



Commissioner for Children and Young People
Western Australia

Social media and the wellbeing of children and young people: A literature review

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Executive Summary

Children and young people's use of technology and social media is evolving at a rapid pace, with implications for their wellbeing. To understand these changes there needs to be wider awareness of the types and use of social media, impacts on wellbeing – plus the range of good practice and opportunities available. Highlighting these can help parents, caregivers, service providers, educators, policymakers and other adults better identify and respond to the challenges and opportunities of children and young people's social media use. To support effective policy, practice and service innovation, this review examined literature published since 2010 on children and young people's use of social media and effects on their wellbeing.

From the age of five nearly all Australian children regularly access the internet and by the time they become teenagers are avid users of social network services (SNS), online games and chat rooms, forums and instant messaging. As they increasingly go online via a mobile device or phone their access has become more personalised, frequent, and possible in a wide range of public and private spaces.

Social media is a set of web applications that enable production, aggregation, sharing and remixing of content from multiple sources by mass, networked participants. They are giving rise to a rapidly evolving set of media practices and are increasingly embedded in other media modalities – such as television, online games and search. Consequently, social media is becoming a common feature of children and young people's everyday lives. However, social media are diverse and their effects on the wellbeing of children and young people are an emerging focus for research, policy and service delivery.

Dimensions of social media use

This report identified four key dimensions that influence children and young people's social media use:

- i) Technical dimension: hardware, software, connectivity and devices that enable social media practices.
- ii) Material dimension: text, images and interactions that are produced and made visible on digital platforms and devices.
- iii) Social dimension: with whom and how children and young people interact via social media, which can promote and enhance interpersonal connections at peer, family, local and global scales.

- iv) Motivational dimension: values and drivers of children and young people's social media use expressed in the different ways they approach and utilise social media.

Children and young people's social contexts, along with their desires to maintain relationships, express themselves to diverse audiences, and discover new information and ideas, profoundly shape their social media engagement.

Impacts of social media on wellbeing

The review identified eight key domains of social media's impact on children and young people: physical and mental health; identity and belonging; formal and informal learning; play and recreation; consumer practices; civic and political engagement; risk and safety; and, family and intergenerational relationships. Among other findings, the review has identified that positive and negative impacts are contextual and that social media:

- Promote positive norms about health and wellbeing and enhances health promotion initiatives. The range of content and culture of social media provides low level exposure to a range of risks. However, experiencing some level or risk is necessary to build resilience online and offline. The rapidly increasing volume of information available online also opens up new questions about the sources and accuracy of information in the digital age.
- Foster identity formation, community-building and creativity. Across these positive developmental processes, children and young people can also experience upsetting and potentially harmful content and practices which can have serious effects on their wellbeing.
- Support the self-directed learning and aspirations of marginalised young people and extend formal and informal knowledge networks and social support for young people generally. However, poor integration of social media in formal and informal learning networks can reinforce social exclusion.
- Provide new leisure, play and recreation spaces for children and young people. Online and video games in particular provide opportunities for learning, creativity, identity formation, socialisation, relaxation and stress relief. There are significant opportunities for the exploration (and development) of games that enhance wellbeing. Additional research is necessary to fully examine the range of concerns raised about online games.
- Can positively influence the consumption patterns of children and young people by facilitating supportive networks and attitudes to financial wellbeing and empowering young people's consumer and financial literacy. More

research is required to understand the multiple influences from which harmful consumption practices can emerge.

- Create new spaces for young people's civic and political engagement by opening up opportunities for diverse forms of participation, self-expression – as well as creatively addressing social issues. While only a small minority of young people are considered to be at risk of radicalisation, social media can also be used to circulate politically extremist messages which, alongside other complex factors, can potentially lead to harmful practices.
- Can amplify risks to physical and emotional safety but can also promote proactive approaches to issues of risk and safety that empower children and young people, develop their resilience and support their wellbeing.
- Support family and intergenerational relationships that utilise different forms of expertise – including knowledge and skills of children and young people, peers, family and other adults – to promote safety, wellbeing and resilience. Also important to consider are the range of factors which influence children and young people's social media use (such as where they are, what device they are using, what activity they are doing – and who they are with).

Good practice and opportunities

This review finds that the benefits of social media for wellbeing can be maximised by valuing the positive possibilities of children and young people's social media use. That is, good practice in research, policy and service design should focus on the multiple dimensions (technical, material, social and motivational) that support and strengthen children and young people's social media use, such as:

- Fostering 'digital age literacies' among children and young people which span media, internet and social-emotional literacies that consider not only the safe use of social media, but the moral and ethical repercussions of their everyday practices.
- Promoting peer and intergenerational capacities and support (online and offline) so as to foster skills, promote shared understandings and maximise positive opportunities for children and young people's wellbeing.
- Involving children and young people in the design of social media platforms, mobile devices, policies and programs for wellbeing. In these processes it is important to consider cultural and linguistic norms, technology access and opportunities to participate.
- Encouraging industry involvement in developing strategies to promote the positive impacts of social media on wellbeing and supporting strategies to promote the digital capacity and resilience of individuals and communities.

- Building formal, informal and shared learning networks enabled through social media, cloud computing and mobile technology which connect diverse pathways, knowledge and expertise.

Further research which looks more specifically at the commercial imperatives and technical affordances of particular social media platforms, alongside the complex circumstances of children and young people (spanning the geographical, social, cultural, political, emotional and psychological) is vital to ongoing policy, service and practice innovation.

Future needs

While research on children and young people's social media practices and wellbeing is burgeoning, there is relatively little research on the practices of children under the age of twelve. Internet access for children under the age of nine has significantly increased in recent years, yet there are major gaps in research and evidence about their activities, capacities and the risks and benefits of their online practices. More research on this demographic – and marginalised population groups – is needed so that findings from older groups are not simply extrapolated to younger children. This requires building rigorous local, national, regional and international strategies for the study of children and young people's social media use. Such strategies must keep pace with technological change, address restrictions and challenges on researching younger age groups, and be meaningful to diverse contexts and communities.

This review provides a high level snapshot of the evidence of children and young people's social media use and the effects on wellbeing. It shows the effects are broadly positive, but are mediated by the social contexts, shared communication and familial conditions in which children and young people live and grow up. While the existing literature provides for some insights on difference according to gender and socio-economic advantage, there is a lack of close analysis on other aspects of lived experience (such as geographical location and culturally and linguistically diverse background). What is clear is that the benefits and risks of social media use map to broader patterns of literacy levels, as well as socio-economic disadvantage. Intervening in this cycle has the potential to generate a steep change in the wellbeing of the children and young people who stand most to gain from the benefits social media offer. Such efforts must not only be informed by research, but by the views and preferences of children and young people themselves.

GLOSSARY

Affordance: the relation between context, technology and a person's actions.

App/application: a software program which is downloadable on a mobile device, or computer (for example, web-based apps).

Asynchronous: Online communication happening at different times, or not simultaneously (opposite of 'synchronous' communication. See below). For example, wikis, blogs and forums.

Avatar: an online character, or representation, of the user.

Blog: an online site which has content posted by an individual, or organisation.

Cloud computing: digital platforms and infrastructures operated by distant computing ('in the cloud').

Critical literacies: the range of media, digital, social and emotional literacies required to negotiate and navigate the digital age competencies (Aspen Institute Task Force on Learning and the Internet, 2014).

Digital infrastructure: facilities and systems that support and connect digital platforms and wireless services.

Digital trace: online content and interactions visible to users (such as the 'like' button) and digital platform providers.

Digital platform: online content, such as apps, social networking sites (Facebook), user-generated content (Youtube) and curated content (Pinterest).

Digital resilience: the capacity to respond to, learn from and move on in a positive way from negative online experiences.

Digital storytelling: communicating and sharing stories using digital tools.

Electronic play: play experiences enabled by digital social games (Przybylski 2014).

Experiential learning: building knowledge through learning activities that promote reflection and experience.

Homebase: a room that users can decorate on SNS (e.g. Habbo Hotel) (Grimes & Fields, 2012).

Interoperability: the exchangeability of data between diverse platforms and devices.

Like: An online expression of enjoyment, recommendation or support (for example the 'like' button on Facebook).

Micro-blog: an online site that has postings of a smaller size than a regular blog (for example, Twitter).

Mobile device: devices which can be easily carried or moved around and have wireless access, for example: mobile phones, laptops and tablets.

Participatory culture: new opportunities for sharing and creating enabled by social media.

Profile: an online identity created for a social networking site.

Social graph: a visualisation of online social connections specific to an individual user (built from their interactions on social networking sites)

Social networking site: a digital platform which enable people to create profiles to communicate and connect with others (for example, Facebook, Instagram and Snapchat).

Synchronous: online communication happening simultaneously, or at the same time (opposite of 'asynchronous' communication). For example, Skype and instant messaging.

Tag: keyword related to a piece of online information (helps to organise and classify content and assist with searching).

Tween: a young person aged between 9 and 12.

Uploading: transferring existing online content to a digital platform.

Introduction

This literature review was undertaken for the Commissioner for Children and Young People Western Australia to provide:

- an overview of the categories and types of social media and how children and young people are currently engaging with them;
- an overview of the impacts of social media use on the wellbeing of children and young people;
- examples of current good practice and opportunities for using social media and online environments to engage with and/or deliver services and information to children and young people.

Globally, there is a wide-ranging and ever-increasing amount of research emerging about the impacts of social media and technology on children and young people's wellbeing. Nearly five years ago, members of this team conducted a similar review exploring the benefits of social network services (Collin et al., 2011b). Social media has rapidly evolved, becoming an ever more ubiquitous feature of social, economic, political and cultural life. Limits of time and scope mean that this report canvasses only certain aspects of the available literature in this area: more detailed reviews are warranted.

For the purposes of this review, 'children and young people' means those 18 years old and younger. 'Social media and online environments' refer to technological devices and platforms including social network services (SNS) such as Facebook, Instagram and Snapchat as well as blogs, chat rooms, gaming, online health, education and other services, apps, clouds, and sharing sites. 'Social media' also refers to the practices and social relations that are formed through social media. As per the Scope of Work, online gambling, sexting, cyberbullying and cybersafety were specifically excluded from this review, recognising that these areas require significant attention in their own right.

This literature review audited peer-reviewed and credible grey literature from 2010 onwards, with a focus on Australian and Western Australian research, plus significant international publications. Literature published before 2010 and outside of the specified age-range has been included where it is of particular significance. For under-examined areas regarding children and young people's use of social media (for example consumerism, radicalisation), newspaper articles were referenced. Influential research beyond that specified in the scope (such as focusing on technology or internet use generally) is included where the implications for children and young people are significant. Due to word and time limit constraints as well as

the breadth of literature to be covered, this review does not list all details (e.g. samples, methodologies, limitations) of every study mentioned.

While social media is increasingly integrated into online education, health, entertainment and other services, quantitative research tends to differentiate between use of the internet for particular activities (homework, playing games, search, use of mobile phone apps etc.) with SNS used as a proxy for social media practices more generally. As such, this review often refers to SNS use, while highlighting that social media is increasingly integrated into many other online environments and activities.

Context

The experience of childhood and youth is social, complex and quickly evolving – especially in an age of social media. Although digitally mediated mobile, personalised and social communicative practices are now a common feature of everyday life, there is significant diversity and unevenness in quality of access, use and impacts in relation to the lives of Australian children and young people. Digital practices accumulate, change and vary according to the individual capacities, history, preferences, social milieu, economic resources, age and interests of individuals (Ellison & boyd, 2013). Moreover, the immediacy of new, 'global media' requires youth culture research, policy and practice to be responsive and able to change (Buckingham & Kehily, 2014) – especially in relation to social media. There is a tendency in much of the popular and scholarly debate to focus on the risks and fears associated with the rapid development of social media practices. Instead of a singular focus upon the concerns and discomforts of children's technology use, Ruckenstein (2013) advocates adopting a socio-cultural perspective, which highlights how digital life produces new forms of participation and consumption and child-adult relations. Policy makers, parents, educators and scholars require new approaches to understand how social life is changing in the context of digital communication – on and offline. This requires moving beyond static views of children and young people's risk and empowerment in the digital age towards a focus on how to support, negotiate and open up the positive aspects of social media so as to enhance 'pluralities', 'playfulness', 'possibilities' and 'participation' (Craft, 2013). The digital age is fundamentally a networked age where children and young people are exposed to life well beyond immediate peer, schooling and family groups through these new and dynamic online networks. As such, their experiences are individual, situational and contextual (Collier, 2015).

