were represented in the final sample of the study (Mason, 2010). A purposive sampling strategy enables the production of a sample that “can be assumed to be representative of the population” (Lavrakas, 2008). To ensure a wide range of experiences of technology used in youth culture facilitation across Scotland, a purposive sampling called “maximum variation sampling” (Palys, 2008, p.697) was implemented. The sampling criteria were also underpinned by the theoretical definition of digital culture co-creation, introduced earlier in this thesis (see Chapter 2). Candidates were sought who:</p> <ul style="list-style-type: none"> • Spanned the 25-64 range with all genders included;

	<ul style="list-style-type: none"> • Facilitated or assisted with the implementation of youth-centred and participatory projects where digital technologies or/and digital and/or social media were utilised; • Were employed on a paid or voluntary basis; • Were working in both rural and industrial areas of Scotland.
Data collection method	Semi-structured interviews
Data recording procedures	All interviews were audio-recorded
Data analysis procedures	The interview data was transcribed and coded using Nvivo 10 software. Thematic analysis approach (Braun & Clarke, 2006) was selected to guide the analysis of the collected data. Thematic analysis is a method for “identifying, analysing and reporting patterns (themes) within data” (Braun & Clarke, 2006, p.79). To conduct a systematic, data-driven, and inductive analysis of the collected data, the 6-phase approach to thematic analysis was utilised. The details of this procedure are examined in Study 1, Chapter 5.
Ethical considerations	Ethical approval for the study was sought and obtained from Edinburgh Napier University’s School of Computing. All participants were provided with information about the purpose of the study prior to their interview. The consent form was presented and discussed before the conversation, highlighting voluntarily and anonymous participation in the study. Participants were informed about their rights under the General Data Protection Regulation (EU GDPR, 2018) including their right to withdraw their data from the study. To ensure the anonymity of the participants, the data gathered during the interviews was stored on a password-protected computer at Edinburgh Napier University on an encrypted directory. A backup of the data was kept on an encrypted, portable hard drive, which was stored in a safe location away from the university premises.

Table 7: Study 2 research design

Study 2 Focus group with digital youth workers in Scotland	
Research questions addressed	<p>(RQ1) What is the current understanding of the social impact of youth digital culture co-creation?</p> <p>(RQ2) What are the methods and approaches currently used to evaluate the social impact of digital youth culture co-creation?</p> <p>(RQ3) How do youth digital culture project facilitators and participants perceive and experience social impact evaluation in Scotland?</p>
Participants recruitment and sampling strategy	<p>Study 2 aimed to re-examine and enrich the data themes emerging in Study 1. For this, theoretical sampling was selected in alignment with constructivist grounded theory (Charmaz, 2014). Through the additional analysis of the data, theoretical sampling added “extra heterogeneity into the sample, or restructuring an already gathered sample into a new set of categories that have emerged from analysis, and replacing any stratification/cells/quotas that were chosen a-priori” (Robinson 2014, p.35). According to Charmaz, theoretical sampling defines the process of “starting with data, constructing tentative ideas about the data, and then examining these ideas through further empirical inquiry” (2006, p.103).</p> <p>To re-examine and refine the emerging themes from Study 1, the researcher returned to the digital youth work field to collect further data. Due to time limitations, it was not possible to replicate the data collection method used in Study 1 (20 interviews) and instead a focus group was utilised, targeting a sample with comparable characteristics to those selected in Study 1. The process was coordinated to align with a meeting of the Scottish Digital Youth Workers Network (SDYWN).</p>
Data collection method	Focus group and card-sort

Data recording procedures	All interviews were audio-recorded
Data analysis procedures	<p>The interview data was transcribed and coded using Nvivo 10 software. Content analysis approaches were undertaken to review the information from the card-sort activities and associated discussions (Nurmuliani <i>et al.</i>, 2004). Directed content analysis has been described as an effective analysis approach when examining “relationships among variables” and “relationships between codes” (Hsieh & Shannon, 2005, p. 1281), which is particularly useful in small sample studies (Nurmuliani <i>et al.</i>, 2004). The details of the procedure are described in the Study 1 methodology section of Chapter 5.</p>
Ethical considerations	<p>Ethical approval for the study was sought and obtained from Edinburgh Napier University’s School of Computing. All participants were provided with information about the purpose of the study prior to the focus group. The consent form was presented and discussed before the session. The researcher ensured that all participants understood the purpose of the project as well as their voluntarily and anonymous participation in the study. At the outset of the session, the researcher (who was also a moderator of the focus group) highlighted the importance of confidentiality and co-agreed with the participants that all information during the focus group ought to remain confidential. While moderating the session, the researcher emphasised that there were no set expectations of the session and did not pressure any of the participants to talk or behave in any particular way (Gibbs, 1997).</p> <p>Participants were informed of their rights under the General Data Protection Regulation (EU GDPR, 2018) including the right to withdraw their data from the study. To ensure the anonymity of the participants, the data gathered during the focus group was stored on a password-protected computer at Edinburgh Napier University on an encrypted directory. A backup of the data was</p>

	kept on an encrypted and portable hard drive, which was stored in a safe location away from the university premises.
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Table 8: Study 3 research design

Study 3 Youth Participatory Action Research Workshops	
Research questions addressed	<p>(RQ1) What is the current understanding of the social impact of youth digital culture co-creation?</p> <p>(RQ2) What are the methods and approaches currently used to evaluate the social impact of digital youth culture co-creation in Scotland?</p> <p>(RQ3) How do youth digital culture project facilitators and participants perceive and experience social impact evaluation in Scotland?</p> <p>(RQ4) To what extent could digital youth practitioner-led and youth-led social impact evaluation recommendations alter current evaluation practice?</p>
Participants recruitment and sampling strategy	<p>In line with Grounded Theory (Charmaz, 2006), the process of data collection was “directed by evolving theory rather than by predominate population dimensions” (Draucker <i>et al.</i>, 2007). Thus, theoretical sampling was selected to enrich and re-examine the data themes emerging in Study 2.</p> <p>The aim of Study 3 was twofold: (1) to work with young people to co-examine digital youth workers’ perceptions of evaluation of digital youth culture co-creation (data from Study 1 and Study 2), and (2) to learn about young people’s experiences and perceptions of evaluation of digital youth culture co-creation.</p>

	<p>To achieve the aims of the study and to address the research questions of this project, the following sample characteristics were applied:</p> <ul style="list-style-type: none"> • Young people of all genders, aged 16-25 years old; • Young people living in Scotland; • Young members of out-of-school youth projects; • Young people who have actively participated in at least one out-of-school and/or group based digital youth project.
Data collection method	Youth Participatory Workshop / Collaborative forms of inquiry (see Chapter 6 for further details)
Data recording procedures	All interviews were audio-recorded
Data analysis procedures	Qualitative content analysis (Helgevold & Moen, 2015) was selected as a data analysis approach. Qualitative content analysis data is described as an appropriate method to analyse a range of data (textual and visual), which goes beyond “merely counting words to examining language” (Helgevold & Moen, 2015).
Ethical considerations	<p>Ethical approval for the study was sought and obtained from Edinburgh Napier University’s School of Computing. Details of the project and the nature of participation were fully disclosed prior to the workshops. All of the study subjects were aged 16 or over and therefore legally classified as adults (UK Data Service, 2017). Steps were taken to protect the rights of the participants throughout the process of recruitment, data collection, and analysis.</p> <p>To provide young people, young people’s parents/guardians, and youth group facilitators with information about the purpose of the study, a dedicated online page, an online presentation, and a PDF booklet were created. Information about the study, the researcher’s role, and the plan for the workshop were also presented on the day. (See Appendixes 4 and 5.)</p>

	Ethical considerations for this youth participatory research were guided by Luis Banegas & Villacañas De Castro's (2015) analysis of action research in education (further discussed in Section 3.6).
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3.5 Ethical considerations: youth participatory research

Prior to commencing data collection for Study 3 (participatory workshops with young people aged 16-25 years old), additional ethical considerations were examined, such as collaboration, young learners, power, confidentiality, anonymity, authorship, ownership, voice, and benefits (Luis Banegas & Villacañas De Castro, 2015). Overviews of the approaches taken to address these ethical considerations are given in Table 10.

Table 9: Ethical considerations in Study 3

Ethical Issue	Actions taken
Collaboration	<p>To ensure that the participatory research process was meaningful to both the researchers and young people, all participants were informed that their participation was voluntary and could be withdrawn at any time (Luis Banegas & Villacañas De Castro, 2015). The researcher paid attention to “<i>how participation is enacted</i>” instead of “<i>how much participation is achieved</i>” (Nind, 2014, p.57). All young participants were informed that there were no “rights or wrongs” and that their participation in the workshop should not be viewed as an assessment. It was agreed that any of the elements of the workshop could be adjusted during the session.</p>
Informed Consent	<p>Whilst all young participants in the study were classified as adults and aged over 16, it was essential to acknowledge some of the possible challenges when working with adolescents. The process of consent was considered not as a one-off decision, but as a continual process through the research process. Consent forms were shared with youth groups facilitators, who then shared them with young people, and (when necessary) with their parents/guardians. In the context of young people participating in this study, competence to consent was based on an observation of three competencies (Valentine, 2018):</p> <ul style="list-style-type: none"> • The young person’s understanding of the information provided by the researcher; • The young person’s ability to make a choice in their best interest; • The young person’s autonomy to make voluntary choices. <p>To ensure that consent was informed, information about the study was provided in the form of a presentation (Appendix 4), a booklet including information about the study and a consent form (Appendix 5), and researcher’s website address (Appendix 6a and 6b). Additionally, all young participants were provided with an opportunity to discuss their concerns related to the consent form, its purpose, and how their personal data would be used and stored.</p>
Power	<p>The ethical dilemmas of power in participatory research were considered and addressed during all stages of workshop planning and implementation. To diffuse possible power-imbalances between the research and the study participants, young people were encouraged to interrogate the researcher’s</p>

	<p>work (link to researcher’s website was provided) and ask any questions about her research during the session. The researcher used an accessible and informal language and practiced “methodological self-consciousness” by becoming aware of “[possible] unearned privileges as well as taken-for-granted privileges accompanying our positions and roles” (Charmaz, 2018, p.34). Young participants were viewed as experts of their own evaluation experiences from the workshop’s outset, likewise “the emancipatory effect was concentrated on the “participant” (Löfman, Pelkonen, & Pietilä, 2004). The researcher critically examined her power while collecting data and during its analysis. The researcher aimed to ensure that young people’s views were central to the research workshop by summing up their input at the end of the session.</p>
Ownership	<p>To ensure meaningful participation and collaboration, the researcher worked to “generate the awareness of acting together in pursuit of a common goal” (Löfman <i>et al.</i>, 2004, p. 338). The goal was a better understanding of young people’s evaluation needs and experiences. In this youth participatory action research project, young people were viewed as autonomous agents of change (Cammarota & Fine, 2008), who not only critically engaged with the subject of this study, but also co-created their own evaluation solutions. Whilst the analysis of the workshop was owned and authored by the researcher, the materials and solutions during the workshop were co-owned by young people. Thus, the evaluation solutions co-created during the workshop were designed to be practically incorporated in their youth organisations.</p>
Voice	<p>Scholars (Hadfield & Haw, 2001) have argued that the notion of “voice” has become “increasingly fashionable”, particularly in the context of research with/on young people. To ensure that young people’s voices were meaningfully represented, the researcher critically examined her assumptions about young people and the process of “listening to the ‘voice’ of young people” prior to entering into the field (Hadfield & Haw, 2001). The researcher aimed to “tune in” and “adjust her listening” to empower young people to guide the discussion and openly share their views (Nind, 2014, p.22). During each workshop, collected information was summarised and reviewed to ensure the validity of the researcher’s understanding. Careful and critical analysis of young people’s input into the project was conducted.</p>

Benefits	<p>The possible benefits of participation in the study were outlined in the research information shared with young people and youth organisations prior to the workshop (Appendixes 5, 6 and 7). During the workshop, young people were provided with opportunities to:</p> <ol style="list-style-type: none"> 1. learn about evaluation tools and their use in the digital youth context; 2. co-create their own evaluation solutions (which could later be used in their youth organisations); 3. voice their opinions about their evaluation experiences; 4. contribute to the improvement of youth project evaluations in Scotland.
Suitability	<p>The following points were implemented to support sustainable learning</p> <ol style="list-style-type: none"> 1. young people were encouraged to implement their evaluation solutions in their youth organisations; 2. published analysis of the study was shared with youth organisations in accessible forms (blog post and presentation); 3. while co-examining the outcomes of this project, a dedicated event was organised for young people, youth workers, and youth organisations from Scotland. The aim of the event was to co-analyse the outcomes of the project, co-design solutions, and propose a way forward. The event was scheduled to take place at Edinburgh Napier University in May 2019.

3.6 Conclusion

The methodology and theoretical framework outlined in this chapter made it possible to generate insights into youth workers' and young people's experiences and perceptions of impact evaluation of youth digital culture co-creation in Scotland. The data collected in this project was guided by Charmez's (2016) Constructivists Grounded Theory, framed within Participatory Paradigm (Heron & Reason, 1997). Participatory Action Research methodology was adopted to generate participants-focused and socially-driven insights. This project was divided into three consecutive studies. In Study 1, qualitative data was gathered through twenty interviews with digital youth workers in Scotland and analysed using Thematic Analysis. The themes identified in Study 1 were further incorporated into the design of Study 2, which involved a focus group with digital youth workers. In Study 2, a card-sort exercise was utilised to co-analyse and enhance the findings from Study 1. In Study 3, three participatory youth workshops were undertaken with young people (aged 16 to 25 years old) in Scotland. Study 3 incorporated findings from Study 1 and Study 2. Thus the design of youth participatory workshop was informed by the data generated by digital youth workers. Each

study was analysed separately (see Chapters 5, 6 and 7). From the individual analysis of the studies, it was then possible to address the research questions guiding this project. (See Chapter 8.)

Chapter 4: Study 1 - Interviews with digital youth workers in Scotland

4.1 Introduction

The results of the first stage of the fieldwork – twenty interviews with youth workers in Scotland – are presented in this chapter. The aims of the data collection were to examine how Scottish youth workers who use digital technologies in their youth engagement practice (1) view the influence of digital technologies on youth engagement practice, and (2) perceive the social impact and social impact evaluation of digital youth culture co-creation projects.

The analysis presented here addresses the following research questions:

RQ1. What is the current understanding of the social impact of youth digital culture co-creation?

RQ2. What are the approaches used to evaluate the social impact of digital youth culture co-creation in Scotland?

RQ3. What are the experiences and perceptions of social impact evaluation among digital youth culture co-creation projects participants and projects facilitators in Scotland?

RQ4. To what extent could digital youth practitioner-led and youth-led social impact evaluation recommendations alter current evaluation practices?

The chapter begins with an overview of the study participants. Section 4.2 provides information on the youth workers participating in the study, including the types of digital youth projects facilitated by their organisations and their reach in Scotland. Research method designs and their implementation, and data analysis approaches are examined in Section 4.3. Data collection results are discussed in Section 4.4. Subsection 4.4.1 examines youth workers' perceptions of the influence of digital technology on youth work practice. Subsection 4.4.2 provides data on youth workers' views on the social impact evaluation of digital youth culture co-creation in Scotland. The results are examined in the context of the literature review (Chapter 2) on digital youth culture co-creation and social impact evaluation. In Section 4.5., the following four data analysis narratives are outlined:

1. Youth workers' polarised views on the impact of digital technologies on youth work;
2. The digital literacy divides in youth work: examining the invisible wall/s;
3. Social impact evaluation of youth digital culture co-creation: the power of interpretation;

4. The digital aspect of the social impact of youth digital culture co-creation: what are we looking for?

The chapter ends with a conclusion section, followed by a discussion of limitations.

4.2 Study Participants

A purposive sampling strategy was implemented to recruit participants who were “especially knowledgeable about or experienced with a phenomenon of interest” (Palinkas *et al.*, 2015, p. 2) and to ensure that particular characteristics were represented in the final sample of the study (Mason, 2010). To ensure a wide range of experiences of technology used in youth culture facilitation across Scotland, a purposive sampling strategy was implemented. The sampling criteria were distinctively motivated, self-selected and underpinned by the theoretical definition of digital culture co-creation, introduced earlier in this project (see Chapter 2). Candidates were sought who:

- Spanned the 25-64 age range with all genders included;
- Had facilitated or assisted with the implementation of youth-centred and participatory projects where digital technologies or/and digital and/or social media were utilised;
- Were employed on a paid or voluntary basis;
- Worked in both rural and urban areas of Scotland.

In May 2017, twenty-five digital youth organisations based in Scotland were contacted via email to request their participation in the study. The emails explained the purpose of the study, the length of the interview, and the data collection procedures (Appendix 7). Contact details were obtained through online searches and from the Scottish Digital Youth Work Network (SDYWN). SDYWN is an organisation that aims to connect youth workers who use digital tools and online spaces in their practices with young people, and to exchange and develop good practices, both in Scotland and internationally (YouthLink Scotland, 2017). The researcher was a member of the SDYWN and thus had access to the network’s online forum where information promoting the study was posted.

Figure 5 presents a graphic created by the researcher and used online to raise awareness of the study’s recruitment across Scotland. Information about the study was distributed through social media (Twitter and LinkedIn) and on the researcher’s academic blog.

Figure 5 Graphic created by the researcher to recruit participants in Study 1
(The graphic was used on social media and in emails.)



Fifteen interviews were successfully arranged as a result of the initial email contact in May 2017. Five of the contacted organisations decided not to participate in the study due to alternative project commitments or lack of time. Between June and July, an additional three organisations/participants contacted the researcher via email and volunteered to participate in the study. Two further participants were recruited through the SDWYN in July 2017. In total, twenty interviews were conducted by August 2017.

The first interview took place in June 2017. The interviews ranged in length from 45 minutes to 90 minutes. All interviews were audio-recorded with permission. The age groups of participants are illustrated in Table 10.

Table 10 Participant age groups

Number of participants	Age (years.)
5	25-34
10	35-44
4	45-54
1	55-64

As illustrated in Table 12, at the time of the study most of the participants (16) had five or more years of experience of utilising digital technologies in youth work. Among the most experienced participants were those with over 10 years of experience in the youth

engagement context. Only four of the practitioners had begun to implement digital technologies in their youth engagement work within the previous five years. The types of digital activities participants had experience of is also illustrated in Table 11. Digital storytelling is defined here as “employment of story and digital technologies for personal expression” (Alrutz, 2015, p.2), and was dominant, with fifteen participants referring to involvement in this type of project. The second and third most common digital youth activities were Media Production (video and film production: eight projects) and Digital Arts (graphic, animation and sound design: seven projects), and the least reported activities included game design (two projects) and digital literacy (three projects). Digital literacy is defined here as the ability to use information technology for both information sharing and information creation practices; it is concerned with how young people access and engage with content as well as the “availability of content appropriate to the needs of users and opportunities to translate these activities into beneficial outcomes in everyday life” (Helsper, 2016, p.176).

Table 11 Participants’ experiences of facilitating digital projects with young people and typology of digital youth projects. Names are anonymised.

Name	Years of experience of using digital technologies in collaborative youth projects	Types of digital youth projects						
		Digital Arts	Digital Storytelling	Media Production	Social Media	Coding	Game Design	Digital Literacy
Alex	5-10							
Alison	0-5							
Andy	0-5							
Blake	10+							
Carla	5-10							
Chris	5-10							
Debbie	10+							
Gabriel	10+							

Name	Years of experience of using digital technologies in collaborative youth projects	Types of digital youth projects						
		Digital Arts	Digital Storytelling	Media Production	Social Media	Coding	Game Design	Digital Literacy
Jamie	5-10							
Jo	10+							
Janek	5-10							
Karel	5-10							
Kyle	0-5							
Martin	5-10							
Marta	10+							
Max	10+							
Rowan	5-10							
Ryan	0-5							
Sam	5-10							
Sandy	5-10							

The sample of youth workers was 60 per cent male and 40 per cent female. Nineteen of the participants were based in Scotland and one worked in England. To learn about youth workers' routes to youth digital culture co-creation, data on the youth workers' prior professional experiences was collected (Table 13). Whilst the interviews took place across four larger towns of Scotland (population ranging between 76,220 and 599,650) it is important to note that participants worked with young people from all over the country, and in some cases internationally (illustrated in Table 13). Thus, the sample includes those with experience of digital project facilitation and evaluation with young people from a variety of towns and rural areas.

Table 12: Interview participants: demographics and routes into digital youth culture co-creation, and representative organisational profiles

Name	Age	Gender		Years of experience	Routes into digital youth culture co-creation	Organisational Profile	
		M	F			Youth Engagement reach	Number of young people involved
Alex	25-34	M		5-10	Film and Media	National	200+
Alison	35-44		F	0-5	Arts	Local	Less than 50
Andy	25-34	M		0-5	Computing	National	Less than 50
Blake	45-54	M		10+	Youth work	National	200+
Carla	45-54		F	5-10	Youth work	Local	50-200
Chris	35-44		F	5-10	Arts	National	50-200
Debbie	35-44		F	10+	Youth work	National	200+
Gabriel	55-64	M		10+	Youth work	Local	200+
Jamie	25-34	M		5-10	Media and film	National	200+
Jo	45-54	M		10+	Media and film	National	200+
Janek	45-54	M		5-10	Computing	National	200+
Karel	35-44	M		5-10	Youth work	Local	50-200

Name	Age	Gender		Years of experience	Routes into digital youth culture co-creation	Organisational Profile	
		M	F			Youth Engagement reach	Number of young people involved
Kyle	35-44		F	0-5	Youth work	International	200+
Martin	35-44	M		5-10	Arts	National	Less than 50
Marta	35-44		F	10+	Youth Work	National	200+
Max	35-44		F	10+10+	Education	Local	200+
Rowan	25-34		F	5-10	Media and film	Local	50-200
Ryan	35-44		F	0-5	Arts	National	50-200
Sam	35-44	M		5-10	Education	Local	Less than 50
Sandy	25-34		F	5-10	Community Development	National	200+

4.3 Method

4.3.1 Semi-structured interviews

Semi-structured interviews were selected as the method of data collection. This provided an open-ended conversation structure with an emphasis on the participant's point-of-view and insights (Bryman 2016, p.467). Informed by a constructivist approach to grounded theory (discussed in Chapter 3), data such as research participants' stories and silences, and the

interview-participant relationship as well as the explicit content of the interview, were considered as valuable during the interview process (Charmaz, 2014). The seven questions used in the interviews were informed by the literature review (Chapter 2). Interview questions are presented in relation to the literature findings in a table presented in Appendix 8.

The interview structure was divided into three stages:

1. Introduction, and review of the contemporary role of young people in the context of digital youth culture co-creation in Scotland

The interviews began with a general focus on the participant, their background, and their views on digital technologies employed in youth engagement practice. Questions 1 and 2 examined participants' organisations, the types of digital work they do with young people, and how young people's roles are defined in their participation. The purpose of question 3 was to inquire into the terminology youth workers across Scotland use to describe their work and to learn about their definition of digital culture co-creation (as discussed in Chapter 2 Section 2.3.2)

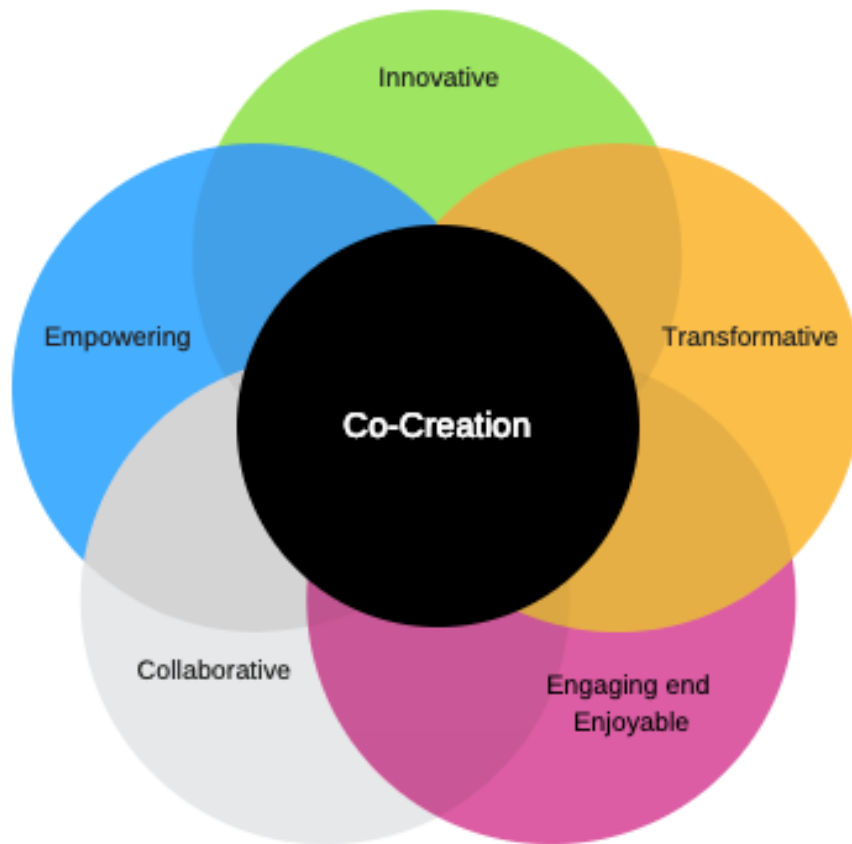
2. Social impact evaluation of digital youth culture co-creation in Scotland

Question 4 examined each participant's interpretations of social impact in the context of digital youth culture co-creation. Themes such as a definition and ownership of social impact in youth digital culture co-creation projects were examined. The aim of Question 5 was to analyse the process of social impact evaluation, as well as each participant's attitudes and perceptions of the practice. The role of young people in the evaluation processes was also discussed.

Two visual prompts were also used to introduce and "ground researcher's interview questions" (Bryman, 2016, p.476). Firstly, a printed diagram (

Figure 6), showing different qualities of co-creation, was shared with the participants. The aim of this diagram was to help elicit participants' views on the definition of effective digital co-creation processes (examined earlier in Chapter 3). The researcher presented Figure 6 during each of the interviews to inquire to what extent it showed qualities that participants considered to be important or relevant aspects of co-creative practices. Participants were also encouraged to write their ideas about/proposed qualities of good co-creation process.

Figure 6 Co-creation qualities identified in Chapter 2



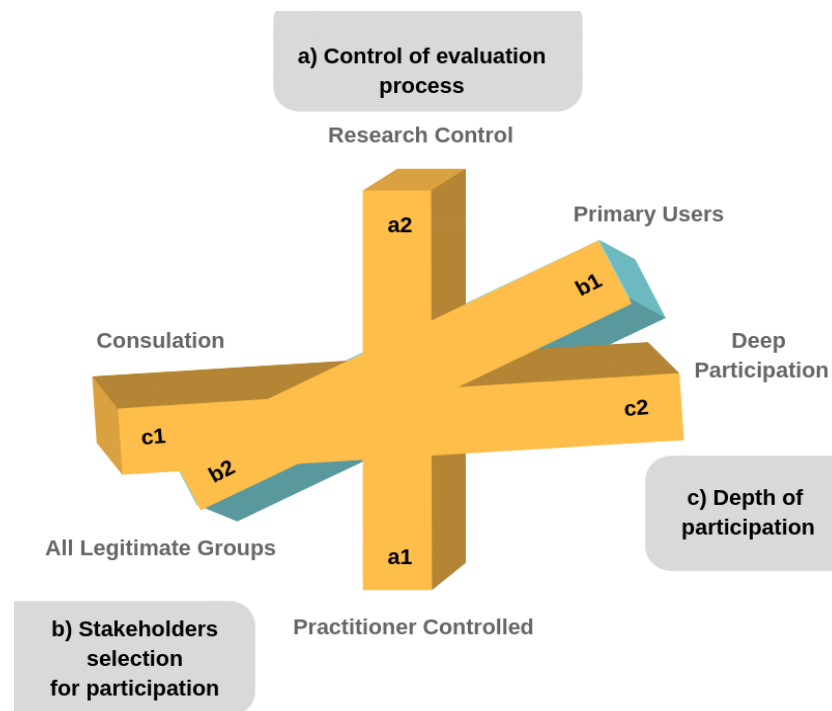
A second visual prompt (Figure 7) was utilised to draw upon Cousin and Whitmore's (1998) distinguishing characteristics of Participatory Evaluation (as discussed in Chapter 2, section 2.3). The participants were invited to reflect on the social impact evaluation practice in the organisations they represented, positioning their organisation's practice against the three dimensions defined in the model:

- a. Control of evaluation process
- b. Stakeholder selection for participation
- c. Depth of participation

However, several problems were identified when using the prompt designed around this model. The model is complex, and several participants appeared to be apprehensive about providing answers. For example, the terminology in the section titled as "Control of evaluation processes" provides two options between "Research Control" and "Practitioner Control". Those were interpreted both in the context of youth-youth workers and youth workers-funders. Also, in some cases, it was unclear who

should be considered as the primary users of the organisation services and who were legitimate groups in the context of stakeholders' selections for participation in evaluation.

Figure 7: Distinguishing characteristics of Participatory Evaluation (Cousin & Whitmore, 1998)



3. The future of social impact evaluation of youth culture co-creation in Scotland

The final questions of the interview were concerned with possible improvements or alternatives to the possible social impact evaluation problems identified during the conversation. During this part of the interview, participants were asked about their views on the future of evaluation.

4.3.2 Ethical Considerations

Ethical approval for the study was sought and obtained from the School of Computing at Edinburgh Napier University. During the recruitment stage, the information about voluntarily participation was highlighted in the email correspondence prior to the initial meeting. All participants were provided with a consent form and were informed of their rights under the General Data Protection Regulation (EU GDPR, 2018), including the right to withdraw their data from the study at any time. To ensure the anonymity of the participants, the data gathered during the interviews was stored on a password-protected computer at Edinburgh Napier University on an encrypted directory. A backup of the data was kept on an encrypted and portable hard drive, which was stored in a safe location away from the university premises.

4.3.3 Interview placing

Interview location is noted due to its possible influence on the data collection process as well as “relationships between researchers and participants, and how they shape the ethics and politics of knowledge construction in fieldwork” (Elwood & Martin, 2000, p.653). In six cases, the researcher visited youth workers in their organisations where she could learn about the nature of their digital youth work and briefly observe the work of these organisations. During the site visits, youth workers often provided tours of the youth work facilities and showcased some of the digital equipment used by the organisation. In five cases, youth workers showed physical proof of evaluation evidence such as evaluation reports, graffiti walls, comic books, or posters created or co-created by young people. The interviews facilitated on-site provided additional and often useful visual information to the work that was discussed during the conversation. However, according to Elwood & Martin, “different locations might situate participants differently in terms of their power in the research process and their sense of the contribution they might make to questions being asked” (2000, p.652), in particular, conversations focusing on the nature of the social impact of digital youth culture co-creation projects (both negative and positive) and social impact evaluation. For example, brief moments of tension, non-verbal interaction, and “silent dialogue” between the researcher and study participants (Charmez, 2014, p.93) were noted in the filed notes (Appendix 9).

Twelve of the interviews took place in cafes and similar venues, selected to suit the study participants. In these cases, the neutral spaces may have prompted more impartial responses with participants, encouraging them to take more time to critically answer questions, aligning with Charmaz’s aspiration for interviews which serve to “clarify meanings and actions while providing rich data that spark analytic insights” (2014, p. 80). The informal settings of the interviews may have allowed participants to distance themselves from their work and the organisations they represented. Thus, it could be argued that the data collected via the twelve interviews held in neutral spaces provide richer insights than those interviews conducted on organisation premises.

Two interviews were carried out via Skype and, due to unreliable Internet connections, took place using audio connections only. It could be suggested that the analytical quality of these audio-only conversations was not as nuanced as those of the face-to-face interviews. Limitations were noted, such as lack of eye contact, visual clues, and physical interaction between researcher and participants.

4.3.4 Data Analysis Approach

The interviews were transcribed and coded using Nvivo10 software. This provides a set of tools for classification, sorting, and management of sets of qualitative data (Sotiriadou, Brouwers, & Le, 2014). The choice of software was driven by “contextual, specific and philosophical considerations” (Sotiriadou *et al.*, 2014, p. 232). Contextual factors were taken into consideration, such as the timescale for the study, prior knowledge of data analysis, and software availability. Nvivo has been described as particularly useful in the context of studies guided by grounded theory approach, because it provides a digital system for “a constant-comparative method” (Ozkan, 2004, p. 590), where the researcher interacts with the data sets and is responsible for their final interpretation.

The analysis was guided by the Thematic Analysis approach (Braun & Clarke, 2006). In this study, a theme was considered as something important about the data in relation to the research question and represents some level of *patterned* response or meaning within the data set (2006, p.10). Whilst the majority of the themes discussed in this study reflect the prevalence of the subject in the conversation, the “keyness” of the themes was not always dependent on quantifiable measures. For example, in some themes (for example: Results 4.4.1 Section 2: Fears) the researcher adopted an in-depth thematic analysis that “goes beyond the semantic content of the data and starts to identify or examine the *underlying ideas*” (Braun & Clarke, 2006, p.13).

Thematic analysis was carried out in accordance with Braun & Clarke’s (2006) procedure, illustrated in Table 14. The entire process consisted of six phases, enabling a structured approach to the formation of the data themes in this study. Phases 1 and 2 focused on initial familiarisation with the data set and identification of the codes and sorting them into categories.

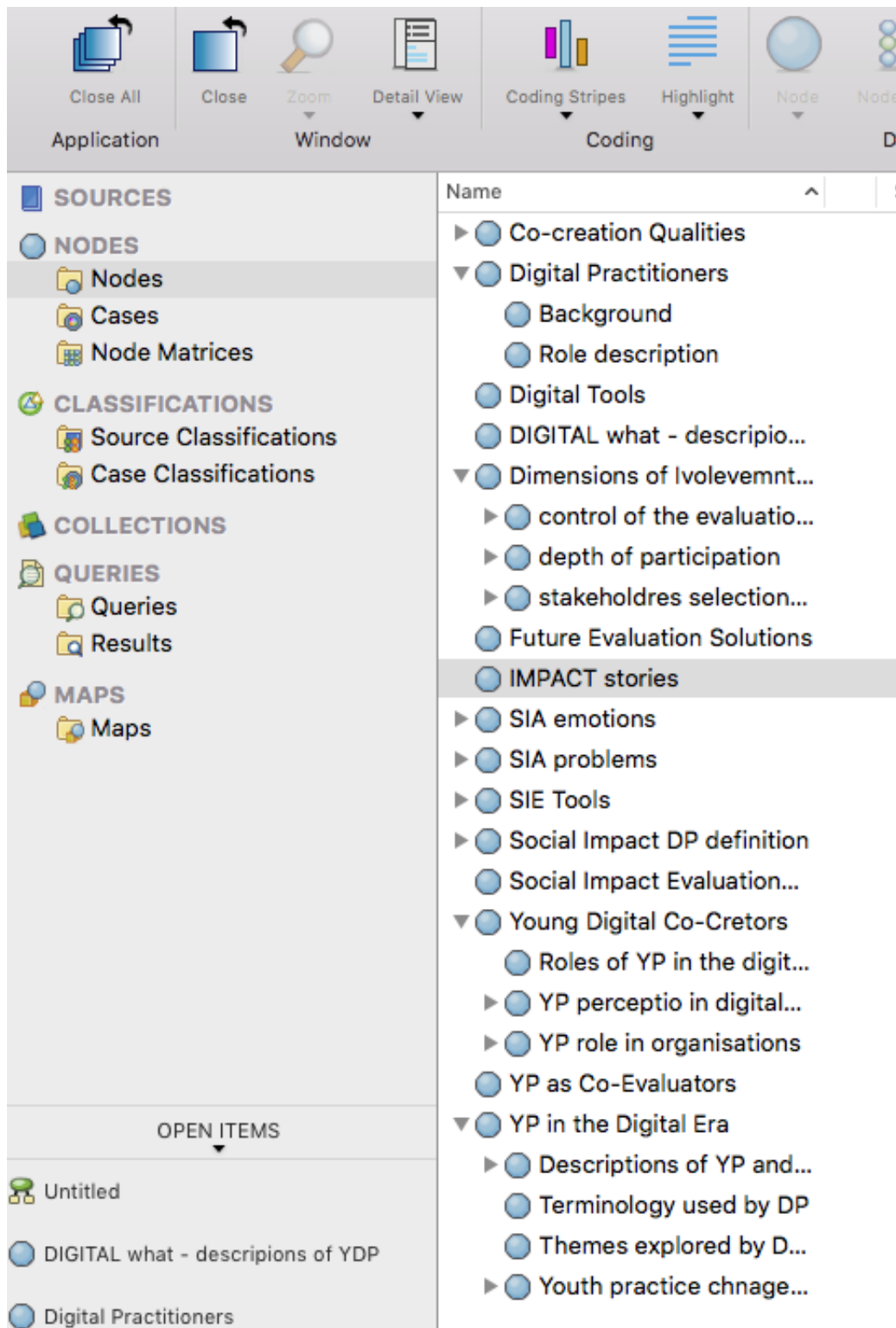
Table 13: Thematic Analysis process in Study 1 (Guided by Braun & Clarke, 2006)

Phases of Thematic Analysis	Purpose of the phase according to Braun & Clarke	Actions taken in this study
Phase 1	Familiarising yourself with the data	1. recordings of the entire data set re-listened 2. transcripts of 20 interviews read twice
Phase 2	Generating initial codes	3. initial codes identified and organised into categories 4. coding carried out in NVivo10
Phase 3	Searching for themes	5. thematic maps of codes created

Phase 4	Reviewing themes	6. main themes in the study identified 7. the validity of individual themes considered 8. themes examined as data stories in the study
Phase 5	Defining and naming themes	9. themes further refined 10. themes named
Phase 6	Producing the report	Study 1 analysis written up

Here, both digital methods (such as coding software Nvivo10) and offline analysis of text were used. As interviews in this study were guided by prior literature reviews (Appendix 8, Chapter 2), their structure allowed for the generation of “focused data” that directly linked to the key themes identified earlier (Charmaz, 2014, p.87). The coding categories created using Nvivo are presented in Figure 8.

Figure 8: Coding categories created using NVivo



As the analysis process progressed, the coding of initial categories expanded, and themes began to emerge. Subsequently, in Phase 3, thematic maps of codes were created both in Nvivo 10 and offline. This phase allowed for an emergence of the following data maps:

1. Youth Workers

- Social impact evaluation of youth digital culture co-creation: possible problems in the practice identified
- Social impact evaluation of youth digital culture co-creation: what works
- Impact of digital technologies on youth work
- Interpretations of social impact in the context of digital youth culture co-creation
- Digital co-creation: definition
- Social impact evaluation of youth digital culture co-creation: what could work in the future?

2. Young people

- Social impact evaluation of youth digital culture co-creation: possible problems in the practice identified
- Social impact evaluation of youth digital culture co-creation: what could work in the future?
- Interoperations of social impact

Examples of the maps are shown in Figure 9

4.4.2 Discussion of digital technology's impact on youth work practice

The first set of results is primarily driven by the first research question in this project: what is the current understanding of the social impact of youth digital culture co-creation? The results indicate that youth workers' perspectives on how digital technologies impact their youth engagement practice can be aligned into three themes: (1) hopes, (2) fears, and (3) myths.

4.4.2.1 Hopes

4.4.2.1.1 Digital technologies in youth work might improve accessibility and communication

Most participants stated that digital media have had a positive impact on their work in the last ten years. Particularly, digital youth workers who work primarily with film and digital video highlighted the advantages of the digital era. Reflecting on his experiences, Blake stated that “[in the past] technology would be alien to people. People would not be used to it. It would have the mystery of the elite.” According to participants, the emergence of technology challenged the traditional top-down communication between adults and youth and provided more collaborative and inclusive systems. The accessibility of new technologies was outlined as a key advantage by Alison, who stated that, “before the technology was a massive barrier, [but now] if you don't have something that can make a film, your friend will. It's much more accessible.”

The notions of cost and affordability were consistently mentioned. According to participants, digital media provide young people and youth workers with a rich range of creative and communicative applications at low (or no) cost. Such cost-effective digital tools were described as effective enablers of the creation of innovative types of youth work approaches (Debbie). Alison, for example, indicated that “technology and the way it's gone and the fact that it is so accessible, you can get a good start, you can start anywhere.”

The data further indicates that the use of digital technologies in youth work has become a norm in recent years. It was agreed that through digital engagement young participants have been provided with opportunities to directly influence and shape the overall nature of youth work (Alison, Blake, Debbie, Kyle). Shared decision-making and ownership were highlighted by Debbie, who emphasised the role of young people in the process of digital culture co-creation: “it's about young people to identify an issue, that they can take ownership, and develop some kind of idea to develop that [youth project], and we use technology to facilitate that.”

The results indicate that digital technologies not only enhanced participants' interactions with young people but also improved their organisational work management. For instance, the use of social media and online messaging was described as an effective way to "keep in touch" with young people. Jo, for example, reminisced on the difficulties of youth work in the pre-digital era: "I just remember years back, and you just couldn't do that stuff. I mean it's hard work because you'd have to say as a team 'right, I'm going to spend the next three days phoning all of these people'. Sometimes knocking on doors". Most participants indicated that digital tools enable effective project documentation, analysis, and evaluation. Therefore there is a sense that digital tools are not only perceived as additional engagement resources, but also as crucial elements of youth and workers communication. As young people no longer view "view their lives as online and offline" embracing digital communication by youth workers was described as necessary in the youth engagement field in the United Kingdom (Jamie).

4.4.2.1.2 Digital technologies might allow for facilitation of new forms of collaborative and experiential digital learning

There was an overall agreement that digital developments have had positive impacts on social inclusion and participation among youth. According to most participants, the emergence of digital culture provided young people with new tools to share, co-create, and influence other youth projects. Alex indicated that "digital let us change the way we work with young people, but also change the amount of influence (...) young people have over us." The notion of power-sharing was highlighted as a vital advantage of digital youth work. For example, Debbie appreciated the fact that digital participatory projects provide a collaborative environment, where workers and young participants are involved in an equal dialogue. She claimed that the top-down approach to teaching ("this is what I want you to do, this is how you do it") has become less applicable in the digital youth work.

Nearly half of the participants felt that they do not have sufficient digital skills to effectively engage in digital youth work. However, they also indicated that advanced technological skills are not essential in facilitating an effective digital youth project. Chris was one participant advancing this view and indicated that nowadays "there is a wider acceptance that it's OK not know everything" when working with young people using digital media. Therefore, during the process of 'collaborative discovery' there is "less of acting as a teacher", but more of "discovering if things are possible together" (Gabriel). The majority of respondents stated that youth workers should not be perceived as digital experts but rather as equal learning partners. The importance of knowledge sharing was also highlighted by Chris, who stated that "you can learn from them [young people] as much as they can learn from you, so you don't have to lead everything." Thus the importance of "presence" and an open mind was outlined as essential

for facilitating effective digital youth experiences. As Blake suggested, collaborative digital learning “is about sharing. I bring my expertise, you bring yours.”

Digital technologies were primarily perceived as practical tools that can assist with – but not substitute for – youth work process. In the view of participants, digital elements are just a means to an end. Debbie claimed that digital technology “[is] not the be-all and end-all. It’s just the tool. In order to get the outcome across. So, if you were a youth worker that came in and you were not clear or fully understanding how digital technologies work or how certain digital technologies work, that’s fine.”

4.4.2.1.3 Digital technologies might provide young people with opportunities to share information

Study participants suggested that digital media can provide young people with opportunities to amplify their voices and even share information globally. Chris described collaborative meaning-making as one of the key advantages of digital youth work. He stated that young project participants “become collaborators with you as well as with each other.” Through digital engagement and collaborations, young people move beyond being solely digital consumers to active “creators and contributors of digital content” (Debbie). The notion of youth’s influence was discussed by Sandy, who indicated that as digital producers, young people “have a stronger voice (...) because they can make these videos, they can make these podcasts, they can write blogs, they can share videos and photos of themselves doing thing.”

When implementing digital technologies into their practice, youth workers emphasised the ability to “share the young people’s voice in a way that you wouldn’t otherwise be able to” (Max). Kyle described this process as a potential formation of youth’s “global voice”, which can “scale and reach out well, well beyond your geographic territory”. Most importantly, youth workers believed that digital media might empower traditionally underrepresented groups to actively participate in public discussions. The importance of digital youth voices from marginalised groups was mentioned by several participants. For example:

We’ve been working with young people with a learning disability, who’ve created a blog, and have been able to reach out to other young people with learning disabilities and share their experiences. That’s created a much larger community supported by youth workers than would ever have been the case without digital (Kyle).

It was indicated that digital tools allowed for creation of more inclusive youth spaces “the quieter [youths’] voices become louder” (Rowan).

There was a sense of excitement linked to youth's ability to directly influence youth work practice through digital media. Whilst it was emphasised that "youth work has always perceived young people as experts in their own lives" (Martin), it was equally believed that digital media provide broader platforms where such expertise can be shared publicly. It was indicated that through digital participation, young people can become co-directors of youth work. They can therefore re-invent and re-shape the notion of youth work and ensure that "it is not something which is prescriptive and done to them" (Sandy).

4.4.2.2 Fears

4.4.2.2.1 Fear 1: Insufficient expertise

While seventeen youth workers acknowledged that it is "OK not to know everything" in the context of contemporary digital technologies, some accounts revealed an anxiety related to not having "sufficient" technological skills and knowledge. It is evident that all participants were keen to test and implement creative digital tools into their practice. However, in some cases, lack of digital expertise was described as a continuing challenge and barrier to exploring the full potential of digital tools in youth engagement. Carl, for example, compared this to a "brick wall", and indicated "I'm banging my head off that brick wall, because I don't know how to get through it to the other side". When reflecting on his experience of implementing digital technologies in youth practice, Carl described this situation as "separate worlds", where young people cultivate their own digital culture away from adults. It was indicated that the inability to understand and filter through digital youth habits turned formerly inaccessible youth culture into something even "more mystified" (Kyle). Kyle described this as "an additional barrier of a counter culture that exists within a field that youth workers can't even access then yeah there's an additional mystification around it."

The fear of not understanding the digital world has created a sense of anxiety and 'insecurity' in the youth worker sector (Marty). Kyle indicated that there are many youth practitioners who are "really worried about digital and don't have the confidence to use technology in a whole host of ways." He defined it as a form of resistance in the field:

...three or four years ago, when they were starting out, their work around digital skills for youth workers, and the frameworks, guidance and advice about how youth workers should deal with digital (...) many youth workers not thinking this was appropriate, that this was part of their job, they were nervous about it (Kyle).

Several participants indicated that there is an evident lack of technological knowledge in the field. "There's a big lack of knowledge amongst the staff, particularly around the technology

itself, because it's not necessarily from their generation" (Carl). Marty talked about the fact that digital youth work is often perceived as "niche" and a set of "specialist skills". He indicated that many youth workers "are really worried about digital and don't have the confidence to use technology in a whole host of ways". Further, he emphasised that nowadays "digital is a context of life for young people" and it is youth workers' responsibility to "upskill". However, at present there is "a real diversity in the sector between people who are quite worried about it or just don't understand that it's a context for life for young people" (Mary).

4.4.2.2.2 Fear 2: Misinterpretation

Whilst all respondents recognised the importance of digital communication tools in their work, some indicated that technology can also have an interrupting influence in youth work facilitation. According to Debbie, while using certain technologies, body language and tone of voice can be lost and messages "misconstrued" or "misread". As Blake put it: "[digital media] is not live, it's not I speak to you, I see you falling asleep, that's the reaction, therefore I modify what I'm saying. If I'm creating a short text or a short piece of audio, I cannot know immediately what the impact of that is." Blake also highlighted the importance of "the transactions and relationships and the continuous immediacy of the action/reaction responses that come out of being in a live situation". Rowan indicated that "you need to get that balance of you know the digital isn't enough, it's not enough, you still need that ... face-to-face mentoring". The use of social media statistics as youth participation indicators was criticised. Youth workers believed that "participation based on Facebook or likes" does not provide a real representation of youth engagement. Consequently, it was suggested that face-to-face contact should remain a vital element of youth work and should not be replaced with digital communication.

4.4.2.2.3 Fear 3: Replacement with digital technologies

There are some indications that youth workers fear that in the near future their jobs might be replaced by computers, or by more digitally-aware practitioners. The problem of not having sufficient and/or up-to-date technological knowledge was outlined as a key issue. One of the interviewees, Marty, complained that "there's a lot of fear about it replacing them as youth workers and replacing their skill set which you know, I personally don't think they should be worried about." Several participants claimed to sense anxiety in the sector concerning "the fear about digital replacing face to face youth work and I think that is... definitely there in the sector" (Marty).

4.4.2.3 Myths

4.4.2.3.1 Myth 1: The 'digital natives' narrative

The data suggest that participants hold a belief that the widespread perception of young people as being “digital natives” is erroneous. In the view of several participants, such beliefs need to be addressed in order to facilitate effective digital youth experience. For example, Kyle indicated that “there is a huge myth around young people’s literacy.” Many adolescents, despite growing up in the digital era, do not have basic digital skills. For example, online privacy and resilience as well as criticality and online-offline balance were mentioned as skills that need to be addressed. Alex complained that there is false sense of “hierarchy of how confident people about their digital skills versus their age’ within youth work sector. Alex defined this situation as ‘oh just pass it on the young person” narrative. However, according to participants, the assumptions that all young people know how to navigate digital spaces are untrue and need to be addressed. Kyle emphasised that there is an ongoing need for critical digital literacy education as many young people “don’t have that high level of information literacy skills around looking at different sources of information, don’t know how to use computers so wouldn’t necessarily know how to use like Microsoft office package or email.” Rowan added that it is essential for young digital participants to adopt a critical mind-set when navigating between digital and offline spaces. The problem of cyberbullying was discussed as an example of a situation where digital literacy is required. Here, Rowan indicated that in the digital youth setting “we [digital youth workers] still need those core skills [like recognising tone] around literacy to understand when to approach somebody, when to tell your teacher, when to tell your youth worker it’s a problem, when to know that you should be ignoring this and being able to talk about that, it needs skills, emotional skills, emotional intelligence”.

4.4.2.3.2 Myth 2: The transformative power of digital media in youth work

Eleven accounts revealed a sense of scepticism towards the empowering and “transformative power” of digital media. In the context of relationships between workers and young person, Gabriel indicated that it is essential to critically assess the negatives and positives of certain types of digital media. He claimed that in his youth organisation “we’ve been resistant to anything [digital] that might ...isolate young people or might diminish the forming of relationships. And working positively with anything that might actually build those relationships” (Gabriel). Elsewhere, Kyle highlighted his doubts by saying, “I think we’ve made a lot of digital as being transformative in youth worker relationships. I’m not sure it is.” Gabriel further challenged this view by saying that it is crucial to

... recognise that technologies make one thing possible, will simultaneously be making another thing impossible or less likely. So

engaging critically with those things and engaging in a way that remembers that we have choices that we can make here. And so we can choose to pick up this tool and not that tool. We can choose to.

Rowan said that the evidence of transformative changes is often imposed by funders. It was assumed that digital youth initiatives would aim to empower young people to co-create and manage their own initiatives. However, Rowan indicated that digital media projects often finish once funding ends and often “they take away [the funding] and then you’re like, what are we going to do now, because there is not enough sustainability” (Rowan).

4.4.2.3.3 Myth 3: Ticking the digital box

There is evidence that the definition of the term “digital” varies in the sector. As it is now expected to use forms of technology in youth work, concern was raised that some youth projects “tick the digital box” without providing young people with a meaningful experience. For example, Carl indicated that:

a lot of youth projects just maybe provide an X-box or a computer and let the young people loose on it. They wouldn’t really be doing any dedicated work to develop the young peoples’ skills on it, but they sort of feel they’ve ticked a digital box because they’ve just got an X-box sitting in the corner.

Carl additionally suggested that digital technologies are primarily used as means of communication between workers and young people, and that they might not be adding anything innovative or exciting to youth projects. Whilst funding for digital youth participation has become more common in the United Kingdom, many projects are thought to add “digital elements” that do not add value. Rowan, for example, claimed that “digital” is often treated as an additional element function in youth work provision. He complained that the digital element is often treated as “a marginalised lump rather than this thing that kind of goes in between everything we do”. Further, he discussed the lack of context for many of the digital youth initiatives: “I just got that impression that they [youth organisation] bought kit, they got some kit, and they’ll give you some training”.

4.4.3 Perceptions, practices, and challenges in the field of social impact evaluation among digital youth practitioners in Scotland

4.4.3.1 *Digital youth workers' perceptions and definitions of social impact*

In their definitions of social impact, participants viewed impact in three distinguishable ways. The themes identified in this study are: individual impact, socio-political impact, and regulated data.

4.4.3.1.1 Individual impact

Digital youth workers acknowledged the importance of young people's development as a result of participation in digital and collaborative initiatives. Centrally, the concept of transition to adulthood – and its associated challenges – were identified in most conversations. For example, Gabriel highlighted the importance of “improved self-knowledge, self-worth, social skills, understanding of their impact on themselves and others”. Other participants talked about “transforming young people's lives’ and providing them with ‘a meaning, a purpose that they didn't have before” (Jo). Certainly, in most cases, digital youth workers emphasised young people's overall well-being as their primary concern when considering social impact. Most accounts also suggested that, through the facilitation of digital youth collaborative projects, respondents aim to inspire and positively influence young people's lives and futures. These holistic visions of an individual's improved sense of self and well-being are at the centre of digital collaborative youth work.

4.4.3.2 *Social impact as a socio-political process*

Social impact, referred to as collective change, was also examined. Kyle described this process as one of “multiple people having a positive change effected for them [youth].” Here, the notion of impact was not described in the context of gains to society, but in terms of the collective experience of the process of change. On the community level, the process of youth digital culture “meaning making” is associated with a complementary positive change in wider society. Most of the participants mentioned an enhanced sense of inclusion and shared decision making as positive processes associated with social impact. This holistic – and empowering – vision of social impact as a journey was outlined by Blake, who highlighted the importance “of belonging, of being part of the decision making, of taking ownership of the process”.

In addition, collaborative digital culture initiatives can create “a lot of pride within the community, it creates a kind of solidarity within the community, particularly if you're working

with a community of young people” (Jane). This is especially the case when digital projects lead to a creative output, such as a film or an exhibition. These engender a sense of creating both a lasting legacy and a contribution to the wider society, which may enable “young people to then have an impact themselves socially” (Marta). Finally, it was indicated that collaborative digital youth work initiatives can provide young people with opportunities to co-produce and amplify their collective voice. Thus the processes of youth digital content co-creation and sharing were described as enablers of a wider societal impact.

4.4.3.3 Social impact as sets of regulated data

Another emergent issue is youth workers’ scepticism towards technocratic social impact measurement procedures. While many believed that achieving social impact is an important aspect of their youth practice, they also stated that funders’ criteria served to limit their ability to explore the real social change they are co-implementing with young project participants. The frequent use of evaluation terminology such as “social impact outcomes”, “stats” and ‘social impact KPIs’ demonstrated that “reported social impact” is often interpreted as a set of regulated data, both qualitative and quantitative. This emphasis on externally imposed social impact outcomes was problematic for the respondents. Kyle indicated that social impact evaluation mechanisms and administrative procedures obstruct the process of examining the underlying value of social impact of digital youth work:

When you're talking about the impact, how does somebody who is a funder understand what the impact is? They go back to a piece of paper, they go back to a statistical report. What is the value of a hundred-young people doing something or one young person doing something? What is the value? We need to make an argument for it.

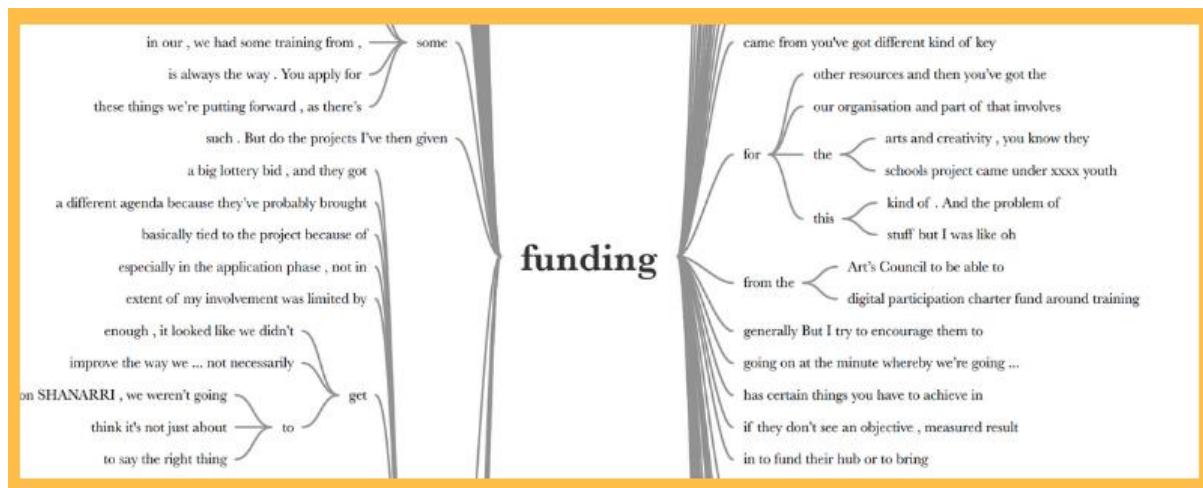
All digital youth workers expressed their concerns over the validity of these sets of regulated social impact data. Indeed, it was indicated that interpreting social impact as sets of data can have a directly negative effect on young people's participation. Chris acknowledged that building trust and relationships with young participants is central to his practice. However, there is no room for genuine reflection. Rather, he experienced pressure insofar as “funders want boxes need to be ticked” rather than genuine reflection. He further added that evaluation mechanisms may make it “hard to then respond, and reflect, and change a project to adapt to those [young] people”. Technocratic assessment procedures not only have a negative impact on youth workers practice, but also on young participants. Kyle complained that young participants are often “over-evaluated”:

You're 14 and you're from this community and that might give them some nice interesting graphs, but it actually is a load of shit if you're not given a good quality experience, and these young people are over evaluated, they are having to do this all the time.

4.4.4 Conflicting attitudes towards social impact evaluation

Whilst social impact was widely perceived as an essential element of a youth practice, the confusion – with regard to whose interpretation (funders, youth workers, young people) of impact is being addressed in the final report – was a common theme in the interviews. Youth digital workers agreed that social impact can be achieved both on an individual and a collective level, and that ensuring social change occurs as a result of their initiatives is vital. However, while positive impact terminology such as and “skills” (119 times identified in interview transcripts) “development” (50) and “learning” (89) were among most the most frequent words used in the conversations, it is also clear that youth workers also experience a degree of frustration when attempting to analyse the social impact of digital youth culture co-creation projects. The word “funding’ appeared 98 times in transcripts and primarily in a negative context. An extract from the analysis is shown in Figure 10.

Figure 10: Data Tree analysis of word 'funding' from NVivo



4.4.4.1 Sensing the change, without being unable to capture it.

Digital youth workers described social impact evaluation as a form of transformation which they witness in the collaborative youth environments in which they work. Alison claimed that, in her work, it is about “being able to see it [social impact] as opposed to evaluate it”. These notions of feeling, or sensing, social impact during youth digital collaborative projects were highlighted by most of the participants. Due to the dynamic nature of this transformation, it was indicated that the formal process of impact assessment, where data is collected and

shared, is an ineffective means of evaluation. Social impact evaluation was also perceived as 'boring': the final – and least exciting – part of youth projects. Study participants complained about the use of traditional project feedback surveys, “so ... because kids don't want to fill out forms, workers don't want to fill out forms with kids. So, you know, you think 'who are we really doing this for?’”

Whilst participants enjoy the interactivity and hands-on elements of collaborative digital projects, they struggle to focus when producing their written feedback. Evaluation processes were described critically, as “chasing young people up” (Sam). Whilst discussing the process of social impact evaluation of digital youth work, youth workers also indicated that external impact indicators can often prove redundant in the context of their projects. For instance, Alex argued that assessing things such as “the number of sandwiches provided or room temperature” is not essential data.

The results of this study indicate that social impact assessment is a time-consuming process, and, for it to be facilitated effectively, more time needs to be allocated to assessment, both during the project and after its completion. Rowan stated that “If you are a tutor on your own and you meant to be just teaching digital media or performance, or whatever, you're like oh that's half of your workshop gone, you know”. The time-pressures, and under-staffed nature, of evaluation process for digital youth projects, was further discussed by Chris:

I'm Project Co-Ordinator as well as running the workshops and I'm doing the evaluation. The people who commissioned me to do it are basically saying well you're going to be there anyway so you might as well do all those things. I'm like yes but I can't lead a workshop and take millions of photographs and spend twenty minutes signing people in and logging all their information and the data that you need and capturing their feedback and actually getting some valuable delivery out of it.

Finally, fifteen out of twenty youth workers interviewed for this study asserted that social impact evaluation should be fundamentally perceived as a learning process. It was agreed that the purpose of social impact assessment is to know whether they provide worthwhile experiences for the participants, and to learn whether, and in what ways, their current digital youth practice needs to improve. Whilst many stated that learning and development are key elements of the social impact evaluation process, it is also clear that (in reality) the process is rarely used as a learning experience, for either digital youth workers or young project participants. Blake believed that due to funder's outcome expectations and tight deadlines, evaluation processes are frequently underused, at least in the context of organisational or

youth learning. He complained that, “If I filled-in a smiley face to a frowny face it normally goes somewhere, and it gets correlated and I don't ever hear back about it.”

Too often, organisations are forced to deliver “cookie cutter kind of programmes and make everyone fit into them” (Alison). Blake indicated that funders are too detached from youth projects to be able to fully comprehend projects’ progress, and consequently, their social impacts. The conflict of interests between funders and workers creates problems relating to inconsistent understandings and perceptions of what matters during the evaluation, both for youth practitioners, and young people. Jane admitted that:

It's not very often that an obvious benefit or gain for the young person in being part of an evaluation. And I don't think anybody's really got that cracked yet. Because I think that's probably the hardest bit of youth participation

4.4.4.2 Chasing positive stories of change

Fifteen out of twenty digital youth workers believed that social impact evaluation is mainly concerned with “giving the funders what they want” (Carla). Thus, since “funders want to see the positive outcome” (Chris), it is a common practice to overemphasise, or even fabricate, positive impact evidence. Additionally, four youth workers talked about “the temptation to try and push for the higher numbers” when attendance numbers were lower than projected. Gabriel added that, “if you build your evaluation around improved self-worth then there's at least an unconscious impulse to not record when a young person is disappearing down a hole.” This problematic relationship with project funders was consistently highlighted across all interviews. To successfully apply, receive, and justify funding, youth work organisations in the United Kingdom are required to either propose set project outcomes or adopt them from a funding body. This is often viewed as a technocratic and overly controlling, approach to social impact analysis and was repeatedly referred to as a source of frustration:

You apply for some funding and that funding has certain things you have to achieve in it so you then tailor your project to meet those needs. You hope that it's about meeting the individual needs and being flexible to the young people that you end up working with but ultimately you have to then match the goals that you've said you would reach which is always a little bit frustrating. (Chris)

The continuing emphasis on positive outcomes places pressure not only on the workers, but on the young people themselves. Younger project participants are aware that their reassuring feedback is crucial to sustaining funding. Alex noted that “by and large when you evaluate a

project you've got to put the positives on it.” Therefore a bias can be perceived when examining participant perspectives. The problem of over-reporting positive project outcomes was further discussed by Jamie:

I think a lot of time young people would find it difficult to be negative when involved in evaluation of this nature. (...) So I guess there would be a trap there that someone seems to be empowered because you're excited, you think it's gone really well, they say, 'Yeah it's great' and then they just go away and don't think about it.

Current funding criteria and evaluation approaches may also limit youth workers and younger participants' abilities to critically reflect on their experiences. Ongoing battles to sustain organisational income were defined as a key problem, and a stress factor, when assessing a project's successes and failures. As a direct result, the anxieties associated with funding and evaluation may have a negative influence on the quality of facilitation of collaborative digital youth projects.

4.4.5 Conclusion

This section aimed to present Study 1 data collection results. This section began with a discussion of digital technology's impact on youth work. In Section 4.4.2 youth workers' hopes, fears and myths associated with digital youth work practice were presented. The key categories concerning youth workers' hopes, fears and myths associated with digital youth work practice were discussed in the following sections:

Section 4.4.2.1 revealed that youth workers hope that technologies might improve youth work practice and allow for new forms of youth work facilitation. The opportunity for an improved information-exchange among young people was also outlined as a potential advantage of using digital technologies in youth work.

Section 4.4.2.2 discussed youth workers fears concerning the use of the digital technologies were presented. It was revealed that youth workers are afraid that they do not have sufficient digital expertise to confidently utilise digital technologies in their practice. Furthermore, youth workers fears related to the disruptive influence of technologies on the communication between youth workers and young people communication was outlined. Youth workers' fear of being replaced by digital technologies was also discussed.

Section 4.4.2.3 provided an overview of the myths outlined by the youth workers. Three myths were presented: (1) the 'digital myth' narrative, (2) the transformative power of digital media in youth work, and (3) ticking the digital box.

The discussion on youth workers perceptions of social impact and social impact evaluation was presented in Section 4.4.3. The results revealed that youth workers defined social impact in three distinguishable ways. First, youth workers emphasised the importance of an individual impact. Secondly, social impact was viewed as a socio-political process. Thirdly, social impact was defined as sets of regulated data.

Youth workers attitudes towards social impact evaluation were discussed in Section 4.4.4. Here, two problematic narratives of evaluation process were revealed. Youth workers argued that during evaluation they can sense the change but are unable to capture it. Further, the data collection results indicated that youth workers tend to chase positive stories of impact during evaluation.

The analysis of Study 1 data results in the context of the reviewed literature is presented in Section 4.5

4.5 Discussion

Analysis of the data suggests an apparent conflict between how youth workers publicly discuss digital youth culture co-creation projects and how they genuinely feel about them. There is an existing excitement and hope in the youth work sector that digital technologies spark innovative solutions and have a positive impact on youth work and digital youth culture co-creation. However, whilst most digital youth workers began their interview as digital enthusiasts, many conversations unfolded stories of frustration, uncertainty, and fear. The findings of this study indicate four distinctive narratives in youth workers' perceptions of digital youth work practice, which can be set out as follows:

1. Youth workers' polarised views on the impact of digital technologies on youth work;
2. The digital literacy divides in youth work: examining the invisible walls;
3. Social impact evaluation of youth digital culture co-creation: the power of interpretation;
4. The 'digital aspect' of social impact of youth digital culture co-creation: what are we looking for?

4.5.1.1 Youth workers' polarised views on the impact of digital technologies on youth work

In alignment with existing research (Ito *et al.*, 2013; Livingstone & Sefton-Green, 2016) this study indicates that youth workers perceive the digital world as a collaborative experiential learning environment and a "space for self-making" for young people (Livingstone & Sefton-Green, 2016, p.22). Digital youth projects are believed to reinvigorate teenagers' learning experiences (Ito *et al.*, 2013) and to provide spaces for creative expression and empowerment

(Black *et al.*, 2015). In line with some scholars (Black *et al.*, 2015; Buckingham, 2008; Erstad, 2012; Livingstone, 2012), study participants believed that digital technologies enhance their youth practice, and provide young project participants with opportunities to enhance their information creating and sharing processes. Youth workers agreed that digital technologies have a potential to encourage young people from “non-institutionalised groups and cultures to have a voice” (Ito *et al.*, 2013, p.12). The inclusive nature of youth digital support collaborations was proven to provide young people from LGBTQI+ communities and adolescents with disabilities or mental health conditions with opportunities to share their stories, develop community, and reach out for support (Reid Chassiakos, Radesky, Christakis, Moreno, & Cross, 2016).

Like their European colleagues (Harvey, 2016), youth workers in Scotland use social media, email and texting to communicate and/or exchange information with young people. Digital technologies allow youth groups to reach beyond their physical boundaries and connect with cultures from all over the world. Using the Internet, young people are able “to connect diverse and geographically-distant cultures and facilitate content co-creation across these cultures” which leads to “the development and proliferation of new cultural norms, values and practices” (Bell, 2011, p.18).

Whilst most interview participants began with an optimistic outlook on the future of digital youth culture co-creation, many accounts revealed more critical attitudes towards young people’s usage of digital technologies. For example, Marty emphasised that there “are huge diversities [as] you’ve got people in the [youth work] sector totally pushing the boundaries.” Others who might perceive digital technologies as distraction to their youth work practice, stated that:

...four years down the line I find the way that the digital culture has gone with social media in particular is really, I find it really negative to the point that even though this is my sort of bread and butter so to speak, I would happily take their devices away from them and do on occasion if they’re being misused because they’re not mature enough to manage their time, the kind of content that they’re looking at. (Karel)

The results of this study further question the empowering effect of digital media on young people (Buccieri & Molleson, 2015; Herring, 2008) and debate the prospect of young people’s “illusionary freedom and autonomy” online (Herring, 2008, p.73). Thus, the data collected here supports scholarly evidence of the negative influence of digital technologies on young people (Aiken, 2016, Herring, 2007). First, youth workers debated the socialising aspects of digital technologies, claiming that digital technologies can cause social exclusion and isolation. The notion of “online addiction” and overreliance on online communication in young people’s

everyday lives was indicated as a problem (Smahel, Brown, & Blinka, 2012). However, despite the negative portrayal of adolescents' digital lives in the media (Bell, Bishop, & Przybylski, 2015), scholarly discourse presents a more balanced debate on this topic. Whilst some scholars report that higher social media use (especially at night) might lead to poorer sleep, higher anxiety levels, and depression (Woods & Scott, 2016), British activists and scholars argue that current young people's mental crisis in the United Kingdom should not be studied separately from the other important global phenomena such as Brexit, climate change and austerity (Devon, 2018).

Additionally, the empowering potential of digital media on young people's development was questioned in this study. Is digital media really a force for social good? Has digital media made young people more liberated or more controlled? These were some of the key questions and doubts that emerged from the interviews. For example, Gabriel argued that critical digital literacy is essential "to recognise that technologies make one thing possible, will simultaneously be making another thing impossible or less likely." Some youth workers were sceptical about the liberating potential of digital technologies (Buckingham, 2008). Problems such as misinformation (Hemsley, Jacobson, Gruzd, & Mai, 2018), cyberbullying (Ashktorab & Vitak, 2016), lack of control of children and young people's data collection or "hyper-celebration of self" – where young people obsessively maintain their online identities – (Aiken, 2016, p.176) were all highlighted as problematic aspects of digital youth culture.

4.5.1.2 The digital literacy divides in youth work: examining the invisible walls

The relationship between the perception of their own group (digital youth workers) and the perception of the young people they work with is complex. Whilst mainly optimistic about young people's digital lives, some youth workers decided to question the role of digital technologies and teenagers' digital behaviours. Using terminology such as "digital natives" (Prensky, 2009) further highlighted the distance between how the two groups communicate and perceive one another. For example, it is suggested that online information exchange cannot substitute face-to-face conversation between young people and youth workers. Digital content can be misread or misconstrued, leading to confusion and misunderstanding in the information exchange. Likewise, some scholars (Aiken, 2016) indicate that digital means of communication might negatively affect information exchange with young people because it removes the "human aspects" of the conversation. In the recent debates on "fake news" (De Keersmaecker *et al.*, 2017) and social media "echo-chambers" (Quattrociocchi, Scala, & Sunstein, 2016) youth workers question "the real value" of online information. Several study participants also complained about the impersonal nature of digital technologies and sceptically described it as information overload (in the era of 'hyperstimulation' (Aiken, 2016,

p.111). This lack of trust and a degree of resistance towards digital solutions in youth work was also hinted at as a possible cause of tensions in the field, in addition to digital avoidance and “professional’s resistance, non-use and workarounds” (Lecluijze *et al.*, 2015, p.167)

Numerous accounts complain about the difficulty of keeping up with the latest technological developments (Livingstone, 2012; Wilson & Grant, 2017). Youth work as a fast-changing practice of “continuous analysis, choice, judgment decision making” (Bestleer & Davies, 2010, p.5) has become even more complex due to expansion of the digital age. Youth workers’ fears of not being a “digital expert” (Wilson & Grant, 2017) was a common thread in most conversations. Digital technologies have been described as “an additional barrier” or “a brick wall” causing a digital divide between youth workers and young people. The evidence presented here correlates with the wider scholarly discussions on “a generational digital skills gap” or “confidence gap” (Gilchrist & Dummer, 2018) between younger technology users and those who learn about digital technologies in their later life. According to Nominet Digital Futures Index, it is estimated although 64% of millennials (born between 1981 and 1996) are digitally savvy, only 46% of Gen X (born between 1965 and 1980) are. This drops to 34% for Gen Z (born 1997 onwards), 23% for baby boomers (born between 1946 to 1964) and 15% for the pre-war generation (born 1945 and earlier). The *invisible wall* analogy was also noted in the European educational policy context. Here, the digital skills gap was described as a “blind spot” in current research. Vaikutytė-Paškauskė, Vaiciukynaite and Pocius (2018) report that “educators do not possess sufficient knowledge to apply and develop digital education materials” and that “training to prepare educators for the digital era is also not sufficient” (p. 43).

4.5.1.3 Social impact evaluation of youth digital culture co-creation: the power of interpretation

The results of this study indicate that the quality of evaluation of digital youth culture co-creation projects in the United Kingdom might be negatively affected by outcomes-based evaluation systems and related administrative procedures. Funding was one of the most discussed topics in this study, with all youth workers referring to it as a central theme of the social impact evaluation. Digital youth workers struggle to gather and produce valid evaluation data while trying to ensure that all boxes are “being ticked”. Participants indicated that the externally imposed, technocratic social impact evaluation procedures might also put too much emphasis on setting specific social impact goals and objectives instead of trying to understand the dynamics of social change (Adams & Garbutt 2008, Becker *et al.*, 2003; Belfiore & Bennett, 2007; Burdge, 2003; Esteves *et al.*, 2012). An ongoing pressure to work towards pre-conceived ideas of the outcomes of digital youth interventions was highlighted. This not only

imposes “unstated goals and values”, but also “pre-empt[s] the outcomes of debates” (Lockie 2001, p. 281). While Rowan believed that evidence of positive feedback is vital to “justify the funding right (lines)”, Jo argued that impact stories also “have to meet the funding outcomes.”

These findings link to prior studies of British youth workers and their roles in the digital era (Wilson & Grant, 2018) and the UK Government’s austerity measures (Pope, 2016). Firstly, participants’ limited controls (or lack of control) over evaluation of digital youth culture co-creation “requires working in ways that may be at odds with [their] youth work values” (Pope, 2016, p.374). The sense of disempowerment and coping strategies among digital youth workers in the context of the financial and evaluation pressure can be compared to a phenomenon described as [youth works] “handing over their ethics” (Pope, 2016). In her study on British youth workers experiences of evaluation, Pope argues that:

Youth workers are caught in a bind – they want to do the best for the young people that they work with whilst, at the same time, wanting to retain the very employment that allows them to do this and maintain funding to the projects that underpin the provision. Yet the requirements of the funding may jar with the core of their value system, producing incongruence which troubles their processes of reflexivity. (2016, p. 374).

Scholars agree that attempts to predict and govern project outcomes largely fail to provide coherent evidence of their social impact (Lockie, 2001). In the increasingly competitive funding environment of youth community services in the United Kingdom, youth workers feel pressured to provide (and overemphasise) the evidence of positive impacts, and in some cases, when something negative has occurred, they might decide to “put the positive spin on it” (Gabriel). The industry or research imposed expectations that youth groups can gain “voice, mobilise, organise and build economic capacity” with the use of digital technologies (Ito *et al.*, 2013, p.12), leave youth workers with little choice but to adopt the role of a patronising evaluator “who will only measure what they would like to be there” (Merli, 2010, p.115). The problem of disempowerment during evaluation facilitation and delivery has a negative impact not only on the accuracy of the data, but also on youth workers’ ability to critically reflect on projects. As suggested by Belfiore & Bennet, “considerably more time and resources have been spent on looking for ‘proof’ of impacts than actually trying to understand them” (2007, p.137). Subsequently, technocratic approaches to evaluation might not provide youth culture co-creators and their organisers with opportunities to reflect critically on their work or to learn from possible failures. Creative and innovative digital learning and cultural youth-driven solutions might occur when “serendipity is damped, and ignored, because it does not fit in the

expected scheme. Personal and professional frustration result when well-laid plans prove ineffective” (Rogers, 2008, p.30).