Children's rights and capabilities provide a useful lens for examining the multidimensional impacts of young people's media use according to diverse socio-

cultural contexts. Third and colleagues argue: “[a]s it becomes increasingly difficult to draw the line between offline and online, it is necessary for us to examine how this changing environment impacts the wellbeing and development of children and their rights” (Third et al., 2014a: 6). This recognises the agency of children, their welfare needs and the power differentials that shape children’s rights (Nussbaum & Dixon, 2012). It focuses attention on what enables and/or constrains children and young people to participate in a networked society. Moreover, a strengths-based approach focused on building on existing child and youth cultures, skills and capabilities is most likely to maximise the benefits and mitigate the potential risks of social media (Collin et al., 2011b:11). ‘Critical literacies’ can be defined as the range of media, digital, social and emotional competencies that children and young people require to negotiate and navigate the digital age (Aspen Institute Task Force on Learning and the Internet, 2014). A focus on these is necessary in order to foster the resilience of children and young people and to address their particular needs, expand their opportunities for participation in the community and equip them with the tools to critique, explore and change the digital world around them. In her influential book, *It’s complicated: the social lives of networked teens*, boyd (2014) argues that:

Networked publics are here to stay. Rather than resisting technology or fearing what might happen if youth embrace social media, adults should help youth develop the skills and perspective to productively navigate the complications brought about by living in networked publics. Collaboratively, adults and youth can help create a networked world that we all want to live in. (p.213)

What is Social Media? How do Children and Young People Use it?

Social media can be defined as a set of web applications that (a) rely on the participation of mass groups of users rather than centrally controlled content providers, (b) aggregate and remix content from multiple sources, and (c) more intensely network users and content together (O’Reilly, 2007; cited in Ahn, 2011). Social media can now be accessed via multiple platforms (eg Twitter and Youtube) and mobile devices (eg mobile phones, tablets and laptops). They are also increasingly integrated with traditional media (eg. television, newspapers and radio) for re-broadcast and intermixing with ‘newer’ media. In this way, social media offers new expectations, interactions and activities – such as user-generated content, remixing and dissemination (Bruns, 2008). This is associated with the rise of ‘participatory culture’, which shapes children and young people’s expectations as

active agents in media practices and the world around them (Jenkins et al., 2006). Social media can thus also be understood as a 'cultural mindset' towards the diverse production, use and purposes of digital communications (boyd, 2014). This diversity can be broken down into technical, material, social and motivational dimensions. While these dimensions are interrelated, individually they illustrate specific enablers of, and constraints, on children and young people's social media practices.

Technical dimension

The technical dimension refers to the hardware, software, connectivity and devices that enable social media practices. Almost all Australian children and young people have regular access to the internet and by age fourteen around 50 per cent go online using a mobile phone (Australian Communications and Media Authority, 2013). From as young as five, children are using social media (including SNS) with use significantly increasing as they get older (Green et al., 2011; Australian Communications and Media Authority, 2013; Holloway, 2014). The majority of Australian children and young people regularly engage in a variety of activities that have social media components including gaming, SNS and instant messaging (Green et al., 2011). In 2012 the Australian Communications and Media Authority conducted a major study of Australian children and young people's social media practices, with a focus on SNS (Australian Communications and Media Authority, 2013). A survey was completed by 1,511 Australians between the ages of eight and 17, with data post-weighted to produce estimates for all young people in that age group. The study found that the majority of eight to 17 year olds in Australia had used SNS ('78 per cent of eight to nine year olds; 92 per cent of 10 to 11s; 88 per cent of 12 to 13s; 97 per cent of 14 to 15s and 99 per cent of 16 to 17s have used social network services at some stage': 38), and that the frequency of use increases with age ('36 percent of 12 to 13 year olds reported daily SNS use on a computer, with this figure increasing to 71 per cent for 16 to 17 year olds': 8).

Global trends in internet access and social media practices (including the growth in use of smartphones and other internet-enabled devices) indicate that children's use is likely to have increased since the Australian Communications and Media Authority study. Holloway finds that "[c]hildren's internet use is rapidly changing. Tweens' (9 to 12 years) usage patterns now resemble those of teenagers five to six years ago, and younger children's (5 to 8 years) usage is approaching that of tweens" (Holloway, 2014: 2). Moreover, Australian children and young people's use is similar to - or higher - than comparable countries – particularly in terms of mobile internet access (Green et al., 2011). While the popularity of specific platforms changes over time, Australian children and young people's use is comparable with that of children

in other English speaking countries such as the USA. For example, 71 per cent of 13 to 17 year olds in the USA and 77 per cent of 12 to 17 year olds in Australia regularly use Facebook (Lenhart & Pew Research Center, 2015; Australian Communications and Media Authority, 2013).

Technical dimension of children and young people's social media practice

Affordances

- collaborative projects (Wikipedia)
- blogs and micro-blogs (Twitter)
- content communities (YouTube)
- social networking sites (Facebook)
- virtual game worlds (World of Warcraft)
- virtual social worlds (Second Life)

(Kaplan & Haenlein, 2010)

Relevant statistics

Australia

Australian Communications and Media Authority (2013) reported that, as at 2012:

- 43 per cent of 10 to 11 year olds used the internet on a mobile device and 54 per cent of 16 to 17 year olds went online via their mobile phone. Access via mobile devices (including tablets, handheld media players, game devices/consoles) increases with age.
- 78 per cent of 8 to 9 year olds and 92 per cent of Australian 10 to 11 year olds had used SNS. The most popular platforms were YouTube, Moshi Monsters and Club Penguin. Despite minimum age requirements (13 years), 61 per cent of 8 to 12 year olds used Youtube and 32 per cent used Facebook.
- 88 per cent of 12 to 13 year olds and 97 per cent of 14 to 15 year olds use SNS. 92 per cent of 16 to 17 year olds use SNS, with 71 per cent using at least daily.
- Among 12 to 17 year olds Facebook was the most popular platform, followed by YouTube, Skype and Windows Live Messenger. Tumblr and Twitter featured to a lesser extent.
- Females are more frequent social networkers than males.
- Playing games was the most frequent SNS activity for eight to 11 year olds.

International

In a study based on a nationally representative sample of 1,060 teens aged 13 to 17 residing in the United States, Lenhart and Pew Research Center (2015) report that, in 2015:

- 92 per cent of teenagers aged 13 to 17 go online daily, with 24 per cent online 'almost constantly'. This is associated with high access to smartphones (75 per cent).
- 81 per cent of 15 to 17 year olds and 68 per cent 13 to 14 year olds use social networking sites
- Facebook is the most popular social media platform (used by 71 per cent of teens), followed by Instagram (52 per cent), Snapchat (41 per cent), Twitter (33 per cent) and Google+ (33 per cent). 71 per cent of teens use more than one social network site.

Material dimension

The material dimension refers to the text, images and interactions that are produced and made visible on digital platforms and devices. Social media practices produce digital products and traces, or 'property' (James, 2014), through sharing and uploading (outgoing practices), as well as consuming and downloading (incoming practices). These are sometimes called digital 'footprints'. Different online activities produce texts (blog entries, comments, chat, status updates), images, videos as well as information on personal preferences through settings, tags, likes and 'hearts'.

Australian Communications and Media Authority (2013) reports that different age groups engage with social media differently: eight to 11 year olds preferred gaming while 12-17 year olds were more social, using SNS to interact with others via comments, messages, tags and group chats. The *AUKids Online* study found that, 'although creating content is generally less common than receiving content, Australian children do this more than in many other countries' (Green et al., 2011: 20). Changes in the types of platforms available to children and young people (and the affordances that those platforms provide) mean their enthusiasm and skills for creating content via social media will increase. However, children and young people's capacity to create social media content are not equal. Their opportunities to participate and produce content can sometimes be restricted by who pays for this activity – thereby producing 'differentiation of access, participation and privileges' (Grimes & Fields, 2012). This means that children and young people's opportunity to play, build and share in online spaces depend upon the payment processes put into place.

Material dimension of children and young people's social media practice

Affordances

- forms of communication (posts, groups, private messaging)
- personal profiles (home pages, avatars, portfolios, homebases)
- networking residues (traces, such as commenting, liking or hearting)
- hierarchies of access (differentiation of access, participation and privileges)

(Grimes & Fields, 2012)

Relevant Statistics

Australia

Australian Communications and Media Authority (2013) found that, in 2012:

- The top activities for 12 to 17 year olds were posting comments, sending private messages, posting status updates, sending public messages and engaging in group chat, posting photos or videos, and tagging people.

The AUKids Online study (Green et al., 2011) found that, in 2011:

- 63 per cent of 9 to 16 year old internet users use the internet for social networking, with 45 per cent actively creating and contributing their own media and distributing it to family and friends.
- 16 per cent have spent time in a virtual world and 9 per cent have blogged, a slightly higher percentage than most of the countries included in the study.
- More Australian children have created a character, pet or avatar than their European counterparts (26 per cent in AU vs. 18 per cent in Europe).
- From the age of 13 onwards, young people were found to create less but remix and share more.

International

In the United States, Lenhart and Pew Research Center (2015) found that:

- Girls are more frequent users of visual-based social media platforms (such as Instagram, Snapchat, Pinterest, Polyvore, Tumblr and Vine), while boys are more frequent gamers.

A study based on fieldwork carried out via a UK online sample of 4,013 premium rate service users and 1,045 users of other micropayment systems, aged between 11 and 65 years old (PhonePayPlus 2013a; 2013b) found that:

- 12 per cent of children had used virtual currencies.
- 24 per cent were unclear about how much they were spending on virtual goods.
- Complaints relating to children and mobile apps increased 300 per cent from 2010/11 to 2011/12.

Social dimension

Social media are specifically designed to facilitate, promote and enhance interpersonal connections at peer, family, local and global scales. The social dimension relates to with whom and how children and young people interact. These interactions encompass networked people, places and information that extend their connections to diverse communities and ideas. The potential relationship benefits (or social capital) of SNS can involve 'bridging' ties to new information and connections, or 'bonding' ties, which have existing social and emotional investment (Ahn, 2012).

Children and young people use social media platforms to connect with friends, family and others known to them offline, as well as people they meet online through their existing networks or through communities of interest. As described below, when children reach the age of ten or eleven, they begin to use new technologies in ways that enable greater connectivity with their expanding social networks. Children and young people build large and diverse online networks across platforms, comprising friends and family, as well as friends of friends and people they have only met online. A small number meet offline with someone completely unknown.

Social dimension of children and young people's social media practice

Affordances

- pluralities (extension of people, places and activities)
- playfulness (opportunities to inhabit make-believe spaces)
- possibilities (varied choices for connecting and constructing content)
- participation (options for taking action and being heard)

(Craft, 2013)

Relevant Statistics

Australia

The *AU Kids Online* study (Green et al., 2011) found that, in 2011:

- Australian children reported more SNS contacts than their EU counterparts, with 16 per cent (compared to 9 per cent of European children) reporting that they have over 300.

Australian Communications and Media Authority (2013) found that, in 2012:

- 39 per cent of 16 to 17 year olds (along with 38 per cent of 14 to 15 year olds, 23 per cent of 12 to 13 year olds, 14 per cent of 10 to 11 year olds and 9 per cent of 8 to 9 year olds) have added people to their friends or address lists without ever having met them face to face.
- 9 per cent of 12 to 13 year olds, 20 per cent of 14 to 15 year olds and 24 per cent of 16 to 17 year olds went on to meet these contacts offline: most of these meetings involved 'strangers' who were friends of friends, with only 5 to 7 per cent meeting someone completely unknown to their social circle.

International

In the United States, Lenhart and Pew Research Center (2015) found that:

- 34 per cent of teenagers residing in the United States are not sure how many Facebook friends they have: among those who did know, the typical teen was found to have 145 Facebook friends.
- Of the teenagers who use multiple social networking sites, 57 per cent report some overlap in their contacts across the various sites: 29 per cent report that they interact with the same people on each social site they use, and 9 per cent report that there is 'not a lot' of overlap in terms of contacts across their chosen sites.

Motivational dimension

The motivational dimension highlights the drivers of children and young people's social media use. These are expressed in the different ways children and young people approach and value social media. In an extensive ethnographic study drawing on offline and online observation and in-depth interviews with young North Americans, boyd (2014) argues that teenage social media practices reflect underlying social motivations. They are not, she finds, "...compelled by gadgetry as such – they are compelled by friendship" (p.32). In an age of heightened surveillance (from GPS tracking to CCTV and helicopter parents), children and young people are also looking for alternative spaces – free from the adult gaze – to socialise and explore their identities. As such, the drivers that attract users to social media can be more extensive than friendship alone and include: maintaining

relationships, expressing themselves to different audiences, and discovering new information and ideas.

Motivations are also shaped by the specific experiences and contexts in which children and young people live. The *AUKids Online* study finds that social media has become particularly important as a mechanism for connection and expression. Almost half of the children and young people surveyed found it easier to be themselves online and one in five 11-16 year olds talked about things online that they would not talk about face to face (Green et al., 2011). SNS and other forms of social media have been identified as critical to a sense of acceptance and belonging for children and young people who experience exclusion or discrimination, for instance due to physical or mental ill-health, sexuality or homelessness (Third & Richardson, 2009; Robinson et al., 2014b; Humphry, 2014). The affordances of social media and the networks they enable become more important as children grow older, forming meaningful relationships that help them to navigate the complex physical, emotional and social changes that accompany adolescence (Third & Richardson, 2009).