4.5.1.4 The ‘digital’ aspect of social impact of youth digital culture co-creation: what are we looking for?

The results of this study indicate that youth workers struggle to define or articulate the possible social impacts of the digital side of their youth projects. Whilst youth work frameworks (Youth Link Scotland, 2017) or pre-defined project evaluation criteria are used to measure the value of digital youth culture co-creation projects in the United Kingdom, the digital elements of such projects seem largely unexamined. One of the study participants, Kyle indicated that the youth work community has not yet established how to best approach digital project evaluations, “How do you measure social impact through digital? And I don't think we're quite there. I guess I'm still negotiating my understanding of it”. This sentiment is consistent with findings of past studies that examine the value of digital youth projects (Mackrill & Ebsen, 2017), digital literacy, and digital technologies initiatives for adolescents. Currently, it is unclear what counts as evidence of impact of digital youth work projects (Wilson & Grant, 2017). For example, questions related to the uncertainty of the definition of digital impact were noted in Carnegie’s Trust digital youth inclusion report:

What is the threshold for a young person to be classed as digitally literate?
What does success look like and once again is this the correct aspiration?
Are digital skills an outcome in themselves or purely a means to an end, a process by which to gain other skills or qualities and ultimately, long-term improvements in well-being? (Wilson & Grant, p.57)

To investigate the digital skills essential in the 21st century, scholars propose multiple frameworks. For example, frameworks covering areas such as media and digital literacy basic digital skills and digital competency can be found in the literature. However, the lack of awareness of “standardized, multi-dimensional of digital literacy” (Chetty *et al.*, 2018) and approaches to their evaluation emerged as key findings in this study. While young people’s digital skills and their needs are continuously evolving, youth workers feel overwhelmed with the amounts of new apps, approaches, and recommended frameworks:

We [youth workers] all use different engagement tools. Every time I go to a different conference, it seems to be that they’re using a different participatory engagement tool every time. And you’ve got to use it, or some kind of badge system or something like that (...) I wish they could just stick

to the one thing here because we're having to do three or four participatory engagement tools (Debbie)

Thus, the notion of social impact and its evaluation seems to have become more complex due to the collaborative and participatory nature of digital youth culture co-creation projects. Evaluation of “hands-on” digital youth culture co-creation workshops seem to be particularly difficult to analyse due to the duality of social impact engagement mediators that affect both “access (i.e. access, skills, attitudes) as well as classifying the digital fields with which people engage (thus reflecting different ways of engaging with technology, i.e. information, education, entertainment, finance and frequently/occasionally/rarely)” (McGillivray *et al.*, 2017, p. 9). Youth workers participating in this study described the qualitative value of social learning (Burdge, 2003) as intangible and difficult to define. While digital youth workers can ‘sense’ or ‘witness’ the social impact, they also agree that its “intrinsic value can be difficult to agree upon or quantify” (Dufour, 2015, p.2).

The results of this study further suggest that youth workers’ anxieties relating to “not knowing what they are looking for” in terms of social impact (and consequently losing possible future funding) of digital youth culture co-creation, might have a negative effect on the quality of project management (RICHEs, 2015). The problem of undefined digital youth culture co-creation legacy (RICHEs, 2015, p.6) might lead to misperception in terms of what types of data “count” as evidence of effective youth digital engagement. For example, as indicated by one study participant, “[to evidence their digital engagement with youth people] organisations will [wrongly] count participation based on Facebook or likes” (Kyle). In the current situation of confusion on the nature of social impact of digital youth culture co-creation, the following question emerges from the data analysis: to what extent should the definition of the ‘digital’ social impact be considered against a pre-agreed set of outcomes, and to what extent should youth workers be provided with the freedom to co-create impact and “bring the collaboration to an inspiring and surprising conclusion” (RICHEs, 2015, p.6)?

4.6 Conclusion

The aim of this chapter was to examine digital youth worker’s attitudes towards youth digital culture and their experiences of managing social impact evaluation of digital youth culture co-creation projects in the United Kingdom. The analysis presented was guided by the following research questions:

RQ1. What is the current understanding of the social impact of youth digital culture co-creation?

RQ2. What are the approaches used to evaluate the social impact of digital youth culture co-creation in Scotland?

RQ3. What are the experiences and perceptions of social impact evaluation among digital youth culture co-creation projects participants and projects facilitators in Scotland?

RQ4. To what extent could digital youth practitioner-led and youth-led social impact evaluation recommendations alter current evaluation practice?

The aims of Study 1 were to collect insights from youth workers who actively use digital technologies in their youth engagement practice, and to provide digital youth workers' perspectives on (1) how they perceive the social impact of digital technologies on their youth engagement practice; (2) how they perceive the social impact and social impact evaluation of digital youth culture co-creation projects. Data was collected in the United Kingdom via twenty semi-structured interviews and analysed using a thematic analysis approach. Through the analysis of the collected data, four distinctive narratives were identified in youth workers' perceptions on the influence of digital technologies on youth work, its social impact, and social impact evaluation of digital youth culture co-creation. The narratives are as follows:

- (1) Youth workers' polarised views on the impact of digital technologies on youth work
- (2) The digital literacy divides in youth work: examining the invisible walls
- (3) Social impact evaluation of youth digital culture co-creation: the power of interpretation
- (4) The digital aspect of social impact of youth digital culture co-creation: what are we are looking for?

Firstly, the analysis presented in this chapter provides evidence of the current tensions in how digital youth workers perceive the social impact of digital technologies on the quality of youth work in the United Kingdom. Whilst at first sight youth workers are optimistic about the value of digital technologies in young people lives, in-depth conversations reveal signs of anxiety and scepticism. The fears of not being the "digital expert" and not being able to catch up with the latest technologies were symbolically summed up by one study participant as "the invisible wall" between digital savvy young people and youth workers.

Secondly, the study reveals that social impact evaluation of digital youth culture co-creation is primarily perceived as a technocratic administrative procedure to sustain project funding. Youth workers indicate that evaluation is primarily dominated by external project success criteria, according to which digital youth culture co-creation projects in the United Kingdom are

being evaluated. However, if provided with a choice of evaluation methods, youth workers might not know what type of digital social impact evaluation is best. As indicated in this study the social impact or success criteria for digital youth culture co-creation projects have not yet been established.

4.7 Limitations

Several limitations should be noted. First, due to sample size and geographical location, the findings may not be generalisable outside Scotland. Because youth work and education are devolved matters, the Scottish Government manages digital youth work provision and funding. Thus, the findings of this study may not be generalisable to other areas of the United Kingdom. Secondly, whilst the data was collected during all interviews using Cousin and Whitmore's (1998) model, limitations must be acknowledged. For the model to be reconsidered as a data collection aid, the labels (a), (b), and (c) would need to be changed in accordance with the topic of the study. In its current academic form, the model proved to be inaccessible to study participants. Additionally, in the context of social impact of evaluation of youth digital culture projects in Scotland, it was challenging to translate the model outline into a practical youth project setting.

Chapter 5: Study 2 - Focus group and card-sort with digital youth workers

5.1 Introduction

The purpose of this chapter is to present the results of the second stage of the fieldwork – a focus group and a card-sort activity with digital youth workers in Scotland. The focus group and card sort exercise were intended to expand upon the analysis from Study 1 (twenty interviews), and to generate further insights into youth workers' perceptions of evaluation that may have not emerged through the interviews. There were three key data-collection aims in Study 2: (1) to re-examine and expand the categories identified in Study 1, (2) to examine how youth workers view the influence of digital technologies on youth engagement practice, and (3) to examine how youth workers perceive the social impact and social impact evaluation of digital youth culture co-creation projects.

The analysis presented in this chapter is guided by the following research questions:

RQ1. What is the current understanding of the social impact of youth digital culture co-creation?

RQ2. What are the approaches used to evaluate the social impact of digital youth culture co-creation in Scotland?

RQ3. What are the experiences and perceptions of social impact evaluation among digital youth culture co-creation projects participants and projects facilitators in Scotland?

The chapter begins with an overview of study participants (Section 5.2). Section 5.3 provides information about the research methods utilised in this study. In Section 5.4, the data analysis approach is examined. The results of the study are presented in Section 5.5. The final sections of this chapter cover discussion (Section 5.6) and conclusions (Section 5.7).

5.2 Participants

Theoretical sampling was selected in alignment with Charmaz's (2014) constructivist grounded theory. (See Chapter 3.) Theoretical sampling is deployed for "re-structuring an already gathered sample into a new set of categories that have emerged from analysis and replacing any stratification/cells/quotas that were chosen a-priori" (Robinson 2014, p.35). Charmaz divides the process of theoretical sampling into three consecutive stages:

1. starting with data,

2. constructing tentative ideas about the data, and
3. examining these ideas through further empirical inquiry (2006, p.103).

In the context of this study, the theoretical sampling process (further discussed in this chapter) began by examining data from Study 1 (20 interviews with digital youth workers). Once the data analysis from Study 1 was completed, the researcher began planning data collection for Study 2. A focus group was utilised, targeting a sample with comparable characteristics to those selected in Study 1. Thus, candidates were sought who:

- spanned the 25-64 range with all genders included;
- facilitated or assisted with the implementation of youth-centred and participatory projects where digital technologies or/and digital and/or social media were utilised;
- were employed on paid or voluntary basis;
- worked in both rural and industrial areas of Scotland.

Due to the time constraints on this research project only one focus group was planned in study 2. To seek a wide representation of digital youth workers, the recruitment process was coordinated with the Scottish Digital Youth Workers Network (SDYWN). SDYWN organises quarterly meetings in Edinburgh attended by digital youth workers from all over Scotland.

One focus group was sufficient to achieve theoretical saturation (Charmaz, 2006). Study 2 focus group served as a method for co-examination of data analysis from Study 1. The results of data collection were in line with those found in Study 1 and saturation point was reached.

The focus group took place at the SDYWN meeting (SDYWN) in October 2018. The researcher was a member of SDYWN prior to the study. Due to the timeframe of this project, SDYWN's October meeting was chosen as the most suitable way to collaborate with a group of participants who had experience of digital youth work facilitation in Scotland. Due to its voluntary nature, the focus group involving a card-sort activity was scheduled at the end of the meeting. The information about the research activity was shared with the network via the SDYWN online communication forum (accessible only to subscribed digital youth workers) two months prior to the meeting. Potential study participants were informed about voluntarily involvement in the focus group.

SDYWN meetings, based in Edinburgh, are normally 2.5 to 3 hours long with a 15-minute break. Whilst the format of the meeting might vary slightly, the typical elements on the meeting agenda include: (1) presentation of a digital youth project or a practice, (2) digital youth work related policy updates, and (3) round table discussions. SDYWN members are very diverse in terms of how they use technologies in their practices and which technologies they use.

Examples of expertise in the group vary from using social media and online communication in youth work support and counselling to creative use of coding and participatory digital storytelling. Members of the SDYWN work in various areas of Scotland, including both rural and industrialised areas. In 2018, there were approximately fifty members subscribed to the network. SDYWN regularly uses a digital communication platform (subscription only) to share updates and communicate with its members. The quarterly meetings in Edinburgh are typically attended by ten participants, some of whom come to meetings on a regular basis.

As a result of the information about study recruitment on the SDYWN network, seven digital youth workers participated in the focus group and card-sort exercise – four males and three females. All participants had some previous knowledge of the study and its purpose (see Chapter 4) as the information about Study 1 (interviews with digital youth workers) and Study 2 (focus group) and their purpose were shared electronically via the SDYWN and on social media. Three of the focus group participants also participated in Study 1 (Marty, Sandy and Jamie).

At the time of the study, three of the seven participants directly worked with young people using digital technologies. Four participants were primarily engaged with digital youth project management. The range of technologies used by participants varied from implementing digital communication with young people to creatively testing experimental digital tools. Table 15 presents participants' age, gender and their years of experience in digital youth work.

Table 14: Focus group participants

Participant's name	Age group	Gender	Years of experience in digital youth work
Sandy	25-34	Female	5-10
Marta	35-44	Female	10+
Jamie	25-34	Male	5-10
Dylan	35-44	Male	10+
Grace	25-34	Female	5-10
Alex	25-34	Male	5-10
Harry	44-54	Male	10+

5.3 Focus Group Design and Delivery

Prior literature review revealed that digital youth workers' insights on their evaluation practice are an unexamined area of knowledge (see Chapter 2). Therefore a focus group was selected

to provide an “in-depth exploration of a topic about which little is known” (Stewart, 2006). As indicated by Bryman, focus groups also allow for a joint and participatory “production of meaning” between study participants and researchers (2016, p.523). Focus groups are used in different disciplines such as social sciences, education, communication studies, political studies, and public health (Colucci, 2008, p.3). Focus groups discussions have also been described as a group interview where, “amidst a relatively informal atmosphere, people are encouraged to discuss specific topics in order that underlying issues (norms , beliefs, values), common to the lives of all participants, might be uncovered” (Parker & Tritter, 2006, p. 24). Focus groups were successfully utilised in a similar study by De St Croix (2017) whose study on youth work in England utilised focus groups to examine youth workers’ experiences of impact evaluation. A focus group was used in this study because it provided an opportunity for a collective and participatory analysis of Study 1. In line with the overarching research paradigm (participatory worldview), the researcher aimed to invite digital youth workers to actively collaborate in the process of data collection, data analysis, and knowledge co-creation in this research project. Thus, a focus group was identified as the most suitable research method to achieve these aims.

5.3.1 Card-sort: hybrid card sort and cards design

Zimmerman’s (2016) card-sort was selected as a data collection method. Card-sort is a recognised method for knowledge formation in the fields of information science (St. Jean, Greene Taylor, Kodama, & Subramaniam, 2018), computing, communication (Zimmerman & Akerelrea, 2002), Human-Computer Interactions and psychology (Brace, Morton, & Munakata, 2006). Card-sort is an effective research tool for “brainstorming different categorisation models” and examining people’s perceptions of a topic (Spencer, 2009, p.11). This qualitative and interactive research method helps to uncover how people assimilate and classify information. The card-sort method and its participatory nature allow study participants to collectively share their knowledge and group it into categories that make sense to them (Nurmuliani, Zowghi & Williams, 2004). In the context of this project, the aim of the card-sort method was to engage study participants as “co-researchers and co-subjects’ (Heron & Reason, 1997, p.283) of the data obtained in Study 1. Therefore, the card-sort activity’s purpose was to incite discussion both between participants and with the researcher.

In the literature, scholars have utilised card-sort methods to develop a categorisation or classification data system. For example, Nurmuliani *et al.* (2004) used a card-sort to gain insights into how software developers understand and classify change requirements. Nurmuliani *et al.* (2004) utilised card-sort with software developers to refine their “preliminary classification” of data. Likewise, the purpose of this study is to take data analysis from Study

1 into a group of digital youth workers with the intention of further co-analysis and further examination. The type of card-sort used in this study was a hybrid card-sort (Zimmermann, 2016). In the hybrid-card sort, participants are asked to sort cards into pre-defined categories but can also create their own categories.

As earlier mention in this chapter, the card-sort activity and its design were guided by the data analysis from Study 1. In Study 1, thematic analysis (Braun & Clark, 2006) was utilised to examine and code the transcripts of twenty interviews with youth workers. The researcher used the codes created in the thematic analysis as a basis for the card-sort design. Phase 3 of thematic analysis (Table 16) was selected because it provided data that was already coded and categorised and mapped into thematic maps of codes. Phase 3 provided a structured data analysis that could be illustrated as a set of cards. Each card responded to one code from Study 1's thematic analysis. Each category represented a name of a thematic map.

Table 15 Phase 3 of the thematic analysis in Study 1 (Guided by Braun & Clarke, 2006)

Phases of Thematic Analysis	Purpose of the phase according to Braun & Clarke	Actions taken in this study
Phase 1	Familiarising yourself with the data	1. recordings of the entire data set re-listened
Phase 2	Generating initial codes	2. transcripts of 20 interviews read twice 3. initial codes identified and organised into categories 4. coding carried out in NVivo10
Phase 3	Searching for themes	5. thematic maps of codes created 6. main themes in the study identified
Phase 4	Reviewing themes	7. the validity of individual themes considered 8. themes examined as data stories in the study
Phase 5	Defining and naming themes	9. themes further refined 10. themes named
Phase 6	Producing the report	Study 1 analysis written-up

The card design process (presented in Figure 11, Figure 12 and Table 17) was as follows:

1. The researcher revisited the 2nd Phase of the thematic analysis carried out in Study 1 and the maps of codes created (Table 16). Five maps of codes were analysed:
 - A. Possible opportunities and improvements in the social impact evaluation of digital youth work
 - B. Possible challenges in the social impact evaluation of digital youth work
 - C. Definitions of social impact of digital youth work
 - D. Opportunities in youth work in the digital era
 - E. Challenges in youth work in the digital era

Figure 11 Card-sort design process for session 1

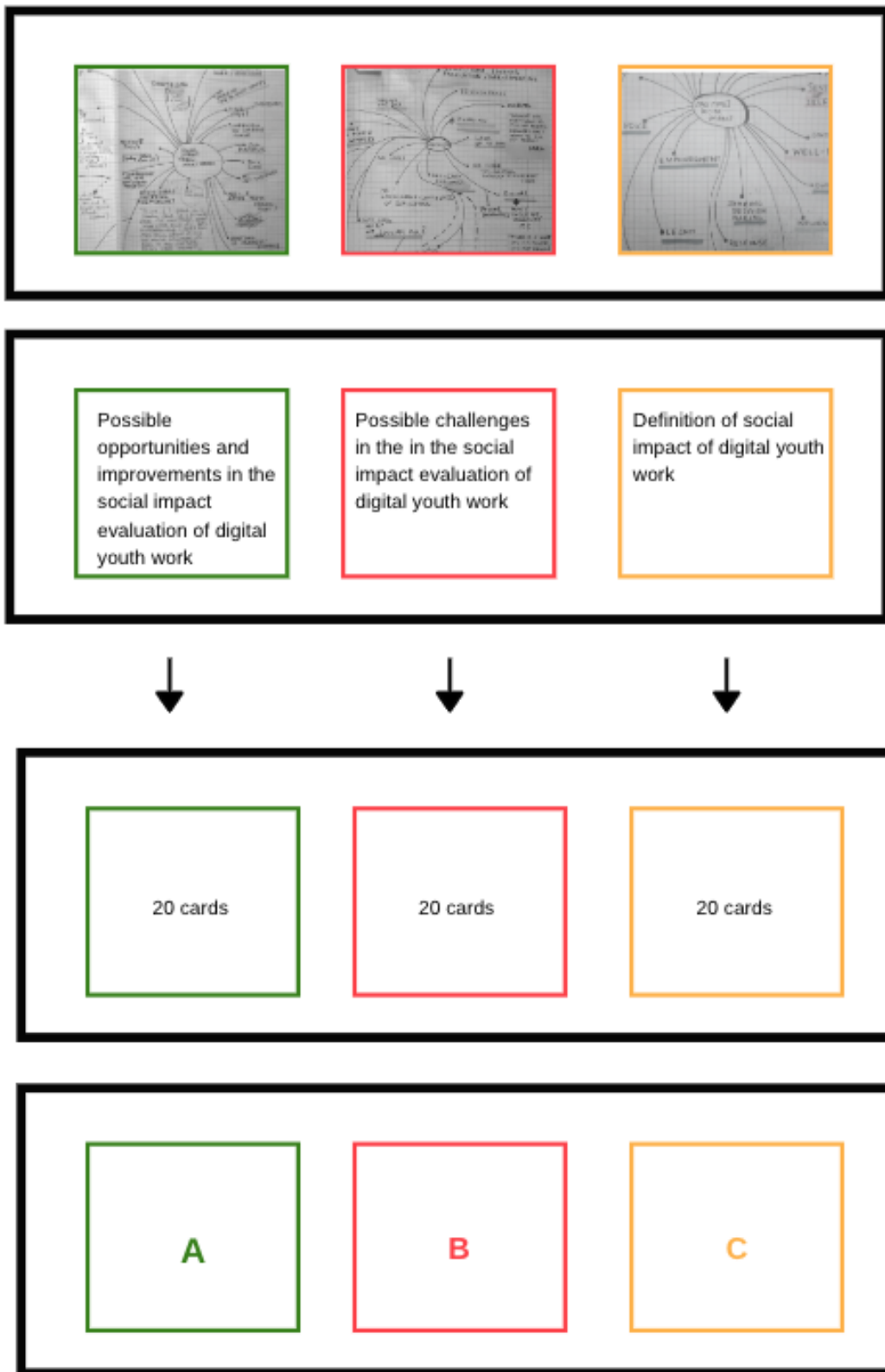
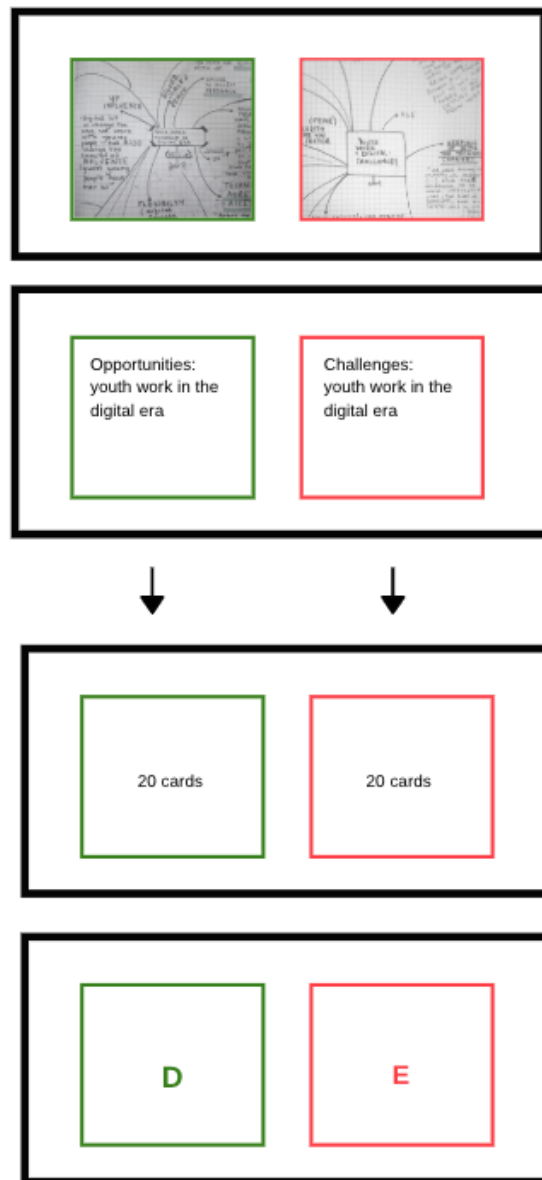
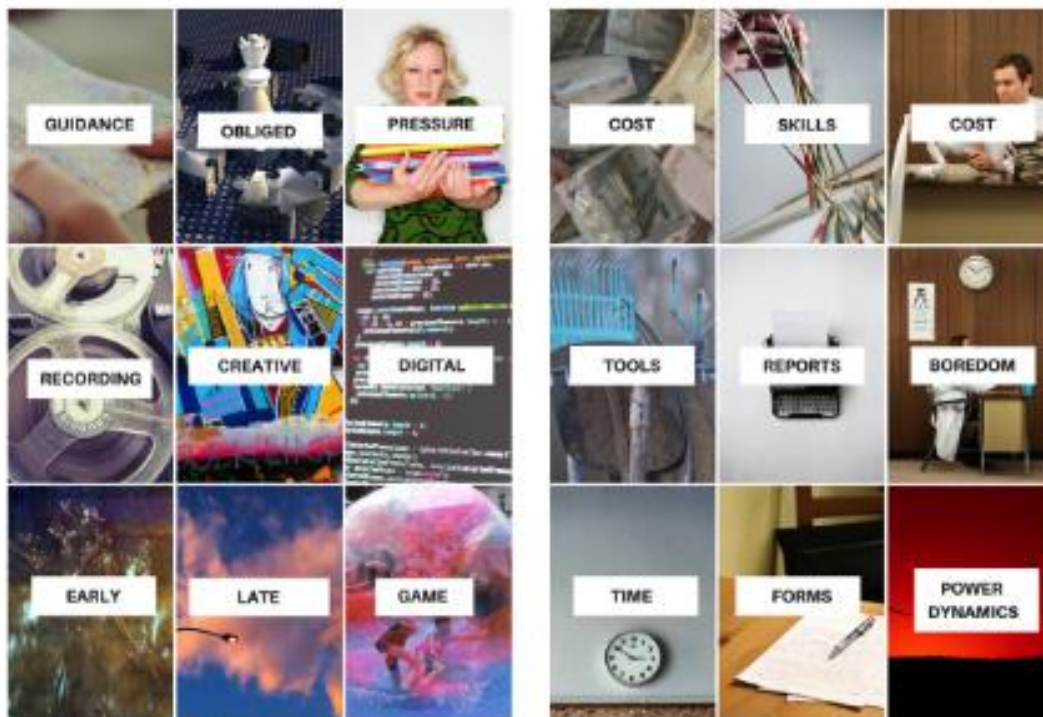


Figure 12: Card-sort design process for session 2



2. Twenty codes were selected from each thematic map. In line with thematic analysis (Braun & Clarke, 2006) among the selected codes were those which appeared most frequently in the interviews and/or provided rich insights into the topic.
3. Each code was printed on a card (see Figure 13). The cards were designed using freely available Canva software and free stock images. The images used in the designs were selected by the researcher, who used the top search results representing each (respective) code.

Figure 13 Examples of cards used in the card-sort



The focus group session was divided into two card sort activities - Session 1 and Session 2. Session 1 aimed to examine youth workers perceptions of social impact and social impact evaluation (RQ3). In both of the sessions, the discussion was led by the researcher. In Session 1, three of the five categories – each representing a thematic map of codes - were provided, such as:

- A. Possible opportunities and improvements in the social impact evaluation of digital youth work
- B. Possible challenges in the social impact evaluation of digital youth work
- C. Definition of social impact of digital youth work

Session 2 focused on youth workers' perceptions of youth work in the digital era (RQ1). During Session 2, two categories were provided:

- D. Opportunities: youth work in the digital era
- E. Challenges: youth work in the digital era

During both sessions, participants were informed that they could create their own categories and codes in addition to the ones provided. The sessions are outlined in Table 18. Information about the card design process can be found in Section 5.3.1.

Table 16: Card-sort activity design process

Card-Sort Design Phases	Activity	Description
1	Review of data analysis from Study 1	The researcher revisited the 2 nd Phase of the thematic analysis carried out in Study 1
2	Selection of data analysis source from Study 1	The researcher selected five “maps of codes” from the Thematic Analysis of data collected in Study 1.
3	Code selection from the Thematic Analysis in Study1	<p>Twenty codes were selected from each “map of codes”. As a result, there were five sets of codes. Each set had twenty codes. The sets represented the following topics:</p> <ul style="list-style-type: none"> A. Possible opportunities and improvements in the social impact evaluation of digital youth work B. Possible challenges in the social impact evaluation of digital youth work C. Definitions of social impact of digital youth work D. Opportunities in youth work in the digital era E. Challenges in youth work in the digital era
4	Codes illustrated as physical cards	For each set of codes, the researcher chose an image. Overall, one hundred cards were printed and divided accordingly into five sets.
5	Card-sets assigned to card-sort activities	Two card-sorting sessions were planned: Session 1 covered card-sets A, B and C. Session 2 covered card-sets D and E.

Table 17: Card sort session in relation to the research questions

Card-sort session	Number of Cards	Categories	RQ
Session 1 (20 minutes)	20	Possible opportunities and improvements in the social impact evaluation of digital youth work	RQ3
	20	Possible challenges in the social impact evaluation of digital youth work	RQ3
	20	Definition of social impact of digital youth work	RQ3
Session 2 (10 minutes)	20	Opportunities: youth work in the digital era	RQ1
	20	Challenges: youth work in the digital era	RQ1

Five sets of twenty cards were used during the focus group: sixty in Session 1 and forty in Session 2. Twenty blank cards were also provided for each session to allow participants to write their own thoughts or ideas related to the card-sort activity. The researcher co-ordinated the card-sort activity. The analysis presented in this chapter was compiled from the sound recordings from the session, images, and observations provided by a note taker/ researcher.

5.3.2 Card-sort Activity Overview

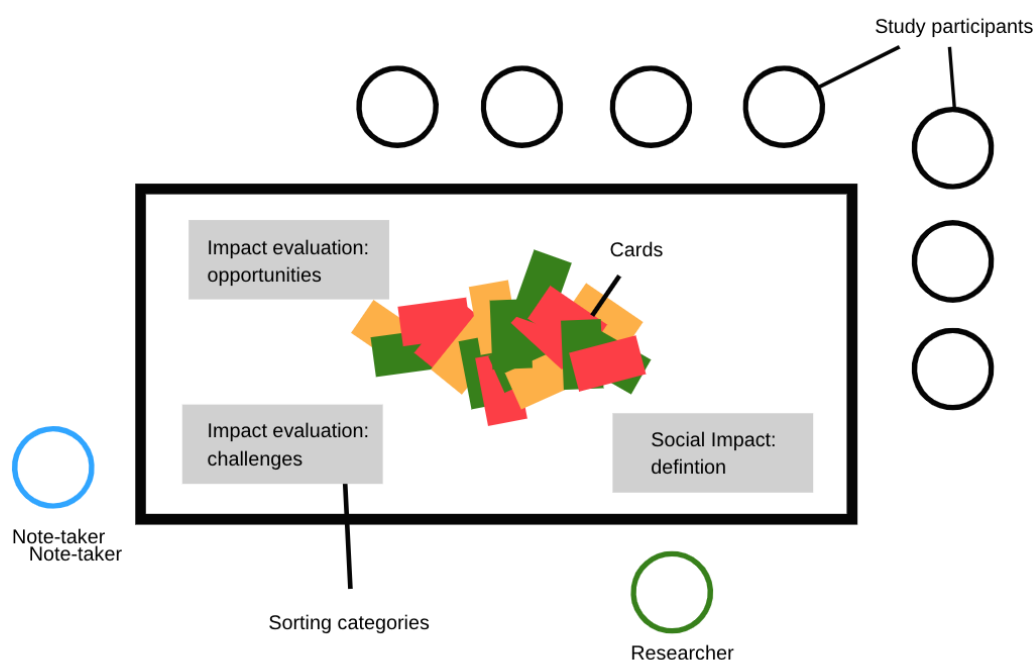
At the beginning of the focus group session, the card-sort activity was explained to the participants. The session began with an introduction to the research project and its purpose. Participants were provided with information about confidentiality and voluntarily participation in the study and consent forms were signed. The cards were then shuffled and placed on the table – 60 cards in session 1 and 40 cards in session 2.

5.3.2.1 Overview of card-sort session 1

In Session 1 the card-sort activity lasted for approximately five minutes, where the group collectively sorted cards placed on the table, as shown in Figure 14. This activity was followed by fifteen minutes of group discussion. Different speeds of engagement through the decision of picking up cards were noted at the beginning of the activity. Most of the participants divided cards in silence. It was also observed that most participants picked several cards at once and placed them accordingly to certain categories. Apart from several brief verbal suggestions to clarify the content of the card, there was limited willingness to openly discuss aspects of the topic. This might have been mainly due to overall fatigue in the room (the focus group was

scheduled in the late afternoon, following a two-hour meeting of the network) or reluctance to openly talk about the way the participants manage the social impact evaluation of digital youth work. Nonetheless, the discussion was initiated by the researcher once the card-sort activity was completed. The discussion began with category A, then progressed to B and C (See Table 18). Category A (Possible opportunities and improvements in the social impact evaluation of digital youth work) received the largest number of cards and attention from the participants.

Figure 14: A visual representation of card-sort Session 1 layout



5.3.2.2 Overview of card-sort session 2

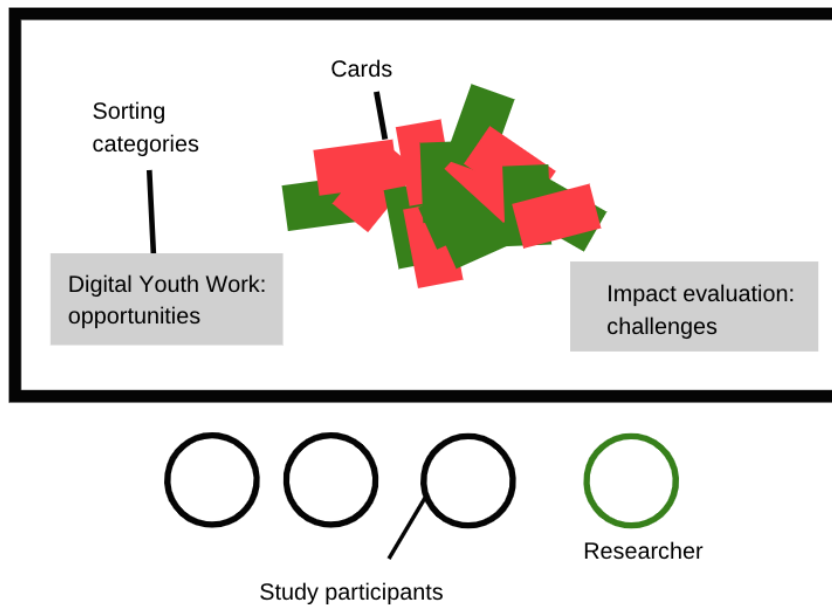
The aim of Session 2 was to sort cards representing codes identified in Study 1 related to opportunities and challenges associated with facilitation of youth engagement projects in the digital era. Two pre-set categories were provided:

- Category D (Opportunities: youth work in the digital era)
- Category E (Challenges: youth work in the digital era)

The cards used in session 2 are listed in Table 20 below. In line with Zimmermann's (2016) card-sort method description, a short break was proposed at the end of Session 1. However, because the meeting was already five minutes past its original finishing time, four out of seven

participants had to exit the session. It was decided that the forty cards designed for Session 2 would be set up on a table outside the room, as shown in Figure 15. Study participants could individually come and talk to the researcher and sort the cards according to the two categories. Only four participants decided to participate. In Session 2, due to time constraints, the interactions between study participants were limited. Each participant would have a brief conversation with the researcher, sort cards, then walk away.

Figure 15: A visual representation of card-sort Session 2 layout



The card-sort sessions' results (illustrated in Table 21) show that participants were drawn to highlighting the challenges of youth work in the digital era (Category E). This was the most populated category, with fourteen cards placed against it.

Whilst card-sort Session 2 was 10 minutes shorter than Session 1, the responses from the individuals stopping at the card-sorting table were more expressive. Participants seemed to be more critical and sceptical in their views on the social value of digital youth work in Scotland. The conversations in Session 2 could be described as brief but insightful. The increased negativity in the group might have been a result of the prior discussions relating to the challenges of social impact evaluation of digital youth work that took place in Session 1. Session 1 finished with study participants being visibly frustrated and irritated by the problems discussed in the session. Another possibility is that participants felt tired after the meeting. Nonetheless, it was noted that individual participants felt more comfortable expressing their concerns in one-to-one conversations with the researcher than in a group setting in Session 1.

5.4 Data Analysis Approach

The aim of this analysis was to further define, extend, and enrich the prior established codes and categories (Hsieh & Shannon, 2005, p. 1283). Content analyses were undertaken to review the information from the card-sort activities and associated discussions (Nurmuliani *et al.*, 2004). Directed content analysis has been described as an effective analysis approach when examining “relationships among variables” and “relationships between codes” (Hsieh & Shannon, 2005, p. 1281), which is particularly useful in small sample studies (Nurmuliani *et al.*, 2004). As discussed earlier in this chapter, the card-sort activity in this study was guided by prior research results from Study 1.

To analyse the data from the focus group and the card-sort activity, the following sources of information were used:

- audio recording
- images from the session
- notes (as provided by a note-taker)
- cards layout and its categorisation by study participants

The data analysis protocol was as follows:

1. The first step of the data analysis process involved transcription of the audio recording from the focus group. The transcribed text was coded using Nvivo 10. The coding led to creation of the preliminary categories.
2. The next step included content analysis of the card-sort activity. The researcher reviewed the number of the cards in each category and compared them with the thematic maps of codes from Study 1. The differences and similarities between the codes in Study 1 and codes in Study 2 were examined. The following aspects were considered during the analysis: (1) the number of cards placed in each category by participants, and (2) the cards shifting between the provided categories and the categories created by participants (Study 2).

Thematic maps of codes were labelled with different colours. As illustrated in Table 18, the following colours were used for each thematic map of codes:

- A – green
- B – red
- C – yellow
- D – green
- E – red

To analyse how/if codes shifted between different thematic maps, the researcher reviewed and counted the cards selected by participants and placed them under their categories using colour labelling (see Table 19). Table 20 allowed for a visual analysis of how/if cards shifted between categories.

3. The third stage of the content analysis included an analysis of note-takers notes. The researcher reviewed information about participants' behaviours, as observed by the note-taker, and linked the notes to the preliminary categories.
4. The final stage included cross-analysis and comparison of the data analysis created in NVivo, tables and the notes. The preliminary categories identified in Stage 1 were re-examined, refined and enriched by additional analysis from the tables and the notes.

Table 18: Card-sort activity plan for the focus group in Study 2

Card-sort session	Number of Cards	Categories (representing thematic maps of codes from Thematic Analysis in Study 1)	Graphic
Session 1 (20 minutes)	20	Possible opportunities and improvements in the social impact evaluation of digital youth work	A
	20	Possible challenges in the social impact evaluation of digital youth work	B
	20	Definition of social impact of digital youth work	C
Session 2 (10 minutes)	20	Opportunities: youth work in the digital era	D
	20	Challenges: youth work in the digital era	E

Table 19: Sets of cards used during the card-sort activities in Study 2

Session 1			Session 2	
A	B	C	D	E
creative	cost	policy	voice	age
early	goals	meaning-making	roles	policy
engaging	funding	voice	flexibility	guidance
evidence	critical thinking	goals	digital	balance
experience	purpose	create	creative	obliged
flexibility	stats	stats	game	pressure
game	pressure	measured	communication	ethics
guidance	boredom	relationships	learning	safety
interactive	time	legacy	skills	funding
involvement	access	sense-of-self	play	skills
learning	rules	contribution	participation	interaction
participatory	recording	fabricated	access	feedback
play	forms	skills	cost	tools
power dynamics	obliged	pride	time	fear
relationships	communication	recording	purpose	interpretation
serendipity	interpretation	Inspiration	power	change
digital	guidance	transition	reach	rules
technology	expertise	knowledge	hierarchy	failure
time	late	reports	response	representation
tools	power dynamics	change	impact	connectivity

Table 20: Layout of cards after card-sort activity in Study 2

Session 1			Session 2	
A	B	C	D	E
Possible opportunities and improvements in the social impact evaluation of digital youth work	Possible challenges in the in the social impact evaluation of digital youth work	Definition of social impact of digital youth work	Opportunities: youth work in the digital era	Challenges: youth work in the digital era
skills	late	policy	Create	access
technology	funding	measured	Play	age
play	recording	legacy	interaction	obliged
stats	cost	digital	representation	change
game	time	voice		communication
interactive	access	knowledge	reach	failure
voice	impact	pride	flexibility	fear
creative	expertise	fabricated		guidance
learning	observed	change		hierarchy
relationships	forms	relationships		roles
engaging	pressure	stats		response
purpose	time	transition		safety
transition	power dynamics	measured		voice
	reports	contribution		purpose
meaning making	boredom	goals		
inspiration	obliged	policy		
skills	funding			
sense of self				
early				
interactive				

5.5 Results

The overall results of Study 2 correlate with the categories identified in Study 1. Content analysis revealed the following categories:

1. Evaluation viewed as an opportunity
2. Outcome-driven impact evaluation viewed as problematic
3. Problematic power dynamics of social impact evaluation
4. Fears associated with the digital era
5. Contradictory views and actions

5.5.1 Evaluation viewed as an opportunity

Category A (*Possible opportunities and improvements in the social impact evaluation of digital youth work*) received the most attention from the study participants. The largest number of cards (twenty-one) was placed in this category. Nine cards originating from Category C were associated with possible opportunities for social impact evaluation (see Table 20). Cards such as relationships, meaning-making, inspiration, sense-of-self, and skills might indicate that participants aspire to create meaningful evaluation experiences for young people. For example, the group believed that including young people's voices in evaluation could lead to development of new opportunities and innovative solutions in digital youth work field. The importance of ensuring that young people's voices are considered as crucial elements of evaluation of youth-centred projects in Scotland was noted. Sandy said "we try different things with our evaluation as it helps us to understand what our young people really need and that is very important." Participants highlighted the opportunities associated with the use of digital tools are currently used as tool for evaluation. Examples of young digital projects participants using video and digital photography to share their feedback were also highlighted.

5.5.2 Outcome-driven impact evaluation viewed as problematic

Study 1 participants as well as those contributing to Study 2 perceived pre-agreed and quantitative outcomes guiding funding evaluation processes of digital youth work as problematic. The group agreed that a tokenistic approach to evaluation in the field primarily exists due to the funding criteria and culture. Grace emphasised that externally imposed evaluation criteria cannot successfully guide and measure digital youth developmental projects. Angus argued that "so much of the work we [digital youth workers] do is driven by what we need to report on and the people we have to report to." The group agreed that the complexity of the digital youth work setting makes it particularly "difficult to forecast what the outcomes are going to be" (Sandy). It was indicated that the emphasis on administrative evaluation tasks may lead to misinterpretation of young people's digital needs and aspirations.

Thus, Grace argued that it is crucial to “make what’s important measurable rather than what’s measurable important.” She advocated more holistic and mindful approaches to evaluation that would encompass young people’s digital and non-digital needs. The group agreed that more experimental and alternative approaches to evaluation (examples of which were already noted by the group in Scotland) should be encouraged by funders to holistically examine the social impact of digital youth work, because current outcomes-driven methods often do not provide relevant data. For example, statements such as “I like it” or “It was OK” seemed not to provide any valuable data to project organisers.

5.5.3 Power dynamics of social impact evaluation

The problem of multifaceted power dynamics between young people, adult evaluators, and funders was discussed. Dylan indicated that “implicit power dynamics” might be rarely considered in youth evaluation settings. While youth digital projects’ participatory processes aim to promote young people’s voices in Scotland, the evaluation stage is often reported as tokenistic. These results correlate with some of the findings in Study 1 (chapter 5, section 5.5), where the problems of social impact evaluation and power dynamics were discussed. The group emphasised that young people’s active engagement in the evaluation process could lead to the development of new opportunities in the digital youth work field. Whilst no examples of *how* young people could be involved were provided, it was agreed that young people’s voices are often missing in the final evaluation data. At the same time, however, funding-based and outcome-driven evaluations make it difficult “not to tell them [young people] what to think” (Harry).

5.5.4 Fears associated with the digital era

Contrary to Study 1 data, Study 2 participants openly emphasised the challenges associated with youth work facilitation in the digital era. In Study 1, the codes “communication”, “access”, “response” or “voice” were associated with positive changes in youth work in the digital era. According to Study 1 participants, young people’s voices and their communication with youth workers improved as a result of accessible technologies. However, the card-sort activity in Study 2 revealed that “communication” and “voice” are also among key challenges. In Harry’s view, for example, youth voices are indeed amplified with digital communication. However, it is still unclear whose “version [of youth voice] we hear online”, and to what extent it is filtered “by those in charge of the digital world” (for example social media companies, digital media outlets). The problems of new hierarchies and roles in the digital era and the concept of “the digital divide” was mentioned by Dylan. Although none of the participants directly referred to their own work, they agreed that lack of digital skills is a major issue in the industry. Dylan

stated that “there are youth workers who have been doing this type of work for years and you can’t expect them to get it [technology] all in a day.”

5.5.5 Contradictory views and actions

Contradictions were identified in the ways that participants interacted with the cards and discussed their meanings. In Session 1, most cards were placed in category A, which related to opportunities of social impact of digital youth work. Participants’ behaviours indicated that they would like to: (1) view evaluation of digital youth work as an opportunity, or/and (2) be viewed by others in the group as someone who views evaluation process as an opportunity. However, once the discussion on category A began, most cards associated with opportunities were discussed by the participants as challenges. For example, when the card “voice” was discussed, participants agreed that social impact evaluation could provide young participants with opportunities to share their views. As stated by Harry: “You want young people to have their voice heard. It’s an opportunity for a young person to express themselves.” However, the card “voice” also led to a further conversation about the value of youth voices in digital youth work evaluations. As a result, Jamie indicated that there might be existing challenges in the sector, because some organisations might find it difficult to “not to tell them [young people] what to think” in the evaluation.

It was observed that the “challenges” section was the most engaging. Here, participants began to openly share their views and experiences of social impact evaluation. None of the participants referred to the work in their organisations directly; instead the discussion was mainly focused on “how things are” or “how things should be” in the digital youth work field.

5.6 Discussion

The aim of Study 2 was to examine, validate, and extend the analysis presented in Study 1 of the thesis. Using a group focus setting and a card-sort activity, participants shared their perspectives on and perceptions of the social impact evaluation of digital youth work (Session 1) and the opportunities and challenges of youth work practice in the digital era (Session 2). The results of Study 2 were divided into the following five categories:

1. Evaluation viewed as an opportunity
2. Outcome-driven impact evaluation viewed as problematic
3. Power dynamics of social impact evaluation viewed as problematic
4. Fears associated with the digital era highlighted
5. Contradictory views and actions noted

The findings of this study correlate to the analysis presented in Study 1 and extend insights into how digital youth workers approach their youth work practice and its evaluation. Two narratives were identified in Study 2:

1. Digital youth workers' technology-enthusiasms versus their critical analysis of digital youth work practice
2. Social impact evaluation of youth digital culture co-creation viewed as a control mechanism

The discussion of the card-sort exercise was led by the researcher.

5.6.1 Digital youth workers' technology-enthusiasms versus their critical analysis of digital youth work practice

The analysis of the study revealed participants' conflicting views and actions when presenting their attitudes towards digital youth work and its evaluation. Firstly, in alignment with scholarly research on youth evaluation (Checkoway & Richards-Schuster, 2003; Cooper, 2018), study participants categorised evaluation as an opportunity where young people are able "to develop knowledge for their own social action and community change" (Checkoway and Richards-Schuster, 2003, p.22). Through their card selections, study participants indicated that engaging, creative, and inspiring evaluation solutions might lead to a greater understanding (Cooper, 2018) of young people's digital needs and aspirations. These findings correlate with previous literature supporting the idea of inclusive and participatory evaluation as "an experience which is enjoyable by all those participating in the process, rather than being something alien and imposed" (McCabe and Horsley, 2008, p.1). However, while discussing card-categorisation and opportunities, the participants also supported scholarly critiques of social impact evaluation process that view it as a tokenistic and "integral, yet often overlooked component of planning for social action" (Pant, 2010, p.106). During discussions, participants outlined limitations of current approaches to digital youth work evaluation. These included technocratic approaches to data collection, overuse of traditional evaluation methods (e.g. surveys) in the digital youth work setting (Hall & Hume, 2011) and pre-agreed funding outcomes criteria (Adams & Garbutt, 2008).

Secondly, disparity in participants' interoperations was noted in the context of the discussion of the opportunities and challenges of youth work in the digital era. Here, participants' initial card-sort choices (Session 1) and their descriptions aligned with previous scholarly research supporting the positive social impact of young people's participation in digital projects (Black *et al.*, 2015; Ito *et al.*, 2013; Sawhney, 2009). However, the discussion during Session 1 and

Session 2 was primarily aligned with the more sceptical views on the social impact of digital technologies in young people's lives (Aiken, 2017; O'Keeffe & Clarke-Pearson, 2011) and youth work (Mackrill & Ebsen, 2017). The key concerns highlighted in relation to young people's well-being were the issues of disinformation and privacy (Hemsley, Jacobson, Gruzd, & Mai, 2018), young people's data protection (5Rights Youth Commission, 2017) and digital inclusion (Mcgillivray, Jenkins, & Mamattah, 2017). The challenges associated with the delivery of youth work in the digital era were also consistent with prior research findings related to (1) limited digital literacy skills among youth workers (Wilson & Grant, 2017), and (2) lack of definition or purpose of the *digital* element in youth work (Kiilakoski, 2017).

The discrepancy between participants' cards selections and the way they talked about them may be attributed to two reasons: (1) focus group sample size and "social variables likely to impact upon levels of participation" (Parker & Tritter, 2006), and/or (2) possible underlying pressure to foster the technology-enthusiasm in the digital youth work field. Firstly, the small size of the group might have affected the quality of the card-sorting process (Parker & Tritter, 2006). Study participants might have felt observed by other participants (also their colleagues from the digital youth work field in Scotland) as well as the note-taker and the researcher, and therefore possibly felt self-conscious.

The initial card-sorting decisions were visibly in line with the core aspects of digital youth work viewed as a proactive, responsive, and creative practice (European Commission, 2018; Harvey, 2016). In the existing literature, digital youth work and its social value are primarily described not just positively but as essential to young people's development in the 21st century (European Commission, 2018; Kiviniemi & Tuominen, 2017). The positive narratives of the empowering effects of digital technologies of young people can be found in scholarly literature (for example Black *et al.*, 2015; Erstad, 2012; Ito, Gutiérrez, Livingstone, Penuel, Rhodes, Salen, Schor, Sefton-Green, & Watkins, 2013) as well as digital youth work publications (Kiviniemi & Tuominen, 2017). It is thus not surprising that study participants – as the ambassadors of digital youth work – at first hesitated to refer to their digital practice and its evaluation in a critical way. In the literature, youth workers' conflicting statements and actions in the context of social impact evaluation are described as "values schizophrenia" (Cooper, 2018, p.41). The phenomenon of "values schizophrenia" is defined as a situation where "commitment, judgment and authenticity within practice are sacrificed for impression of performance" Cooper, 2018, p.41). It might be possible that digital youth workers were reluctant to be critical in an industry where positive performances appear to be more valued than constructive criticism.

5.6.2 Social impact evaluation of youth digital culture co-creation viewed as a control mechanism

Social impact evaluation of digital youth work is perceived primarily as an externally governed administrative procedure that aims to satisfy funding criteria. This study's findings correlate with existing scholarly critique of the technocratic evaluation rationality that "supports the instrumental manipulation and engineering of people" (Lockie, 2001, p.278). Like the participants, scholars argue that youth projects are negatively affected by the "target culture", where "professional autonomy and morale were being eroded by the privileging of accountability-focused evaluation process" (Cooper, 2018, p.43). Evaluation is thus perceived as a "control mechanism [to] quash resistance and ensure that workers comply" (De St Croix, 2018). De St Croix refers to evaluation "numbers" as indicators of the power that external evaluation systems have over youth work delivery. These "'numbers' operate as threat, as resignation, and as pride" and the controlling evaluation software systems "play an important role in affirming or 'naming and shaming' workers and projects" (De St Croix, 2018).

Thus it can be argued that current social impact evaluation processes disempower digital youth workers (and young projects participants) and their ability to collect meaningful data. Whilst examples of creative methods of evaluation were noted by participants, the overall discussion focused on the limitations of traditional methods such as surveys. Corresponding to existing research (Lemke et al., 2015), the sole use of methods such pre-set questionnaires or interviews were described as ineffective in capturing and analysing the multi-layered nature of social impacts associated with digital youth initiatives.

5.7 Conclusion

The purpose of this chapter was to study digital youth worker's attitudes towards youth digital culture and their experiences of managing social impact evaluation of digital youth culture co-creation projects in the United Kingdom. The analysis presented here addressed the following research questions:

RQ1. What is the current understanding of the social impact of youth digital culture co-creation?

RQ2. What are the approaches used to evaluate the social impact of digital youth culture co-creation in Scotland?

RQ3. What are the experiences and perceptions of social impact evaluation among digital youth culture co-creation projects participants and projects facilitators in Scotland?

The aims of Study 2 were to collect insights from youth workers who actively use digital technologies in their youth engagement practice, and to provide digital youth workers' perspectives on (1) how they perceive the social impact of digital technologies on their youth engagement practice; (2) how they perceive the social impact and social impact evaluation of digital youth culture co-creation projects. Data was collected in the United Kingdom via a focus group and analysed using a thematic analysis approach. Through the analysis of the collected data, four distinctive narratives were identified in youth workers' perceptions of the influence of digital technologies on youth work and its social impact as well as the social impact evaluation of digital youth culture co-creation.

5.8 Limitations

Several limitations should be noted. First, due to sample size and geographical location, the findings may not be generalisable outside Scotland. Because the areas of youth work and education are devolved matters, the Scottish Government is managing digital youth work provision and funding. Thus, the findings of this study may not be generalisable to different areas of the United Kingdom. Additionally, some participants' fatigue needs to be noted as a limitation. Because the data collection was scheduled in the late afternoon, digital youth workers were visibly tired after attending prior meetings that day. As earlier noted in this chapter, to mitigate these problems the researcher adjusted the card-sort activity.

Chapter 6: Study 3 - Youth Participatory Workshop

6.1 Introduction

Young people's perceptions of the evaluation processes of digital culture co-creation are discussed in this chapter. The analysis presented here is guided by the research questions: (RQ1) What is the current understanding of the social impact of youth digital culture co-creation? (RQ2) What are the approaches used to evaluate the social impact of digital youth culture co-creation in Scotland? (RQ3) What are the experiences and perceptions of social impact evaluation among digital youth culture co-creation projects participants and projects facilitators in Scotland? (RQ4) To what extent could digital youth practitioner-led and youth-led social impact evaluation recommendations alter current evaluation practices?

In Study 3, the researcher worked with young digital participants as co-researchers to understand their views of social impact and social impact evaluation practice and to propose alternative and youth co-created approaches to social impact evaluation of youth digital culture co-creation.

Chapter 6 examines this final stage of data collection. The data analysed here was obtained during three participatory youth workshops conducted in Spring 2018 in Scotland. Nineteen young people (aged 16-25) were involved in this study. The data was analysed using Thematic Analysis (Braun & Clarke, 2006). In line with Participatory Action Research (PAR), young people's views and their understandings of the evaluation process of digital youth culture projects are at the centre of Study 3.

The chapter begins with an overview of the study participants. Section 6.1 provides information on the young people participating in the study, including their expertise on the processes of social impact evaluation and their digital culture co-creation activities. In Section 6.2, the design and methodology of the youth participatory workshop and the research tools are discussed. The results of the study are then presented in Section 6.3, using the three categories identified in the data: (1) young people's perceptions of social impact, (2) young people's perceptions of social impact evaluation and its problematic aspects, and (3) young people's proposals on how evaluation processes could be improved.

These findings are followed by data analysis, in which themes emerging from the findings are framed within the wider scholarly debate, examining young people's involvement in the digital culture. In section 6.4, themes are examined in the context of a literature review from the following areas: information science, HCI, digital youth, youth participation, and social impact

evaluation. Based on the literature review and analysis, four areas for recommendation are presented: Interactivity, Participation, Time, and Inclusion.

6.2 Study Participants: Young Digital Culture Co-creators

Nineteen young people (seven males and twelve females) participated in the study. These young people were associated with three different youth groups across Scotland (Table 22). Groups 1 and 2 could be described as regularly meeting youth clubs that were consistently involved in digital projects for over a year prior to this study. Young people from groups 1 and 2 had digital youth project evaluation experience, both as evaluation participants themselves and also as facilitators of evaluation with younger youth club users. Thus, Group 1 and 2 members had prior experience of both being evaluated and managing evaluations (which primarily involved survey distribution to other youth club members).

Group 3 was comprised of young people attending a residential event where they participated in a one-off digital (VR production) workshop and its evaluation. Young people from Group 3 participated in evaluations prior to this study but had no previous experiences of evaluation facilitation.

The demographics of the study participants are presented in Table 22. Groups 1 and 2 were composed of older participants (aged between 18 and 24). Young people from Groups 1 and 2 were not only participating in digital youth activities organised by their youth clubs, but were also supporting digital youth work delivery, both on a voluntary/unpaid (7 young people) and paid basis (2 young people). Group 3 participants were younger (aged 16 to 18) and less experienced in terms of digital youth project delivery and evaluation.

*Table 21 Youth participatory workshops participant's subset data
(Names of the participants have been anonymised.)*

Group 1			
Digital youth project activities: youth club facilitating sessions in coding, gaming, sound design, digital design.			
Name	Age	Gender	
		Male	Female
Benjamin	24	x	
David	24	x	

Kirstie	23		x
Logan	18	x	
Liam	19	x	
Sandra	23		x
Group 2			
Digital youth project activities: youth club focusing on digital storytelling, video, and film production.			
Name	Age	Gender	
		Male	Female
Kate	19		x
Pat	20		x
Roz	18	x	
Group 3			
Digital youth project activities: youth residential event which included a virtual reality workshop.			
Name	Age	Gender	
		Male	Female
Amelia	16		x
Ava	16		x
Alfie	16	X	
Caitlin	17		x
Elie	18		x
Laureen	16		x
Lesley	16		x

Olivier	16		x
Olly	16	x	
Paige	16		x

6.3 Methods

The Study 3 workshop design was guided by Youth Participatory Action Research methodology (Cammarota & Fine, 2008) and utilised Cooperative Inquiry (Heron & Reason, 2001) as a data collection and data analysis approach. The Study 3 workshop design was enhanced by a prior literature review of YPAR projects (Cammarota & Fine, 2008; Foster-Fishman, Law, Lichty, & Aoun, 2010; Tanner, 2015) and youth-led cooperative inquiry (Guha *et al.*, 2010; Howard, Agllias, Cliff, Dodds, & Field, 2015). The literature review, design decisions, and Study 3 workshop protocols are all presented in this section.

6.3.1 Workshop Design: Youth Participatory Action Research (YPAR)

In line with the overarching Participatory Paradigm (discussed in Chapter 3), this study implemented Youth Participatory Action Research (YPAR) methodology to facilitate a collaborative and youth-centred research process. The aim of YPAR is to engage young people as agents of critical and collective inquiry (Cammarota & Fine, 2008). Thus, in the context of this study, young people participating in YPAR were viewed as experts in their own evaluation experiences. YPAR has been described as “an approach to research in which those most impacted by a problem—the youth—co-research it and take action in partnership with adults” (Bertrand, Durand, & Gonzalez, 2017, p. 142). YPAR aims to highlight and develop young people’s capacity and agency to study their social contexts (Cammarota & Fine, 2008). Participatory and youth-centred action research projects aim to provide young people with meaningful and engaging experiences, and can lead to co-creation of research outcomes reflecting young people’s needs (Buccieri & Molleson, 2015). YPAR has been described as particularly useful for “engaging youth in democratic processes as well as providing young people with a systematic way to analyse the oppressive circumstances within various institutional settings” (Cammarota & Fine, 2008). YPAR studies have involved young people in identifying critical needs and co-creating interventions that address their concerns or providing feedback to promote dialogue and action within a community (Foster-Fishman *et al.*, 2010).

Practical implementations of YPAR methodology have been extensively examined in the scholarly literature (Anyon, Bender, Kennedy, & Dechants, 2018; Cammarota & Fine, 2008; Chen, 2015; Foster-Fishman *et al.*, 2010). A recent systematic review of YPAR by Anyon *et al.* (2018) revealed that the most common outcomes associated with participation in YPAR relate to agency and leadership, academia and careers, and social and critical consciousness. Examples of YPAR projects include high school students' collaborative constructions of a theatrical play examining the notion of white supremacy (Tanner, 2015), participatory photography projects to advocate for community health and well-being (Wang, 2006) and co-design of online information services for homeless youth (Bucciari & Molleson, 2015).

The literature review reveals examples of YPAR projects in which young people have been involved both in data co-creation (Chen, 2015; Howard *et al.*, 2015) and in data analysis (Akorn, Shah, Nakai, & Cruz, 2016; Foster-Fishman *et al.*, 2010) YPAR approaches have been described as effective tools to co-create research goals, to address power imbalances during research processes and to collate collective knowledge (Howard *et al.*, 2015). In the context of participatory data analysis, YPAR methodology has been utilised "to generate an in-depth analysis of current community conditions and substantive recommendations for action from the youth" (Foster-Fishman *et al.*, 2010, p. 79). To engage young people in qualitative data analysis, Foster-Fishman *et al.* (2010) designed the ReACT Data Analysis Method. Through this creative and participatory process, the ReACT Data Analysis Method implemented elements of thematic analysis "to preserve scientific rigor and the voice of youth during the analysis phase" (Foster-Fishman *et al.*, 2010, p. 75).

Whilst traditional qualitative research tools (such as interviews, focus groups, surveys, observations) have been primarily utilised in YPAR studies (Anyon *et al.*, 2018), literature review also revealed use of more experiential tools. YPAR researchers (Akorn *et al.*, 2016; Cooper, 2018; Foster-Fishman *et al.*, 2010; Vecchio, Dhillon, & Ulmer, 2017) have advocated use of experiential, interactive, and novel tools when working with young people. Firstly, storytelling has been described as an effective way to encourage young people's critical and creative thinking skills (Cooper, 2018; Sawhney, 2009). Cooper has indicated that storytelling exercises – both visual and non-visual – can serve as powerful means to obtain information from individuals and groups of young people (2009, p.143). Examples of visual and storytelling data collection methods in YPAR include photography (Foster-Fishman *et al.*, 2010), participatory video making, and digital storytelling (Sawhney, 2009). Foster-Fishman *et al.* indicate the use of visual prompts (photographs) and discussion allowed researchers to "effectively tap into the wisdom of participating youth and promote their critical consciousness" (Foster-Fishman *et al.*, 2010). They assert that the use of interactive and novel data collection

and data analysis approaches helped the researchers to address the possible power imbalance between the researchers and young people, and to avoid “a home-work-like feel”. In their YPAR project working with young refugees in Palestine, Foster-Fishman *et al.* utilised stories, drama, poetry, photography, music, and digital video (2009). Foster-Fishman *et al.* suggested that visual and novel participatory tools enabled them to reach beyond traditional literacy requirements and “spur the imagination of youth to create original stories that go beyond existing themes and narratives they experience everyday” (Sawhney, 2009). The combination of images or/and moving images and text, defined as a “hybrid photo-image-text”, has also been described as effective in opening “new spaces for dialogue, resistance and representation” (Vecchio *et al.*, 2017, p. 136). By using visual media, young people might be better able “portray their own experiences” and create their unique voice (Vecchio *et al.*, 2017, p. 139). Visual methods examining young people’s views and experiences have also been explored in the context of participatory design (Ashktorab & Vitak, 2016). In their youth participatory action research study on cyberbullying, Ashktorab & Vitak used methods such as co-creation and prototyping to design cyberbullying solutions. Ashktorab and Vitak have suggested that the openness of these methods might have allowed young participants to “feel that anything is possible in design” and might have boosted young people’s creative thinking and problem solving skills (Ashktorab & Vitak, 2016).

The use of creative play and games-based data collection methods has also been praised in the context of YPAR data analysis (Cooper, 2018; Foster-Fishman *et al.*, 2010; Sabo, 2003). It has been argued that play in research might provide young people with possibilities to tap into their intrinsic and creative abilities, and provide in-depth insights (Sabo, 2003). Scholars (Foster-Fishman *et al.*, 2010; Kim Sabo, 2003) agree that embedding play into research might diffuse the power dynamic between the researcher and young people and provide them with alternative (non-literacy based) ways to express themselves. As indicated by Sabo, adding playfulness to YPAR workshops design might encourage creative thinking, serendipity, and risk-taking among young participants (2003, p. 23).

As illustrated in the above review of the YPAR literature, the research tools used to work with young people as co-researchers can vary greatly. Nevertheless, scholars agree that youth-focused and action-driven workshops ought to utilise interactive, creative, and novel research methods (Ashktorab & Vitak, 2016; Cooper, 2018; Sabo, 2003). Thus, the workshop in this research project aimed to provide young participants with an interactive and participatory experience, where creative research methods were used to enhance critical and creative thinking. Study 3 research methods included: (1) card-sort and “data tree activity”, (2) a problem solving session, (3) scenarios and storytelling and (4) prototyping. The detailed

design of the current workshop and the methods used are described in the workshop protocol section. In line with prior research (Akom *et al.*, 2016; Chen, 2015; Foster-Fishman *et al.*, 2010), YPAR in this study aimed to involve young people in data analysis (Study 1 and Study 2) and data co-creation.

6.3.2 YPAR: Defining characteristics

To ensure that the Study 3 workshop was designed in line with YPAR methodology, Rodriguez and Brown's (2009) YPAR characteristics were examined. In their conceptualisation of YPAR, Rodriguez and Brown (2009) outline three key defining characteristics of YPAR methodology (Table 23). Firstly, they indicate that the knowledge creation process must be grounded in young people's lived experiences, and must reflect and address their real-life issues, desires, and needs. The research process should position young people "not as information receptacles or data sources but as whole human beings" (Rodríguez & Brown, 2009, p. 25), and offer learning experiences that are participatory, purposeful, practical, and experiential. To confirm that young people's evaluation experiences are approached holistically, the workshop design was framed within YPAR's co-operative inquiry (discussed in this section) and extended epistemology (Heron & Reason, 2001). The extended epistemology aimed to reach beyond young people's primarily theoretical knowledge of evaluation and focus on their practical and emotional experiences of it. Thus, the researcher aimed to provide a YPAR workshop using the following four ways of exploration: experiential knowledge (face to face), presentational knowing (story, picture, art), propositional knowing (concept, ideas), and practical knowing (knowing in action in the world) (Reason & Bradbury 2001, p.9). These are represented in Table 23.

Table 22: YPAR characteristics as outlined by Rodríguez and Brown (2009)

	YPAR characteristic	Description	In this study
1	Situated and inquiry based	The topic of YPAR's inquiry is grounded in young people's lived experiences.	The topic of YPAR was grounded in young people's experiences of digital projects evaluation
2	Participatory	YPAR is participatory and involves young people as active research collaborators	Young people were viewed as active co-researchers during the process and were presented with opportunities to engage with the data from Study 1 and Study 2. All research methods used in the study were participatory and youth-centred.
3	Transformative and activist	YPAR is transformative and aims to change and improve knowledge and practice to improve young people's lives and their communities	The workshop aimed to create space where young people could utilise their analysis of their evaluation experiences and to use it to co-create their evaluation solutions. The co-created evaluation tools were designed to be introduced and tested in their youth clubs.

The second key characteristic of YPAR is that it is participatory, actively involving young people as active research collaborators. Rodríguez and Brown emphasise the importance of “genuinely collaborative methodological and pedagogical processes that validate, incorporate, and build on the knowledge and skills of youth researchers and support critical and creative engagement in research and learning” (2009, p. 27). To achieve a meaningful participatory learning experience for young people, the workshop was designed in accordance with the co-operative inquiry reflective cycle (examined in section 6.2.2). Thirdly, Rodríguez and Brown

indicate that YPAR ought to be transformative and activist. Because it is essential to provide opportunities for young people to critically engage with and analyse their evaluation experiences, the workshop was designed in accordance with the four stages of the action inquiry cycle.

6.3.3 Workshop design: cooperative inquiry

Cooperative inquiry (CI) is an action-based approach to research and learning. CI has been described as “a systematic process of action and reflection among co-inquirers who are tackling a common question” (Ospina, El Hadidy, & Hofmann-Pinilla, 2008, p. 131). CI is rooted in participatory action research (PAR) methodology, and emphasises the importance of authentic collaboration between researchers and communities – also called a co-operative relationship (Heron & Reason, 2001). In the literature, examples of studies implementing CI with children and young people can be found in the contexts of technology design (Guha, McNally, & Fails, 2016), education (Howard *et al.*, 2015). Guha *et al.* used CI on an intergenerational project where children and adults co-designed digital prototypes. They indicated that CI encourages creative thinking in participants and “promotes attitudes and skills to encourage children and adults to address ambiguous problems with no clear answer, and even no clear way to answer” (Guha *et al.*, 2016, p. 57). The practical and action-focused characteristics of CI have been also highlighted in a study examining student experiences among under-represented groups in Australia (Howard *et al.*, 2015). Howard *et al.* suggests that the CI participatory approach provides opportunities for collective reflection and knowledge co-creation. CI has been described as particularly useful when working with children and young people, because it might provide opportunities to challenge traditional hierarchy and power dynamics. Each CI inquiry is “unique and not generalisable” (Howard *et al.*, 2015, p. 781). Thus a vast range of limitations might be noted during the participatory research process, including (but not limited to) lack of participation, power imbalance, or tokenistic researcher approaches.

In order to mitigate any possible theoretical and practical risks related to CI facilitation, this project worked according to Heron and Reason’s guidance (2001). In their book chapter, “The practice of co-operative inquiry: Research ‘with’ rather than ‘on’ people”, they provide a set of strategies to facilitate a meaningful CI (2001). First, they advocate for the use of a wide-range of methods to integrate the following four “ways of knowing” associated with the extended epistemology (discussed in Chapter 3) presented in Table 24.

Table 23: Four ways of knowing as outlined by Reason and Bradbury (2001)

	Knowing	Example
1	Propositional knowing	Theories, idea, theoretical concepts.
2	Practical knowing	Technical competence, knowing how to do something, manual, technical, interpersonal
3	Experiential knowing	Empathy, relating to the other, examination and description of relationships or experiences – supported by a community of practice
4	Presentational knowing	Expressive story, movement or drama.

To facilitate CI, Heron and Reason outline four stages of the cooperative inquiry cycle that encompasses four cyclical phases of reflection and action. The first part of the co-operative inquiry involves clarification of the project’s goals. At this stage, all research participants “explore an agreed area of human activity” (Reason, 2002, p. 169). The second stage of CI aims to encourage critical and practical engagement with the research problem. In the third stage, participants become engaged in the research. According to Heron and Reason, this stage sets out to explore participants knowledge as “grounded in [their] experience” and “expressed through their stories and images” (2001,p. 14). Finally, the fourth stage of CI serves as a critical reflection and summary of the inquiry process. During the final CI stage, resaerch participants explore if and how their findings can be taken further.

For the purpose of the current workshop, the four stages of co-operative inquiry were labelled as: (1) Observe, (2) Reflect, (3) Plan, and (4) Act. The four stages of co-operative inquiry used in this workshop and their relation to the extended epistemology are presented in table 24.

Figures 16 and 17 and Table 25 provide a visual representation of the co-operative inquiry.

Table 24 The four stages of co-operative inquiry in this project

Phase	Description	Workshop	Methods	Extended epistemology			
				Propositional knowing	Practical knowing	Experiential knowing	Presentational knowing
1. Observe	Developing the focus of their inquiry	Discussion and examination of the data collected in Study 1 and Study 2	Card-sort and data-tree activity	Understanding and definitions of social impact evaluation and social impact	Practical experiences of evaluation	Description of feelings, relationship and power dynamic related to evaluation	
2. Reflect	Reflection on individual and group experiences in relation to the research topic	Further examination of Study 1 and Study 2 results and co-creation of responses to youth workers evaluation problems, using young people evaluation experience and expertise	Focus group	Understanding of evaluation guidelines, its purpose and evaluation methods	Practical experiences of evaluation, procedures, and facilitation	Description of feelings and perceptions of Study 1 and Study 2 outcomes	

3. Plan	Research participants become immersed in and engaged with their experiences	Co-creation of personas representing two types of young person's evaluation experiences: positive and negative	Scenarios co-creation, and storytelling	Understanding of evaluation guidelines, procedures and methods involved	Practical steps involved in the organisation of evaluation process, data collection and data analysis	Description of a fictional character involved in facilitation, their point of view and their emotions	Creating evaluation scenarios, followed by a story presentation
4. Act	Research participants design solutions		Prototyping youth-led evaluation solutions		Practical creation of evaluation solutions	Describing the possible advantages of the proposed evaluation solutions	Presentation of evaluation solutions

Figure 16: Visual representation of the four stages of co-operative inquiry in this study

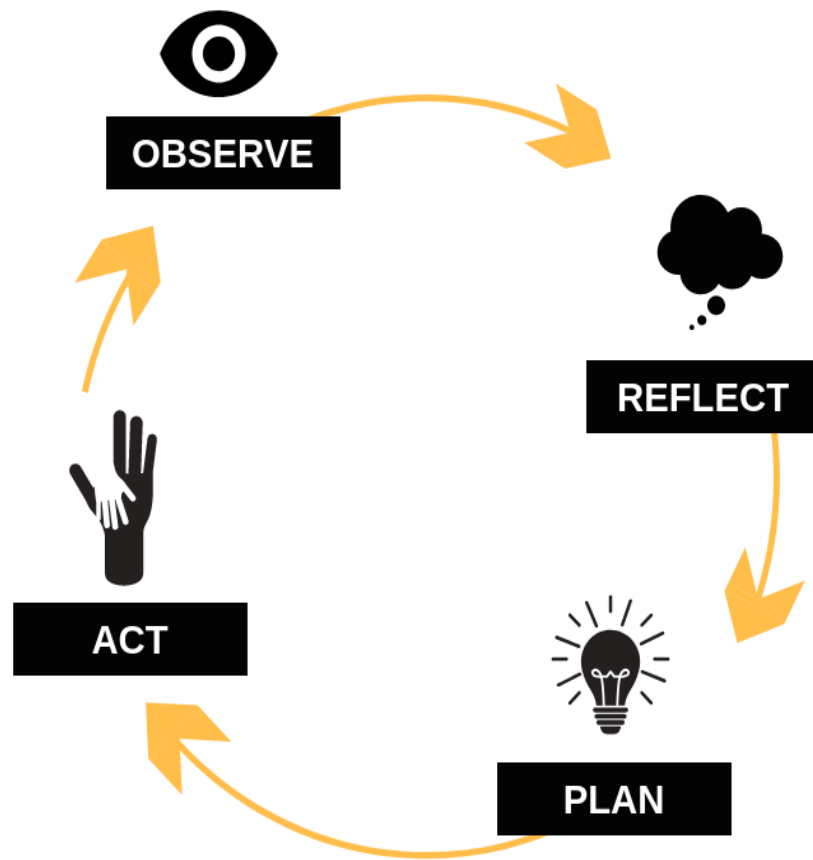
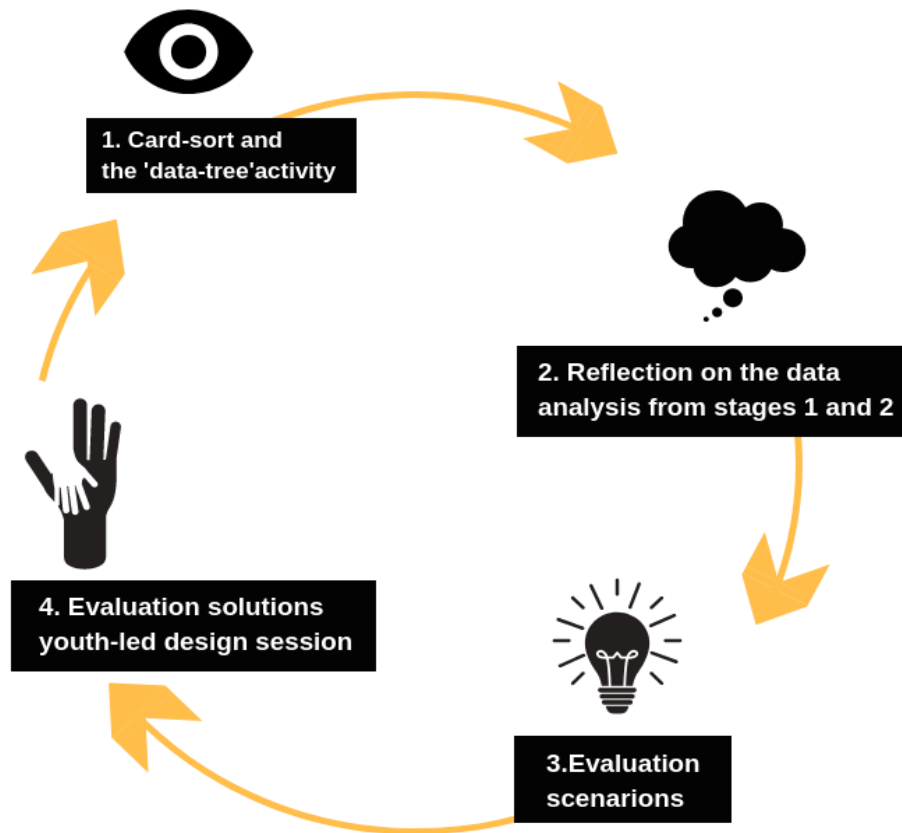


Figure 17: A visual representation of the co-operative inquiry stages and activities in this study



6.3.4 Workshop Protocol

Stage 1: Observe

Methods: Card-sort “data-tree activity”

Figure 18: Part 1 of the youth workshop protocol and an image of the data tree used during this stage



The aim of the first stage of each workshop was to introduce and discuss the goals of the study. To achieve this – like previously examined PAR scholars (Foster-Fishman *et al.*, 2010) – creative, novel, and participatory research methods were selected, such as the data-tree activity (illustrated in Figure 18 above). The data-tree activity was based on a card-sort research method (Nurmuliani, Zowghi, & Williams, 2004). The purpose of the data-tree activity was to introduce participants to the process of data sorting. The workshop facilitator opened the session with a question: “Which of the cards would you use to describe social impact in the context of your digital youth clubs?” Participants were asked to pick cards off the tree and stick them to a large piece of paper labelled “Impact”. Pens were also available, so participants could write their definitions of the word *impact* in case their views could not be found (as explicitly written on a card) on the data tree. Forty cards were used: they aimed to represent previously obtained youth workers’ views on social impact (from Study 1 and Study 2). In each of the workshops, forty cards would be placed on the tree, but no particular order or placing strategy was followed.

During each workshop, participants would spend from 1 to 2 minutes in silence, observing the tree and reading the cards. Then, individual cards would be picked off the tree and placed on

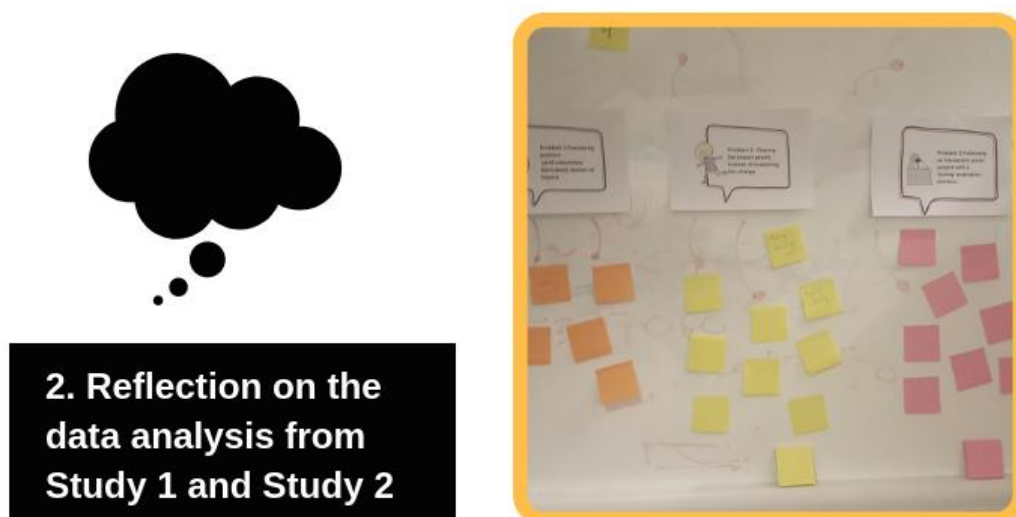
the sheet of paper. In all of the workshops, participants would briefly comment on their card selection, which would start a conversation with the group. The activity of looking through the cards, reading them out loud, and picking cards served as an effective warm-up activity because it encouraged participants to think and talk about their views and experiences of social impact evaluations. It thus can be suggested, that, similarly to Vecchio *et al.* (2017) YPAR, the interactive data-tree activity and the use of both texts and images enabled the initial dialogues as well as collective and individual critical reflections. The card-sorting activity was followed by a discussion in which the participants' cards were discussed.