Just as the social media landscape is constantly evolving, the habits and preferences of children and young people also change; transformations in social media use take place as children and young people get older, as particular platforms come in and out of favour and their unique circumstances shift over time. Robards (2012) examined the migration of Australian young people from MySpace to Facebook and found that moves to new social media platforms can be influenced by factors including functionality, as well as the 'broader social milieu in which the sites operate' (p. 385). Motivations for use can evidence the ways in which young people manage their 'digital trace', and can also 'be understood through a narrative of transition or 'growing up'' (Robards, 2012: 385, 386). Uptake of platforms is also influenced by practical, cultural, language and other demographic factors. For example, Divas Chat (a minimal messaging and social network platform attached to Telstra pre-paid services) had rapid uptake in some Australian indigenous communities due to its greater reliability in remote areas and subsequent community fidelity (Brusse et al., 2014).

In a report exploring children's use of 'social networking forums' – social network sites, virtual worlds, networked games and project-sharing sites – Grimes and Field (2012) highlight the importance of exploring the role of 'marginalized users', 'non-users' and 'lurkers'. The authors also raise the need to examine demographic differences and inequities that provide more focused and in-depth insights (than simply access and usage rates). This would require taking up new digital methods

such as 'social media ethnography' and 'digital ethnography' (Postill & Pink 2012; Gallagher et al., 2013) which use a combination of both online and face-to-face methods.

Motivational dimension of children and young people's social media practice

Affordances

- social connections (family, friends, peers and adults)
- visibility and recognition (to see and be seen)
- freedom to explore (privacy and autonomy)

(boyd, 2014)

Relevant Statistics

Australia

- *AUKids Online* found that 46 per cent of Australian internet users aged 11 to 16 found it easier to be themselves online: 47 per cent of them discuss 'different things' online, with 22 per cent revealing that they talk more about private things online than face to face (Green et al., 2011).
- An Australian mixed-methods study asked 1,004 middle-school students what they thought was the best thing about social media: 49 per cent said the ability to stay in touch with friends and family (de Zwart et al., 2011).

International

- In a 2014 UK study, 1,000 11 to 16 year olds with social networking profiles were asked what they liked about specific social networking sites (including Facebook, YouTube, Twitter, Instagram, Club Penguin, Moshi Monsters, GooglePlus and Tumblr). The most popular responses were: 'Being able to talk to my friends' (33 per cent); 'Keeping up to date with gossip' (25 per cent); and 'All of my friends are on there' (24 per cent).
- Depending on the specific platform, they also reported enjoying 'Playing games', 'Being able to see and share photos', 'Learning new things', 'Being creative', 'Feeling I am part of an online community', and 'Feeling people understand me' (Lilley et al., 2014: 9).
- When asked what they disliked about social networking sites, the most common responses were 'Adverts' (29 per cent), 'Spam' (18 per cent); 'Spending too much time on there' (18 per cent); and 'People can be rude and hurtful without realising it' (17 per cent). Other responses (depending on

the specific platform) included 'Cyber bullying', 'Seeing stuff you don't want to see, like porn', 'Making you feel envious of others', 'Strangers', 'I don't have any friends on there', and 'It puts you under pressure to make your life out to be amazing' (Lilley et al., 2014: 11).

- A 2013 Andalusian study asked 1,487 adolescents about their motivations for using social media: the most popular motivation was to 'share experiences' (82.8 per cent), followed by 'knowing what my friends say about the photos I upload and our experiences' (51 per cent) and to 'make new friends' (45.6 per cent): the authors found that boys tend to display psychological motivations (such as personal recognition, and reinforcement of self-esteem) while girls display more social and relational motivations (Colás et al., 2013: 20).

Critical Literacies for a Digital Age

Social media practices are shaped by the personal and social circumstances of children and young people, the particular social media they use, the activities they engage in and the people they interact with present unique sets of opportunities, risks and benefits for wellbeing. In addition, social media practices are a set of literacies – often described in terms of 'digital literacy', 'social network literacy' learning or 'digital citizenship'. There is also a broader concept, which recognises that "today's online and networked environment requires that young people develop new skills to participate and stay safe in the new digital media environment" (Collin et al., 2011b: 12). Taken further, the literacies required to thrive in a digital age are multidimensional and encompass 'digital age literacies' (Aspen Institute Task Force on Learning and the Internet, 2014). These span the range of media, digital, social and emotional literacies required for young people to "learn through multiple media confidently, effectively and safely" (p.17).

Levels of literacy can enable or constrain individual capacities for decision-making, agency and empowerment and understanding. While improvements in quality and availability of technology means young people often hold a lot of expert knowledge, they do not all have the same levels of media literacy (Third et al., 2014a). Though research is showing that improvements in access to technology means that socially disadvantaged children and young people in Australia (such as refugees and Indigenous people in remote communities) are becoming increasingly 'media savvy' (Evers et al., 2013), quantity and quality of technology access still varies and can affect opportunities for developing media literacies (Bird, 2011).

Role of Social Media for Children and Young People's Wellbeing

The *Commissioner for Children and Young People Act 2006* states that the 'wellbeing of children and young people includes the care, development, education, health and safety of children and young people' [Section 5 amended by No. 46 of 2009 s. 5(2).].

Australian health and wellbeing surveys and reports have only recently begun to reference the specific role of social media in relation to children and young people's wellbeing with mixed approaches and assessments. For example, the *Stress and Wellbeing in Australia Survey* highlighted how young people (aged 18 and over) were "listening to music, visiting social network sites and consciously avoiding stressful people to help manage their stress" (Casey & Liang, 2014 p.5). A report about the emotional wellbeing needs of children and young people (Urbis, 2011) indicated how new technologies are contributing to poorer mental health outcomes, specifically in reference to cyberbullying, SNS and chat-rooms.

It is still more common for studies to acknowledge that digital technologies have the potential for enhancing children and young people's wellbeing without specific reference to social media. For example, in the Australian Human Rights Commission *Children's Rights Report*, online programs and digital technology were seen as a key aspect in "supporting children and young people who are engaging in intentional self-harm, with or without suicidal intent" (Australian Human Rights Commission, 2014: 104). Similarly, a youth mental health report by Mission Australia and the Black Dog Institute recommend the use of "online initiatives to improve access, appeal and affordability of mental health services" (Ivancic et al., 2014: 3). While the Australian Research Alliance for Children and Youth (ARACY) Report Card, *The Wellbeing of Young Australians* (2013) highlights the role that technology plays for young people's participation – it has no specific mention of social media. While we acknowledge that social media is part of online practices in general, there are particular aspects of social media which invite closer examination as it increasingly becomes a part of children and young people's everyday lives.

Guiding this review is the understanding that wellbeing is a dynamic and relational process that takes into account the diverse dimensions of children and young people lives and that "a severe deficit in any dimension must impact on the achievement of capabilities in all other dimensions" (Australian Research Alliance for Children and Youth & Australian Institute of Health and Welfare, 2010: 56). Indeed, with digital technologies interwoven in the everyday lives of children and young people, some have argued for a 'digital wellbeing' approach to "take account of the increasingly

important mediating role played by the internet for children's interpersonal relationships, education, play and social development" (Nansen et al., 2011: 239). However, rather than viewing the digital as a separate realm, a holistic approach focuses on how new intersections between physical, mobile and digital spaces have the potential to impact children and young people's wellbeing. Accordingly, this review considers the evidence on how children and young people's social media practices impact wellbeing in these multidimensional terms.

Approaches to the Study of the Effects of Social Media

The 'impacts' of social media on children and young people can be theorised and measured in many ways and are researched from a variety of disciplinary perspectives spanning cultural studies, psychology, public health and youth studies (Brown & Gregg, 2012; Kross et al., 2013; Winpenny et al., 2013; De Ridder & Van Bauwel, 2015). Different theories and methodologies produce particular understandings of children and young people's social media use. Much social science research focuses on understanding the causal effects of social media and usually adopts survey and other quantitative methods. Others argue that the effects of social media are socially determined. However this doesn't sufficiently account for the ways in which some social media affordances make particular activities and social interactions easier than others (for example finding new information, sharing ideas and communicating with others). As such, some research is "moving away from variables relating to intensity of use, and is shifting towards the impact of different and discrete online activities" (Best et al., 2014: 33). This interrelated approach seeks to account for the complex interrelationships of technology and sociality (Buckingham, 2008; Ahn, 2011; boyd, 2014). For example, Ahn (2011) advocates for a 'social informatics' approach (Kling, 2007) that explores the relationships between social media features, characteristics of user populations, their contexts, and behaviours relating to social outcomes. Children and young people's interpersonal connections, online activities and motivations are significant factors that influence their wellbeing, as well as the architecture of social media platforms themselves.

This review takes a broad approach, canvassing a wide literature and noting that some will argue causal relationships while others maintain that impacts are relational.

Summary of Recent Literature Investigating the Impacts of Social Media on the Wellbeing of Children and Young People

Acknowledging that social media is complex, and in light of the vast and rapidly changing array of platforms and practices available in the current social media landscape, the review examined the literature on impacts of social media on the wellbeing of children and young people with reference to: mental and physical health; identity and belonging; formal and informal learning; play and recreation; consumer practices; civic and political engagement; risk and safety; and family and intergenerational relationships. These eight themes relate to recognised indicators of children and young people's wellbeing (Australian Research Alliance for Children and Youth, 2013; Commissioner for Children and Young People WA, 2011a).

Mental and physical health

Mental and physical health is an integral aspect of children and young people's wellbeing, as identified by ARACY: "Healthy children and youth have their physical, developmental, psychosocial and mental health needs met" (2013: 14, 16). In consultation with over 3,700 young people and families, ARACY identified the vital role supportive systems and environments play for child and youth wellbeing. The Mission Australia Youth Survey (Fildes et al., 2014) highlights how friend/s, parent/s and relatives/family friends were the top three sources of help – with over half of respondents indicating they would access the internet for help regarding important issues in their lives.

Whilst 99 per cent of young Australians are online daily (Burns et al., 2013), quality access to technology remains an outstanding issue for many young Australians, limiting their capacity to access the benefits of social media (Blanchard et al., 2008; Humphry, 2014). Access issues are often most acute in marginalized or 'vulnerable' communities (Blanchard et al., 2008; Humphry, 2014). For example, the 29.7 per cent of Western Australian children and young people (aged 0-17) from Culturally and Linguistically Diverse (CALD) ancestry (Commissioner for Children and Young People WA, 2013) are less likely to access the internet than their peers (Commissioner for Children and Young People WA, 2014: 245) However, smartphone uptake has enabled greater levels of connectivity, particularly for Indigenous children and young people in rural and remote Australian communities (Johnson & Oliver, 2013). Internet and social networking activities are identified as key enablers for children and young people to access information, advice and support. This section highlights that we need more research to understand further how social media platforms and practices affect mental and physical health.

Enabling social support and participation

For many children and young people, social media (and online communities more broadly) provide vital points of social connection that enable them to respond to adversity with resilience. The Young and Well CRC's *Growing Up Queer* report found that, in the context of experiencing alarming rates of homophobia or transphobia in their everyday lives, young people who identify as sexuality diverse or gender variant rely heavily on social media and other online engagement to support their mental health and wellbeing. 85 per cent of participants had used the internet (including social media) to explore their sexual and/or gender identity, and described it as a place where they 'can find friends they can trust' (49 per cent) or a place where they 'feel accepted' (78 per cent) (Robinson et al., 2014b: 31). Queer young people use social media "to connect to young people's services; chat with other queer young people; find support for coming out; ... and engage with social and political issues such as international gay rights and same sex-marriage" (Robinson et al., 2014b: 31).

A recent study of mobile phone usage by people experiencing homelessness indicates that "users of mobile phones who are homeless are using a wide range of social media and web-based platforms for communicating and accessing information in their daily life. Smart phone users are using the multimedia functions of their phones and engaging strongly in social media and content creation (e.g. photos)" (Humphry, 2014: 25). The study finds that engaging in social media via mobile phones facilitates this population's social and economic participation – and, by extension, supports their mental health and wellbeing – by enabling them to pay bills, seek employment, and study (Humphry, 2014: 25). The study recommends that homelessness services need to be supported to build their digital capacity "through adequate funding and resourcing to integrate mobile, social media and other web-based platforms into regular contact and support activities" (Humphry, 2014: 5).

Similarly, a study of the Livewire online community showed that the social media capabilities of this moderated, closed community powerfully support the wellbeing of young people living with chronic illness and/or disability (aged 10 to 25):

It achieves this by helping members to overcome the social isolation that is often experienced by young people who have limited opportunities for socializing with others their own age due to limited mobility, long periods of time spent away from school, either in hospital or at home, and so on. Livewire enables young people living with a chronic illness or disability to

experiment socially in a safe, moderated setting. These factors in turn foster meaningful friendships – with many Livewire members reporting that they count their Livewire friends amongst their closest and most dependable friends – and a high level of peer support among members (Third & Richardson, 2009: 2).

Social media platforms create spaces in which young people with health issues can stay connected with their peers, school and family while also supporting their ongoing learning. Hopkins et al (2014) describe the re-design of student learning at the Melbourne Royal Children's Hospital, where the introduction of a range of mobile digital tools enabled young people's inclusion, continuity of learning and personalised projects spanning: "music creation; project blogs, learning documentation, animation, film making, and communication with peers, family and school, whilst confined to a hospital bed or ward" (p. 315). The design of a specific, hospital-based social networking website for children and adolescents living with Type 1 diabetes also had a range of positive impacts, such as involving youth in "real-world based, authentic self-management education and problem-solving" (Sprod et al., 2014: 1).

Enhancing information and services that promote mental and physical health

The internet is a key means by which young people access information, services and support (Burns et al., 2010). The accessible, often anonymous and peer-based features of the internet have increased young people's access to engaging and relevant mental health and wellbeing information, as well as peer-support and communities of care, and professional services (such as online counselling). As one form of online communication, social media (via websites, SNS and virtual worlds) is associated with improved and tailored information and service delivery to children and young people (Collin et al., 2011b). It specifically enables 'targeted, local, credible and continuous' messages to be disseminated through social connections (Christensen, 2014), enhancing awareness of different issues, resources and support in ways that hold particular potential to address stigma and encourage help-seeking. There are however challenges to measuring social media-based health promotion initiatives, particularly those targeted at children: anonymity and differences in degrees and conditions of social media can make it difficult to measure outcomes. Furthermore, the pace of technological advances and trends can limit the relevance of findings by the time they are published (Brusse et al., 2014).

Building on lessons learned from a study involving sexual health promotion campaigns for Australian young people aged 16 and over, Evers et al (2013) advise

that social media-based health promotion initiatives need to be (among other things): adaptable (in the context of the 'fast-moving technological environment'); adequately resourced (including trained social media staff as well as clinicians); credible (with social media being a path into a central, trustworthy source of accessible and factual information); rights-based (respecting the rights of young people to be involved in matters affecting their lives); interactive (to take full advantage of the medium's possibilities); and humorous (to inspire greater engagement). This requires use of social media as a form of community building and participation – not as a communication channel to speak at young audiences.

A few key Australian initiatives are leading the way in this field: for example, Reachout.com (an online mental health promotion, prevention and early intervention service) uses a sophisticated social media strategy encompassing content generation, sharing and campaigns as a means by which to promote access to information and services as well as peer-to-peer support for young people going through tough times. A 2011 evaluation of young people's use of ReachOut.com found that the service was effective in engaging with and facilitating help-seeking with young people, in part because their model incorporates online delivery, participant involvement and clear links to professional services (Collin et al., 2011a). Further research is required in order to track outcomes and understand which specific aspects and uses of the model are most effective in promoting mental health literacy and help-seeking. In the meantime, recent user profiling of the service found that, of the 61,000 visitors to ReachOut.com (aged 16–25 years) in March 2015, '89 per cent reported experiencing symptoms of depression, anxiety and/or stress; nearly 50 per cent reported thinking about taking their life in the past month; and 71 per cent reported not otherwise accessing help from any other mental health professionals' (ReachOut.com, 2015), suggesting that online services with integrated social media functionality are playing a vital role in young people's help-seeking and management of their wellbeing. Young people are also using social media to develop and deliver their own strategies for promoting mental health (see, for example, [#yarnupforchange](https://twitter.com/yarnupforchange) and [ProjectRockit](http://ProjectRockit.com)).

There is also an emerging body of literature relating to use and impact of social media in the context of suicide and suicide prevention. Suicide is the leading cause of death for Australians between the ages of 15 and 34, and Indigenous young people aged 15 to 24 have four times the risk of suicide compared to their non-Indigenous peers (Shand et al., 2013: 396). Various challenges have been identified, including the risk that social media can be used to seek information about suicide methods, to communicate suicidal intentions and engage in suicidal acts online (Robinson et al., 2014a). Concerns have also been raised about whether social

media sites have adequate ethical and safety protocols (and sufficiently skilled moderators) to provide appropriate support to individuals at risk (Robinson et al., 2015). Scholars agree, however, that social media has significant potential as a tool for suicide prevention: the reach, accessibility, cost effectiveness, and immediacy of social media are seen as advantages in the context of health promotion, treatment delivery and real-time interventions. The increased opportunities to share experiences in a flexible and timely way, as well as support others, are also particularly important features (Robinson et al., 2014a). While this peer-to-peer support via social media isn't a replacement to traditional care and treatment options, it appears to be a powerful adjunct to professional care and plays a significant role in supporting positive identity, expression and social connectedness (Robinson et al., 2014a). Accordingly, a range of Australian researchers (connected to the [Young and Well Cooperative Research Centre](#)) are currently collaborating with health professionals and social media users to establish methodological and ethical guidelines, conduct empirical work and develop safe and effective initiatives and interventions in this area.

Accessibility and cultural relevance

Some children and young people experience difficulties using available technologies to participate in social media. For example, an evaluation of the [Livewire.org.au](#) online community for young people living with chronic illness, a serious condition or a disability showed that some participants find it physically difficult to navigate keyboards and mouse technology. Whilst this doesn't entirely prevent their participation in online chat sessions, it can decrease the speed and subsequent quality of their participation (Third et al., 2013). International guidelines have been developed by the [World Wide Web Consortium](#) (W3C) to ensure accessibility of online content and interfaces for such groups. However, until recently, these guidelines have not been widely implemented in social media settings. Facebook announced their Accessibility Toolkit, the result of a four-year investment, in April 2015. The ultimate goal is to build accessibility into the design and development processes of the company (for example, screen reader compatibility for mobile use of Facebook) so that new products are already accessible and do not require retrofitting.

Attention also needs to be paid to designing social media platforms in culturally and linguistically meaningful ways that may also help children and young people develop literacies that support and strengthen local culture and practice. Social, economic and other inequities can create digital divides that further exacerbate existing inequalities, an issue that is relevant in, for example, the context of health

promotion: marginalised populations are often at risk of health issues and have lower levels of health literacy (Diamond et al., 2011). Access issues can impede their exposure to social media-based health promotion initiatives, further exacerbating inequities in health outcomes (O'Mara et al., 2010; Pascoe, 2011). In order to address the needs of Culturally and Linguistically Diverse, Indigenous and other groups of children and young people, social media-based health promotion initiatives should be community-driven, culturally and linguistically appropriate, account for differences in digital, health and other fundamental literacies, and be integrated with offline initiatives (O'Mara et al., 2010; O'Mara, 2013). Research into the impact of these campaigns will require interdisciplinary approaches that consider: 'the social, cultural and political dimensions of digital technology use' as well as relevant personal, government and corporate influences (Lupton, 2015: 174), and the work of health and medical researchers alongside that of cultural researchers, social anthropologists and relevant communities themselves (Brusse et al., 2014)

Emerging research suggests that, rather than designing social media and wellbeing strategies for the mainstream population and then tailoring these initiatives for vulnerable populations, efforts should focus on designing for our most vulnerable populations and then mainstreaming such initiatives. This idea forms a key principle of the Young and Well Cooperative Research Centre's research agenda from 2016 onwards.

Key insights

- There are significant opportunities for social media to be directed to improve the mental and physical health of children and young people. Taking advantage of these opportunities requires an understanding of how social media work, the ways in which children and young people use them, and relevant offline and online social connections (including with health professionals and service providers).
- While social media interventions cannot – and should not – replace face-to-face interventions, social media is associated with improved and tailored information and service delivery to children and young people, enhancing awareness of resources and support, reducing stigma and increasing help-seeking.
- Continuous and quality access to technology remains an outstanding issue for marginalised young Australians, limiting their capacity to effectively access the benefits of social media. The uptake of smartphones is increasing marginalised populations' access to social media. Smartphone access to social media platforms needs to be introduced in culturally and linguistically meaningful ways to ensure that they can support the wellbeing of marginalised children and young people. Services for these children and

young people must be supported to embed social media in their engagement with their target populations.

- Collaborations between children and young people, researchers, health professionals and other relevant stakeholders are required in order to develop (and evaluate) relevant, safe and effective initiatives that manage social media in ways that enhance existing health services.
- Future work in this space must take age, gender, culture and other relevant technical, material, social and motivational factors into account: an understanding of these factors is essential to developing nuanced and evidence-based policy, guidelines, initiatives and interventions that are relevant to the everyday lives of children and young people. Social media services must be encouraged to adopt the World Wide Web Consortium (W3C) accessibility guidelines in the development and delivery of services, and efforts should focus on designing social media initiatives for our most vulnerable populations and then mainstreaming them.

Identity and belonging

"Children and youth who are loved and safe are confident, have a strong sense of self-identity, and have high self-esteem" (Australian Research Alliance for Children and Youth, 2013: 8). In a Mission Australia survey of 13,600 young Australians, "[j]ust over four in ten respondents indicated that feeling part of your community was of high importance (extremely important: 14.1 per cent; very important: 26.9 per cent)" (Fildes et al., 2014: 22). The extended range of communities and creative practices associated with social media raise questions about how these platforms and practices can enhance children and young people's sense of identity and belonging.

Identity formation, community-building and creativity

Social media and mobile technologies increasingly enable young people to create content and share experiences which are meaningful to them – informing their wellbeing and sense of belonging which makes them feel part of a community. Constructing a sense of identity and belonging refers to the emotional, or affective, ways in which they emotionally connect with a particular online community; that is, "sharing norms and collective identities with and through media" (Lim, 2013). It is recognised that belonging and self-disclosure are "important peer processes that support identity development" (Davis, 2012: 1535). The influence of digital technologies upon personal and social development is reflected in how "Australian youth use digital technologies to build, extend and maintain personal networks and negotiate appropriate collective and personal identities" (Mallan et al., 2010: 30). A study of mobile internet access and use among European children (Mascheroni &

Ólafsson, 2013) highlights how portable devices are enabling new forms of mobility, sociability, education, entertainment, identity exploration, protection and privacy. A key component of this is everyday creativity where young people are appropriating “spaces in which they can engage in, and support, creativity through social networking” (Light et al., 2012: 344).

Examples of identity, community building and creativity for children and young people are Gaia Interactive, Habbo Hotel, fan culture and Minecraft ‘modding’. These spaces allow children and young people the freedom to experiment with different roles, explore relationships, as well as creatively contribute in diverse ways. Gaia Interactive is an online, anime-themed site where “the vast majority [of users] are teens and young adults” (Kahne et al., 2011); the appeal of the site is not only its variety of dress-up, gaming and art but also where “members gather to discuss random stuff, make new friends, complain about life, argue about nothing, laugh at dumb pictures, discuss serious issues and/or curse like sailors” (Gaia Interactive Inc., 2015). Habbo Hotel is a virtual world where children and young people “operate via modifiable cartoon-like avatars, perform make-overs with them, joke at other children’s expense, visit each other’s rooms, swap items, and try to find themselves a girlfriend or boyfriend” (Ruckenstein, 2013: 476). Fan culture, or ‘fandom’ involves the creation of ‘affinity spaces’ where “young people have an authentic audience who reads, responds to, and even critiques their creative work” (Curwood, 2013: 81); a study of Harry Potter and Hunger Games-inspired fandom among 11-17 year olds highlights how youth are experimenting with their identities as fans, writers and re-mixers to a global audience. The immersive game of Minecraft is becoming increasingly popular among children and young people; it is “a complex system requiring the sharing of information, and as a creative platform for self-expression, result in two main genres of social information shared in Minecraft spaces: (1) help seeking and information provision, and (2) expressions of accomplishment and social support” (Pellicone & Ahn, 2014). In these environments children and young people’s identities are not fixed – but vary across and even within platforms. For example, in virtual worlds they can be explorer-investigators, self-stampers, social climbers, fighters, collector-consumers, power users, life-system builders or nurturers (Jackson et al., 2008). This means that there is no single, stereotypical way that children play in online spaces (Grimes, 2015). Similarly within fan cultures identity formation is continually evolving and shifting according to different platforms “shaped by practice and within multiple social networks” (Morrissey, 2013).

Explorations of digital technology and social media use among Indigenous Australian young people highlights how their digital practices reflect a blend of global and local interests, the increasing use of social networking sites for sharing content and

maintaining relationships – plus fostering knowledge sharing and giving voice to their cultural practice (Kral, 2010; Kral, 2011; Edmonds et al., 2014). Indigenous young people identified that creating and exchanging user-generated content on Facebook enabled them “to reinforce and initiate relationships, build confidence in their identities, negotiate their place in society, and control and manage social media as a resource for navigating online environments” (Edmonds et al., 2012: 22). Digital storytelling is an example of everyday, ‘vernacular creativity’ (Burgess, 2006) which can support positive identity formation and community building.