At the end of Stage 1, participants were provided with an opportunity to learn about youth workers' perceptions of social impact (collected in Study 1 and Study 2). The following results were presented on a large sheet of paper – social impact viewed as (1) individual change, (2) socio-political process, and (3) regulated data. Participants were encouraged to respond to these categories using printed images of “speech bubbles”.

Stage 2: Reflect

Methods: Focus group

Figure 19 Part 2 of the youth workshop protocol and an image of themes on a wall and post-it notes



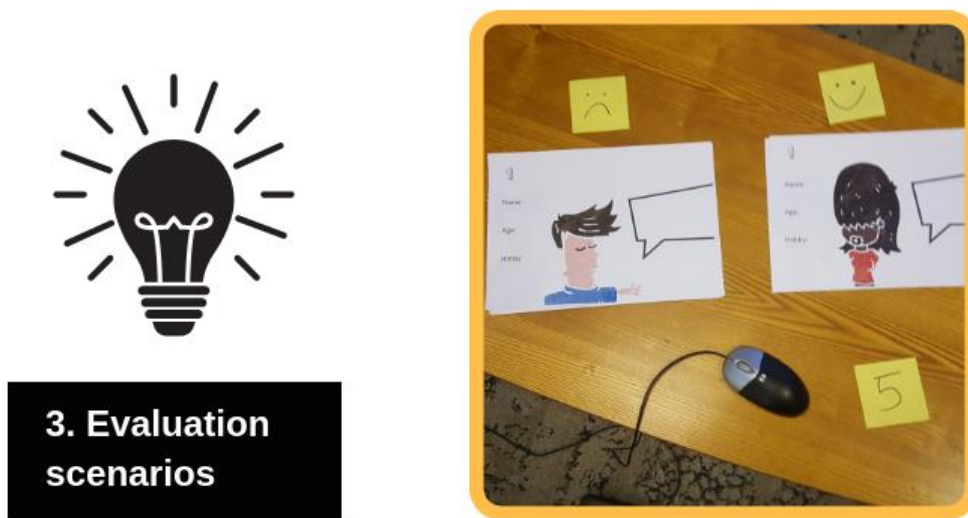
The following section aimed to facilitate a collective and in-depth analysis of three key issues identified in Study 1 and Study 2. During the second part of each workshop, participants were presented with some key themes found in Study 1 and Study 2 and encouraged to investigate the data. The data was presented in a visual way, as shown in Figure 19 above, highlighting the three key problems in youth workers' views on evaluation: (1) not having enough time to

carry out evaluation, (2) overemphasis on positive evaluation results, and (3) the evaluation process being viewed as boring. Three large sheets of paper were displayed, each dedicated to one of the problems. The problems were discussed in a group setting and the participants were provided with post-it notes to write their responses/solutions to the problems.

Stage 3: Plan

Method: Scenarios of co-creation and storytelling

Figure 20: Part 3 of the workshop protocol with examples of persona booklets



The third part of the workshop aimed to reflect and summarise on the discussions that took place during the data-tree exercise (Workshop Part 1) and focus group (Workshop Part 2). Stage 3 was divided into two parts: (1) scenarios co-creation and (2) storytelling. The details of the methods used are described below:

1. Scenarios co-creation

The objective of this exercise was to encourage participants to create stories of what they perceive as good and bad examples of a young person's evaluation experiences. To develop their evaluation scenarios, participants were provided with a pre-designed template consisting of four pages, as shown in Figure 20 above. The template was influenced by a data collection method called "persona", which in the context of this study is defined as a "hypothetical archetype" (So & Joo, 2017) of a real young person participating in evaluation of a youth digital project. According to So and Joo, designing a persona might improve creative performance while creating novel solutions to research problems (2017). Thus, the aim of the scenarios exercise was to encourage young people to combine their different evaluation experiences and views and present them in one persona and a story. During each workshop, every group of participants

spent between 10 to 15 minutes co-creating their scenarios. Table 26 illustrates an example of scenario co-creation activity. An example of the scenario activity work sheet is presented in Appendix 10.

Table 25: An example of scenario co-creation activity (see Appendix 10)

Scenarios	Fields to complete	Negative scenario example from Group 2
Page 1	<ul style="list-style-type: none"> • Young person's name • Young person's age • Young person's hobby 	<ul style="list-style-type: none"> • Stephen Von Heinz Beans • 12 • Medieval role play, World of Warcraft, RuneScape, Red Velvet Cheesecake
Page 2	<ul style="list-style-type: none"> • Type of digital youth project • Young person's hopes and aspirations 	<ul style="list-style-type: none"> • Digital Lego Building • Wants to become an architect and a graphic designer
Page 3	<ul style="list-style-type: none"> • Young person's experience of evaluation • What has this young people learned from their evaluation experience? 	<ul style="list-style-type: none"> • [About evaluation experience] 30 minutes of questions data and scales. It was 4 pages long with no instructions. We were being watched by the group leader so felt like I couldn't be negative • "I thought I wanted to be an architect but the experience of building with Lego was hellish. I was excluded from groups and ridiculed for my fluffy hair.
Page 4	<ul style="list-style-type: none"> • Young person's experience of evaluation • Young people's view on what could have been done differently during the evaluation process 	<ul style="list-style-type: none"> • It was really hard it was written terribly and there [were] too many numbers and had too many pages also no one helped us. Also, [I] felt like a prisoner. • More help, qualitative, structure, anonymity

2. Storytelling

The storytelling session aimed to provide an experiential learning experience for young people in which they would tell or perform a story about a young person's evaluation. The storytelling method was selected due to its potential to tap into young people's creative abilities and in-depth insights and assumptions (Sabo, 2003) about the evaluation process. This storytelling allowed young people to collectively present their scenarios, most of which were playful and animated. All participants chose to give their personas unusual names or hobbies.

Stage 4: Act

Method: Evaluation solutions design session

Figure 21: Part 4 of the workshop protocol with examples of evaluation scenarios



The fourth part of the collaborative inquiry was to encourage participants to plan or take an action related to the researched topic (Reason, 2002). In the context of this study, the fourth part of the workshop served to summarise and address the problems identified in Stages 1, 2 and 3. Thus, participants were asked to design their own evaluation solutions. Participants were provided with sheets of A4 paper, where evaluation solutions could be written or sketched, as shown in Figure 21 above. In line with advice from a CI facilitator who utilised design sessions with young participants (Guha *et al.*, 2016), this project aimed to encourage participants to think beyond the traditional evaluation format and “think outside the box”. Most workshop participants created individual evaluation solutions and then presented them to the group.

6.4 Data analysis approach

The data was transcribed and coded with the use of Nvivo 10 software. As in Study 2, a content analysis approach was used to examine the following sources of information:

- Audio recording
- Images from the session
- Notes taken by the researcher
- Written content produced by young people during the workshops (post-it notes, sheets of paper with young used during the evaluation scenarios, evaluation solutions)

Qualitative content analysis (Helgevold & Moen, 2015) was selected as a data analysis approach. Qualitative content analysis data is described as an appropriate method to analyse a range of data (textual and visual), which goes beyond “merely counting words to examine language” (Helgevold & Moen, 2015). According to Helgevold and Moen (2015) this allows for a structured and rigorous analysis of data collected in different formats.

The data analysis protocol was as follows:

1. The first step of the data analysis process involved transcription of the audio recordings from the workshops. The transcribed text was coded using Nvivo 10. The coding led to the creation of preliminary categories.
2. The next step included content analysis of the text written by the young people. Data from the post-it-notes, evaluation scenarios and evaluation solutions were coded in Nvivo 10.
3. Following, the coding categories were re-examined and refined.
4. The final step included writing up the results in a report.

6.5 Ethical considerations

Ethical approval for the study was sought and obtained from the School of Computing at Edinburgh Napier University. Details of the project and the nature of participation were fully disclosed prior to the workshops. All study subjects were aged 16 or over and therefore legally classified as adults (UK Data Service, 2017). Steps were taken to protect the rights of the participants throughout the process of recruitment, data collection, and analysis.

To provide young people, young people’s parents/guardians, and youth group facilitators with information about the purpose of the study, a dedicated online page, an online presentation, and a PDF booklet were created (see Appendix 6 and Figure 22). Information about the study, the researcher’s role, and the plans for the workshops were also presented on the day of each

workshops, respectively. Ethical considerations for youth participatory research were guided by Banegos and Castro's (2015) analysis of action research in education (discussed in Section 3.5 in Chapter 3). The three groups of young people participating in this project were supported by their youth workers during the workshop. During each of the workshops the researcher was supported by a qualified youth worker. To maintain young people's welfare, conditional confidentiality was ensured through the study. However, if any of the shared information implied that they were at risk, it was agreed that this would be disclosed, and appropriate authorities informed.

Figure 22: Pages from a presentation with information about the purpose of the study



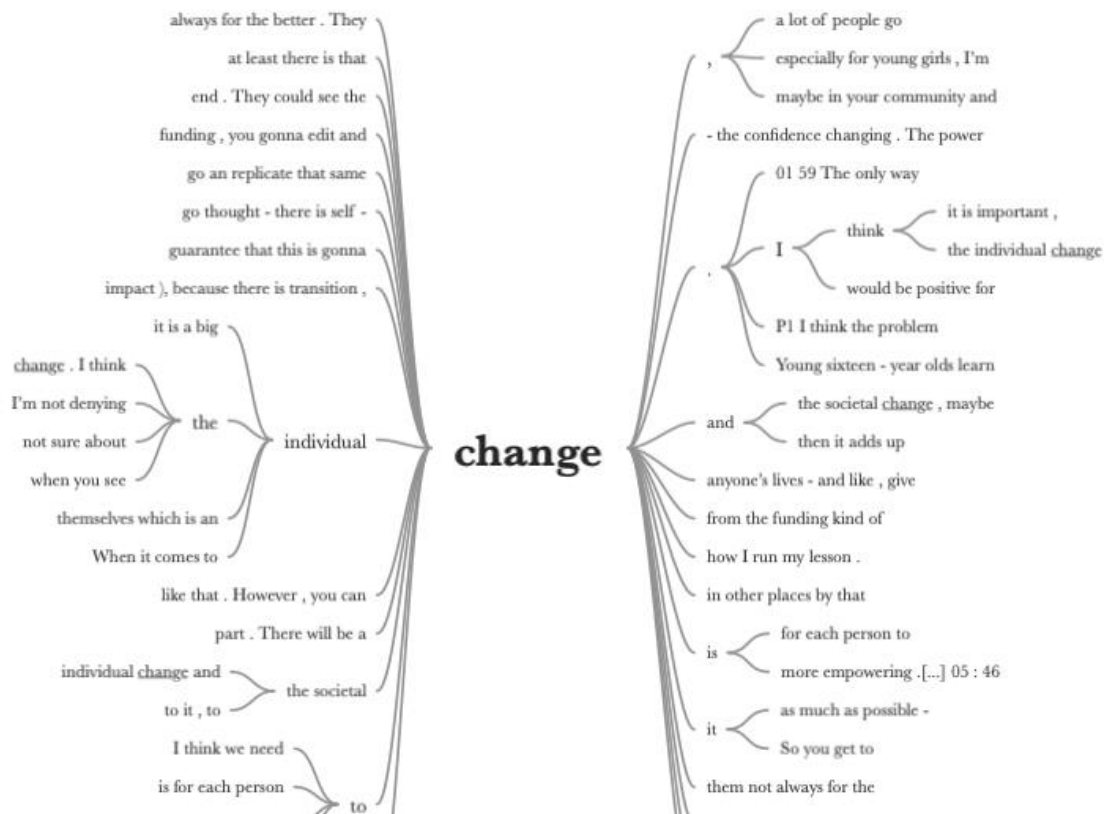
6.6 Results

6.6.1 Perceptions of impact among young people: positive and negative change

When analysing their understanding of social impact, all groups agreed that change is its core indicator. Unsurprisingly, themes of change and creative expression were identified in the

dataset. The NVivo analysis of workshop transcripts (see Figure 23) revealed that the word “change” was the 4th most frequently used word during workshop conversations. The word “change” was used 43 times, with ten references to self-change and twelve references to wider social/community change.

Figure 23: The frequency of 'change' in the transcripts from the youth participatory workshops



Generally, most participants indicated that social impact occurs as a result of a transition, transformation, and/or creative intervention. For example, Group 2 emphasised the importance of their creative work (the digital stories they produced), and how these could affect wider society. Roz stated that, “you would use ‘word impact’ when you create a digital story and you want someone to feel something. That is impact” (Group 2). In the context of their creative work, Group 2 further defined social impact as a “response” or a “message” which may lead to social or individual transformation. The creativity theme was also mentioned by a member of Group 1, who argued that “to have a social impact on society it has to be a new idea, it has to be creative” (Group 1).

The importance of change and transformation were debated in the context of both positive and negative social impacts; although, some of the participants’ first instincts were to frame

social impact as positive change. For example, two of the opening phrases during the card-sort exercise included “[social impact is about] improving on old ideas” (Group 1) and:

the more involved you are into something, the more you care about something, the more you do to better our society. Even if that’s just making friends or meeting people in the street – it generally has a positive impact (Group 3).

However, as the activities and discussions progressed, participants became more openly critical in their views of social impact. Subsequently, questions about the ‘real value’ (or lack of it) of impact, were analysed. For example, Megan focused on the act of community participation and its connection to social impact, saying: “I don’t know how often being involved in your community can have a negative impact, but the action of choosing to get involved or not can have an impact” (Group 3). While the dual perception of social impacts as both positive and negative phenomena was identified as a key narrative among all participants, one young participant argued that social impact can also be neutral. Roz stated that “even when someone feels nothing, that’s still an impact. They can watch a film and say - that meant nothing to me whatsoever. It had no emotional impact on me” (Group 2).

The idea of negative social impact was introduced very early to the discussion in Group 2. Here, Roz reflected on the complex nature of social impact and a possible tendency to focus on positive elements only:

The first thing that comes to my mind is that everything about impact is an improvement, but it is not. Like, say my mum died, that would have a huge impact on me, but it would not improve me really.

I’m not sure about the meaning or the purpose (of social impact), because it depends on what the youth worker is doing or how they are doing it, ‘cause you can’t guarantee that this is gonna change anyone’s lives - and like, give them a meaning or a purpose. I think it is a naive outlook, but it is a good outlook cause that’s you are aiming for. (Group 2)

During the card-sort exercise, all groups also indicated that “failure” is an important aspect of impact. Some participants indicated that social change can only be achieved if people are not afraid to fail and make mistakes, which might involve experiencing negative impact. Group 1 emphasised the importance of serendipity in the work of their youth club: “You have to fail to succeed. If you don’t fail you don’t grow” The importance of making mistakes while working towards social impact was also highlighted by Tina from Group 3, who argued that “the fear

of failure will stop you from doing anything at all – you are not even going to start 'cause you are scared of failing. You can't succeed by only doing something once" (Group 3).

6.6.2 Social impact evaluation of digital youth projects: perceptions of practice among young people: three problems

6.6.2.1 Problem 1: Uncertainty about the meaning of their participation in digital youth culture co-creation evaluation

A recurrent theme in all workshops was a sense amongst participants that the meaning of social impact evaluation can be unclear. While there was an overall agreement that evaluation data is collected to improve future digital youth projects, none of the young people knew what happens to their feedback once it is submitted at the end of the project. The evidence suggests that there is a lack of certainty with regard to the purpose of evaluation data, how it might be stored, how it is processed by the evaluators or funders, and what actions (if any) are based on it. "Usually, when you are doing the evaluation, it's at the end of something. So you don't really know. You don't go back and find out [if anything has changed]" (Roz, Group 3).

While some young people indicated that it is essential to collect quantitative data to create a workshop formula that can be replicated or tested by other digital clubs, others argued that summing up their personal feedback in a numerical way does not provide them with an efficient way to express themselves. For example, Ashley indicated that:

Impact is also often emotions and personal, growth and confidence. On the report, you just mark it - but when you see it, it's like a completely changed person, but on the report they went from 3 to 5" (Group 1).

There was a sense of uncertainty as to how evaluation metrics could provide evidence of individual impact. The following questions were consistently considered in participants' discussions: Is the evaluation process aimed at capturing our personal development? Or, is it primarily used as a data collection mechanism for funders? Adam described himself as "a bigger fan of the regulated data" who believes that the purpose of evaluation is to provide funders and other communities with a digital youth culture co-creation work formula that can be replicated. He stated:

It's great when you see the individual change and the societal change, maybe in your community and in your town. It's forward-thinking and everything is great, but you go one town over and they look at it - how did we get there? Then that means you can go and replicate that same change

in other places by that recorded data. You need to have that stuff written down. (Group 1)

When reflecting on the purpose on evaluation processes, Group 3 also questioned the value of the process altogether. Criticising the tokenistic forms of evaluation, some participants argued that “we [young people are] treated like we don’t understand because we’re younger and not as experienced” (Group 3).

6.6.2.2 Problem 2: The emphasis on telling only the positive stories of evaluation

The results of this study indicate that some young people feel pressured to provide predominantly positive feedback during evaluations. Most of the study participants felt that social impact evaluation of youth-centred digital projects is primarily focused on collecting “positive stories of change”. Whilst the digital youth work of the three clubs was at its core youth-centred, democratic, and participatory, all of their evaluation approaches were designed and facilitated using a top-down approach.

The hierarchal power dynamic between project funders, youth workers, and young participants was mentioned as a self-regulation mechanism when providing feedback. For example, all groups indicated that it is the “right thing” to focus on positive experiences during evaluation. Some of the data suggests that being honest or critical might be taken as an offence or – as indicated in one case – used against them. For example, Kate believed that as a young person doing an evaluation, honesty is not a priority:

You don’t want to be honest because you see the person doing the evaluation as someone higher than you. You don’t want to ruin their project, you don’t want to upset them, after seeing how much effort they put into the project. (Group 1)

Logan argued that young people worry about having their feedback anonymised or their data revealed through a “computer number” or “handwriting”, “I knew no one would see it apart from that person [evaluator], cause my name was on it. So, someone could say – oh, this and this kid didn’t like it” (Group 1).

The results also indicate that there is a level of anxiety and/or fear related to sounding or being perceived as “too mean or too critical”. 16 participants said that they would prefer to say that the digital workshop was useful to them instead of indicating more critically how it could be improved. Liam described this behaviour as a “societal thing” in the United Kingdom:

When we went to an event and we were filling in a form and that event was terrible, I could not say 'the event was terrible'. I would always have to put [it] higher on the spectrum. Like a lot higher than it deserved. (Group 1)

Logan stated that he would repeatedly provide positive comments for a programme he did not enjoy, "I can't physically give negative reviews – I'm really bad [about that]" (Group 1). In Group 2, Pat said, "Sometimes you get a question: What can we improve? If there is something I wanted or thought they could have improved on, I feel bad for saying what I thought. So, I don't say it" (Group 2).

Additionally, the format of evaluations was mentioned as a possible reason why young people find it hard to express their criticisms when providing feedback. Kate suggested that "because it [evaluation process] is written, you can come across as too mean or too critical because there is no tone. If you are talking to someone you can have a conversation about it" (Group 2). Group 3 workshop notes (taken by the participants) reveal that formal approaches to social impact evaluation assessment might imply that young people are "students". Thus, the evaluation stage might be perceived more as a final exam, where young people are expected to produce "the right type" of impact. When co-creating a story of a negative personal experience on an evaluation, participants referred to "exam-like" forms, containing "long-winded instructions" (Group 3). In some cases, participants also noted feeling stressed at being observed by the workshop evaluator when providing feedback (Group 1).

Funding (or lack of it) was another suggested reason as to why young people might feel obliged to report primarily positive stories of the social impact of youth digital culture co-creation. The discourse analysis of participant perceptions and experiences of social impact evaluation reveals that they feel co-responsible for youth projects funding. For example, Tim stated that the "funding takes a couple of weeks to get it and then. They can get quite frustrated when they don't get it. It's really difficult to get funding" (Group 3). Adam said that:

If you are based on funding you don't want to be like 'Oh yeah, we didn't succeed. We failed'. 'Why did we give you the money then?' You have to put like positive spin even on your failures, which can then reduce on the impact they had, 'cause it makes them look a little bit better. (Group 1)

Among the nineteen participants, only one appeared to be confident in reporting negative social impact. As an exemption from the rest, Roz believed that evaluation should serve not only as a mechanism to share opinions but also to improve workshops design for future participants. Reflecting on his experience of evaluation, Roz shared:

I've not been evaluated that often, but most of the time I'm quite honest. Cause, usually, if it's made me feel really good, I'm happy to tell they done really good. Usually, if it makes me feel like shit, I don't give a fuck about telling them that they did a bad job. (Group 2)

Roz additionally shared his personal experience of dealing with ineffective feedback procedures at college, where he believes that “nothing has changed” as a result of students' actions. Thus, he indicated that young people should advocate for high-quality experiences: “if they've [digital youth workers] done something bad they should know it. If I have to feel it or write it then it is their fault” (Group 2). Further, he indicated that he never had an experience where he felt pressured or “had to say that things were good”. While reflecting on his honest attitude towards evaluation, he explained: “It's not so much feeling obligated, I'm just like, it's just the way I see things” (Group 2).

6.6.2.3 Problem 3: The lack of young people's voices in the evaluation of digital culture co-creation

All groups discussed the importance of youth voice and “being heard” in the evaluation process and its outcomes. The study found that social impact evaluations of digital youth culture projects are primarily facilitated using top-down approaches. Surveys and open-ended questionnaires were identified as the most mentioned evaluation tools. Out of nineteen workshop participants, only three reported using alternative evaluation methods. Subsequently, the results revealed that traditional evaluation approaches do not fully reflect or represent young people's voices. All groups agreed on the importance of young people sharing their views and being heard. A distinctive narrative focusing on the relationship between evaluators (as listeners and feedback gatekeepers) and participants (as advocates for the younger generation) was identified. For example, Pat expressed her mixed emotions with regards to social impact evaluations:

They (evaluators) asked your opinion, and that's something I don't take lightly. Not my opinion, but somebody asking for my opinion, makes me feel like validated - no matter what they do with it, if they listen to it or not. (Pat, Group 2)

While reflecting on their past evaluation experiences, sixteen out of nineteen participants argued that their voices or feedback had been systematically ignored in the past. Roz, for example, stated that evaluators never “actually do anything”; Pat added that “things would never change”. The results further indicate that some participants did not feel that their evaluation feedback had any real impact. For participants, it is unclear what happens to the

evaluation data once it is submitted, how it is processed, or what actions are being taken to address their suggestions. Pat said that: “When we get the evaluation forms, it does make me feel like a have a voice and like they do want to hear it, but after that stage I don’t actually think they listen” (Group 2).

Sandra also questioned the value of the youth-voice and youth-created content in the evaluation process. She argued that “funders want to see it [impact] on paper. Even if you show them video proof, photo proof – all of it – that still doesn’t make a difference. They want to see [us] as graphs and numbers” (Group 1). Similar concerns about the value of young people sharing their views using traditional evaluation tools (such as surveys) were outlined by Pat:

Even if a course has [sic] an impact on someone, how are they [funders] actually going to record it? How are they going to see that, if we don’t do some form of evaluation form or questioners or something like that?’ (Group 2)

Megan argued that the current evaluation system is not working as “both groups, the people who are handing out the surveys and the ones who are filling them out – both said they were not telling the full story” (Group 3). Moreover, Roz indicated that evaluation might not be working. He argued that “they [evaluators] don’t listen” as he has “never seen any difference” (Group 2). Similarly, Kate believed that evaluation does provide young people with a voice as “they say ‘you can talk to us, if you have a problem’ but there is no action” (Group 2). Roz added that “the problem is, once again it is too vague. There is some [changes] when action gets done. But there is some that don’t, and there is some that kind of do their best” (Group 2).

The overall results indicate that certain types of evaluation data appear inaccessible to younger audiences. For example, Kate talked about the formality associated with evaluation and needing to adjust her voice when filling in a feedback form: “I feel like I have to sound smart as well, because I have to write so much” (Group 2). The language barrier surrounding official documentation related to project evaluation was also criticised by Megan, who suggested that inabilities to express or access their feedback data might disempower young people:

The [governmental official documents] information is often presented in a way so we cannot access as normal people. It is hard for to understand that we are supported by something, ‘cause we don’t know what we are being told [...] If our [public] information or even just the surveys that we are doing

- and the information about how their being carried out isn't accessible, then it disempowers us. (Megan, Group 3)

Despite the overall optimism towards an enhanced inclusion of young people's voice in the evaluation process, there were also several sceptical voices in the groups. For example, Adam thought that:

You have to be careful when you are letting them [young workshops participants] doing evaluation. You'll have to be able to put that into stats and data. It might not be the funniest thing but at least there is that change from the funding kind of things, you'll still need to show this is paper evidence. You have to be careful when you are letting them [young digital workshops participants] doing evaluation. You'll have to be able to put that into stats and data. It might not be the funniest thing but at least there is that change from the funding kind of things, you'll still need to show this is paper evidence. (Group 1)

When discussing the traditional power dynamic of evaluation, Ashley suggested that young people might not have enough skills to manage their responsibilities and subsequently efficiently represent their perspectives. She argued that providing young people with additional evaluation power without prior training might be similar to "giving a kid a £100 and say go and do your weekly shopping. What will they buy? What the hell they want, they will go crazy" (Group 1). Finally, Pat doubted that young people would actually use the opportunity to share their voice if extra feedback options were provided: "I don't think that anyone is that passionate to ask for an open question, 'right, give me an option to tell you more'. I mean I loved the course" (Group 2).

6.6.3 Young People's Recommendations for Future Evaluations: Participative, Inclusive, and Reflective

Whilst the results reveal some problems in the way young people experience social impact evaluation, they also provide several possible solutions. Some of the data presented in this section derives from the analysis of the final part of the youth workshop – Part 4: Evaluation Solutions Co-design. However, it is important to note that all groups were proactively looking for solutions both to the problems identified by themselves as well as those provided in the workshop materials.

6.6.3.1 Solution 1: 'Allow us to interact and express impact in various ways'

One key point suggested by all groups was the importance of trying to find a way to make evaluations less formal. All groups supported the idea of turning the evaluation into a “hands-on” activity. Participants in Group 2 and 3 believed that some young people might find it difficult to express their feeling in written forms. For example, Kate introduced her evaluation solution by stating that:

It [the evaluation process] can be playful. It's got some colour and it's visual, something you can connect with. Instead of having to actually voice all of your thoughts, because you might not be good at that. (Group 2)

In Group 3, the problem of dyslexia among young people was considered. When presenting their persona (Workshop Part 3) they suggested that written evaluation made their character extremely anxious to the point where he could not share his views. Subsequently, they indicated that evaluation could be more interactive: “we should integrate more adaptable methods of evaluating workshops” (Group 3). Similar themes of interactivity and play were found in Group 1's discussion. Ashley proposed that the evaluation process in their club could be turned into “a game. Like traffic lights or something like that” (Group 1). Kate indicated that participation in evaluation could “be playful. It's got some colour and it's visual, something you can connect with” (Group 2). Finally, Pat's idea for improved evaluation of youth digital culture co-reaction was implementing the notions of interactivity:

I came up with an idea of an app. During the course, you can give ratings certain aspects of what you are doing, so you can like do one of the tutors or tutors overall. Another aspect could be, the content and stuff like that. However, you can change your ratings and notes during the course that way the course can adapt whilst you're doing it. (Group 2)

The use of digital technologies to evaluate youth projects was also suggested by Logan, who believed that:

The problem with printed forms is that it is expensive to print them in colour. Everything is black and white and it's just boring, at least if you do it on a tablet or an iPad or whatever, it's got to be bright, colourful and interactive. Or if my handwriting is terrible, I don't need to worry about it. (Group 1)

Ashley believed that interactive and colourful evaluations would be more likely to catch young people's attention, and as a result they would feel more focused while providing feedback. Additionally, she suggested the use of sound in the design of evaluation application: “On a

tablet, if you make a new question, you can make a new sound, like a bubble sound” (Group 1). Group 2 described a possible youth-led evaluation podcast as a way to critically examine their experience and build a community based on new friendships and “relationships while thinking about impact” (Group 2).

6.6.3.2 Solution 2: ‘Allow us to co-design the evaluation process’

There was a clear sense that participants would like to be more involved in the design of the evaluation process. The results indicate that young people would like to be informed about the feedback method, as well as engaged with its selection and design. Group 3 proposed that “letting people know [about the evaluation] at the start [of the project]” (Group 3) would provide them with a better sense of understanding and ownership of the evaluation process. Further, Group 3 suggested that in order to address young people’s needs in evaluation, they should be encouraged to create their own feedback forms. Involving participants in the evaluation planning was an idea also noted in Group 1, “They [young digital project participants] can even make their own evaluation if that was part of their task. [They could then think for themselves] What do I want to tell them?” Logan suggested that through direct participation in evaluation design young people would feel more ownership of the process:

We can have a rough set evaluation form and then they can choose a question each they want to kind of to use in their own group, that way each of them is getting to put something themselves. That way, they feel they added something. (Group 1)

Ideas for youth input into evaluation design included planning evaluation questions and designing the feedback form layout in Word or in a programming language called Scratch. Likewise, Group 3 stated: “We should get to make the forms” (Group 3). Further, the group highlighted the importance of having ongoing reflection and collaborative forms of reflection during digital workshops: “Evaluation should be integrated into the activities we take part – so people can constantly talk about subtle changes and new ideas” (Group 3). The relevance of ongoing engagement with evaluation and co-ownership of the process was highlighted by Pat. Pat’s evaluation app was proposed as a collaborative way to co-manage and respond to evaluation, “you can change your ratings and notes during the course that way the course can adapt whilst you’re doing it. So, the people [youth workers or evaluators] would have to choose to take that advice” (Group 2).

6.6.3.3 Solution 3: Provide us with more time to think critically

The notion of reflectivity was considered to be a central element of a good evaluation experience. As noted earlier, participants often feel anxious and embarrassed providing

negative feedback. Thus, while considering how best to improve their evaluation experiences, young people asked for more support from youth workers. Group 3 noted the importance of youth workers' (or those in charge of evaluation) support and their encouragement to embrace critical thinking during the evaluation process. They suggested that it is crucial "for older people to let us know it's ok to be critical and how this who oppose your views" (Group 3).

In their ideal evaluation scenario, young people would "inform their youth worker about the actual [even negative] impact ... instead of leaning into their imagination and fear of reduced funding" (Group 3). Others in the group suggested that evaluators (youth workers) should ensure that an honest and critical discussion is facilitated as a part of the evaluation, and that youth workers seek to find out why young people really "want these opportunities rather than just sharing what they want to hear" (Group 3).

The timescale and frequency of the evaluation process were repeatedly mentioned during the workshops, with the majority of participants believing that facilitating evaluation only once and at the end of a session did not provide them with enough time to critically reflect on their development or impact:

We don't get told until last minute we have to do the evaluation until [the end of the project when] they get thrown at us and we haven't had time to properly time to think about what we were going to write. (Group 3)

Participants also argued that more time should be provided for self-reflection throughout the duration of the digital project "instead of just one big evaluation at the end as many may have forgotten what they wanted to say" (Group 3). A similar thought pattern emerged in Group 1, where participants proposed that improved evaluations could provide them with several reflective points during their digital course. For example, Lyndsey referred to young people's personal developmental journeys, indicating that monitoring over a longer time frame could stimulate more in-depth analysis of young people's digital experiences:

you can use the graphics to check how happy you are up to this point and how happy you are up to this point. See if it's 60% happiness until this point (say a restaurant), but after this they are not happy - why are they not happy? (Group 1)

While reflecting on the timeline of the evaluation process, it was indicated that the proposed youth project's aims and objectives (described by participants as "success criteria") should be explored at the beginning of the course so that – according to Group 3 – it would be easier to reflect on the project's progress when filling a final evaluation form.

To better comprehend their digital workshop participation and the evaluation process, a post-evaluation communication was also considered. The results showed that young people would like to learn about possible impacts their evaluations may have on future projects. As suggested by Kate: “even seeing something like an action plan being put in place. Like: ‘this is what we’ve got from you, this is what we are going to do in the future’. Like an actual, physical plan, not just ‘we’ll work on this in the future’”.

6.6.3.4 Solution 4: Create an inclusive and safe evaluation environment

The importance of inclusive and anonymous evaluation options was highlighted by Group 1. Adam believed that the use of digital technologies (e.g. an app or an online form) in evaluations could provide participants with more privacy as “it makes it more anonymous, because they can just press a send button” (Group 3). Group 3 also suggested that evaluation processes should cater for all needs and provide young people of different intellectual abilities equal opportunities to contribute their feedback. In their storytelling exercise (Part 3), they presented a story of a talented young game-developer who, due to his dyslexia, was unable to verbalise his feedback in a traditional written format. They believed that “more adaptable” (Group 3) and inclusive modes of feedback should be integrated into evaluation processes. Kate insisted that more inclusive evaluation approaches should be adopted “to take on loads of personal opinions and find a middle ground, so then actions are being taken” (Group 2). Cath also insisted that “we should ensure that equal opportunities are in place [during evaluation process]” (Group 3).

6.7 Discussion

The results of the study reflect the critical scholarly analysis of evaluation in digital youth settings (Lemke *et al.*, 2015; Wilson & Grant, 2017) as well as youth evaluation and social impact assessment (Checkoway & Richards-Schuster, 2003; Flores, 2007). Social impact evaluation of youth digital culture co-creation projects appears to be a confusing, disempowering, and stressful process for participants (young people). The results of this study reveal three problematic areas for consideration when designing evaluations: (1) informed consent, (2) power dynamics, and (3) critical thinking.

Whilst the notion of evaluation is primarily studied in the context of young people’s participation in digital culture, this study was intended to examine the process of evaluation in both broader theoretical as well as practical community applications. Thus, to initiate a multi-stakeholder (academics, youth workers, funders, young participants) cross-disciplinary discussion on the perceptions of impact evaluation of digital youth projects, the following discussion is informed by scholarly analysis found across different disciplines (e.g. digital youth work, youth

participation, youth evaluation and social impact evaluation). Finally, to contextualise participants' views within a broader youth-led debate on the role of digital media for young people, this section is also enriched with information sourced from youth co-design and co-produced publications (e.g. 5Rights Youth Commission, 2017).

6.7.1 Informed consent

As indicated by Lockie (2001), it is yet unclear as to “whose definition of impact, an aspiration a value and fact is considered legitimate and whose is dismissed as subjective, emotional and irrelevant” in the context of youth digital projects in the United Kingdom. Young digital culture co-creation project participants might be unable to articulate the exact purpose of the evaluation data collection. Whilst most youth participants acknowledge that their feedback is essential to justify project funding, they also argue that the anxiety and pressure related to that process are barriers to fully examining and discussing its purpose (Adams & Garbutt, 2008). Questions such as “What happens after we submit our feedback?” and “How is our feedback data used?” frequently appeared during the focus group discussions.

Similar concerns with regard to young people's data protection and their digital rights have been also examined in the literature (Livingstone & Third, 2017; 5Rights Commission, 2017). Scholars (Livingstone & Third, 2017), policy makers (Council of Europe, 2018), and Scottish young people themselves (5Rights Commission, 2018) emphasise the importance of children's and young people's human rights (both offline and digital), meaningful youth-adults dialogue, appropriate guidance, and understanding in terms of personal data collection. Thus youth-designed 5Rights Framework's (2017), the Rights to Know (UNCRC Article 16, right to privacy), Article 17 (access to information from the media), and the Right to Informed and Conscious Use (UNCRC Article 13, freedom of expression), Article 15 (freedom of association), and Article 36 (protection from exploitation) (5Rights Commission, 2017, p.11) should all be particularly taken into consideration during evaluation. Lack of effective communication, equal dialogue and accessible language were outlined as additional barriers to young people's understanding of the purpose and value of social impact evaluation of digital culture co-creation projects. Participants complained that “information is often presented in a way so we cannot access as normal people” and that it “is hard for us to understand that we are supported by something, 'cause we don't know what we are being told” (Megan, Group, 3). Similar concerns were identified by the authors of the 5Rights Report, who highlighted formal language as one of the key barriers to exercising human rights within digital areas:

From the evidence we gathered across 10 regions in Scotland during the Discovering Digital World Roadshow, we are not surprised to find that 83%

of them have confessed to lying about having read the terms and conditions before signing up to a service online. Terms and conditions are often long, and packed full of legal jargons that don't mean much to most adults- let alone young people. 75% of whom answered our survey said they would read the terms and conditions, if only they were shorter and easier to read. After all, these are formal agreements between the user and the service providers. How are we supposed to understand its consequences, when it's not clear to us what we have signed? (5Rights Commission, 2017, p.25).

The ethical concerns related to participants' inability to meaningfully understand their role in the evaluation process leads to distrust and scepticism among workshop participants (Esteves *et al.*, 2012). Checkoway & Richards-Schuster (2003) argue that having participants who are uninformed as to "how the information was gathered, findings shared and about the benefits of the results" poses a significant ethical problem. Indeed, providing people with a voice with no control over the subject or communication style or tool can be defined as tokenistic approach to youth participation (Hart, 1992) and consequently youth evaluation.

6.7.2 Power Dynamics

The notion of power in evaluation processes has been examined in HCI (Wodike, Sim, & Horton, 2014), participatory design (Bossen *et al.*, 2016), digital youth (Lemke *et al.*, 2015), and social impact evaluation (Adams & Garbutt, 2008). It is agreed that the quality of social impact evaluation processes can be negatively impacted by conflicting interests, unequal power distribution and funding criteria (Adams & Garbutt, 2008; Lockie, 2001; Pant, 2015). While many youth digital projects highlight the importance of empowering young people as active and equal partners in the UK, young participants view themselves mainly as passive subjects of evaluation processes. Youth participants feel analysed, observed, measured, tested and enumerated during the evaluation stage (Checkoway & Richards-Schuster, 2003). While digital youth culture projects are often guided by the core principles of youth work (European Commission, 2018) and democratic education (Ito *et al.*, 2013) the notion of meaningful participation is primarily noted during the design and implementation stages of the digital projects. Likewise, HCI scholars often perceive young people as design partners (Fitton & Bell, 2014), active participants (Lang *et al.*, 2016) and equals (Gaye & Tanaka, 2011), but still focus on the use of evaluation tools such as surveys, focus groups, and observations (including digital surveillance, logging, and data collection) (Hall *et al.*, 2016).

Indeed, young people participating in this study reflected on the above pattern of hands-on and active digital projects participation followed by non-participatory evaluation processes. For

instance, young people participating in this study emphasised that their youth workers “want to push us to achieve to what we want to achieve” and “they always support us in making our decisions” (Group 2) throughout the duration of the project. However, the exact opposite is recorded during the evaluation stage, with several participants stating that “we are disempowered as young people. We are not taken seriously [during evaluation], so we are less likely to be able to create the change” (Group 3). Thus it can be argued that in this instance “meaningful participation” (in the context of digital youth culture co-creation) ends when the evaluation process begins. Since the feedback procedures take place mainly at the very end of projects, young participants compared their experience to a “formal exam”. Perceived as tokenistic and hierarchal procedures, evaluation processes become a way to produce evidence in line with externally imposed “quantifiable targets for attendance, participation, accreditation and recorded outcomes” (Cooper, 2018, p.26). Likewise, despite extensive research on young people’s HCI and digital design, many participatory projects still “do not explore the impact the process has on its participants, and rather focus on the process itself” (Guha *et al.*, 2010, p.199)

6.7.3 Critical thinking

The apprehension of providing honest or critical feedback was outlined as a problem by sixteen of nineteen young people participating in this study. Young participants view evaluation facilitators as “someone higher up than them”, thus “you don’t want to be honest because (...) you don’t want to ruin their project, you don’t want to upset them” (Group 1). This traditional division between social impact digital evaluation ‘experts’ and evaluation’s “human subjects” (Checkoway & Richards-Schuster, 2003) further imposes a set of institutionally and socially constructed roles (Flores, 2007) of well-behaved and grateful youth participants. When such power imbalance occurs, evaluation participants are not allowed to share their voice or critically reflect on their participatory experience (Cousins & Whitmore, 1998). Thus the lack of meaningful and balanced impact analysis amongst evaluators and digital youth projects participants results in a lack of self-reflection in the group. Subsequently, evaluation “is reduced to upward compliance” (Cooper, 2018, p.29) where young people are involuntary positioned to view the feedback process as a way of “proving the worth” of digital youth culture instead of improving it.

According to Coburn and Gormally (2017), due to the ongoing budget cuts to youth services in the United Kingdom (funding was reduced by £387m in years 2010 – 2016) and the further impact of Brexit, “the loss of resource for youth work projects takes this tipping point to a more critical level than ever before” (Coburn & Gormally, 2017). The financial pressure can be felt among young people, who view themselves as co-responsible for their clubs’ projects’ funding

streams. Young participants' fears of being critical or sounding negative is further impacted by the tense politics of funding in youth work in the United Kingdom. As indicated by Adam:

They have to have this evidence to back themselves up. If their boss comes in 'why did you give money for this people to buy a PlayStation?'. They [youth workers] have to throw down the paperwork to show that this is what happened. (Group 1).

Young people's lack of critical reflection during evaluation can also lead to lack of motivation while completing the feedback exercises, resulting in them meeting only minimal standards (Esteves *et al.*, 2012). Thus, effective youth digital culture co-creation evaluation processes should tap into young people's unique expertise to balance technocratic bias with critical social learning. To provide reliable and nuanced feedback data, critical thinking and meaningful engagement with the evaluation should be encouraged.

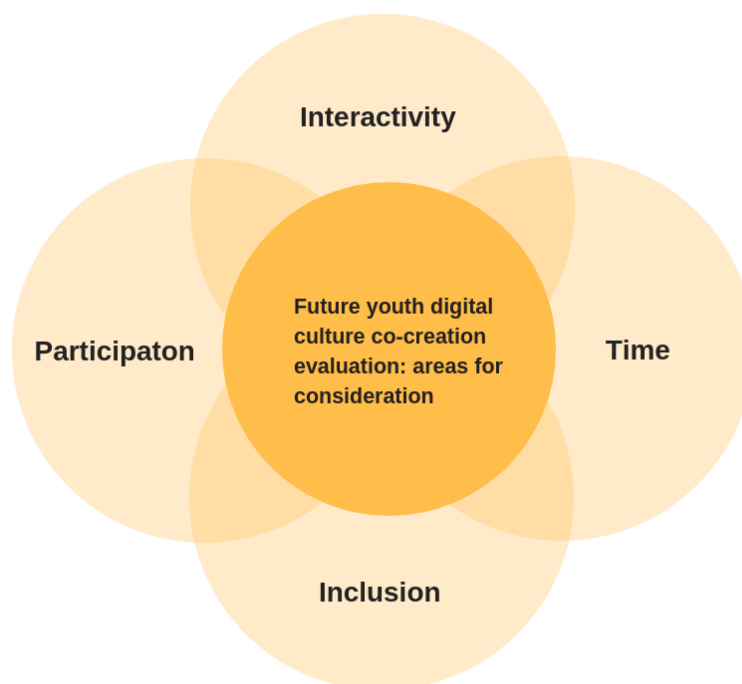
6.8 Conclusion

The aims of this study were to (1) work with young digital workshop participants as co-researchers, (2) to understand their views of social impact and social impact evaluation practice, and (3) to propose alternative and youth co-created approaches to social impact evaluation of digital-youth culture. The analysis presented here was guided by the following research questions: (RQ1) What is the current understanding of the social impact of youth digital culture co-creation? (RQ2) What are the approaches used to evaluate the social impact of digital youth culture co-creation in Scotland? (RQ3) What are the experiences and perceptions of social impact evaluation among digital youth culture co-creation projects participants and projects facilitators in Scotland? (RQ4) To what extent could digital youth practitioner-led and youth-led social impact evaluation recommendations alter current evaluation practices?

The data in this study was collected through a qualitative mixed methods approach, including three youth participatory action research workshops (YPAR), and was analysed using Thematic Data Analysis (Braun & Clarke, 2006). The evidence from this study suggests there is currently no shared understanding of the meaning and purpose of the social impact evaluation of digital youth projects. The results further indicate that there are distinctive ways young people perceive social impact and their experiences of social impact evaluation. Three problematic areas for improvement are discussed: Informed Consent, Critical Thinking, and Power Dynamics.

Finally, the analysis presented in this section provides young people’s recommendations (as identified in this study) and frames them within a wider scholarly and youth practitioners’ discourse on effective youth social impact evaluation. It is argued here that these youth-led evaluation recommendations could not only enhance the understanding of social impact evaluation of digital youth culture co-creation, but also provide actionable proposals for a more inclusive and critical approach to feedback data collection. Four key dimensions are examined in this section: (1) Interactivity, (2) Participation, (3) Inclusion, and (4) Time. (See Figure 24.)

Figure 24: Future youth digital culture co-creation evaluation: areas for consideration.



The results of this study indicate that young people would like to be more involved in the design and facilitation of evaluation of digital culture co-creation projects. Their key recommendation is to consider young people’s rights “to be involved in the decision making about the planned interventions that will affect their lives” (Vanclay, 2003, p.9). Collaborative methodologies could enable young people to create youth-friendly methods to measure social impact, and subsequently produce more realistic and truthful evaluation data (Checkoway & Richard-Schuster, 2003).

The notion of interactivity was another key youth-led recommendation for youth evaluation. Participants argued that evaluation approaches need to be interactive, responsive, and colourful so that they gain their attention. Interactivity and play are common themes examined in the literature related to digital youth culture co-creation and youth evaluation. Youth

evaluation studies encourage the use of a range of creative methods (Flores, 2007; Gawler, 2005; McCabe & Horsley, 2008). Participants insisted that creating an online game or an app would provide many participants with new ways to express their views. Connected to young people's ideas about using colours and sounds, scholars suggest that many individuals prefer to express themselves in alternative ways, such as storytelling, painting, photography, and other media (McCabe and Horsley, 2008, p.1).

Interactive and playful evaluation methods have the additional benefit of temporarily re-balancing adult-youth power dynamics and allowing for a more equal distribution of control over data gathering and interpretation. Thus, using non-traditional evaluation methods creates a more inclusive evaluation environment. According to the participants, it is essential to ensure that young people of all intellectual abilities can contribute their feedback during the evaluation process. Whilst traditional methods of evaluation (e.g. questionnaires, surveys, focus groups) often expect participants to have basic literacy or numeracy skills (McCabe & Horsley, 2008), interactive methods can provide alternative, inclusive, and youth-friendly solutions. Sabo claims that play helps to "level the playing field so that staff and youth can begin to see evaluation as something everyone can do" (2008, p.25).

Finally, it is recommended that the time-scale of evaluation is considered to avoid chasing up evaluation evidence to only meet the minimal standards (Esteves *et al.*, 2012). The analysis presented in this study suggests that participants not only need more time to reflect on the value of their experience but would also benefit from having several reflective opportunities throughout the duration of the course.

6.9 Limitations

The research reported in this study has a number of notable limitations. Theoretical saturation (Charmaz, 2006) was achieved after facilitation of three youth workshops. Through an ongoing process of theoretical sampling, data collection and data analysis process in Study 3, the researcher identified the saturation point. While the saturation point was achieved with no new theoretical codes being generated, the data collection process was ended. Nonetheless, it is important to note that the findings cannot be considered truly representative of 16- to 25-year-old digital youth project participants in Scotland. The young people involved in this study represented a group of active and engaged members of their digital youth clubs, and thus were keen to take part in the research activities. The results might have been different if a similar data collection method was used with a group of less engaged or socially disengaged group of young people. Another limitation was the youth workers' presence during the data collection process. Youth workers were coming in and out of the sessions while they were

being conducted by the researcher. Therefore, possible power dynamics associated with youth workers' presence and the possible impact this would have on young people's responses should be noted.

Chapter 7: Research Questions: Discussion

7.1 Introduction

The findings from Chapters 4, 5 and 6 are discussed in this chapter, focussing on how they contribute to existing knowledge of social impact evaluation of youth digital culture co-creation. The discussion explicitly addresses each research question and provides commentary that explains findings concomitant to these questions. The research questions are as follows:

RQ1. What is the current understanding of the social impact of youth digital culture co-creation?

RQ2. What are the approaches used to evaluate the social impact of digital youth culture co-creation in Scotland?

RQ3. What are the experiences and perceptions of social impact evaluation among digital youth culture co-creation projects participants and projects facilitators in Scotland?

RQ4. To what extent could digital youth practitioner-led and youth-led social impact evaluation recommendations alter current evaluation practices?

The discussion surrounding RQ1 draws from the interview findings presented in Chapter 4 and the focus group outcomes presented in Chapter 5. In both cases, the data was gathered from digital youth workers in Scotland. A combination of the findings in Chapter 4, 5, and 6 form the basis of discussion of RQ2, RQ3, and RQ4. To validate the novelty of these findings within the wider academic context, related literature is cited throughout. A full examination of the scholarly literary discourse of this project's topics can be found in Chapter 2.

7.2 (RQ1) Social impact of digital youth culture co-creation: young people's and youth workers' perceptions

7.2.1 Introduction

Findings relating to RQ1 are discussed in the following sections. The analysis presented here examines the way youth workers and young people perceive and define the social impact of youth digital culture co-creation in Scotland. Section 7.2.2 examines youth workers' definitions of impact. In Section 7.2.3 young people's understandings of social impact are analysed. Conclusions are presented in Section 7.2.4.

7.2.2 Youth workers' definitions of social impact

In their definitions of social impact, both young people and youth workers perceived social impact as a primarily positive outcome of a digital or non-digital community intervention. In line with the work of scholars (Esteves *et al.*, 2012; Lockie, 2001; Vanclay, 2003), change has been reported as the defining element of social impact.

According to the youth workers in this study, social impact occurs as a result of a positive “change” on individual and collective socio-political processes. The findings of Study 1 and 2 are in line with prior research that indicates that social impact might be a consequence of young people's digital participation (Bell & Davis, 2016; Lang *et al.*, 2016). For example, Bell and Davis (2016) note that through digital communication channels (such as social media) young people are able to develop their personal and social identities. Previous examples of positive social impact of youth digital culture co-creation have also included gaining employment (Lang *et al.*, 2016), learning new skills (Bell & Davis, 2016) and meeting new friends (Harvey, 2016). Similar findings have been found in this project, with youth workers often citing activities or stories of young people's achievements to define and describe the social impact of their digital youth projects. Youth workers agreed with Ito's (2013) view that digital technologies have the potential to encourage young people from “non-institutionalised groups and cultures to have voice” (p. 12). When asked about how they define social impact, youth workers would often cite a story of how digital youth projects helped young people to gain employment in a technology-related industry, to share their voices, or to gain better understanding of socio-political issues. For example, participant Kyle provided an example of a project in which young people with learning disabilities co-created a blog to reach out to their peers. Another story of social impact, contributed by participant Alison, provided an example of using technologies and digital games to develop young people's understanding of the European migration crisis. Prior research reported young people developing their creative abilities, critical thinking, and self-awareness through participation in digital projects (Ito *et al.*, 2015; Lemke *et al.*, 2015). Youth workers confirmed that – in their view – young digital co-creators might influence positive social change through participatory filmmaking, digital gaming, or arts projects. This project confirmed Ito *et al.*'s (2013) argument that accessible technologies enable creation of inclusive and participatory spaces for equal dialogue in youth work). As indicated by Alex (a youth worker), “digital let us [youth workers] change the way we work with young people, but also change the amount of influence (...) young people have over us“. Youth workers' accounts confirmed that digital youth work aims to challenge the traditional social hierarchies and promote equality (Kiviniemi & Tuominen, 2017). The results of this project indicate that young people are, to a large extent, perceived as active digital co-

creators, digital citizens, and socio-political actors (as discussed by Jenkins *et al.*, 2016) who create positive social impact in Scotland.

However, youth workers' interpretations of the real value of the "change" associated with social impact revealed levels of both (1) confusion and (2) frustration in the digital youth work field in Scotland. The results indicate that despite providing many positive examples and stories of positive social impact, youth workers were equally concerned about the negative and often unreported impacts of digital youth projects. These findings also indicate that the interpretation of social impact is often defined and controlled externally (e.g. by project funders), leaving youth workers with pre-structured – and thus limited – input into how social impact is defined in their youth projects.

Firstly, the results reveal critical and fearful attitudes towards young people's use of digital technologies. These findings link to prior studies examining the negative impacts of digital technologies on youth. For example, the problems of miscommunication and technological addiction (Aiken, 2016) were commonly cited by youth workers. Debbie, a youth worker, argued that while using certain technologies, body language and tone of voice can be lost and messages "misconstrued" or "misread". The negative social impacts of digital youth culture in Scotland were further reflected in discussions that questioned the soundness of online information. The problem of misinformation has been examined by scholars such as Hemsley *et al.* (2018). Scottish youth workers worry about some of the negative impacts of digital technologies on young people such as the psychological influence of social media (Anderson & Jiang, 2018; Mills, 2016), online gaming (Lopez-Fernandez, Kuss, Pontes, & Griffiths, 2016) and excessive "screen time" (Twenge & Campbell, 2018). Karel, one of the youth workers, argued that young people spend too much time on social media. Reflecting on his experiences of digital youth work, he stated:

four years down the line I find the way that the digital culture has gone with social media in particular is really, I find it really negative to the point that even though this is my sort of bread and butter so to speak, I would happily take their devices away from them [young people] and do on occasion.
(Karel)

The results of this project also indicate that youth workers often question their own definitions of positive social impact of youth digital projects. As documented in Study 1, interviews would often start with youth workers being very optimistic about the social value of digital technologies in youth work and people's lives. However, in line with prior scholarly analysis, these positive reflections would often be examined in a more critical light as the interviews

progressed and the interviewees became more comfortable sharing. Youth workers questioned the empowering effects of digital media on young people (Buccieri & Molleson, 2015; Herring, 2008) and debated the prospect of young people's "illusionary freedom and autonomy" online (Herring, 2008, p. 73).

Secondly, when examining their definition of social impact, youth workers were frustrated about their lack of control over the interpretation of their projects' social value. As reported in Study 1 and Study 2, youth workers view social impact as a "regulated sets of figures". As indicated by Sam:

... social impact probably comes within that but when you're doing your evaluation I guess your primary aim is to make sure that you've done what you've said you're going to do to the funder. So I guess there is a lot of pressure in terms of getting more funding to keep the project going or something like that. (Sam)

These findings are particularly important because they indicate that in spite of youth workers' positive or negative views of social impact of digital youth projects in Scotland, the official definitions of impact might be regulated and (some argue) censored by funding organisations. As argued by one of the youth workers, Rowan:

We'll literally write that [social impact evaluation report] up in a way that looks good, but we don't ever talk about the failures and if we talked about the failures, the failures would be able to then identify and improve. We don't talk about the time when we hired the wrong person or we wasted the money on that.

Subsequently, it could be argued that the official interpretation of social impact youth digital projects might not provide an accurate representation of young people's digital experiences. Such negative feelings associated with the quantification and external regulation of social impact by youth workers (not digital youth workers) have also been discussed in the literature (Cooper, 2018, De St Croix, 2018). De St Croix reports that pre-agreed project outcomes – and thus controlled definitions of social impact – serve as managerial and surveillance tools for measuring youth workers' accountabilities. Cooper (2018) also indicates that pre-agreed and quantifiable indicators of impact serve as a control mechanism that imposes restrictions on authenticity. Indeed, the youth workers in this project believe that real social impact can be often seen or sensed, but that it is difficult to capture or quantify. Thus, external coordination of social impact might not only provide its inauthentic representation, but also negatively affect

youth workers' relationships with the young people they aim to support. According to De St Croix (2018), some youth workers in England might view impact as "numbers":

... 'numbers' operate as threat, as resignation, and as pride. Numbers stand in for the meeting of targets, and also for the scale of workers' and young people's achievements. Numbers are 'done' and 'reached'; they also seem to have an agency of their own. (2018, p. 428).

Similar attitudes to quantifiable definitions of social impact were found in Study 1 and Study 2. For example, Carl argued that funders want to see social impact as "measured results for their work". Blake emphasised his frustration related to social impact bureaucracy and called it "a system of control". These findings support Muller's (2018) view, which describes excessive use of metrics-driven evaluation as tyrannical, where social impact is viewed as a reward-and-punishment mechanism. Muller argues that "while there are vested interests at stake that sometimes lead from reasonable metrics to metric madness, the cause lies as much in the uncritical adoption of metric ideology" (2018, p.9).

The above analysis clearly demonstrates that youth workers' perceptions of social impact are complex. Firstly, the results suggest that digital youth workers in Scotland aim to balance their interpretations of social impact of digital youth between the positive and negative. It might be argued that youth workers found themselves balancing between the two existing myths discussed by scholars such as Livingstone and Third (2017) and Helsper (2016). The two myths indicate that young people are often viewed in two categories, either as "the digital pioneers" or "the innocent victims" (2017, p. 658). Helsper (2016) reports that these two narratives drive most policy and research interventions.

Nonetheless, it is also evident that youth workers frame their understanding of social impact of digital youth projects in accordance with what is expected from them – both from the funders and the digital youth work sector overall. As reported by the European Commission, youth workers are currently expected to support, enable, and empower young people to take active roles in shaping their society and their digital futures (European Commission, 2018; Harvey, 2016). As reported in the recommendations on digital youth published by the European Council, youth workers require "an agile mind-set, being willing to try new things and learn from both success and failure, and be supported to do so" (European Commission, 2018, p. 7). The external pressure to willingly become creative digital enthusiasts might explain why, in this project, youth workers began their accounts by outlining the positive social impact of digital youth projects, only to later follow them up with examples of negative social impact.

Another possible explanation of why the youth workers progressively changed their views about the social impact during the interviews in Study 1 from positive to negative might be their levels of compliance with external expectations (from funders or government bodies, for example) of how social impact should be defined. As illustrated in Study 1, youth workers would only present their negative views of social impact once they had outlined the positive and “official industry accepted” ones. On the contrary, in Study 2, during the second part of the focus group, youth workers primarily complained about issues related to digital youth projects. Youth workers might not feel confident enough or encouraged to critically assess how they view social impact. This is something that has been observed by Cooper (2018), who stated that English youth workers report to have “numbers drilled in their heads” as they navigate their way around authoritarian definitions of social impact, which she describes as “the terrors of performativity” (2018, p.38). It can be suggested that because digital youth work has become colonised by a technocratic language obsessed by “outcomes”, “outputs”, “impacts”, “targets”, “actions plans”, “cost improvements”, and “best practices” (Fraser, 2015, p. 5), youth workers have no choice but to embrace the external investors’ rhetoric and interpretations of social impact.

7.2.3 Young people’s understandings of social impact

When reflecting on their personal development during digital and non-digital youth projects, young people focused primarily on learning new skills, gaining confidence, developing creative thinking, and networking. For example, Megan stated that, “Even if that’s just making friends or meeting people in the street – it generally has a positive impact.” The development of these “soft skills” is often used in the literature as an indicator of social impact in the context of youth development in traditional (Checkoway, 2011; Head, 2011) and digital contexts (Ito *et al.*, 2013). Checkoway argues that youth participatory projects should aim to enhance young people’s “knowledge and skills; or their academic achievement or performance in school; or their sense of direction, self-confidence, social connectedness, and psychosocial well-being; or their critical thinking, public speaking, and civic competencies” (2011, p.341). Similarly, in Ito *et al.*’s view, out-of-school and digital youth participatory projects should strive to empower young people to become creative and conscientious thinkers and doers.

Young people's accounts revealed a mix of interpretations of social impact in terms of its scale and purpose. Some defined social impact as the process of collective meaning-making. For example, Adam stated that:

social impact is about community. You need to get a bunch of people. You can be the first people getting that revelations but it's not gonna make much of an impact unless you convince other people.

Cathy, a young person, provided a more illustrative description of why, in her view, social impact should always be considered as a collective phenomenon:

If I was cooking a meal and I messed up the ingredients, this would have an impact on me because I'm the one cooking it, but it would also have an impact on others eating it. They would not enjoy it as much. Things like that could have more impact on me, but people would still feel the event.

The results of this project also indicate that young people perceive social impact as something that does not directly belong to them. In their views, social impact is something that is externally managed and defined by adults in authority, such as youth workers, funders, teachers, or government bodies. For instance, Roz said that "I'm not sure about the meaning or the purpose (of social impact), because it depends on what the youth worker is doing or how they are doing it". Other young people referred to the process of evaluation and social impact interpretation as something that is "done to them". This finding is consistent with several studies that explore the problematic nature of both the process and impact of the tokenistic nature of youth participatory project and of youth evaluation (Checkoway & Richards, 2003). Middleton argues that because youth participation is increasingly becoming a trend in the United Kingdom, there has been an increasing number of initiatives "asking young people for their opinions but failing to ask enough young people to make a significant impact, or failing to act upon their opinions or take them very seriously" (Middleton, 2014). Thus, it might be possible that digital youth workers need to balance between empowering young people – but not too much – lest they notice that the interpretation of social impact does not reflect their authentic experiences. It is evident also that, in line with Checkoway and Richards's (2003) research, young participants often feel like they are observed, measured, and enumerated subjects, who are passively unaware of how findings are being distributed and if/how they could/would benefit from the results. Indeed, Cath argued that quantified social impact "puts us as numbers, when we are people and lives are being changed. But when it's seen as data, cause we're data. Sometimes it's dehumanising us – it feels like it's something that isn't that important, but it's just brought down to numbers".

Despite their limited ownership and control over how social impact is defined and reported, young people view themselves as co-responsible for producing "the right type of impact". In their views, positive social impact is what they feel is normally expected from them at the end of a project. Firstly, the results of the study indicate that, in young people's views, it is desirable

for young people to provide positive feedback, which consequently means either lying or withholding information about their negative digital experiences. For example, Pat admitted to not suggesting any project improvements, despite having ideas. Liam provided an example of a time when he thought that his experience was terrible, but admitted to rating it higher than it deserved. When explaining their reasoning behind these decisions to primarily provide positive examples of social impact, young people indicated that such socially conforming behaviour is what is expected from them in both informal and formal education settings. Indeed, De St Croix argues that British youth work evaluation systems favour young people “who are willing to be ‘worked on’, happy to answer personal questions, and able to demonstrate a logical and incremental ‘improvement’ in behaviour or attitudes over time” (2018, p.430). Such results might mean that young people feel under obligation to adopt funders’ or youth workers’ criteria of success when reporting impact. Subsequently, it seems likely that the report outcomes consist of inauthentic claims.

Secondly, it appears that young people feel co-responsible for a project’s successful delivery and its sustained funding, as they appeared to be very knowledgeable about youth work funding criteria and its associated dynamics.

- “it’s really difficult to get funding” (Tim)
- “If you have got the funding, you gonna edit and change it [social impact] as much as possible - make it look as good as you can, use keywords for funding” (Ashley)
- “Funders want to see it on paper. Even if you show them video proof, photo proof - all of it - that still doesn’t make a difference. They want to see [us] as graphs and numbers” (Adam)

These statements indicate that young people are informed about the wider control structure involved in impact interpretation. Indeed, such young people’s concerns in the literature. For instance, De St Croix (2018) indicates that due to funding criteria and funding cuts in the United Kingdom’s youth work provision, youth clubs find themselves in the position where they need to prove their competitive value. Thus, she suggests that young people are viewed as possible “investment opportunities” (2018, p.429). It is also possible that young people frame their understanding of social impact as they would the positive results of an exam. Indeed, young people criticise social impact evaluation for being an “exam like” procedure where the right impact needs to be reported. This might be due to the formal nature of social impact evaluation. (Young people reported filling in written forms, and answering questionnaires.) Similar problems have been outlined by Zimmerman, who worked with a group of young people to co-create and then co-evaluate an out-of-school programme. Zimmerman *et al.* provided a list of young people’s statements such as “Youth want to talk more and write less”

and “There are too many handouts—worksheets make the youth feel like they are in school” (2011, p.434). Young people’s concerns about “getting it right” with regards to social impact description are also reflected in the prior work of social impact assessment (SIA) scholars who argue that there is an existing pressure to evidence proofs of impact instead of trying to understand them (Belfiore & Bennett, 2007).

The importance of improving young people’s capacity to understand and own social impact was highlighted by authors such as Gawler (2005) and Pant (2005). Gawler argues that youth-focused evaluation needs to be transparent in its aims and results, so that social impact can be shared with young participants (2005). Similarly, Pant argues that traditional evaluation power dynamics must be addressed, and evaluation results should be communicated in different ways responding to end users’ needs (2005).

The above analysis provides insights into how young people in Scotland manage their understandings of social impact of digital youth projects. It is clear that “the young people’s voices are invariably inflected through both the facilitator’s and the funders’ understandings of what they should say” about social impact (Blum-Ross, 2015, p.318). The findings also reveal that, while young people might feel that digital projects provide them with opportunities to gain new skills, enhance their social connectedness and have a voice, it might also be true that their voice is muted with the beginning of the evaluation process. Young people’s definitions are definitely influenced by multiple actors (e.g. peers, social expectations). Such emotionally filtered definitions of social impact form a wider problematic narrative that might lead to the formation of “a particular kind of critical discourse [is legitimised] as the official critical discourse” (Blum-Ross, 2015, p.318). Nonetheless, whilst some of the findings align with the existing literature, it is also evident that there is limited prior analysis of young people’s perceptions of social impact in the context of digital youth projects.

7.2.4 Conclusion

Findings relating to RQ1 were discussed in the above section. The analysis presented here examined the way youth workers and young people perceive and define social impact of youth digital culture co-creation in Scotland. The analysis was presented in two subsections. Section 7.2.1 provided findings related to youth workers’ understandings of impact. Section 7.2.2 examined people’s understandings of social impact.

7.3 (RQ2) Approaches used to evaluate the social impact of digital youth culture co-creation in Scotland

7.3.1 Introduction

Findings relating to RQ2 are discussed in the following sections. These describe the approaches currently utilised to evaluate the social impact of digital youth culture in Scotland. The findings presented here are framed within a wider scholarly discussion on the measurement of digital youth projects. The results of this study indicate that digital youth projects are primarily evaluated with the use of traditional tools such as surveys, case studies, or/and observation. The approaches identified can be themed into three groups: (1) surveys, (2) observations and conversations, and (3) creative and participatory tools.

7.3.2 Surveys

The findings of this project indicate that traditional evaluation tools (e.g. surveys, questionnaires) are the most commonly used tools for evaluating digital youth projects in Scotland. In line with existing research, surveys are viewed as “a practical and cost-effective method of collecting and analysing large amounts of easily anonymisable data” (Hall, 2016, p.311). Surveys serve as reliable and safe solutions while analysing the outcome of digital youth projects (Hall, 2016). According to the youth workers participating in this study, questionnaires are often an evaluation approach of choice by funding providers. Such questionnaires are primarily designed in accordance with national framework criteria for youth development or funders’ requirements. For example, Ryan talked about how questionnaires helped him to understand the value of his digital project:

I really think the surveys worked because you get a clear quantitative, really direct aspect. I think there were lower scores on things like increased chances of employability. Now I can see why someone would put a low score for that, that makes sense.

Consequently, they provide a useful instrument to ensure that the right type of evidence is being collected for funders. The results indicate that surveys are perceived as the “safe evaluation option”.

Young people also described surveys as the most commonly used evaluation tool. Young people view evaluation surveys as essential and often useful elements of their participation in Scotland. To a certain extent, young people do not seem to mind completing surveys to provide feedback about their digital project experiences. For example, Roz said that his youth club regularly sends out evaluation surveys, which she appreciates, because they make her

feel “validated”. Roz indicated that he likes evaluations even though they are officially considered as boring. Liam argued that surveys allow for collection of objective data that might improve wider youth work practices. He stated that quantified feedback allows for effective replication of “[positive] change in other places” (Liam).

The above findings align with the pre-1970s positivist evaluation paradigm (discussed in Chapter 2), that assumed that evaluation tools such as surveys can produce “objective knowledge about the efficiency of social programs” (Bossen *et al.*, 2016, p.3). There are several advantages of surveys described in the literature, both in social research (Bryman, 2016) and in youth digital participation (Quinlan, 2016). Similarly to this project’s participants, Bryman suggests that surveys might provide quick and bias-free tools for data collection. In addition, according to Bryman (2016), surveys take less time and are cheaper to administer than, for example, interviews. Indeed, recent surveys have been carried out to investigate young people’s attitudes towards digital making (defined in the report as “learning about technology through making with it”) throughout the United Kingdom (Quinlan, 2016).

Nonetheless, the disadvantages of surveys were also outlined in this project. Firstly, young people argued that the process of filling out forms often reminds them of their negative experiences associated with the formal educational system and its marking criteria. When co-creating scenarios of a young person’s negative experience of social impact evaluation in Study 3, “filling in forms” was identified as the most stressful and boring procedure. For example, Logan said that “everything is black and white and it’s just boring”. Another disadvantage of surveys was highlighted by Group 3, who complained that the instructions are “long winded” and difficult to understand. A similar problem was presented by Group 2, where Sandra said that:

we had forms with questions that should not be asked, for example: “Do you think your family is in poverty?”, “Are you from LGBTQ community” - when they are 10 years old - even if they are [in poverty or from LGBTQ community] , they [young people] won’t admit it as the form has their name, their address and their post-code on it.

In Group 3, Paige asked: “Sometimes they [evaluators] put some very complex questions in the 1 to 10 scale and it’s like, what if I can’t describe it in 1 to 10? These positives and negatives it’s something I can’t put a number on it”.

These findings support previous research that indicates that surveys might not serve as effective tools for youth participation evaluation and digital youth participation. Stevens *et al.* (2016) utilised surveys to learn about socially disadvantaged young people’s social media

habits and found that “a significant minority of participants failed to complete the social media use item on the pre-interview survey” (Stevens *et al.*, 2016, p.15). Similar “respondent fatigue” associated with surveys (Bryman, 2016, p.224) was noted in De St Croix’s (2018) study. De St Croix reports that young people in the United Kingdom find surveys “tedious and intrusive” and are often reluctant or even refuse to fill them in (2018, p. 435).

The limitations of surveys were also outlined by youth workers. In their accounts, youth workers sceptically referred to the process of introducing survey-based evaluation to young people as “pulling out bits of paper” (Carl). Karel complained that “sometimes I think if you put out a survey, it's the duller part of the project. Sometimes you don't have everybody turning up because they know it's the survey week.” These observations might suggest that surveys (or any type of paperwork) might work to undermine youth workers’ relationships with young people. This is consistent with prior research by De St Croix (2018), who reported this striking example of youth workers’ experiences with survey-based evaluation:

You sit down with a kid and you have a really meaningful conversation with them and you're like, 'Now can you fill in this sheet and tell me-', it's like it completely undermines everything that you've just done ... 'You've only just had that conversation with me about my life and the different issues I've got at the moment so you can record it? So it looks like you're a decent youth worker? Is that it?' It's, yeah, bullshit (2018, p.425).

Similarly to young people, youth workers complained about the technocratic and non-inclusive rationality of surveys, which in their view serve as tools to “instrument and engineer people (and nature)” (Lockie, 2001, p.278). Youth workers agree with scholars such as Cooper (2018) and Flores (2007) that pre-structured and administration-based evaluation formats might not intimidate young people, but they also do not provide holistic evidence of young people’s experiences. For example, Sandy said that:

sometimes a young person might never voice that and even if you do survey them, you're not going to get that kind of impact, so it's very difficult. So actually, you need to have that relationship with a young person to be able to follow up like that.

It is clear that both groups (youth workers and young participants) view questionnaires as a necessary formality guided by pre-agreed indicators. Nonetheless, there is a sense that currently they have no choice but to use these surveys in order to sustain their funding. Such a dilemma is also analysed by De St Croix who indicates that while “‘paperwork’ and numbers-based monitoring were widely criticised, they were simultaneously taken for granted,

normalised, and difficult to avoid” (2018, p.426). It seems that youth workers in Scotland struggle with a similar ‘survey paradox’ when assessing the impact of their digital projects.

7.3.3 Observations and conversations

Whilst least cited in the project, forms of observation and conversations (such as case studies) are also used in the context of evaluating Scotland’s digital youth projects. Youth workers tend not to refer to these activities as evaluation methods *per se*. However, the analysis of their accounts indicates that youth workers frame their understanding of social impact and youth development while discussing and observing their development. Stories of social impact reported in this project provide some of the richest descriptions of how digital youth projects affect young people’s development and social connectedness. As indicated by Debbie:

just sitting talking with another young person about how they went to undertake their enterprise journey over a ten, twelve-week period, gave me an idea of what it is that I would need to do.

As reported earlier (in Study1 and Study 2) youth workers often perceive social impact as something intangible that can be seen or sensed but not easily captured. Indeed, prior research emphasises the complex nature and definition of social impact (Lockie, 2001; Vanclay, 2003). In his definition of social impact, Vanclay proposes ten different contexts and purposes of social impact (also analysed in Chapter 2). Lockie describes social impact as complex and “a subjective social phenomena” and debates whether or not social impact can really be captured or quantified (2001, p.279). While trying to negotiate their understanding of social impact of digital youth projects, youth workers often return to their observations of and conversations with young people. They create and share “stories of impact”. Debbie told a story of a young girl who managed to become a professional DJ as result of a digital youth project. Max provided a vivid description of a group of young digital filmmakers who had an opportunity to screen their documentary film at the Scottish parliament to raise awareness of the issue they cared about. These stories often include a detailed description of what – in the view of the youth workers – young people learned and gained as a result of their digital engagement. The importance of genuine conversation between youth workers and young people was also outline by the young people in this project, who argued that “evaluation should be integrated into the activities we take part – so people can constantly talk about subtle changes and new ideas” (Group 3). As reported in Study 3, young people feel that their voice is often unheard in the evaluation.

7.3.4 Participatory and creative tools

A wide range of creative and innovative methods to evaluate impact was identified and used. The analysis revealed that the creative methods can be divided into the following three categories: (1) digital, (2) mixed (using digital and offline methods), and (3) offline. These categories can be further examined in the context of if and how they engage young people in the evaluation process. The examination of the tools is discussed below.

Firstly, this project found that youth workers are keen to translate traditional surveys into more engaging and stimulating modes of evaluation. Digital quizzes have been described as a (more) effective way to capture social impact. For example, Alex shared his experience of using the STAR application (designed by Creative Scotland) to evaluate young people's creative learning. According to Alex, the purpose of the STAR application was to unify impact measurement across different youth projects sponsored by Creative Scotland. In his view, due to its interactive design and integrated database, STAR provides young participants with a digital, and thus, enhanced survey experience. STAR's "buzzfeed-like quiz" (Alex) can be used on a digital device (smartphone, tablet). At the time of this interview (2017), the STAR application's design did not provide opportunities for young people to add original content; this would limit their participation. Different types of digital quizzes (such as Kahoot and Mentor Me) were used by Debbie, who said that:

So we'll have a set of questions that we want answered. And we'll have maybe a group of twenty, thirty, forty-odd young people that we want to engage with in terms of certain youth work, or youth-led social action questions or something, and about engaging them with anonymity, they vote with their voting pad so we can get ideas that way.

Debbie's youth club integrated some of the most creative and experimental evaluation methods, which stood out in relation to the rest of the youth workers participating in this project. For example, in addition to digital quizzes, Debbie described their use of digital gaming to analyse and understand young people's development. It is possible that Debbie perceived young people similarly to Ito *et al.* (2009), who define youth as active agents and co-creators of digital culture. Thus, to capture their social impact, Debbie decided to move away from traditional evaluation formats, and create participatory and digitally-mediated experiences of evaluation.

Similar emphasis on collective analysis of impact and its co-creation was outlined by youth workers who used participatory digital media formats (e.g. film, photography, poster design, comic design, online blogs) in their evaluations. Several youth workers (Max, Gabriel, Karel,

Sam, Blake) agreed that participatory videos allow young people to take ownership of the evaluation narratives. These findings correlate with the work of scholars (Cooper, 2018; Sawhney, 2007). Cooper suggests that using participatory videos or photography enhances collaborative knowledge, providing young people with opportunities to connect with “[digital] artefacts that become the focus of facilitated reflective dialogue” (2018, p.144). The importance of co-created knowledge and young people's agency was also emphasised by Sawhney, who argues that participatory media production might empower young people to act as “cultural agents” interpreting, reflecting, and artfully re-engaging in their world” (2009, p.302).

The social impact of digital youth projects in Scotland is also evaluated by the use of creative, non-digital methods. Results of this project indicate that youth workers and young people believe that creative and “hands-on” methods help them to turn what was often described as a boring evaluation experience into an exciting activity. One of the young people referred to her favourite evaluation tools called “bin, sock, suitcase” as an easy and accessible activity. Megan emphasises that the visual “bin, sock, suitcase” method allows young people to write about “Something you [a young person] would get rid of – that is the bin. Something you would change – that’s the sock. Something you would take away from the workshop.” Megan argued that the “bin, sock, suitcase” is simple, fun, and provides young people with a semi-structured document where they can use their own words to describe their experiences. One young person, Amelia, liked her experience of having physical movement involved in project evaluation. She described an example of a workshop where young people were provided with an incomplete sentence and several answers, each answer representing a different area in the room. Young people were asked to choose their answers, which Amelia described as something “a wee bit different” and enjoyable.