Further examples of young people’s social media use shows the ways they are connecting with others, bridging isolation and drawing strength from sharing their experiences. Collin et al. argue that the “...strong sense of community and belonging fostered by SNS [social networking services] has the potential to promote resilience, which helps young people to successfully adapt to change and stressful events” (Collin et al., 2011b: 7). This is particularly significant for children and young people with complex communication needs (CCN). In a study of young Australian people aged 10-18 with CCN, a tailored intervention using social networking and social media was shown to have positively impacted on their social participation and communication (Grace et al., 2014). Benefits of social media identified by a group of Australian young people with a physical disability included “increased connectivity with existing friendship networks and family, which increased their sense of belonging to these existing circles” (Raghavendra et al., 2012: 156). A mixed methods study of a closed SNS for young people living with a serious illness, chronic condition or disability, found that members experienced a safe environment in which there was acceptance and normalisation of illness and disability. Importantly they felt the social media features enabled self-expression and social connection (Third & Richardson, 2009). Vulnerable youth (due to sexual assault and abuse) are also using social media to enhance their sense of self and belonging. In an Australian study (in which 29 per cent of survey participants in this study were under the age of 17 self-disclosure of sexual assault or abuse in online communities was viewed as a beneficial experience due to: positive responses, links to information and support, perceived lack of judgement, 24 hour accessibility, feeling less inhibited than face-to-face disclosure – plus helping to begin the process of healing (Smith, 2010). A study of homeless youth (involving 60 per cent of participants aged under 24) highlighted how a significant proportion (67 per cent) of participants are using their mobile phone for using social network sites and content creation (Humphry, 2014). Social media also enables young people to publicly share memories and emotions with friends and family members during times of grief. The Australian national youth mental health foundation, ‘headspace’, highlights the variety of community-building

purposes social media has following a suicide (sending news, posting messages, arranging impromptu gatherings – plus creating virtual memorials) – and that it “can be used in a positive ways to help share health promoting information and minimise risk” (headspace, 2012: 1). In an Australian report, *Growing Up Queer*, young gender variant and sexuality diverse participants reported as engaging with SNS and online forums, such as Facebook and Minus18, for “networking and support, and as a place of visibility when openness was not possible in other places or situations” (Robinson et al., 2014b: 35). There are indications that the sense of community, positive feedback and social support which online networks can offer may enable lower barriers to self-disclosure, as well as prompt alternative help-seeking pathways: “[t]hese processes may provide a more direct explanatory link between SMT [social media technology] and increased wellbeing” (Best et al., 2014: 33).

Problematic content and harmful practices

Social media dimensions can also be deployed in negative ways – specifically in relation to content which can lead to potentially harmful practices. This focus on content assists in identifying the potentially negative impacts of online communities which can span the range of “illegal production and dissemination of photographic images of minors ... to the video documentation of gang fights, to the communities that promote eating disorders or self-injury” (boyd et al., 2010: 3). An Australian Communications and Media Authority report highlighted one in five 8 to 13 year olds and one in four 14 to 17 year olds have “seen or experienced something on the internet in the last year that bothered them” (Australian Communications and Media Authority, 2013: 35).

Examples of problematic content include pro-eating disorder sites, normalising and/or glorifying suicide-related deaths, online hate speech and radicalisation. While there is no data relating to the proportion of Australian children and young people who have visited pro-eating disorder sites, the EU Kids online study (2014) revealed that 13 per cent of 11 to 16 year olds have been exposed to pro-anorexia sites (an increase from 9 per cent in 2010). The need for greater critical visual literacy is identified in a UK report on the risks of pro-anorexia sites (Bond, 2012). Exposure to such content and communities does not necessarily equate to harm and experts call for responses to addressing the production and accessibility of this content to focus on the underlying socio-cultural drivers of the underlying issues, rather than punitive and regulatory approaches that push such practices ‘underground’ (boyd et al., 2010). This is to address the needs of the producers and participants as well as unintended audiences. For example, an Australian report about disadvantaged youth indicated that they sought peer-acceptance about their body and appearance via

social media; suggesting online campaigns which support young people to counter negative messages could be an effective strategy (Flaxman et al., 2012). An example of such a campaign is [Appreciate-a-Mate](#), an app developed with Australian teenagers to promote positive body image and communication (Young and Well Cooperative Research Centre, 2014).

Online sharing can also be a forum for the rapid dissemination of problematic content, such as suicide pacts and notes, methods – plus images and videos which may promote normalisation (Robinson et al., 2014a). Yet alongside these online expressions are the rapid detection and responses within informal online communities, such as Reddit forum SuicideWatch, subreddits StopSelfHarm and MakeMeFeelBetter (Hess, 2015). The safety and effectiveness of these forums for children and young people are yet to be fully evaluated. The Australian Online Hate Prevention Institute has examined online hate in relation to ‘griefing’ – “malicious content focusing on people who have died” – and homophobia, among other issues (Online Hate Prevention Institute, 2015). In late 2014, the Online Hate Prevention Institute launched [Fight Against Hate](#), a community crowdsourcing tool to report online hate which could generate data to inform counter-strategies; Children with Disability Australia is one of the supporting organisations which recognises this as a tool to raise awareness about vilification and the need for ‘cultural and behavioural change’. Online memorial sites can become places where derogatory messages are posted about the deceased, rumours are spread and vulnerable youth can exhibit suicide warning signs which may go unnoticed (headspace, 2012). An Australian report highlighted the ways in which gender variant or sexuality diverse youth managed their social media profiles according to perceived audiences, plus “the serious impact that homophobia, transphobia and heteronormativity can have on the health and wellbeing of young people who are gender variant or sexuality diverse” (Robinson et al., 2014b: 35).

In relation to youth radicalisation, the role of social media in recruiting young Australians to violent extremism overseas has been prominent in newspaper headlines (news.com.au 2014). While the role of social media in facilitating terrorism and violent extremism has been documented in adult populations (McFarlane, 2010), research in relation to young people, social media and radicalisation is still underexplored. While only a small minority of young people are considered to be at risk of radicalisation, it should be noted that trends of online activities of terrorist organisations to recruit children and young people include: e-marketing, or propaganda via comics, videos, video grams and quizzes; guidance and instruction via chat rooms or forums – plus ‘skip parties’ (skipping school to engage with online activities), peer-pressure, generational membership and online advertising (Bott et

al., 2009). Identifying opportunities for young people to be involved in proactively examining the issues and solutions are initiatives such as the [*No Hate Speech Movement*](#): a Council of Europe project launched in 2013 involving young people aged 13 to 30 (with the mission to reduce hate speech and increase media literacy). It is vital that problematic content and harmful practices are examined as expressions of interrelated and complex social issues and not simply as problems of social media.

Key insights

- Social media can build and extend young people's personal and collective identities, plus participation in protective and interest-driven communities; these spaces are providing new tools for exploring, sharing and creativity e.g. connecting with new ideas, opportunities for self-disclosure – plus new places for imaginative play.
- The impact of social media on social relationships, cultural identity and belonging among Indigenous youth is still underexplored; further supporting digital storytelling initiatives is recommended, plus examining the role of social media to enhance the capabilities of Indigenous youth and communities.
- There is opportunity to use children and young people's engagement with social media to foster literacies that promote positive community building and social networks; this strengths-based approach draws upon children and young people's experiences and perspectives to develop literacies and strategies which they can utilise when faced with problematic content and harmful practices.

Formal and informal learning

Children and young people learn through a variety of formal and informal experiences within the classroom and more broadly in their home, in the community – and now in online spaces. “Effective learning and educational attainment is fundamental to future opportunities, both financially and socially” (Australian Research Alliance for Children and Youth, 2013: 18). In a Mission Australia survey of 13,600 young Australians aged 15 to 19 years old, respondents indicated the high value they placed on school or study satisfaction (Fildes et al., 2014); yet Australia ranks in the bottom third of OECD countries as to the number of young people aged 15 to 19 who are in education (Australian Research Alliance for Children and Youth, 2013). A key population group to therefore consider in terms of examining the intersections of learning and social media are children and young people who are

disengaged and marginalised from school and the workforce, especially in WA: 10 per cent of young people struggle and often move directly from school to unemployment, this disengaged and marginalised group “required access to intensive, long-term support and services to overcome problems that have been a long time in the making” (State Training Board of Western Australia, 2013: 38).

For children and young people aged five to 14 in Western Australia, ‘educational activities’ was ranked as the most popular internet activity across the age ranges (Australian Bureau of Statistics, 2012). With educational activities identified as a key activity of internet use, there is a need to understand how social media platforms and practices can effectively build upon this to support children and young people’s formal and informal learning and educational attainment.

Supporting self-directed learning and aspirations of socially disadvantaged youth

Effective integration of social media in the design of learning and teaching can motivate disengaged youth and connect with immediate learning support, as well as future opportunities. An Australian junior secondary school rocket science project (Wilson & Boldeman, 2011), which integrated Web 2.0 technologies such as YouTube clips, an interactive ‘Wind Tunnel’ App plus creating instructional videos to share online, describes how this approach captured the interest of youth who were disengaged from mainstream schooling; the design of multimodal resources and mobile tools contributed to a positive learning experience and orientation toward science which even extended to some students sharing these activities beyond the school setting. The positive role of integrating technology for both the engagement and retention of learners was identified as due to a number of in-built opportunities for collaboration, interaction, building on existing skills – plus being responsive to individual learning and reflection (Walsh et al., 2011). For example, in exploring the potential benefits of smartphones and apps upon Indigenous youth cognition and literacy development (Johnson & Oliver, 2013) particular learning styles and diverse life circumstances need to be taken into consideration. A study of first-generation high school students’ college aspirations in the US found that social media played a major role in providing information and social support in the process of “applying for, planning to attend, and feeling confident about succeeding at college” (Wohn et al., 2013: 434).

Extending formal and informal knowledge networks and support

Social media can support learning across different time scales and geographical spaces which help extend knowledge networks and collaboration that provide social

support. For example, synchronous affordances (e.g. Skype and instant messaging), asynchronous affordances (e.g. wikis, blogs and forums), plus open access resources (enabling knowledge sharing and building between schools, other institutions and organisations across regions, cities and countries). This notion of 'connected learning' (Ito et al., 2013) is built upon the core properties of: i) being production-centred; ii) having a shared purpose; and iii) being openly networked. It is important for these learning networks to connect easily (or be 'interoperable') so to allow for easy reusing, revising, remixing and redistribution of content – plus also more secure transferability and tracking of data (Aspen Institute Task Force on Learning and the Internet, 2014: 62). In the United States, the Common Education Data Standards project is working at developing a "shared vocabulary for education data" across the spectrum from early childhood to workforce education (Common Education Data Standards, 2015).

Australian researchers (Henderson et al., 2013) highlight how collaboration is a key affordance of social media, and describe how the anytime, or 'asynchronous', nature of social media (e.g. blogs, wikis and forums) enables a more in-depth engagement with an activity, while also tracking and encouraging students' progress over time. Other opportunities they identify include contact with outside experts and a broader audience for their work. A study of a US-based after-school program explored the role of computer-supported collaborative learning and indicated how social media in the vein of Wikipedia (aggregating micro-contributions), plus Facebook and Reddit (voting) can be valuable tools for young people to negotiate content and quality for scientific collaborative inquiry (Clegg et al., 2013).

In the US, a mixed-methods study examined teens' use of technologies with people and resources outside of their immediate network of school, family and friends – identifying how technologies can support young people's development in ways that "broaden their horizons with diversity, specialized knowledge, and social support" (Lin & Farnham, 2013: 1342); the different roles of technology across informal learning included: i) online resources as learning supplements, ii) online as main learning resource, iii) inspiring creative efforts in informal learning activities, and iv) to push information and increase participation in communities. Investigations of children and young people's social media use needs to also consider the diverse spaces in which their learning occurs: online, off-line, classrooms, libraries, museums, code academies (learning how to code), maker labs (providing tools, space and skills for making objects) – plus online tutorials, lessons and entire courses (Aspen Institute Task Force on Learning and the Internet, 2014). Examples of intergenerational and peer-to-peer learning networks include: [Curriki](#), [Cisco Networking Academy](#), [Whyville](#) and [Scratch](#). These innovative spaces can potentially

foster 'learning for wellbeing' where "people learn how to fully engage and express who they are, living in the present moment while developing, challenging and creating themselves for the future in harmonious engagement with one's own self, family and friends, the community and the world at large" (Kickbusch, 2012: 5). The emerging role of social media and mobile technologies in enabling and constraining 'learning for wellbeing' is becoming increasingly apparent.

Child and youth-centred learning networks

Fostering learning via social media relies upon a supportive ecosystem of people, activities and technologies. For this ecosystem to have maximum benefit, children and young people need to be at the centre, with surrounding people sharing knowledge and expertise to effectively utilise resources and scaffold learning. Poor integration and understanding of children and young people's use of social media can impact the quality of their learning experiences, as well as perpetuate existing inequalities.

An Australian report on the role of technology in engaging disengaged youth (Walsh et al., 2011) warns of the hazards of relying upon technology-led approaches; they emphasise that quality learning still relies upon the quality of teaching, content and the social relationships between peers, teachers and trainers.

A review of social media and collaborative learning by Australian authors (Henderson et al., 2013) highlights how assumptions can often be made about the capacity and knowledge of teachers to effectively incorporate social media into pedagogical design; in addition, assumptions that all students are skilful social media users still exists and needs to be addressed via explicit teaching so as to better support inclusive learning environments. A New Zealand study indicates how pre-service health education teacher perceptions of technology devices, social media and youth wellbeing have implications for their practices (Sinkinson, 2014).

The need for further research into the potential for social media use in physical and health education to enhance social interactions has also been raised (Vollum, 2014). A study in the United States investigating high school students' perspectives of social media (Mao, 2014) showed social bookmarking or tagging tools were the tools least used – while SNS, virtual worlds and gaming technologies were most popular; Facebook was raised as an example of being the most poorly integrated into teaching and learning. Another study in the United States of high school students (Ahn, 2012) explains how "teenagers' choices to use SNSs are related to cultural and social factors such as ethnicity, SES, and community dynamics".