A similar method was described by Max, a youth worker, who said:

We tended to do probably more informal evaluations so we would do things like, at the end of the day ask people to get into a position that showed how they felt about how the session had gone and then we'd take a walk of the whole room and so like the higher up you are the better it went, or the lower you know, things like that, so a slightly more informal type of things, or you know just get them to like write on a post-it what's been the best thing about today and sometimes it would be banana!

Max argued that playful evaluation activities are more suited to digital youth projects due to their interactive and participatory nature. The benefits of implementing play into evaluation

were previously examined by McCabe and Horsley (2008), who argued that playful evaluation might enrich youth participation and turn it into “an experience which is enjoyable by all those participating in the process, rather than being something alien and imposed” (McCabe & Horsley, 2008, p.1). Indeed, several youth workers (Blake, Carl, Debbie, Karel, Max, Sam) agreed that through interactive means, such as play and movement, young people can express themselves in various forms (e.g. art, performance) and thus provide rich(er) evaluation insights about their experiences. These findings align with Flores’s (2007) analysis, which states that playful and participatory methods enhance the process of knowledge co-creation and serendipity in evaluation. Flores argues against top-down approaches to youth evaluation:

Often prevent us from asking questions, from being curious, from experimenting and perhaps even from developing. Play helps to create an environment in which it is OK not to know.

The importance of collective learning was also a focus in the scholarly discourse. Cooper’s (2018) analysis indicates that participatory evaluation methods and “collective dialogues” (p. 105) allow all project stakeholders to form a shared understanding about the purpose of the project and its possible outcomes.

However, it is indicated that such creative and participatory evaluation methods are also associated with challenges. Firstly, the practical implications such as “proving projects’ worth” to their investors was outlined. As stated by some of the young people Study 3:

Funders want to see it [social impact] on paper. Even if you show them video proof, photo proof - all of it - that still doesn’t make a difference. They want to see [us] as graphs and numbers.

This type of quantified and measurable impact – in the literature referred to as “the real picture” (Cooper, 2018, p.37) and “hard numbers” (Muller, 2018) – might indeed be difficult to obtain while facilitating participatory and playful evaluation. For example, problems of validity of young people’s digitally mediated productions were debated by one of the youth workers, Max. Max argued that, when using participatory video techniques to evaluate, she noticed that “as soon as you turn a camera on somebody or sort of warning them you’re putting a filter down, there’s things they won’t say.” Similar problems are outlined by Gawler, who writes about the possible challenges associated with participatory evaluation, such as ensuring that results remain evidence-based or what he describes as “getting carried away with the participatory techniques” (2005, p.2). Finally, the challenging aspects of facilitation of meaningful engagement in participatory evaluation are outlined by Checkoway and Richards-Schuster

(2003). In their view, young people might not meaningfully engage in the participatory evaluation process if they “themselves accept the adultist notion of adult control over research, or do not view themselves as a group that could organize their own project, or try to take action but lack legitimacy in the larger society” (Checkoway & Richards-Schuster, 2003, p.30). Thus, it is argued that both pre-existing power dynamics and opportunities and challenges of the participatory approach to evaluation should be noted by youth workers (Checkoway & Richards-Schuster, 2003; Cooper, 2018; Gawler, 2005).

7.3.5 Conclusion

Findings related to RQ2 were discussed in the above section. The analysis presented here outlined approaches currently utilised to evaluate the social impact of digital youth culture in Scotland. The following three forms of evaluation approach were examined: (1) surveys, (2) observations and conversations, and (3) creative and participatory tools.

7.4 (RQ3) Experiences and perceptions of social impact evaluation in Scotland

7.4.1 Introduction

The findings relating to RQ3 are discussed in the following section. These relate to young people’s and youth workers’ experiences of participating in impact evaluations of digital youth projects in Scotland. The results of this project reveal three themes in how youth workers and young people experience evaluation of digital youth projects:

1. Uncertainty about the meaning of evaluation of digital youth projects
2. Emphasis on telling only positive stories of evaluation
3. The problem of disempowerment during the evaluation of digital youth projects

The contribution of this project’s findings is the examination of the process of evaluation in both broader theoretical terms as well as in practical community applications. Thus, the discussion aims to initiate a multi-stakeholder (academics, youth workers, funders, young participants) cross-disciplinary discussion of the perceptions of impact evaluation of digital youth projects. The analysis is informed with scholarly analysis found across different disciplines (e.g. digital youth work, youth participation, youth evaluation, and social impact evaluation).

7.4.2 Uncertainty about the meaning of evaluation of youth digital projects

The results of this project correlate with previous studies that assert that examining the social value of the latest digital developments has become increasingly difficult, both for researchers (Mackrill & Ebsen, 2017) and for youth workers (Kiviniemi & Tuominen, 2017). It is evident that traditional youth work, defined as a fast-changing practice of “continuous analysis, choice, judgment decision making” (Batsleer & Davies, 2010, p. 5) has become even more complex due to the expansion and impressiveness of the digital age. As indicated by one the youth workers: “I don't think that they [youth workers] really feel confident to know how to measure it [impact]... in a lot of cases the organisation knows what it is they're looking for” (Alex). Similar findings have been reported by Wilson & Grant (2017) who suggested that youth workers struggle to define and articulate the possible social impacts of the digital side of their youth projects. The lack of a consistent definition of the evaluation of digital youth work, as presented in this thesis, was also documented by Wilson and Grant:

What is the threshold for a young person to be classed as digitally literate?
What does success look like and once again is this the correct aspiration?
Are digital skills an outcome in themselves or purely a means to an end, a process by which to gain other skills or qualities and ultimately, long-term improvements in well-being? (2017, p.57)

The results of this project also provided evidence that the definition of the term “digital” varies significantly in the digital youth sector. Because the use of technology is an expectation in youth work, some youth projects tick “the digital box” without providing young people with a meaningful experience. For example, Carla, a youth worker, indicated that:

... a lot of youth projects just maybe provide an X-box or a computer and let the young people loose on it. They wouldn't really be doing any dedicated work to develop the young peoples' skills on it, but they sort of feel they've ticked a digital box because they've just got an X-box sitting in the corner.

Carla additionally suggested that often digital technologies are used solely for communication between workers and young people, and therefore might not be adding “anything innovative and exciting” to projects. Whilst funding for digital youth participation has become more common in the UK, many projects are thought to add “digital elements” that do not add value to their applications. Rowan, a youth worker, described the “the digital bit” as a poorly defined element among digital youth workers. He complained that the digital element is often treated as “a marginalised lump rather than this thing that kind of goes in between everything we do.”

Further, he discussed the lack of context for many of the digital youth initiatives: “I just got that impression that [youth organisations] bought kit – they got *some kit* – and they’ll give you some random training.”

To solve the consistent under-rating of digital impact, youth workers called for a unifying approach to measure digital youth projects in Scotland. These findings fit into a wider debate on the need for “standardized, multidimensional [set of measures] of digital literacy” (Chetty *et al.*, 2018). Youth workers are aware of and consider the following theoretical concepts in their work: digital literacy (Covello, 2010), basic digital skills (Mcgillivray, Jenkins, & Mamattah, 2017) and digital competency (Gutiérrez & Tyner, 2012). However, the results of this project also indicate that youth workers in Scotland are aware that the practical implications of such theoretical concepts are limited. One youth worker, Carl, argued that digital education frameworks are being continually updated and improved, and thus it is difficult to stay informed. Similar problems were identified in literature (Harvey, 2016; Wilson & Grant, 2017). Harvey reported that while it is evident that “youth workers need to live up to their media-educational responsibilities” (2016, p.16), they find it difficult to identify and implement digital education recommendations into their work. Wilson and Grant (2017) reported on the use of basic digital skills for evaluation of youth digital inclusion projects. Their analysis revealed that “standard methods of digital skills measurement are not always appropriate and may not capture the varied types of [young people’s] progression” (Wilson & Grant, 2018, p. 4). In line with Lemke *et al.*’s analysis, it is possible that the interactive, multi-layered and unpredictable nature of digital youth projects often leaves project facilitators unable to decide which youth developmental contexts of their work should be evaluated (2015).

The findings of this project also indicate that young people struggle to articulate the exact purpose of the evaluation data collection. Whilst most young people acknowledge that their feedback is essential to justifying the project’s funding, they also argue that the related anxiety and pressures of that process are barriers to fully examining and discussing its purpose. Questions such as “What happens after we submit our feedback?” and “How is our feedback used?” frequently appeared during studies. According to scholars (Esteves *et al.*, 2012), the inability to meaningfully participate and understand their role in the evaluation process leads to distrust and scepticism among evaluation participants. Checkoway & Richards-Schuster (2003) argue that if young impact evaluation participants are uninformed as to how the information was gathered, how findings were shared, and how they might benefit from the results, then there is an ethical problem (Gawler, 2005). Finally, young people’s lack of awareness of the meaning of impact of evaluation has also been associated with a lack of

motivation and perception of evaluation process as “a burden” (Hall & Hume, 2011) resulting in them meeting only minimal standards.

7.4.3 The emphasis on telling only positive stories of evaluation

The notion of power in the evaluation process has been examined in HCI (Wodike *et al.*, 2014), participatory design (Bossen *et al.*, 2016), digital youth (Lemke *et al.*, 2015), and social impact evaluation (Lockie, 2001). It is agreed that the quality of social impact evaluation process can be negatively impacted by conflicting interests, unequal power distribution and funding criteria (Lockie, 2001; Pant, 2015). While many youth digital projects highlight the importance of empowering young people as active and equal partners in the context of social of digital youth projects in Scotland, young participants view themselves mainly as passive subjects in the evaluation process. Apprehension around providing honest or critical feedback was outlined as problematic by most young people participating in this study. Young participants view evaluation facilitators as “someone higher up than them”, thus “you don’t want to be honest because ... you don’t want to ruin their project, you don’t want to upset them” (Pat). Subsequently, as discussed earlier in this chapter, young people often feel pressured to submit only positive feedback.

The problematic trend of submitting “overwhelmingly positive” workshop feedback has also been noted in computing (van der Velden, 2016) and evaluation literature (Checkoway & Richards, 2003; Flores, 2007). Checkoway and Richards-Schuster argue that the positivist division between evaluation “experts” and “human subjects” imposes a set of institutionally and socially constructed roles – roles which Flores (2007) describes as well-behaved and grateful youth participants.

Both young people and youth workers feel obliged to adopt the technocratic rationality of the evaluation process, which was often imposed by external funding bodies. As one of the youth workers complained, “We’re not allowed to fail [provide negative social impact], everything’s got to be bloody brilliant and that’s it” (Kyle). Kyle’s statement clearly outlines the power imbalance between funders and youth workers covered by prior scholars (Cooper, 2018; De St Croix, 2018). De St Croix indicates that not complying with the externally imposed narrative of positive impact reinforces the discourse of “youth workers as good and impactful, or bad and resistant” (2018, p.429). Cooper suggests that the current fixation on “target culture” is a source of internal values conflict for youth workers who are under pressure to frame all young people’s experiences as positive ones.

Scholars agree that attempts to predict and govern a project’s outcomes largely fail to provide coherent evidence of its social impact (Cooper, 2018; Lockie, 2001; Muller, 2018). For

example, Muller argues that “when mission-oriented organisations try to use extrinsic rewards, as in promises of pay-for-performance, the result may actually be counterproductive” (2018, p.70). Muller reports that metrics-based evidence has been linked to the production of inaccurate evidence of impact. Similar problems were also described by one of the youth workers, Gabriel, who stated that “there are times where maybe numbers are going lower than what we projected, and the temptation is to try and push for the higher numbers.” Hence it could be concluded that youth workers’ and young people’s tendencies to view social impact evaluation as a process creation of positive “social impact stories” can lead to inaccuracies in the way social impact of digital youth projects in Scotland is reported.

7.4.4 The problem of disempowerment during the evaluation of digital youth projects

While many youth digital projects highlight the importance of empowering young people as active and equal partners in the context of social of digital youth projects in the United Kingdom, young participants view themselves mainly as passive subjects in the evaluation process. Youth participants feel analysed, observed, measured, tested, and enumerated during the evaluation stage (Checkoway & Richards-Schuster, 2005). Apprehension around providing honest or critical feedback was outlined as problematic by sixteen of the nineteen young people participating in this study. Young participants view evaluation facilitators as “someone higher up than them”, thus “you don’t want to be honest because ... you don’t want to ruin their project, you don’t want to upset them.” Subsequently, young people often feel pressured to submit only positive feedback (a problem also examined in Section 7.2.2).

This traditional division between social impact digital evaluation “experts” and evaluation’s “human subjects” (Checkoway & Richards-Schuster, 2005) further imposes a set of institutionally and socially constructed roles of well-behaved and grateful youth participants. Cousin and Whitmore (1998) argue that when such power imbalances occurs, participants are not allowed to share their voice or to critically reflect on their participatory experience. Thus the lack of meaningful and balanced impact analysis amongst evaluators and participants results in a lack of self-reflection in the group. Subsequently, it is evident that young people’s inability to express their opinions and lack of a sense of co-ownership of the evaluation data lead to their disengagement from the evaluation process.

Scholars (Lockie, 2001b; Muller, 2018) agree that attempts to predict and govern a project’s outcomes largely fail to provide coherent evidence of its social impact. (Lockie, 2001; Muller, 2018). For instance, Lockie argued that:

Despite the aura of objectivity, technocratic rationality is ill-equipped to deal either with the competing interests, beliefs, values and aspirations that characterize complex social situations, or with the active participation of multiple stakeholders (2001, p. 279).

Technocratic and pre-set outcomes-driven evaluation was also critiqued by Muller who calls it “metric fixation” (2018, p.27). In Muller’s view, “metric fixation” encompasses the discourse. This researcher believes “that it is possible and desirable to replace judgment, acquired by personal experience and talent, with numerical indicators of comparative performance based upon standardized data [metrics]” (2018, p.27).

Metrics-driven evaluation in youth work was identified as one of the key problems. It was indicated that in the increasingly competitive funding environment in youth community services in the United Kingdom, youth workers feel pressured to provide (and over-emphasise) evidence of positive impacts, and in some cases, when something negative has occurred, they decide to “put a positive spin on it” or omit it entirely. Thus, it appears that youth workers are disempowered in the light of the current evaluation requirements. They are keen to provide young people with valuable digital experiences but are unable to critically examine their value. A similar problem was explored by Cooper (2018), who argued that “dominant modes of evidence-gathering, which privilege data and serve to silence the voice of the [youth work] practitioners” (2018, p.37). In alignment with existing research (Mackrill & Ebsen, 2017; Wilson & Grant, 2017) this project indicates that youth workers have limited opportunities to critically engage with the social impact evaluation of digital youth. Social impact evaluation is viewed as a time-consuming administrative process (Bossen *et al.*, 2016), which primarily serves to fulfil digital youth funding criteria.

The results of this project also indicate that compulsory application of pre-agreed outcomes, technocratic formats, and frameworks in digital youth work evaluation might also lead to fabricated evaluation results. Existing scholarly analysis on youth worker practice in the United Kingdom (Pope, 2016) shows that digital youth workers view social impact evaluation primarily as a process to sustain organisational funding. De St Croix defines the above problem as “[youth work evaluation] impact regimes” where “competition between providers [of youth work] for an ever-diminishing funding pot means that everybody must be an impact enthusiast” (2018, p.431). It can thus be suggested that lack of critical engagement with the evaluations and measuring “only what they [digital youth workers] would like to be there” (Merli, 2002, p. 115), results in limited (if not false) interpretations and understandings of young people’s digital literacy needs and aspirations, and associated social impacts. Scholars emphasise that a lack of young people’s meaningful participation or/and critical engagement in youth-centred

project design and its evaluation is both unethical and disempowering (Checkoway & Richards-Schuster, 2005; Cooper, 2018; Gawler, 2005). Cooper states that evaluation makes little sense unless it is understood as part of a learning process” (2018, p.102). Gawler argues that, “if the information gathering will not directly benefit the children and adolescent involved or their community the evaluation process should not proceed” (2005, p.3).

7.4.5 Conclusion

The findings relating to RQ3 are discussed in this section. The above findings relate to young people’s and youth workers’ experiences of participating in impact evaluations of digital youth projects in Scotland. The following three themes were discussed:

1. Uncertainty about the meaning of evaluation of digital youth projects
2. Emphasis on telling only positive stories of evaluation
3. The problem of disempowerment during the evaluation of digital youth projects

The above analysis revealed several problems in the way young people and youth workers perceive and experience social impact evaluation of digital youth projects in Scotland. Firstly, the results indicate that both youth and youth workers in Scotland have limited understanding of what and how should be evaluated. This project also found that evaluation is perceived as a process of reporting examples of primarily positive impact due to the pressures of meeting external funding criteria. Thirdly, the findings suggest that outcomes-driven evaluation might lead young people and youth workers to feelings of disempowerment.

7.5 (RQ4) Youth and practitioner-led evaluation recommendations

7.5.1 Introduction

To address RQ4, the following section outlines social impact evaluation recommendations proposed by young people and youth workers participating in this project. The findings presented earlier in this project demonstrate that both groups perceived social impact evaluation of youth digital culture as largely problematic. All project participants were invited to propose their ideas to improve the current practice of digital youth culture evaluation in Scotland. The recommendations are presented in ten sections, based on the underpinning areas for change, arguing that future evaluations should be: (1) accessible, (2) anonymised, (3) digital, (4) encouraging of critical thinking, (5) independent from funding, (6) informed, (7) participatory, (8) playful, (9) serendipitous, and (10) well-timed.

7.5.2 Youth and practitioner-led evaluation recommendations

This section provides a summary and analysis of youth and youth workers' recommendations to extend and enrich current understanding and practice of evaluation of digital youth culture and co-creation in Scotland. The recommendations are listed in alphabetical order and do not reflect any hierarchical importance

7.5.2.1 *Accessible*

Both groups (youth workers and young people) indicated that current evaluation should become more accessible to young people, outlining that the language of evaluation is problematic. In the views of project participants (young people and youth workers), current evaluation vocabulary is difficult to understand and thus might exclude many young people from providing feedback. For example, young people argued that digital projects often provide opportunities where young people with learning difficulties (e.g. dyslexia) can develop skills (e.g. coding, animation, filmmaking) that are beyond traditional literacy. Young people argued that evaluation exercises should be accessible to young people of all intellectual and physical abilities. It is therefore recommended that evaluators consider the importance of acknowledging the needs of all young people, including possible learning difficulties that might be barriers to evaluation form completion.

7.5.2.2 *Anonymised*

Young people's recommendation is that all evaluation data should be anonymised. In their view, anonymity is an important element while sharing feedback. The results of this study indicate that anonymity is not only concerned with the provision of personal details but with providing a space where young people feel safe when completing their evaluations. As reported in Study 3, a safe space which respects young people's anonymity means having youth workers present to support the evaluation process but not monitoring its progress or its content over "young people's' shoulders".

7.5.2.3 *Digital*

Digital tools might be considered to supplement, improve, or replace some of the traditional evaluation tools (e.g. surveys, questionnaires). According to the young project participants, digital forms of evaluation (e.g. digital quizzes, dairies) could be particularly useful in the context of digital youth projects. Digital evaluation solutions are described as more appealing to young people for several reasons. Firstly, digital evaluation tools might provide a degree of participation and ownership of the process. Secondly, digital formats might offer more accessible and inclusive forms of evaluation (for example using different font sizes). Digital

evaluation systems might provide an efficient system to collect and share data. Finally, digital tools were recommended as they might provide an extra level of anonymity during evaluation (e.g. a young person's hand writing style cannot be identified).

7.5.2.4 Encouraging critical reflection

According to participants (young people and youth workers) evaluation should serve as critical and reflexive exercises. It is advocated that more emphasis should be placed on critical thinking and authentic analysis of impact. Young people should be encouraged to critically examine their experiences of a digital youth project – both positive and negative ones.

Study 3 found that young people often feel under pressure to provide positive feedback. As the results of this project indicate, young people need extra support and reassurance to have confidence to express their criticisms. In the context of youth workers, it is recommended that external funders provide extra reassurance that it is acceptable to report young people's criticism of digital youth project in evaluation reports.

7.5.2.5 Independent of funding

It is strongly recommended by participants that evaluation should not be seen to serve as a tool to justify funding. According to the participants, quantitative and monetary value centred evaluation of digital youth work should be avoided. The results of this project indicate that young people are aware of the politics and power dynamics associated with digital youth projects funding. Young people feel co-responsible for securing funding for their youth clubs and often view impact evaluation as an administrative task. As argued by the young people, the impact of their participation in digital youth projects should not be viewed 'as value for money'. It is thus advised that evaluation should serve not as a 'box-ticking exercise' but as a tool for learning and sharing knowledge between young people, youth workers and funders. Youth workers and young people participating in this project recommend that evaluation of youth projects should not function as a mechanism for financial reward and punishment, because this appears to have multiple negative impacts on all project participants.

7.5.2.6 Informed and accountable

Young people believe that providing them with additional information about the purpose of evaluation would be useful. This particularly applies to how their data is processed and used. Young people suggest that currently it is not clear why their feedback is collected and what happens to it after digital projects have ended. As indicated by one participant: "it would be nice to know that things have been improved for people who go on to do the same things, so that they experience can always be improved" (Pat). This project has found that young people

would like to get better understanding of how their views might or might not influence digital youth projects in Scotland. To improve the accountability of the evaluation process, they propose that follow-up information about how their feedback was considered or used should be shared with them.

7.5.2.7 Participatory

Young people's participation in the design and facilitation of evaluation of digital youth projects is recommended. Youth workers and young people reported that involving young people in the design and delivery of evaluation would improve current evaluation practice. The analysis of youth worker accounts revealed that they are aware that involvement of young people into the evaluation process makes the results more meaningful and representative of young people's needs. The importance of a collective discussion on digital youth project aims and objectives was emphasised in Study 1 results. Youth workers also talked about evaluation motivation and the fact that participatory approaches can create a sense of youth ownership of evaluation process and its outcome.

Young people indicated that providing them with opportunities to participate in evaluation design and/or its implementation would improve their experience and understanding of evaluation. The analysis of this project indicates that there are two areas that young people would like to take part in during evaluation: (1) setting outcomes and (2) choosing or creating evaluation methods. When designing their evaluation methods in Study 3, youth participants offered rich insights into how their involvement could improve the current power dynamics in the evaluation. For example, Group 3 noted ideas such "let us [young people do the forms]", "use discussion led by young people to of the activity to stimulate more open discussion in an informal way." In this project, young people clearly showcased their abilities to create evaluation methods that are both engaging and fulfil organisational functions of data collection. The results of this project provide evidence that young people are capable and willing to critically engage with evaluation design and propose evaluation designs that – in their view – would better serve other young people.

7.5.2.8 Playful

The results of this project indicate that both young people and youth workers would like to see more playful methods used in evaluation. Both groups indicated that traditional evaluation formats (such as surveys or questionnaires) do not provide them with opportunities to think creatively and consider various types of impacts. It was argued that interactive and playful methods enable young people to express themselves in different forms other than written texts. This was particularly important in the context of often highly-interactive and creative

youth digital projects, where social impact can be noted while interacting with technologies (e.g. designing graphics, coding).

7.5.2.9 Serendipitous (no pre-set outcomes)

To improve future evaluations of digital youth projects, it is essential to acknowledge their multi-layered and dynamic nature. It is recommended that the number of pre-set evaluation outcomes should be limited. Both groups indicated that working towards narrowly specific goals does not allow participants to reflect on other possible areas of impact. Thus, youth workers and young people advise that taking risks and making mistakes during evaluation is crucial for their learning. As suggested by the young people, failing and making mistakes should be considered, analysed and reported as important elements of young people's development, which might serve as basis for future innovation in the digital youth sector.

7.5.2.10 Well-timed

Both groups (youth works and young people) advise that the consideration of timing of the evaluation is crucial. For workshop participants to experience and possibly progress, youth workers believed that the process of evaluation should start at the beginning of the project. Young people emphasised the importance of viewing evaluation as a multi-layered process that requires substantial time for reflection. Young people repeatedly indicated that choosing several points during youth workshops (e.g. start, middle, end) is essential to understanding impact. It is thus recommended that digital youth projects facilitators view evaluation as an ongoing process that aims to provide young people with multiple points for reflection and feedback. Therefore, it is recommended that more time be allocated to the evaluation process.

7.5.3 Conclusion

The findings relating to RQ4 were discussed in this section. The above findings relate to young people's and youth workers' recommendations with regards to social impact evaluation of youth digital projects in Scotland. According to the project participants, improved evaluation should be (1) accessible, (2) anonymised, (3) digital, (4) encouraging to critical thinking, (5) independent of funding, (6) informed, (7) participatory, (8) playful, (9) serendipitous, and (10) well-timed.

Chapter 8: Conclusions

8.1 Introduction

The purpose of the research reported in this thesis was to investigate youth workers and young people's perceptions of social impact and social impact evaluation of youth digital culture co-creation. Although prior studies provided analysis of youth digital participation (Cohlmeyer, 2014; Mihailidis, 2016; Quinlan, 2016; Ito *et al.*, 2013), youth participation evaluation (Checkoway & Richards-Schuster, 2005; Flores, 2007) and digital learning evaluation frameworks (Lemke *et al.*, 2015) there has been no work specifically examining how youth workers and young people experience evaluations of digital youth projects. Using a Participatory Action Research framework, this project produced insights that have been absent from previous research on the topic.

In this chapter, the key research findings are revisited, and conclusions are drawn as to their overall significance, including how this work has contributed to existing knowledge on the social impact evaluation of digital youth culture co-creation.

Finally, recommendations are provided for:

1. Academics, on future research directions relating to this topic
2. Practitioners and policy makers, on implementing changes based upon the evidence presented in this thesis report

8.2 Summary of the research findings

It is useful to consider the key findings in relation to the research questions they address:

8.2.1 RQ1. What is the current understanding of the social impact of youth digital culture co-creation?

The analysis of the data indicates that youth workers' and young people's official understanding of social impact is largely influenced by the power dynamics in the evaluations system. Youth workers' interpretations of the real value of the 'change' associated with social impact revealed levels of both confusion and frustration in the digital youth work field in Scotland. The results indicate that despite providing many positive examples and stories of positive social impact, youth workers were equally concerned about the negative and often unreported impacts of digital youth projects. Positive social impact is considered as the official and reported social impact in evaluation. The negative impact is seen as linked to youth workers' personal opinions, and therefore less likely to be offered in evaluations.

Youth digital projects participants are more likely to talk about positive and negative social impacts. In their views, both are of equal value for their project development. Nonetheless, the results of this project also indicate that young people perceive social impact as something that does not directly belong to them. According to youth digital projects participants, social impact is something that is externally managed and defined by adults in authority, such as youth workers, funders, teachers, or government bodies.

8.2.2 RQ2. What are the approaches used to evaluate the social impact of digital youth culture co-creation in Scotland?

This research found that three types of evaluation methods are currently used to collect and analyse the social impact of digital youth culture co-creation:

1. Surveys

The findings of this project indicate that traditional evaluation tools (such as surveys and questionnaires) are the most common tools used to evaluate digital youth projects in Scotland. Both groups (youth workers and young people) view questionnaires as a necessary formality guided by pre-agreed indicators. Consequently, there is a sense that they currently have no choice but to use these existing surveys to sustain their funding.

2. Participatory and creative tools

A wide range of creative and innovative methods to evaluate impact was identified and used. The analysis revealed that creative methods can be divided into the following three categories: (1) digital, (2) mixed (using digital and offline methods), and (3) offline. Among some of the most commonly cited in this project were digital quizzes, participatory videos, and photography.

3. Observations and conversations

Whilst least cited in the project, forms of observation and conversations (such as case studies) are also used in the context of Scotland's digital youth projects evaluation. Youth workers tend not to refer to these activities as evaluation methods, *per se*. However, the analysis of their accounts indicates that youth workers frame their understanding of social impact and youth development while discussing and observing their development. Stories of social impact reported in this project provide some of the richest descriptions of how digital youth projects affect young people's development and social connectedness.

8.2.3 RQ3. What are the experiences and perceptions of social impact evaluation among digital youth culture co-creation projects participants and projects facilitators in Scotland?

The results of this project reveal three dominant themes in how youth workers and young people experience evaluation of digital youth projects.

Firstly, both groups are uncertain about the meaning of evaluation. Youth workers are concerned about the lack of clarification of what *digital* means in the context of youth projects and how *digital impact* should be evaluated. Young people are concerned about the lack of transparency during the evaluation process. They do not know how their evaluation data is being analysed and if/how it is being used to improve future digital youth projects.

Both groups report feeling pressure to report only the positive impacts of evaluation. Youth workers believe that evidence of positive impact is required to sustain future funding. Young people feel that providing positive examples of social impact is what is expected/required from them during evaluation.

Thirdly, both groups also feel disempowered during evaluation of digital youth projects, which they perceive as a control and accountability mechanism imposed by the funders.

8.2.4 RQ4. To what extent could digital youth practitioner-led and youth-led social impact evaluation recommendations alter current evaluation practices?

The analysis of the data suggests that young people's and youth workers' insights extend and might improve current evaluation of youth digital culture co-creation projects in Scotland. To improve current evaluation systems, participants propose that evaluation approaches of youth digital projects should be:

1. accessible
2. anonymised
3. digital
4. encouraging of critical thinking
5. informed
6. independent of funding
7. participatory
8. playful
9. serendipitous

8.3 Contribution to existing knowledge

These research findings make several contributions to knowledge on digital youth participation and social impact evaluation. These are stated below, alongside a synthesis of related themes from previous work, which have been explored in depth in Chapter 2.

1. Digital youth culture in Scotland

A large body of work examines social impact of youth digital participation. Prior scholarly accounts examine both positive and negative social impact of digital youth projects. However, there has been limited literature focusing on youth digital culture and youth digital participation in Scotland. One of the key contributions of this thesis is that it provides a summary and analysis of digital youth related literature and policy activities since the year 2000.

2. Digital youth workers

Previous studies examined youth workers' and media literacy workers' experiences of project evaluation. These studies produced insights into how youth workers perceive and manage evaluations of their projects. However, these studies do not address the digital element of youth work provision. Thus, the second contribution of this thesis is an analysis of youth workers' experiences of evaluation of digital youth projects.

3. Digital youth participation evaluation

There is extensive existing literature covering digital youth participation and youth evaluation. However, there has been limited literature concerned with the evaluation of youth digital participation. This thesis's third contribution relates to the analysis of existing evaluation approaches in digital youth setting and provision of ten recommendations for digital youth projects evaluators.

4. Young people's voices on digital youth projects evaluation

There is limited analysis examining young people's experiences of evaluation. While some studies test the effectiveness of participatory and non-participatory methods of evaluation used with and on young people, young people's critical examination of their evaluation experience in digital projects is missing. Thus, the analysis of young people's accounts of evaluation is the fourth contribution to knowledge.

5. Young people's recommendations on future of the social impact of digital youth culture co-creation

Prior research provides some information on how young people could currently be involved in evaluation in digital youth settings. However, there is limited research focusing on young people's recommendation for future evaluation in an informal and digital youth setting is missing. Young people's recommendations for social impact evaluation of youth digital projects serve as a fifth contribution to knowledge.

8.4 Importance of the research findings

The above findings provide an important contribution to knowledge as well as digital youth work practice in Scotland (and possibly beyond) for several reasons.

Firstly, they provide new insights into how social impact is perceived by digital youth workers and young people and its associated challenges. It is shown here that both groups struggle to strike a balance between following external social impact definitions and guidelines and its meaningful and critical analysis. Such tensions between targets and authenticity in the digital youth sector in Scotland might lead to a lack of critical understanding of real social impacts, and thus of young people's real digital needs, aspirations, and skills shortages.

These findings are important in the context of the national digital strategy for Scotland, published in 2017, which emphasises the need for educators to “prepare young people for jobs that do not exist, using technologies that have not yet been invented, to solve problems of which we are not yet aware” (Scottish Government, 2017, p. 24). The lack of critical and authentic analysis of social impact of digital youth projects in Scotland will lead to the collection of inaccurate evaluations. Subsequently, inaccurate evaluation data might not provide information on the “problems of which we are not yet aware” of (Scottish Government, 2017, p. 24). As argued by Muller, “trying to force people to conform their work to pre-established numerical goals tends to stifle innovation and creativity” (2018, p.32). To address young Scottish people's digital needs of the 21st century, it is essential to gain a critical and holistic understanding of the social impact (both positive and negative) of co-created youth digital culture.

Additionally, this project provides evidence that problematic power dynamics play an important role in how youth workers and young people experience evaluation. It is striking that both groups feel the need to conform to the technocratic rationality of current social impact evaluation structures. Evaluation requires youth workers and young people to perform their industry- and socially-imposed roles. In order to “pass” the evaluation and subsequently sustain/obtain future funding, youth workers tend to become “digital youth culture enthusiasts” and young people take on roles of the “grateful and improved versions of themselves”. Youth

workers and young people believe that these structures do not work, as they do not allow them to contribute authentic and critical evaluations of their digital youth projects.

Meaningful digital youth participation can and does take place in Scotland. However, this research indicates that that meaningful participation ends when evaluation processes begin.

8.5 Recommendations for academia

Whilst the research reported in this thesis has established a significant base of social impact evaluation of youth digital projects, there remains a great deal to be learned about this important topic. Recommendations for academia are presented in the following two sections: (1) recommendations for researchers and (2) recommendations for future research.

8.5.1 Recommendations for researchers working with young people and digital technologies in informal learning settings

1. Researchers working with young people using, designing or testing digital technologies in informal learning settings should aim to pay particular attention to the possible power dynamics between them and the young research participants. As evidenced in this project, young people often feel obliged to provide only positive feedback in their evaluations, which might lead to false study results. Encouraging critical thinking and using accessible evaluation language might be useful.
2. To obtain a holistic understanding of young people's progress (or lack of it) during a digital research intervention, evaluation could be imbedded into a project's activities. If possible, evaluation activities should be interactive, with limited or no text, and should take place at different multiple stages of the research project.
3. When working with young people and using digital technologies in informal learning settings, it might be useful to move beyond the dominating research narratives of young people as either passive digital users or active digital agents of change. Moving away from this dualistic view of good and bad social impacts of digital youth participation might provide researchers and young research participants with the freedom to examine and produce nuanced and not-yet-studied information about the relationship between young people and digital culture.

8.5.2 Recommendations for future research

1. To address the digital literacy needs of the 21st century, it is essential to gain a critical and holistic understanding of young people's digital needs. Digital youth projects offer

young people with informal learning environments where both their personal development and digital needs can be explored. The outcomes of digital youth projects could provide youth workers, researchers and policy makers with important findings about young people's digital literacy, needs, and aspirations. However, more research is needed to improve the understanding how and if such outcomes should be analysed.

2. To improve the quality of social impact and its evaluation of digital youth projects, a review of currently used methods should be conducted. Although creative and participatory tools are currently available to measure youth development (Flores, 2007), social impact (McCabe & Horsley, 2008) and digital skills (Mcgillivray et al., 2017), there is a need for further research linking these to problematic areas in order to provide digital youth practitioners with guidance and a set of practical social impact assessment tools. Examples of digital tools and applications have already been tested in informal education settings (Lemke et al., 2015); thus, an up-to-date comparative analysis of such studies and their effectiveness would be beneficial for further research in this area.
3. An analysis of digital youth project funders' evaluation criteria in relation to the previously documented phenomena of 'target culture' in youth work in the UK could provide useful insights.
4. A study of the existing power dynamics between digital youth workers and their impact on the validity of the evaluation outcomes could result in vital contributions to both research and digital youth practice applications.
5. The roles of digital youth workers have yet been largely unexamined by the scholarly literature. More research is required to understand this emerging field of research and youth work practice. As stated by Kiilakoski, "to define who we are [as digital youth workers], what we do and why we do it is never before more critical" (2017, p.19). Thus, research collaborations to further examine social impact evaluation of digital youth might consider examining multiple stakeholders' perspectives (e.g. young people, digital youth workers, funding organisations, policy makers and researchers).
6. More research is needed to understand both the social impact of digital youth projects and its assessment. To analyse the vast range of social impacts that can occur during digital youth work projects, researchers should consider looking beyond their disciplines to facilitate cross-disciplinary solutions and analysis of multimodal human experiences of digital project participation.

7. Further research is needed to understand young people's experiences of evaluation of youth digital projects. Studies involving young people from varied cultures and backgrounds and of diverse learning abilities would provide important insights into how different groups view their participation in evaluation.

8.6 Recommendations for practice, policy makers, and digital youth project funders

Youth workers should be provided with additional support, training and tools for social digital youth projects facilitation and evaluation. The results of this study indicate that youth workers in Scotland are keen to utilise new technologies in their work with young people and are aware of the importance of digital skills and literacy provision. It is important to note that informal learning environments play a crucial role in supporting young people's transition into adulthood, both in offline and online contexts. In the context of continually emerging and shifting nature of digital youth culture, many Scottish youth workers have no choice but to become digital youth workers.

Important work and research on digital youth culture and digital youth work is already taking place in Scotland (Youth Link, 2018) and in Europe (Harvey, 2016). However, the results of this indicate that while youth workers in Scotland are encouraged and rewarded for the use of technologies in their practice, they are also struggling to analyse and understand technologies' impact on young people and their youth work practice. It might be argued that funding is available to facilitate digital youth work projects, but there is limited guidance or support to understand it. Therefore, additional development of existing or additional training and support services for digital youth workers across Scotland is recommended.

Furthermore, the usefulness of outcome-led and metrics-based funding of digital youth projects in Scotland should be examined. This could be achieved by facilitating a space and time for open and judgement-free dialogue between policy makers, funders, youth workers, and young people. The results of this project indicate that current evaluation systems do not provide young people and youth workers with opportunities for authentic reflection on their digital experience. It is thus recommended that policy makers and funders place less emphasises on quantified and written forms of evidence evaluation. Most important, however, is the consideration of social impact evaluation as a holistic and serendipitous learning process for all stakeholders, whereby *positive* and *negative* social impacts are examined and celebrated.