The Aspen Institute Task Force on Learning and the Internet (2014) highlights the importance of young learners being at the centre of new learning networks: being able to access these networks; the interoperability of these networks; the importance of digital literacy skills; plus safe and trusted environments for learning.

Copyright confusion and cyber-plagiarism

Social media enables children and young people to remix and share content in rapid and easy ways. With the increased use of social media and easily-accessible online content in the classroom “the mere opportunity to commit infringement, either accidentally or purposefully, is higher than it ever has been for both teachers and students” (Perrott, 2012: 9). This potential for ‘copyright confusion’ signals a need for innovative literacy programs. A review of young people and technology (McGrath, 2009) highlights a range of ‘unacceptable or inappropriate use of technology’ – such as plagiarism and copyright infringement – where user behaviour is “offensive, self-risking, illegal, unethical or uncritical” (p.4). Cyber-plagiarism can be both intentional and unintentional and involves the “unattributed use of information from the web, and ranges from copying and pasting a couple of lines of text to buying whole papers and using digital objects such as images, films, movies, and other online material without crediting the creator” (Subrahmanyam & Smahel, 2011: 109).

The use of anti-plagiarism software in Australian high schools is increasing (Preiss, 2014) and is viewed as beneficial for quickly identifying the source of copied material, such as from Wikipedia. What is less known are the various understandings, motivations and impacts of penalties upon children and young people, especially given many have grown up in a culture of online remixing and sharing. Rather than focusing on plagiarism-detection software, such as Turnitin.com, Evering and Moorman suggest that instruction “should aim at demystifying the concept of plagiarism while improving students’ research and writing skills” (2012: 42-43) thereby focusing on a ‘spirit of inquiry’ and not just a ‘culture of fear’.

In *Young People, Ethics, and the New Digital Media*, James et al (2009) describe the blurring of authorship and ownership in the digital age, where “past conceptions of ownership, authorship, and copyright are now contested and are likely to be significantly revised or reinterpreted” (p. 48). In an examination of online communication and publishing issues in the contemporary English language classroom, McGrail and McGrail (2010) highlight how young people should be supported in making “careful and creative choices about the use of intellectual property” (p.270). Researchers have identified the “structural changes in the information environment that affect the quality of information” (Gasser et al 2012, p.

6), making children and young people's ability to assess 'information quality' on the most vital skills in the digital age.

Key insights

- Social media can support the self-directed learning and aspirations of disadvantaged youth (for example, social media can support positive learning experiences for students outside of mainstream schooling); social media also has a role to play in supporting first-generation tertiary students.
- Recognising the importance of investigating cultural and socio-economic factors that influence SNS use (such as the persistence of offline inequalities that persist, or replicate in new ways, within online communities). In addition, understanding the impact of web-based apps and mobile technologies among Indigenous youth is an underexplored research area.
- An intergenerational approach is required to support the capabilities of children, young people and teachers in relation to social media, teaching and learning; for example, explicit teaching when introducing new learning activities involving social media, plus ongoing professional learning communities and supportive leadership for teachers.
- Raising awareness of the importance of carefully integrating social media within learning, teaching and assessment – as well as recognising that the quality of content, teaching and social relationships are the foundation of successful learning initiatives.
- There is an identified need to support initiatives that explore young people's perspectives of social media copyright, authorship and ownership in relation to formal and informal learning; for example, supporting teachers and students to better understand cyber-plagiarism and copyright confusion; designing innovative literacy curriculums.
- There is significant potential to further explore the role of formal, informal and shared networks enabled by social media, cloud computing and mobile technologies e.g. Common Education Data Standards. Recognising the diverse ways social media is being used across both formal and informal settings can provide richer insights into children and young people's social media use to inform educational innovations.
- Exploring youth perspectives on ethics, authorship and ownership in digital media. Strengths-based approaches (such as fostering children and young people's literacies) invite proactive, youth-centred ways of exploring and addressing complex issues in the digital age.
- Children and young people's capacities to assess 'information quality' is a key skill as the volume of digital content rapidly increases.

Play and recreation

A study involving 959 children and young people from Western Australia (aged 5 to 18) highlighted 'fun and activity' as one of eight dimensions they saw as important to their wellbeing (Commissioner for Children and Young People WA, 2011b). It is increasingly recognised that digital social games, like 'traditional forms of play', can contribute substantially to positive youth development (Harvest 2014). With gaming a key source of fun and entertainment for many children and young people, it is essential to understand the role of social media in online and video games for supporting participation, social connections and freedom to explore ideas.

Landscape and nature of use

Electronic games can be thought of as "a new variety of toys offering a range of distinct play experiences" (Przybylski 2014: 6). In Australia, it is estimated that there is a device for playing computer games in 98 per cent of homes with children under the age of 18 (Brand et al., 2013), with scholars noting that "[s]ocial networking is as likely to take place on web-enabled gaming consoles (such as the Nintendo Wii, PlayStation 3, Xbox 360) and handheld devices (iPad, Nintendo 3DS, Android) as it is via personal computers" (Grimes & Fields, 2012: 21). The internet affords gamers unprecedented opportunity for social interaction, enabling them to play "with friends, family, and complete strangers, crossing vast geographical distances and blurring not only cultural boundaries but also age and generation gaps, socioeconomic differences, and language barriers" (Granic et al., 2014: 76).

There is a huge (and constantly increasing) number and variety of games available to children and young people. Grimes et al (2012) undertook some case studies of the gaming practices of children between the ages of 5 and 13 years and found that they include, for example, virtual worlds (such as Club Penguin), social networking through web-enabled consoles (such as LittleBigPlanet), knowledge sharing affinity places (such as Cisco Networking Academy on Facebook), social networks of learning and identity play (such as Whyville), as well as project-based social networks of creativity where they can design their own games (such as Scratch.mit.edu.au). The number and variety of games increases significantly as children and young people get older: Massively Multiplayer Online Role Playing Games ('MMORPGs'), Massively Multiplayer Online Games ('MMOGs') and other virtual spaces are being viewed as "new on-line leisure spaces" that allow young people a place to "meet and hang out" (Crowe, 2011: 201, 218). By affording young people the opportunity to design avatars, tell stories, learn, and navigate challenges, relationships, social practices and identity in contexts that "both intersect and transcend the material", games provide opportunities for cognitive and social

development and enable children and young people to experiment with identity construction and social behaviours (Crowe, 2011: 218; Etengoff, 2011; Grimes & Fields, 2012).

It should be noted that, due to the enormous number and variety of games available to children and young people, much of the literature in this field addresses the impact of 'video games' or 'gaming' generally without necessarily distinguishing games from a social media or networked/interactive element. We have included literature that relates specifically to social or networked games where possible, but have also included some of the more general evidence from leading scholars and studies where the findings are particularly relevant.

Concerns

While there are positive aspects to online recreation, or 'electronic play', there are also certain drivers that can negatively influence children's psychosocial adjustment (Przybylski 2014). For example, children aged five to 12 are increasingly engaging in virtual worlds with social networking functions, and researchers have expressed concerns that some may not be developmentally ready nor have the critical skills needed to navigate the issues and interactions encountered in these contexts (Holloway, 2014). Others, however, express concerns that worlds designed specifically for children can be too risk-averse, restricting texts, affordances and opportunities in ways that can limit prospects for learning and development (Grimes & Fields, 2012).

The risks increase as young people progress to games aimed at more mature age groups. Researchers acknowledge the potential for games to reproduce and promote harmful stereotypes (Olson, 2010): female characters, for example, are often highly sexualised, and gender roles within games often reflect patriarchal structures (Crowe & Watts, 2014; Johnson et al., 2013). Race is also a key issue, with some games incorporating problematic racial stereotypes and hierarchies: Young (2014), for example, acknowledges the potential of MMORPGs to work against prejudice and "challenge players who otherwise have very insulated experiences of the world", but notes that fantasy MMORPGs generally fail to live up to this potential (p.12).

The impact of violent games is the subject of much research. While some scholars argue that an attraction to violent themes is part of normal development and can help children "master the physical and emotional sensations that go with being afraid" (Olson, 2010: 185), others argue that exposure to violent games can be detrimental and lead to aggressive behaviour (see discussion of relevant literature in Johnson et al., 2013; Ferguson, 2011; Australian Government, 2010). Significant

limitations with methodologies and data collection in this area have been acknowledged: a literature review conducted by the Australian Government found that “research into the effects of [violent video games] on aggression is contested and inconclusive”, and that there are a number of factors that “arguably reduce the policy relevance of [violent video game] research” (Australian Government, 2010: 5; Ferguson et al., 2012). Leading academics caution against broad claims linking violent video games with societal violence (Ferguson, 2015; Ferguson, 2011), warning that a focus on violent games may obscure “much more powerful and significant causes of violence amongst young people that have already been well established, including a range of social, behavioural, economic, biological and mental-health factors” (Johnson et al., 2013: 10; Ferguson et al., 2012; Bajovic, 2013).

Concerns have also been raised around ‘addiction’ or ‘pathological gaming’. There is some debate about appropriate terminology (see King et al., 2013; Lemmens et al., 2011) as well as about whether time spent playing is an appropriate predictor of problematic gaming (Johnson et al., 2013). Nevertheless, excessive gaming has been linked with impacts on moral development (Bajovic, 2013) and has resulted in symptoms including “withdrawal, preoccupation, loss of control, and interpersonal or intrapersonal conflicts” (Johnson et al., 2013: 10) as well as anxiety and insomnia, social dysfunction and other mental health issues (Allahverdipour et al., 2010). There is evidence that ‘lower psychosocial wellbeing’ (including factors such as social competence, self-esteem, and loneliness) can be a cause rather than a consequence of excessive gaming, but that harm may nevertheless result from excessive play (Johnson et al., 2013: 11; Lemmens et al., 2011). An Australian study identified that the prevalence of problem gaming is very low in Australian adolescents, and that the risks of comorbidity impacts from problem gaming are lower than the risks related to problem technology usage generally: more research is however recommended, given the clinical concerns raised by existing studies (King et al., 2013).

Positive impacts

It is also recognised that “like nondigitally mediated forms of child play, games may encourage child well-being and healthy social adjustment” (Przybylski 2014, p. 2). The impacts of these new spaces of play indicate a range of benefits that are yet to be fully examined. The Young and Well CRC have produced a landmark publication in this field, reviewing over 200 research papers and concluding that moderate gaming (7 to 10 hours per week) can be an effective form of relaxation and stress reduction, as well as have positive impacts on young people’s “emotional state, self-esteem, optimism, vitality, resilience, engagement, relationships, sense of

competence, self-acceptance and social connections and functioning" (Johnson et al., 2013: 5. Note that the review encompassed all types of video games and their effect on young people aged 12-25). For children aged five to 12, Holloway (2014) acknowledged "the educational, social and recreational advantages of playing and chatting online" through children's virtual worlds (p.3). Another recent publication incorporated insights from psychology sub-fields (developmental, positive, social and media) and concluded that games can provide children and young people with 'immersive and compelling social, cognitive, and emotional experiences' that have the potential to enhance general mental health and wellbeing (Granic et al., 2014).

Researchers and medical practitioners have begun to try and seize the potential of games for health promotion and to increase wellbeing generally, as well as improve health outcomes for children and young people with particular health needs. An increasing variety of these games have been developed and a new academic journal has emerged (*Games for Health Journal*) but there is much more work and evaluation to be done in this burgeoning field before evidence-based conclusions can be drawn about the impacts of these games (Granic et al., 2014). There is also work being done to design games and virtual worlds in ways that incorporate particular cultural frameworks (see for example Lameman & Lewis, 2011, which described a Montreal-based project in which North American Indigenous students developed a game incorporating traditional stories from their community).

Issues for future research

While 'electronic play' is a key part of many children and young people's everyday lives, these new sites of recreation are still underexplored (Przybylski 2014). Ferguson and Olson (2013) argue that a better understanding of children's motivations is needed before the long term impact of video games can be assessed, highlighting the value of "understanding video games as something children choose to do rather than something done to them" (Ferguson & Olson, 2013: 156). Their research indicated that children's interest in video games is driven by desires for fun, stress release, social interaction and to avoid boredom. Olson's previous research (2010) suggested a variety of other motivating factors including 'hanging out' with and teaching others, competition, making friends, opportunities to lead, regulation of feelings, challenge and mastery, expressing creativity, experimentation with identity, and curiosity, discovery and learning. Johnson et al's literature review (2013) also noted a variety of player motivations, including "socialisation, exploration, achievement, and dissociation" (p.25). More research is needed to assess the extent to which motivations can impact on player experiences and wellbeing.

Future research also needs to better investigate the interrelationship between the motivational dimensions of children and young people's gaming practices and the technical, material and social dimensions. There is evidence to suggest that, when it comes to determining the impact of games on wellbeing, the ways in which children and young people engage with games is more important than the specific games or types of games that they play (Johnson et al., 2013). The way that children and young people engage with games is influenced by a variety of technical, material, social and motivational factors including the type and content of the game, developmental stages, personal traits, the social and physical settings in which they play, motivations for playing, as well as the personal traits, circumstances and in-game behaviours of other players involved (among other factors). Future research needs to consider various combinations of these factors (Johnson et al., 2013; Olson, 2010), and to better investigate the interrelationship between these factors and the impacts of gaming on wellbeing (Granic et al., 2014). These factors also need to be considered and incorporated into the development of future policy and practice, parental and other guidelines, game classification and rating systems plus other relevant resources and initiatives.

Key insights

- The impacts of 'electronic play' on the wellbeing of children and young people depend on a range of complex and interconnected factors including the types and content of games, the length of time spent gaming, the other players involved, and each player's personal and social circumstances. There are unique sets of risks and benefits for every game, and every player.
- There are significant gaps to be addressed in online play and recreation research: multi-method, objective and longitudinal approaches are needed, and connections with the health, education and youth studies fields (at a minimum) need to be further explored in order to achieve a better understanding of the games children and young people play, and how and why they play them. This would enable the more accurate assessment of the impacts gaming can have on children and young people's wellbeing.
- There are significant opportunities for children and young people, researchers, game designers and clinicians to work together to explore and develop games that enhance the mental health and wellbeing of children and young people.

Consumer practices

The quality and choice of children and young people's 'material basics', spanning adequate housing, clothing, healthy food and clean water (Australian Research

Alliance for Children and Youth, 2012) influences their development and wellbeing. “For young people, access to material basics supports them to make effective transitions to adulthood: they are able to secure housing and live independently, and receive an income that enables them to provide for themselves” (Australian Research Alliance for Children and Youth, 2013: 12).

Social media is opening up an array of consumer practices for children and young people to purchase items online, as well as increasing their exposure to food and beverage advertising. ‘In-app’ and ‘in-game’ purchases (items bought while using an app or playing a game) are increasing in popularity among children and young people, issues relating to their financial and consumer literacy are also raised. This is heightened by the increasing predominance of smartphone usage by Australian children and young people; the issue of “youth debt related to mobile phone usage has been a recurring theme in Australian sociological research for over a decade” (Fieldgrass, 2011: 9).

Children and young people’s roles as consumers are becoming more complex in the digital age, with an emerging range of positive and negative possibilities. With children and young people’s consumer practices now a key activity of internet use, there is an identified need to understand how new social media platforms and practices can enhance, rather than detract from, children and young people’s consumer wellbeing.

Overspending and under-informing

Social media via apps usually involves making purchases – both of the app and in-app purchases (e.g. for games). A survey conducted by the Youth Action and Policy Association (2013) highlighted that overspending on apps is impacting young people aged 12 to 15. The Australian report identifies four key issues: i) “lack of clear point of sale information on app markets; ii) encouragement of over-spending; iii) in-app purchases being targeted at children; and iv) the “difficulty in making complaints and getting refunds for in-app purchases” (pp. 2-3). To address this under-informing, they recommend: clear icons and information on point of purchase; spending alerts and caps; password blocks and unique passwords; default restrictions for in-app purchases; clearer end-user license agreements; and more prominent display of complaints procedures. The Yale Rudd Center for Food and Obesity (2012) highlights the broad appeal and reach of food and beverage companies connecting with young consumers via social networks and innovative mobile apps. They recommend mobile app ratings to include messages regarding commercial content and unhealthy eating. Addressing a current gap in terms of ethical considerations of child-targeted digital media content, a report by the

'kidsmediacentre' (2013) has explored child privacy and safety, child development considerations, plus marketing and purchasing practices that generate revenue, to develop an ethical framework for digital publishers and developers.

Personal and peer tracking via consumer-generated content

Opportunities for co-creating consumer content via social media are reliant upon personal information disclosure plus an ongoing archiving of children and young people's online activities, or 'property' (James, 2014). A US study identifies key features of food marketing in the digital age and the strategies they use to target youth: ubiquitous creativity, personalisation, social graph (tracking relationships and influence via the digital traces of their online use), engagement/interactivity and immersive environments (Montgomery et al., 2011). This is reflected in an Australian study (Jones & Reid, 2010) which highlights the ways companies use co-creation and consumer-generated strategies to build 'emotional connections', such as: inviting 'buddies', customising voices, blogging, company-driven imitations of social networking sites, uploading footage and images – as well as a range of tactics for collecting personal information. This shows the new ways in which companies are attracting the attention and engagement of children and young people, who are becoming part of the co-creation process. Buckingham (2014) highlights how embedded young people's digital practices are in consumer culture – and how young people's everyday consumer expressions are part of an ongoing corporate surveillance. With spending on child-targeted new media advertising on the rise, corporations have unprecedented access to children and young people as 'brand ambassadors' for their products via Facebook, Twitter and YouTube (Yale Rudd Center for Food Policy and Obesity, 2013). While this escalation of youth-generated peer-to-peer advertising has obvious advantages for corporations, the open-endedness of social media communication has the potential to spiral from supporting to boycotting, or 'buycotting' – a new 'youth political consumerism' (Wicks et al., 2013).

Low nutrition products and weak industry regulation

Jones et al argue that the increasing number of overweight and obese children in Australia, as well as the impact of marketing on children's food choices, positions children as a 'vulnerable consumer group', thereby raising the need for stricter food industry regulation and media compliance (Jones et al., 2010). The Yale Rudd Center for Food Policy and Obesity (2012) recommends that mobile app ratings, such as the [Entertainment Software Rating Board](#) (ESRB) "be expanded to include commercial content and unhealthy eating messages".

In an examination of the websites of eight prominent food companies targeting children and adults, an Australian study (Jones & Reid, 2010) highlighted the product-themed characters, games, puzzles and often dubious nutritional messages used to push product information and advertising. They raise questions about the ethics of some of these practices, as well as the new strategies being deployed in the rapidly changing domain of youth-targeted internet marketing.

Drawing upon earlier research, Rath et al (2014) highlight how children's ability to decode commercial messages varies at different ages – with those younger than age eight most unaware about the persuasive tactics being utilised.

The Yale Rudd Center for Food Policy and Obesity (2013) examined how nutrition and marketing of fast food to children and teens is evolving; they report that fast food restaurants “have been early adopters of new forms of marketing through social and mobile media that are popular with teens” (p.79); and while many fast food corporations have added healthy products, advertising continues to focus on unhealthy products, with children and teenagers remaining key audiences.

The launch of YouTube Kids has recently come under the spotlight; the Georgetown Law Institute for Public Representation identified the platform's apparent ‘intermixing’ of commercial and other content, undisclosed relationships with product manufacturers – plus violation of its own advertising policies (2015). It is recognised that further research needs to “fairly assess the role of digital marketing in the social lives of children and their family and peers, not only in relation to eating habits” (Advertising Education forum, 2012: 66).

Normalising harmful consumption and buyer-behaviour

Social media dimensions can be arranged to normalise young people's relationships with products – such as alcohol – via banner advertising, SNS company profiles, consumer tracking and tailored marketing. Other techniques include ‘viral marketing’, ‘buzz marketing’ and ‘astroturfing’ to create brand conversations (Australian Medical Association, 2012). The McCusker Centre for Action on Alcohol and Health (2013), based in Australia, highlights how young people are “encouraged to view alcohol as just another consumer product, not a product that can cause significant short and long term harms to the drinker and others when used inappropriately” (p.12). A New Zealand study of how 16 to 18 year olds reproduce marketing messages and alcohol-related branding found that peer-to-peer transmission of their alcohol consumption habits and brand engagement is contributing to the normalisation of youth consumption of alcohol (Griffiths & Casswell, 2010). The Australian Research Alliance for Children and Youth

recommends investigating “further means of curbing young people’s exposure to alcohol promotion via the internet and social media, including through an international response” (Australian Research Alliance for Children and Youth, 2014). In support of such further investigations, McCreanor et al (2013) highlight the major gaps in our understanding of “the dynamics of online alcohol marketing, its impacts on drinking practices, the effects of evasion of regulation, influence on pro-alcohol posts from users, associations with consumption and links to harm” (p.117). A preliminary examination of the presence of alcohol brand content, user engagement plus age restrictions on Facebook, YouTube and Twitter (Winpenny et al., 2013) casts light on the potentially high exposure of alcohol marketing to children and teenagers, inviting further longitudinal and more diverse studies of social media sites. The role of media campaigns, such as the New Zealand anti-drink driving ad *Legend (Ghost Chips)*, are innovative spaces to explore in terms of raising awareness of the effects of alcohol consumption among young people.

Young people are generating enormous amounts of money for the e-commerce industries, but their buying-behaviours should not be stereotyped simply according to age. Investigating the diverse socioeconomic, age-related and cultural aspects that influence children and young people’s online consumer behaviours is key to understanding young people’s consumer practices. In a UK study exploring how websites promote ‘ethical consumption’ among young people, the authors warn this should not be seen as common, or the norm, when young people’s socio-economic backgrounds and shopping choices are so diverse (Banaji & Buckingham, 2009). It is therefore important to consider the socioeconomic and demographic factors influencing internet use and activities within the Australian ‘digital economy’ (Australian Communications and Media Authority, 2009a). So too, it is important to better understand the ethnic and gendered relations that enable or constrain a diversity of young people’s involvement and wellbeing as producers, buyers and beneficiaries of products and services.

The rise of e-commerce sites such as Redbubble and Etsy are offering a new array of online marketplaces and products for children and young people, yet the positive and negative possibilities are still underexplored in youth and childhood studies. For instance, Redbubble provides a potential entrepreneurial forum for young people to promote and sell their artwork (Pena, 2014). Whereas sites like Etsy can spark controversy when potentially problematic products are posted by sellers. For example, when t-shirts with suicide notes printed on them and aimed at a teen market were advertised via Etsy, the product was deemed to contravene their policy of prohibiting items or listings “that promote, support or glorify acts of violence or harm towards self or others” and was removed after concern was raised by a Reddit

user (Clements, 2015). This highlights how social media responses can have a regulating effect on the consumer domain.

Supportive networks and attitudes to consumer wellbeing

A report into young people's use of SNS (Australian Communications and Media Authority, 2013) highlighted how parents of 12 to 17 year olds were most likely to underestimate their child's online activity in relation to both researching products and services and buying products and services (particularly 14 to 17 year olds). In Australia, the National Financial Literacy Strategy recognises that building financial literacy and wellbeing is a complex and dynamic process – as well as indicating the vital role of parents, families and peers in “shaping young people's knowledge, behaviours and attitudes towards money” (Australian Securities and Investments Commission, 2014: 19). The strong influence of relationships is also highlighted in an Australian empirical study of 207 Year 11 students aged 16 to 17 (Ali et al., 2014), which suggests relationships with parents and teachers with whom they are able to discuss such matters, play a positive role in their financial literacy. A US study (Wisnblit et al., 2013) of parental styles and their role in mediating children's relationships with television and internet advertising highlighted how different approaches influence purchasing practices, consumer awareness and critique of commercial messages. A focus on changing financial attitudes and behaviours among young people was identified as key by a study in the United Kingdom (Dolphin, 2012), which recommended the co-development of digital marketing campaigns with young people. The potential of social media to support ‘collective intelligence’ (Jenkins et al., 2006) toward fostering the financial wellbeing of younger age-groups is worth exploring further.

Empowering young people to exercise financial literacy

Authors of an Australian study recognise that “the increased interaction of young people with money and corporate targeting of young consumers through advertising, social media and mobile phone technology are issues cited in support of educational interventions from a young age” (Ali et al., 2014: 343). A UK report highlights the need for fostering young people's consumer, financial and media literacy and education across formal and informal sectors; this involves developing knowledge and skills to negotiate the commercial world, understanding money management – and critiquing the diverse messages and forms of media (Department for Children, Schools and Families & Department for Culture, Media and Sport, 2009). A United States report (Consumer Financial Protection Bureau, 2013) illustrates the choice and complexity of the financial services landscape for young people and the potential for online learning tools and resources to build their financial literacy skills

and capabilities. They describe initiatives which incorporate online games, videos, animation, 3-D gaming, avatars and social networking so as to enable young people to strengthen their financial decision-making skills, understand complex financial concepts and become more empowered consumers. Building on current Australian initiatives, such as an online financial simulation for Australian high school students, [*Earning, Saving, Spending and Investing*](#) (Australian Securities and Investments Commission, 2011), there is scope for future designs to integrate social media to engage children and young people in more diverse ways. For example, while not targeting the under-18 age bracket, [*Hello Sunday Morning*](#) is an example of an initiative harnessing social media and community platforms to change the conversation around alcohol use. How social media can be potentially utilised to shift conversations around children and young people's consumer choices and financial decision-making invites further attention.

Key insights

- There is a need to strengthen and build the intergenerational support networks of children and young people which positively influence consumer attitudes and behaviours across increasingly diverse social media spaces. For example, exploring the impact of relationships and socio-economic circumstances of families on young people's financial literacy levels; adapting campaigns and initiatives to engage with children and young people; increasing parental awareness and mediation of their children's involvement in researching and buying products and services via SNS.
- The importance of recognising the broader structural aspects of social media influencing young people's consumer decision-making and wellbeing e.g. developing best practice guidelines, plus procedures for accountability, that can be adopted by providers of platforms and app markets. For example, best practice guidelines should address in-app purchasing and ratings; deceptive and unfair marketing; and commercial content and unhealthy eating messages.
- Accountability procedures around pervasive food marketing strategies need to be explored, such as effective regulation to curb online alcohol marketing aimed at young people. Examining the ethics and practices of corporate tracking and digital developments is also vital to raise public awareness and dialogue about social obligations and future directions in this space.
- Recognising the value of integrated approaches toward examining SNS effects upon young people's consumer practices. For example, fostering young people's financial literacy skills via gaming initiatives that incorporate social media; drawing upon children and young people's expertise to develop online

marketing campaigns utilising social media; exploring the diversity of social, economic and cultural factors influencing SNS youth consumerism, plus young people's experiences of new online marketplaces (such as Etsy and Redbubble).