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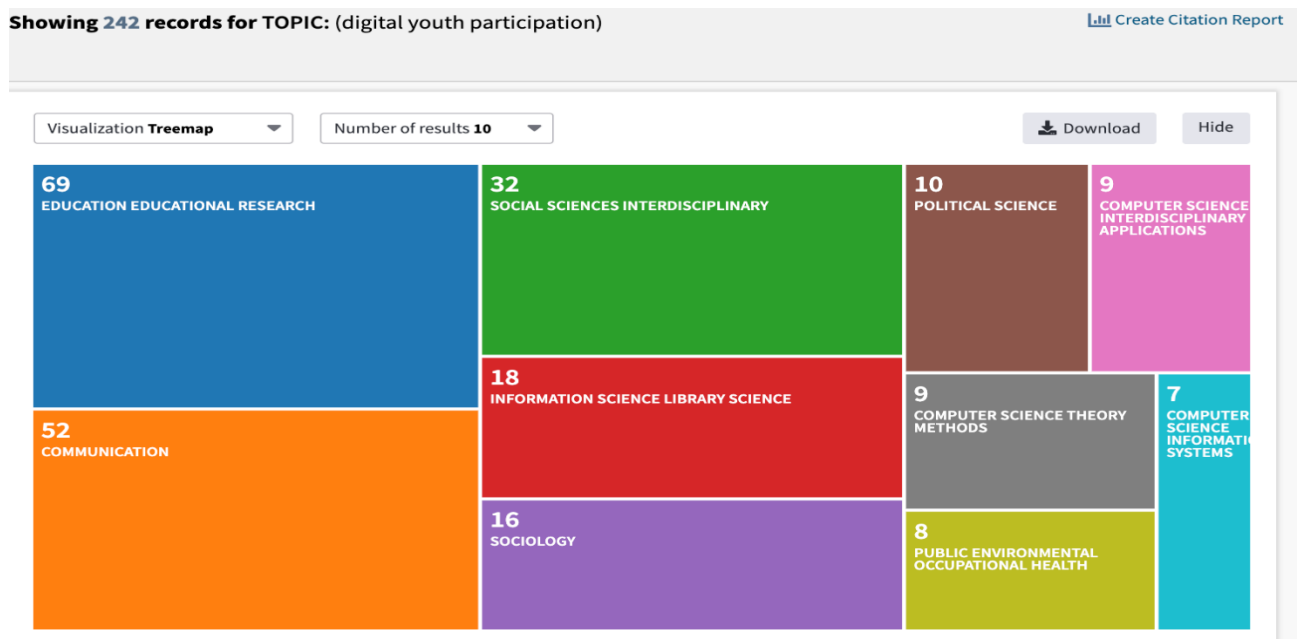
Appendixes

Appendix 1. Web of Science search result for term “digital youth participation”

Figure 25: Web of Science report on the years of publications on the topic of digital youth participation

Select	Field: Publication Years	Record Count	% of 242	Bar Chart
<input type="checkbox"/>	2019	7	2.893 %	
<input type="checkbox"/>	2018	44	18.182 %	■
<input type="checkbox"/>	2017	53	21.901 %	■
<input type="checkbox"/>	2016	41	16.942 %	■
<input type="checkbox"/>	2015	23	9.504 %	■
<input type="checkbox"/>	2014	17	7.025 %	■
<input type="checkbox"/>	2013	11	4.545 %	■
<input type="checkbox"/>	2012	17	7.025 %	■
<input type="checkbox"/>	2011	10	4.132 %	
<input type="checkbox"/>	2010	7	2.893 %	
<input type="checkbox"/>	2009	5	2.066 %	
<input type="checkbox"/>	2008	2	0.826 %	
<input type="checkbox"/>	2007	1	0.413 %	
<input type="checkbox"/>	2006	3	1.240 %	
<input type="checkbox"/>	2003	1	0.413 %	

Figure 26: Web of Science categorisation of 242 records for the topic “digital youth participation”



Appendix 2. Web of Science search result for term “co-creation”

Figure 27: Web of Science categorisation of 4,658 records for the topic “co-creation”



Appendix 3. Web of Science search for term “digital culture”

Figure 28: Web of Science’s categories showing 852 records for topic "digital culture"

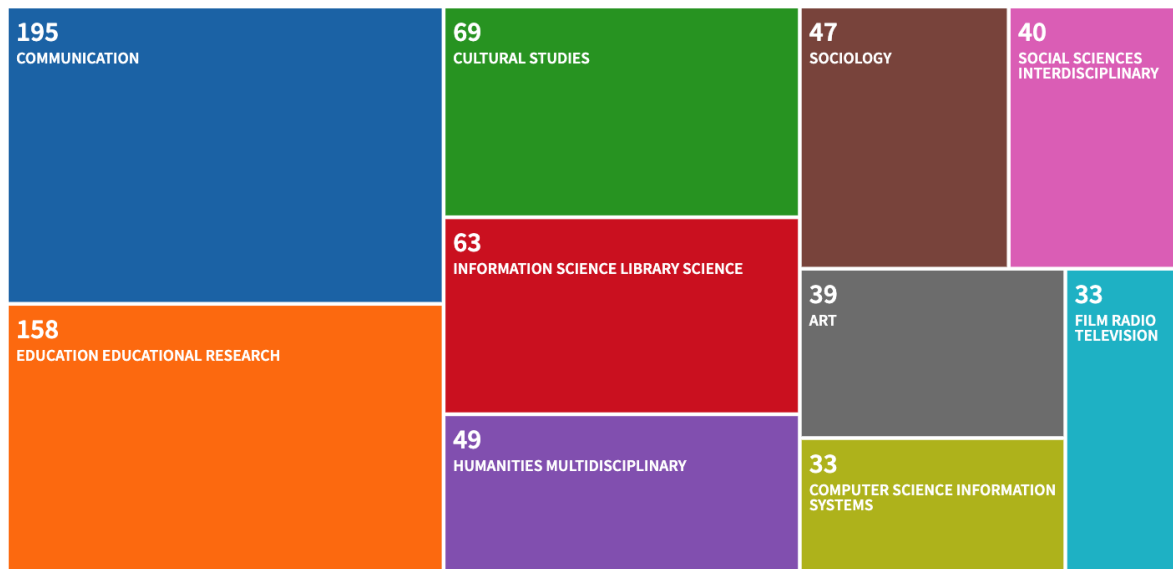


Figure 29: Web of Science report on the years of publications on the topic of digital culture.

Select	Field: Publication Years	Record Count	% of 852	Bar Chart
<input type="checkbox"/>	2019	15	1.761 %	
<input type="checkbox"/>	2018	123	14.437 %	■
<input type="checkbox"/>	2017	150	17.606 %	■
<input type="checkbox"/>	2016	109	12.793 %	■
<input type="checkbox"/>	2015	120	14.085 %	■
<input type="checkbox"/>	2014	51	5.986 %	■
<input type="checkbox"/>	2013	52	6.103 %	■
<input type="checkbox"/>	2012	56	6.573 %	■
<input type="checkbox"/>	2011	33	3.873 %	
<input type="checkbox"/>	2010	33	3.873 %	
<input type="checkbox"/>	2009	33	3.873 %	
<input type="checkbox"/>	2008	21	2.465 %	
<input type="checkbox"/>	2007	10	1.174 %	
<input type="checkbox"/>	2006	8	0.939 %	
<input type="checkbox"/>	2005	3	0.352 %	
<input type="checkbox"/>	2004	4	0.469 %	
<input type="checkbox"/>	2003	7	0.822 %	
<input type="checkbox"/>	2002	3	0.352 %	
<input type="checkbox"/>	2001	6	0.704 %	
<input type="checkbox"/>	2000	1	0.117 %	
<input type="checkbox"/>	1999	5	0.587 %	
<input type="checkbox"/>	1998	6	0.704 %	
<input type="checkbox"/>	1997	1	0.117 %	
<input type="checkbox"/>	1996	2	0.235 %	

Appendix 4. Information about the study was provided in the form of a presentation to the young participants.

1

Participant information:
Digital youth culture co-creation:
measuring the social impact.

Edinburgh Napier UNIVERSITY

2

Hi,
My name is Alicja Pawluczuk and I am a postgraduate student from the School of Computing at Edinburgh Napier University.
I am undertaking a PhD doctoral research project titled: Digital youth culture co-creation: measuring the social impact.

Edinburgh Napier UNIVERSITY

3

Alicja Pawluczuk
My PhD Adventures
Digital Co-creation Storytelling
Want to learn more about my project or about me?
Check my blog
www.phdadventures.com

Edinburgh Napier UNIVERSITY

4

This is Edinburgh Napier University.
you can learn more about us here:
www.napier.ac.uk

Edinburgh Napier UNIVERSITY

5

You may wonder - "what is the purpose of her study?"
Let me explain.

Edinburgh Napier UNIVERSITY

6

You use different digital technologies when attending your youth clubs - camcorders, tablets, computers etc.

Edinburgh Napier UNIVERSITY

7

Your digital projects are sometimes *evaluated* by your youth workers or project staff.
(you know - when they ask you if you liked or not, or want to discuss your experience of coming to the youth club)

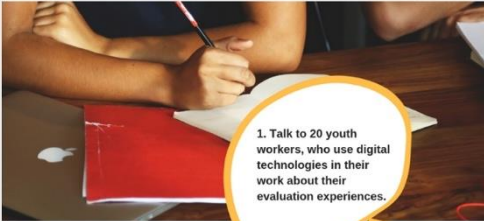
Edinburgh Napier UNIVERSITY

EVALUATION?

I want to do 2 things with my research...

Edinburgh Napier UNIVERSITY

9

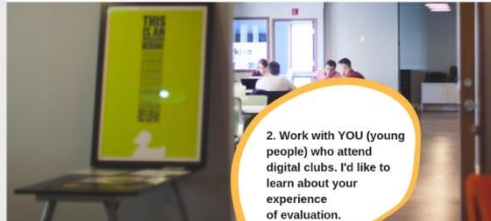


1. Talk to 20 youth workers, who use digital technologies in their work about their evaluation experiences.

Edinburgh Napier UNIVERSITY



10



2. Work with YOU (young people) who attend digital clubs. I'd like to learn about your experience of evaluation.

Edinburgh Napier UNIVERSITY



11



I'm looking for young people aged 16-25 yrs who would like to participate in my workshop.

Edinburgh Napier UNIVERSITY



WHAT ARE WE GOING TO DO DURING THE WORKSHOP?

Edinburgh Napier UNIVERSITY

12



The workshop will take place at your local club and it will take approximately 3 hours.

(Don't worry, you can have a break OR leave anytime. Food and drinks will be provided, we will have breaks whenever you need.

Edinburgh Napier UNIVERSITY



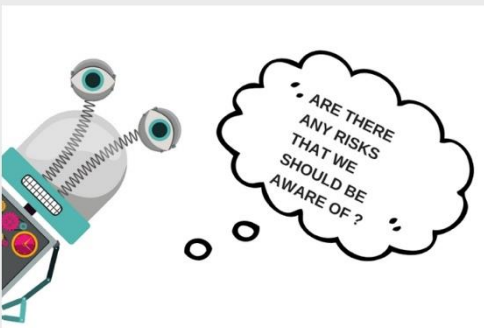
13



During the workshop we will use paper, pens and post-it notes to create large posters.

The session will be very informal. We will get a chance to chat about your digital work with your club.

Edinburgh Napier UNIVERSITY



ARE THERE ANY RISKS THAT WE SHOULD BE AWARE OF?

Edinburgh Napier UNIVERSITY

15



I am not aware of any risks associated with any activities related to the workshop.

Edinburgh Napier UNIVERSITY



16

WHAT ABOUT MY DATA AND MY PRIVACY?

Edinburgh Napier UNIVERSITY

17

All data will be anonymised as much as possible, but you may be identifiable from audio recordings of your voice. Your name will be replaced with a participant number or a pseudonym, and it will not be possible for you to be identified in any reporting of the data gathered.

All data collected will be kept in a secure place (locked cabinet and secured university hard drive) to which only I have access. These will be kept till the end of the examination process, following which all data that could identify you will be destroyed.

Edinburgh Napier UNIVERSITY

18

The results may be published in a journal or presented at a conference.

Edinburgh Napier UNIVERSITY

19

Any questions?

Please contact me:
a.pawluczuk@napier.ac.uk

Edinburgh Napier UNIVERSITY

20

If you have read and understood this information sheet, any questions you had have been answered, and you would like to be a participant in the study, please now see the consent form.

Edinburgh Napier UNIVERSITY

21

Thank you!

Edinburgh Napier UNIVERSITY

Appendix 5. Information about the study and consent forms.



Digital youth culture co-creation: measuring the social impact

My name is Alicja Pawluczuk and I am a postgraduate student from the School of Computing at Edinburgh Napier University. I am undertaking a PhD doctoral research project titled: Digital youth culture co-creation: measuring the social impact

This study will investigate youth workers' attitudes to social impact evaluation of digital youth projects. Young people will also be invited to participate in participatory youth evaluation workshops to share their views on social impact evaluation of projects they participated in. Youth workshop will provide an opportunity for young people to learn about evaluation practice, gain evaluation skills and co-create new, youth-led solutions to social impact evaluation of digital youth initiatives.

I am looking for young people aged 16-25 yrs, who have experience of participating in digital youth initiatives and who are willing to volunteer 2 to 3 hours of their time to participate in the project.

If you agree to participate in the study, you will be asked to participate in a workshop. The researcher is not aware of any risks associated with any activities related to the workshop. The whole procedure should take no longer than 3 hours, with a 30 minutes break for refreshments. You will be free to withdraw from the study at any stage, you would not have to give a reason. This project will also mean that I will have to read your notes from the workshop.

All data will be anonymised as much as possible, but you may be identifiable from audio recordings of your voice. Your name will be replaced with a participant number or a pseudonym, and it will not be possible for you to be identified in any reporting of the data gathered. All data collected will be kept in a secure place (specify eg locked cabinet in locked room/stored on a pc that is password protected) to which only Alicja Pawluczuk has access. These will be kept till the end of the examination process, following which all data that could identify you will be destroyed.

The results may be published in a journal or presented at a conference.

If you would like to contact an independent person, who knows about this project but is not involved in it, you are welcome to contact John Morrison. His contact details are given below.

Merchiston Campus

10 Colinton Road

Edinburgh

EH10 5DT

If you have read and understood this information sheet, any questions you had have been answered, and you would like to be a participant in the study, please now see the consent form.

Workshop Consent for young people aged 16+

Edinburgh Napier University Research Consent Form

Project Title: **Digital youth culture co-creation: measuring the social impact**

Edinburgh Napier University requires that all persons who participate in research studies give their written consent to do so. Please read the following and sign it if you agree with what it says.

1. I freely and voluntarily consent to be a participant in the research project on the topic of “Digital youth culture co-creation: measuring the social impact” to be conducted by Alicja Pawluczuk who is a postgraduate student at Edinburgh Napier University.
2. The broad goal of this research study is to explore examine digital youth workers and young people’s perception of social impact evaluation processes. Specifically, I have been asked to participate in a workshop which should take no longer than 3 hours to complete.
3. I have been told that my responses will be anonymised. My name will not be linked with the research materials, and I will not be identified or identifiable in any report subsequently produced by the researcher.

4. I also understand that if at any time during the workshop I feel unable or unwilling to continue, I am free to leave. That is, my participation in this study is completely voluntary, and I may withdraw from it without negative consequences. However, after the data has been anonymised or after publication of results it will not be possible for my data to be removed as it would be untraceable at this point.
5. In addition, should I not wish to answer any particular question or questions, I am free to decline.
6. I have been given the opportunity to ask questions regarding the workshop and my questions have been answered to my satisfaction.
7. I have read and understand the above and consent to participate in this study. My signature is not a waiver of any legal rights. Furthermore, I understand that I will be able to keep a copy of the informed consent form for my records.

Participant's signature

Date

I have explained and defined in detail the research procedure in which the respondent has consented to participate. Furthermore, I will retain one copy of the informed consent form for my records.

Researcher's Signature

Date

Workshop Consent for Parents/Guardians of Project Participants

Edinburgh Napier University Research Consent Form

Project Title: Digital youth culture co-creation: measuring the social impact

I agree that my child/person(full name of child/person) for whom I am a guardian may take part in the above Edinburgh Napier University research project. The project has been explained to and to me, and I have read the Participant Information Sheet, which I may keep for my records.

I understand that agreeing to take part means that I am willing to allow Alicja Pawluczuk to:

- allow the interview to be audiotaped
- participate in a workshop at (name of the youth club) on.....(date) for the maximum duration of 3 hours.

I also understand that’s (full name of child/person) participation is voluntary, that s/he can choose not to participate in part or all of the project, and that s/he or I can withdraw at any stage of the project without being penalised or disadvantaged in any way.

Data Protection

This information will be held and processed for the purpose of academic publications. I understand that any information (full name of child/person) provides is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports on the project. No identifiable personal data will be published.

Participant’s Name: (please print) Participant’s Age:.....

Parent’s/Guardian’s Name

Your relationship to participant:.....

If appropriate, reason(s) why s/he cannot give written consent.....

Signature of Parent/Guardian:

Date:.....

Appendix 6a. Researcher's blog post about youth participatory workshops (Study 3).

Digital Youth Social Impact Events

Young Evaluators Workshops: what's the point?

February 8, 2018



A.PAWLUCZUK@NAPIER.AC.UK // EDINBURGH NAPIER UNIVERSITY 

Are you a youth worker/artist using digital technologies in your practice? Would you like to learn more about the social impact of your work?

Young Evaluators Workshops will be touring around Scotland between February and May 2018. Join our Young Evaluators Army - together we can amplify young peoples' voices and (hopefully) make the evaluation process super fun (!).

Social media, digital storytelling, podcast, film, animation, gaming - are you using any of these tools to enhance your youth work projects? If so, how do you measure the impact of your work? Majority of the digital youth workers I interviewed last year, told me that their evaluation practice is often "externally imposed and govern" and "boring". Others told me that it is quite difficult to measure the social impact of both youth development and digital technologies, after all some of the outcomes might differ.

So, have can we make the evaluation process meaningful to us all -young people, youth workers and funders? I SAY: let's involve the young people...

The information that I gathered from the digital youth workers community in 2017, suggests that young people (as active participants of digital projects) should be able to have they say when it comes to measurement and analysis of their social impact.

That is why, I'd like to invite young digital enthusiasts, experts and makers to work with my as co-authors of my research project.

*Although, I won't be able to add you as co-authors to my PhD, I intend to co-publish a case study or a paper together...#fingerscrossed

Appendix 6b. Researcher's website introducing herself and the purpose of the research (Study 3).



Home | My Work | Who is Alicia? | Publications & Presentations | Blog | Evaluation Resources (Youth+Digital) | More

Proposed Title: Youth digital culture co-creators | Measuring the social impact in Scotland

Nowadays digital technologies comprise a core element of youth work practices across Europe (Harvey, 2016). Digital media have been used to enhance communication, self-expression and advocacy, within and between youth projects (Black et al., 2015). Thus, young people are no longer solely perceived as end-tech-users or customers, but as makers, doers and co-creators of digital culture (Ito et al., 2013).

However, whilst there is an increasing interest in youth-centred digital projects, it is also clear that measuring the young people's participation in digital culture co-creation has become increasingly difficult (Wilson & Grant, 2017). There is currently a limited understanding of how to measure or understand the impact of youth digital participation (Guha et al., 2010; Mackril & Ebsen, 2017; Pawluczuk, 2018). Both scholars (Mackril & Ebsen, 2017) and youth practitioners (Wilson & Grant, 2017), have called for further research into social impact evaluations of the interactions between young people and digital technologies.

The purpose of this doctoral research project is to enrich the current understanding of social impact and social impact evaluation of youth digital culture co-creation. This study aims to 1) review digital youth practitioners understanding of social impact and social impact evaluation methodologies in the context of youth centred digital work; 2) to work with young young participants as co-researchers, to understand their views of social impact and social impact evaluation practice of youth centred digital work; 3) to provide insights and propose youth co-designed evaluation approaches for youth centred digital work

My research is funded by Edinburgh Napier University & supervised by [Dr Gemma Webster](#), [Dr Colin Smith](#) and [Professor Hazel Hall](#)



Appendix 7. Introduction email to digital youth workers.

Hello [REDACTED]

My name is Alicja and I'm a researcher at Edinburgh Napier University. I've received your contact details from [REDACTED]

I'm really interested in your digital work with young people and was wondering if you'd find some time discuss this with me as a part of a broader research study: [Youth Digital Co-creators](#) | [Measuring the social impact in Scotland?](#)

All interviews will be anonymised and would take no longer than 40 minutes. I'm also happy to meet on Skype, if this would suit you better.

In my research, I'm particularly interested in how we measure the social impact of digital youth initiatives. I'm very keen to explore digital youth workers voices from all over Scotland. Apart from being an academic, I had worked as as digital youth worker and participatory media producer for a number of years - so I'm quite aware of some of the challenges and rewards of *digital youth* engagement.

Please let me know if you have any questions at this stage. I'd be happy to share more details about my work and the purpose of the research. You can also learn more about my research ([here](#)) and digital work ([here](#)).

Thanks for your time & have a nice day.

Best wishes
Alicja

Alicja Pawluczuk | Research Student

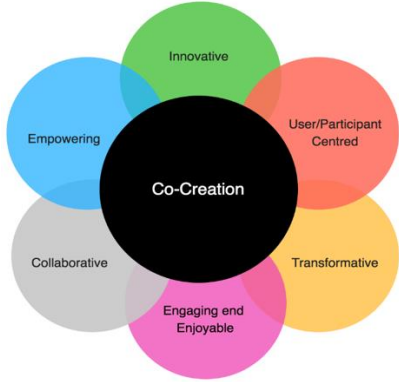
School of Computing
Institute for Informatics and Digital Innovation
(Centre for Social Informatics)

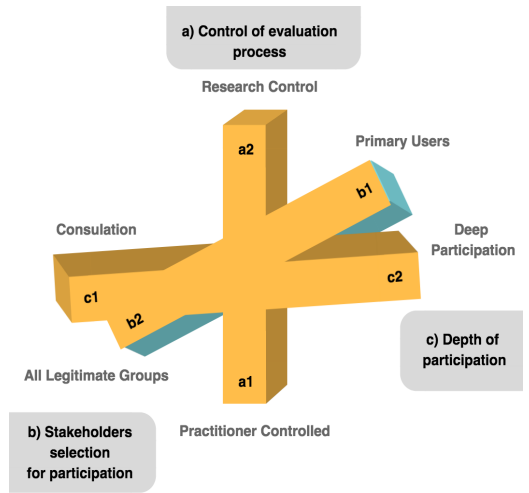
Edinburgh Napier University
10 Colinton Road
Edinburgh
EH10 5DT

Appendix 8. Interview questions presented in relation to the literature findings discussed in Chapter 2.

Interview question	Sub-questions	Links to the literature review
<p>1. Introduction: Could you please introduce your organisation and your role?</p>	<p>What are the aims of your organisation?</p>	<ul style="list-style-type: none"> • Youth participation types and objectives (as examine by Checkoway, 2011; Head, 2011; Samuelson, Smith, Stevenson, & Ryan, 2013) • Digital youth participation types as outlined in Table 1 (for example Digital Making (Quinlan, 2016); Connected Learning (Ito <i>et al.</i>, 2013); Digital Curation (Mihilidis, 2016); Youth Digital Activism (Stornaiulo & Thomas, 2017)
	<p>How do you perceive young people in your work? (for example, clients or equal partners)</p>	<ul style="list-style-type: none"> • design partners (Fitton & Bell, 2014) • active participants (Lang <i>et al.</i>, 2016) • equals (Gaye & Tanaka, 2011) • active and equal partners (Checkoway & Richards-Schuster, 2003) • digital natives (Prensky, 2009) • active agents of social change ((Hart 1992; Loncle <i>et al.</i>, 2012; Checkoway & Gutiérrez, 2006) • human rights holders (Richards-Schuster & Pritzker, 2015) • culture co-creatos (RICHS, 2015) • active digital participants, makers, and 'doers' (Ito <i>et al.</i>, 2013, p.6) • digital makers (Makerspaces.com, 2017).
	<p>Do you work directly with young people?</p>	

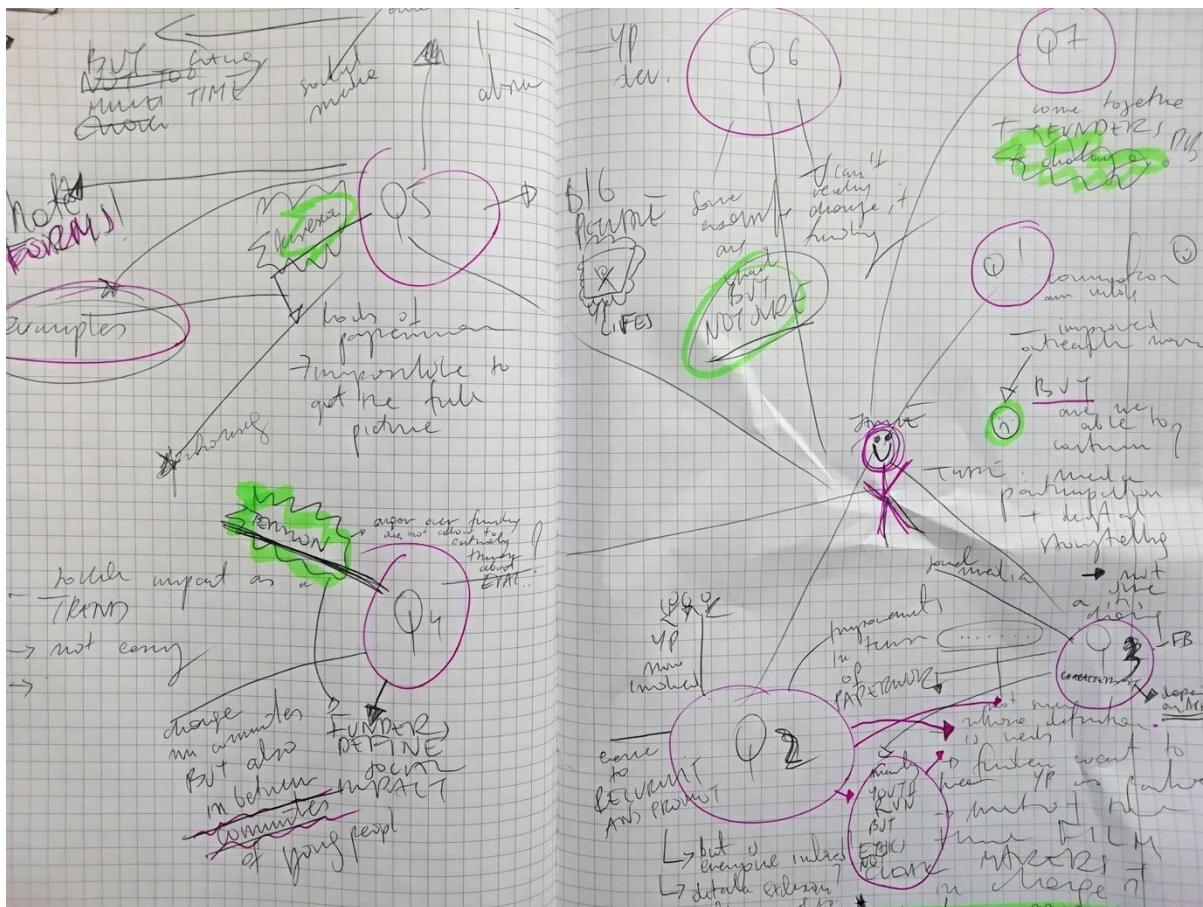
<p>2. Youth participation and digital culture: how and to what extend has the emergence of digital era altered youth participation?</p>	How has digital era affected your work and the work of organisation?	Prior reports on the digital youth work in Europe (for example Harvey, 2016; Kiilakoski, 2017; Wilson & Grant, 2017)
	Why have you decided to use digital media in youth engagement practice?	<p>The role of digital technologies in digital youth work</p> <ol style="list-style-type: none"> 1. advantages (Ito <i>et al.</i>, 2015; Lemke, Lecusay, Cole, & Michalchik, 2015); 2. disadvantages (Ashktorab & Vitak, 2016; O’Keeffe & Clarke-Pearson, 2011); 3. the importance of digital literacy education among young people (Porat, Blau & Barak, 2018; Wilson & Grant, 2017)
	Has digital era changed the way young people are perceived by you or your organisation?	
<p>3. Young people as co-creators of digital culture: the characteristics of effective participatory digital</p> <p><i>*Show characteristics graph and consult with the youth workers.</i></p>	How do you define your digital work with young people (terminology used)?	Digital youth participation types as outlined in Table 1 (for example Digital Making (Quinlan, 2016); Connected Learning (Ito <i>et al.</i> , 2013); Digital Curation (Mihlides, 2016); Youth Digital Activism (Stornaiulo & Thomas, 2017)
	What digital tools do you use in your youth engagement practice?	Prior reports on (1) the digital youth work in Europe (for example Harvey, 2016; Kiilakoski, 2017; Wilson & Grant, 2017); (2) tools used in Teen HCI (Fitton, Bell, <i>et al.</i> , 2016)
	Youth digital culture co-creation - what are the key characteristic of a good co-creative process? *	Literature review analysis of the good characteristics of good co-creation process.

		
<p>4. Social Impact: digital youth workers understanding</p>	<p>What is your understanding of social impact of youth digital participation/co-creation?</p>	<p>Social Impact definition: 'All social and cultural consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to another, organise to meet their needs, and generally cope as members of society' (Burdge & Vanclay, 1995, p.59).</p>
	<p>Who defines social impact in your organisation? (young people, management, youth workers, funders)</p>	<p>Literature review on tokenistic versus participatory nature of evaluation (for example Adams & Garbutt, 2008; Akpofure & Ojile, 2003; Becker <i>et al.</i>, 2003; Belfiore & Bennett, 2007; Burdge, 2003; Cousin & Whitmore, 1998; Douthwaite <i>et al.</i>, 2007; Dufour, 2015; Esteves <i>et al.</i>, 2012; Gawler, 2005; Ito <i>et al.</i>, 2015; Lockie, 2001; Merli, 2012; Morris <i>et al.</i>, 2011; Rietbergen-McCracken & Narayan, 1998; Vanclay, 2003).</p>
<p>5. Social Impact evaluation: approaches and youth participation in the evaluation process</p>	<p>How would you define social impact evaluation? What is the purpose of social impact evaluation?</p>	<p>Definitions of social impact and social impact evaluations (for example Adams & Garbutt, 2008; Akpofure & Ojile, 2003; Becker <i>et al.</i>, 2003; Belfiore & Bennett, 2007; Burdge, 2003; Cousin & Whitmore, 1998; Douthwaite <i>et al.</i>, 2007; Dufour, 2015; Esteves <i>et al.</i>, 2012; Gawler, 2005; Ito <i>et al.</i>, 2015; Lockie, 2001; Merli, 2012; Morris <i>et al.</i>, 2011; Rietbergen-McCracken & Narayan, 1998; Vanclay, 2003).</p>

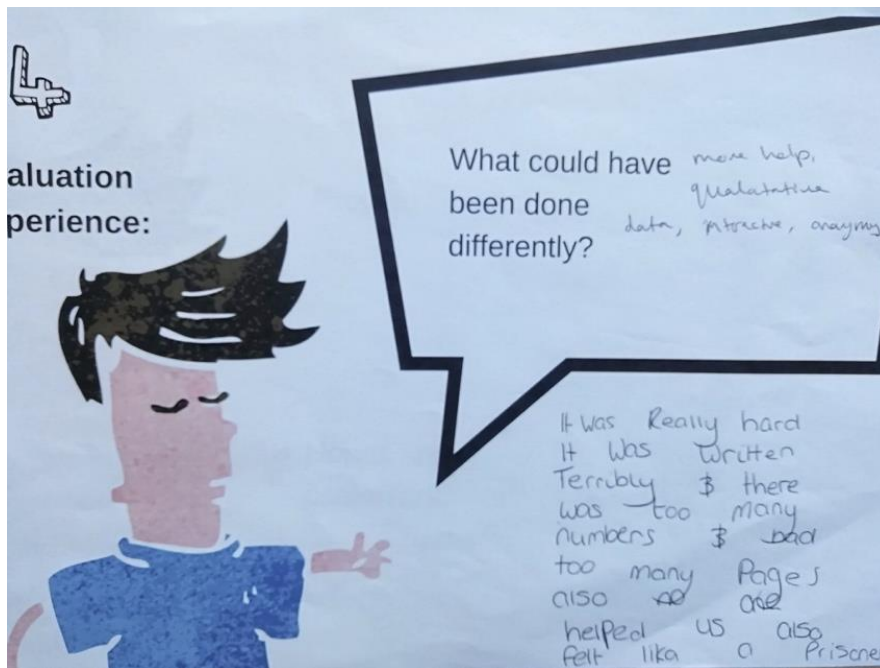
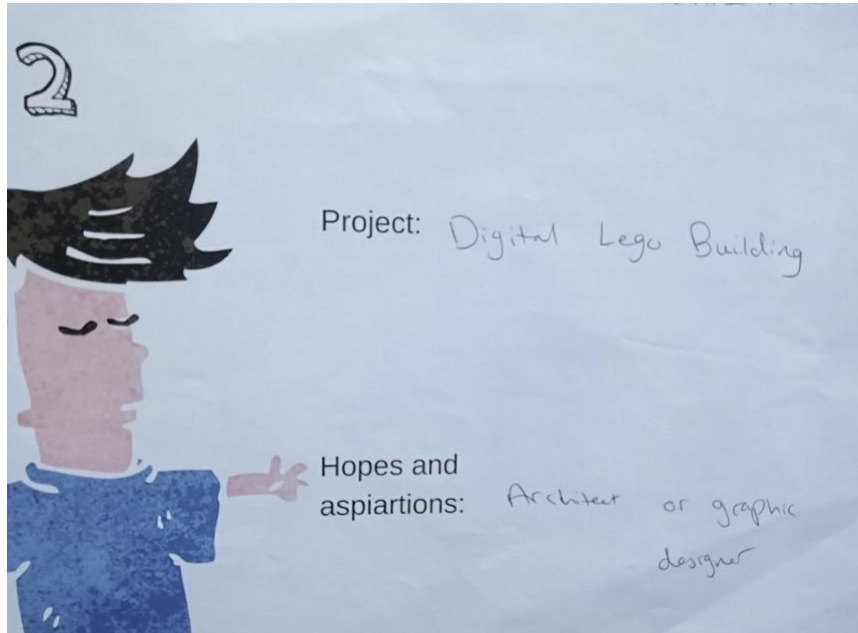
	<p>Which evaluation approaches have you used in the past to evaluate the social impact of your youth initiatives? (advantages and disadvantages)</p>	<p>The analysis illustrated in Section 2.4, none of the identified approaches (Becket <i>et al.</i>, 2003; Fetterman, 1994, 1995; Just Economics, 2015; Patton, 1994; Rietenberg-McCracken & Narayan-Parker, 1998; Sabo Flores, 2008; Simster, 2015; Tanner, 2012)</p>
	<p>Do you evaluate the role of technologies in the process?</p>	<p>Prior studies focusing on digital learning (Lemke, Lecusay, Cole, & Michalchik, 2015), HCI projects evaluation (Bossen, Dindler, & Iversen, 2016; Dow <i>et al.</i>, 2017; Følstad, 2017)</p>
	<p>Are young people involved in the evaluation process and to what degree? (Position yourself on the Cousin & Whitmore model)</p>	<p>Model: Distinguishing characteristics of Participatory Evaluation (Cousin & Whitmore, 1998)</p>  <p><i>Distinguishing characteristics of Participatory Evaluation (Cousin & Whitmore, 1998)</i></p>

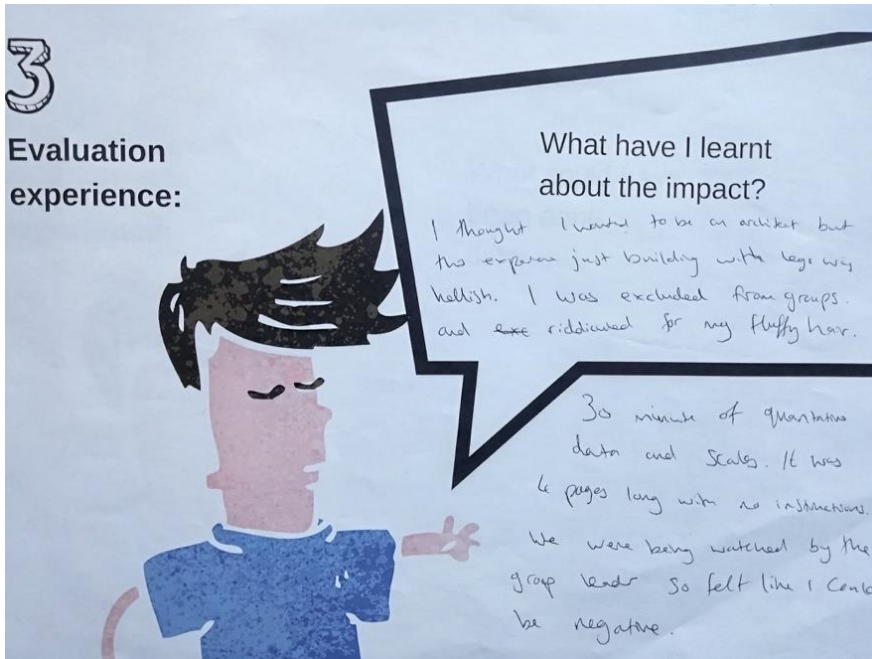
6. Participatory youth evaluation	<p>Have you ever considered participatory youth evaluation in youth digital setting?</p> <p>How could youth participation alter impact evaluation of youth digital projects?</p>	
7. Social Impact Evaluation of youth digital culture co-creation: future solutions	<p>What could be done to improve current evaluation approaches of digital youth co-creation?</p> <p>What would be the qualities of an efficient evaluation approach?</p> <p>What form would it be (a model, game, app?)</p>	

Appendix 9. Interview field notes

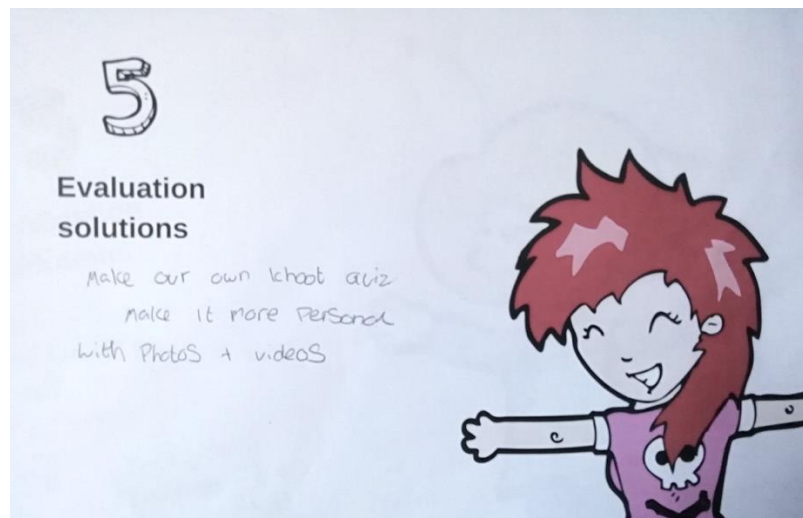


Appendix 10. Images presenting an example of a negative scenario co-creation activity.





Appendix 11. Evaluation solutions proposed by young people.



5

Evaluation solutions

- If you use digital technology then the evaluation should be carried out on the same platform e.g. iPad questionnaire. That way they can be visual and colourful.
- if it is a long course e.g. 6 weeks you should have check in evaluation weeks 2, 3 and 6.
- make it fun like a quiz or an app
- if there is a way for students to come up with their own questions but still ensure quality