Civic and political engagement

Participation and civic engagement are recognised as key determinants for mental health and wellbeing (World Health Organisation, 1986; World Health Organisation, 1997; VicHealth, 2005). Participation is considered important because it can promote change at the level of the individual, community and society (Baum, 2000; Collin et al., 2011c). The Australian Research Centre for Children and Youth identified participation as a key aspect for identifying and measuring wellbeing: "Participating includes involvement with peers and the community, being able to have a voice and say on matters, and, increasingly, access to technology for social connections" (2013: 22). Social media is becoming a key feature of young people's political and civic engagement (Xenos et al., 2014). As civic and political engagement becomes increasingly embedded in social media practices, there is increased opportunity for understanding how they can promote participation and positively impact wellbeing.

In a US study of 14 to 20 year olds, Farnham et al (2013) explore how the internet and social media "affords new opportunities for connecting youth with civic life, by enabling them to express their civic voice" (p.165) – plus "the importance of encouraging youth to engage in civic discourse in the public sphere, through technologies such as blogs, Twitter, and wikis" (p.172). However, compared with research on older young people (18+ years of age) and adults, there is comparatively less published research that focuses on teenagers – and even less on children. This reflects dominant perspectives that construct children and young people as 'apprentice citizens' and 'learners' of politics and citizenship – not practitioners (Collin, 2015b). Outdated or cautious approaches to conducting research on children and young people's social media practices held by research ethics committees may also be a limiting factor. As such, little is known of the impacts of social media on the political and civic practices and identities of children under the age of 15. For older young people the Australian data is limited when compared with international studies (eg. Livingstone, 2009; Banaji & Buckingham, 2013). Nevertheless, research on young people aged 15 to 30 illustrates key effects of social media for civic and political engagement and as such, is included here.

Top-down, adult-centric communication approaches

It is now well established that, when young people want to seek information or take civic or political action, the internet is often their first port of call. As social media has become more diverse and prevalent in social life it is a focal point for studies on spectacular new forms of political expression and organisation, such as the so-called 'Arab Spring' (Lotan et al., 2011).

Traditional approaches have been concerned with measuring if social media increases political knowledge or interest, traditional forms of political and civic participation (such as voting, joining a political party or a protest) and political socialisation. There is a lack of recent survey data that accurately captures the diversity of practices and meanings associated with social media, such as involvement in issue-based campaigns and peer-to-peer discussions (Chen & Vromen, 2012). Some recent international and comparative data on older young people (over 18) indicates that online political engagement supports offline political engagement (Hargittai & Shaw, 2013).

While there is evidence that political candidates and elected representatives, government departments and agencies and other institutions are increasingly utilising social media in their communications with children and young people, the dominant approach is to use social media as a new channel for communicating *at* children and young people, rather than exploring social media as a setting in which to engage or listen to what they have to say (Vromen & Collin, 2010; Vromen, 2011).

Even though organisations and services internationally are increasingly viewing social networking practices as the next step in youth participation in government and community decision-making (Collin, 2010), there are few examples in the Australian context of governments or organisations using social media to engage directly with children and younger teenagers. Case study and interview-based research finds social media is largely viewed as a mechanism to increase channels of communication for governments and other authorities *to*, rather than *with*, children and young people (Collin, 2015b). However, as children younger than eight are increasingly regular users of social media (Australian Communications and Media Authority, 2013), they are developing the communication skills to express their views and engage with others. This could be used to improve engagement with adult authorities and decision makers.

Enabling diverse participation, self-expression and creatively addressing social issues

A significant impact associated particularly with SNS platforms such as Facebook is exposure to new political issues, information and networks (Xenos et al., 2014; Vromen et al., 2015). In addition to engaging with the social media of specific organisations or interest-groups, Xenos et al found that 24 per cent of users (including Australian youth) post content on civic and political issues and 53 per cent learn about political issues online. Moreover, regular review of a social media news feed can expose young people to incidental information on political issues and activities they might not otherwise be knowledgeable about or interested in (Xenos et al., 2014). This constitutes increased access to material and social resources that support civic and political (micro) actions (Xenos et al., 2014). To this extent, social media may not only enable more diverse forms of civic and political participation, but also help to empower disadvantaged or marginalised young people to act, be seen and heard in political discussions (Vromen et al., 2015).

A substantial literature also argues that social media is associated with a broadening definition of 'politics' and expanding forms of civic and political participation particularly, though not exclusively, by young people (eg. Banaji & Buckingham, 2013; Loader et al., 2014; Collin, 2015b). A study of Swedish adolescents aged 13-17 (Östman, 2012) found that user-generated content supported new forms of expression and collaboration, opening up new ways for participating in politics. The role of "positive effects of interactional and creative forms of internet use on online political interactions" was evident from a two-wave panel survey of 1,520 Swedish adolescents (Ekström & Östman, 2013: 16).

Social media enable children and young people to create, remix and share content on issues they care about, creating an interest in the role of social media for the development of political subjectivities (Collin, 2010; Edwards, 2012; Bennett et al., 2012). A broad range of social media support self-expression, social connections and online communities where political views and civic acts take place. These now encompass cultural activities and affinity groups, such as videos of youth flash mobs dancing for climate change (Collin, 2015b).

In addition, social media is increasingly implicated in the ways in which young people learn about themselves, issues that interest and concern them, connect to organisations and networks, and express their views. These opportunities to connect for self-expression and agency, peer culture, interests and affinities and civic activities that produce a unique mode of political and civic engagement. Ito et al (2015) have called this 'connected civics' and argue that child-adult collaborations

and fostering of networks have considerable impact upon youth political and civic engagement (see also Collin, 2015b).

Qualitative studies find the affordances of social media are associated with Australian youth practices of linking to or forming communities of interest and action, campaigning and disseminating information about their own projects (Rose & Morstyn, 2013; Collin, 2015a; Collin, 2015b). This is in part due to the accessibility and networked nature of social media (boyd, 2014). New communities for action enabled by social media are both self-forming but also facilitated by organisations specifically concerned with enabling children and young people to use social media as a form of civic and political expression – and as a resource for creatively addressing social issues (eg. [Foundation for Young Australians](#), plus the Seattle-based '[Puget SoundOff](#)'). While the literature is generally optimistic about the positive impact of social media for children and young people's participation, there is some persistent evidence (Mainsah & Morrison, 2012) that youth civic engagement social media initiatives are often managed from a traditional, 'top down' view of what citizenship involves; instead of recognising the social and entertainment-related aspects of young people's civic engagement (Banaji & Buckingham, 2013). Mainsah and Morrison (2012) highlight the important role participatory design can play in drawing upon young people's expertise in "designing for civic participation through social media" (p.5).

Key insights

- Social media use supports children and young people to learn about issues, express their views in creative and relevant ways, connect with communities for action, and develop their own networks and strategies for social change.
- Social media positively supports the development of children and young people's civic and political identities and could be further used to connect them to adult-led institutions for community and government decision-making.
- Current evidence indicates that social media has many positive effects for young people's civic and political engagement but focuses on social media enabling offline engagement, rather than understanding social media as a legitimate form of engagement in itself. Moreover, the potential to enable new spaces for civic and political action via social media is yet to be optimised by policy-makers – particularly in relation to children. Research and service initiatives that specifically explore how social media supports civic and political participation, socialisation and subjectivities are warranted.

- Raised in an earlier section (see **Identity and belonging**) was how social media can also be used to circulate politically extremist messages which, alongside other complex factors, can potentially lead to harmful practices. The issue of youth radicalisation therefore cannot be reduced simply to social media use and exposure to information; instead the focus needs to be upon fostering literacies that promote positive community building, social networks and narratives.

Risk and safety

The Australian Research Alliance for Children and Youth describes how: “[c]hildren and youth who are loved and safe are resilient... [They] can withstand life challenges, and respond constructively to setbacks and unanticipated events” (Australian Research Alliance for Children and Youth, 2013: 7, 16). Such a holistic approach helps to examine issues of risk and safety relating to children and young people in the digital age. Pro-active, intergenerational approaches can support young people to navigate and manage risks, as opposed to reactive or surveillance approaches that focus on potentially negative consequences. With social media engagement becoming more prevalent across the age ranges of children and young people, there is opportunity to gain richer understandings of their perceptions of risk and safety in order to inform effective approaches.

Rethinking discourses of online risk and the protection paradigm

As more and more people have come online, governments and other agencies and organisations have mobilised in response to the new demands of a digitally mediated world. Policy and practice initiatives have focused very strongly on safeguarding children and young people from the potential risks associated with social media. Whilst children and young people are seen to be engaging at the forefront of emergent digital media practices – rapidly embracing new technologies and developing novel ways of relating and engaging with the world – they are also commonly configured as highly vulnerable to online risks.

The advent of social media has only exacerbated these fears about children’s and young people’s vulnerabilities online. This is not only because children and young people do indeed potentially encounter new forms of risk in the context of their social media engagements, but also because their social media practices are often perceived to be developing beyond the locus of adult supervision (Third et al., 2014a).

As a consequence of the protection paradigm, there has been large investment globally in developing and delivering cybersafety education and campaigns that can

raise children's awareness of the risks they potentially face in online and networked media environments. This has been an important step in enabling governments, parents, children and other stakeholders to come to terms with the ways social media is implicated in contemporary social life. However, available research and evidence is increasingly showing that awareness raising does not necessarily translate into long-term behaviour change (see for example, Jones et al., 2013; Barr, 2010).

To promote effective behaviour change, international commentator on youth digital practices, Anne Collier has called for internet safety "to be folded into a) 'real world' risk-prevention education (in line with the public health field's 'levels of prevention' framework) and b) literacy education (digital, media and social literacy)" (Collier, 2011). The literature suggests that educational products, programs and policies need to foster experiential learning that can provide "children with the skills and the responsibility for developing their own positive behaviours online" (Barr, 2010). An example of an effective initiative that fosters children's safe social media engagements is Skooville, an Australian-based moderated social media environment for primary school children in which users construct their own personalised web pages, network with online friends and get involved with projects. This platform's key focus is on teaching children practical skills for staying safe online and it has been shown to promote long-term shifts in the ways children look after themselves in, and gain benefit from, social media environments (Barr, 2010).

Research globally has frequently struggled to keep pace with the rapidly transforming social media environment, and the equally fast-paced evolution of children's and young people's everyday social media practices. This has been compounded by the belief that education and risk prevention are tied to the technology rather than to offline relationships and behaviours that show up in technology use (Collier, 2013a). These factors have limited the capacity to develop a strong and comprehensive evidence base to generate policy and practice initiatives that can genuinely support children's and young people's safe participation in social media, and further coordinated effort and investment is required. Nonetheless, there are several key insights about children's and young people's safe social media participation that can be drawn from available evidence and analysis, and which are beginning to strongly impact policy and practice.

Recognising the complex interrelationships between risks, opportunities, harm and wellbeing

Evidence increasingly shows that the relationships between risk and harm, and between opportunity and wellbeing, online (as offline) are not straightforward. As

Livingstone (2013) notes, "there can be no simple translation of online risks – or opportunities – into predictable outcomes, and each can result in positive or negative outcomes for children" (p.25). We know that, the more time children spend online, the more likely they are to reap the benefits of digital participation (Livingstone, 2013). However, at the same time, spending more time potentially increases children's exposure to risk. Social media presents a range of new potential risks and harms, but these require measured responses from policymakers and practitioners. For example, Holloway notes that the risks young children (aged 5-12) as online social networkers ostensibly face when using social media include "overt and covert bullying; access to violent or other 'adult' content; meeting online contacts offline; the misuse of personal data; and the 'normalisation' of copyright infringement or the creation of harmful or risky content themselves" (2014: 3). Other evidence notes that the most rapidly growing risk Australian children face on social networking sites is cyberbullying and peer harassment (Barr, 2010: 6).

Importantly, social media risks are not evenly distributed amongst children and young people. Some children and young people – due, for example, to socio-structural determinants – are more vulnerable to experiencing harm as a consequence of exposure to online risks than others. That is, those who are more vulnerable offline are most vulnerable online (Barr, 2010; Blanchard et al., 2008: 10; Schrock & boyd, 2008: 39), and efforts need to focus more precisely on supporting these children to participate in social media safely (Livingstone & O'Neill, 2014).

But it cannot be assumed that exposure to risk translates into harm. Children and young people's social media practices are rooted in their everyday lives and peer relations, providing a lens through which they navigate potential risks. Indeed, evidence from EU Kids Online also shows that policies and practices that have attempted to restrict children's online behaviours can impede their ability to maximise the benefits of their social media use, or as De Haan (2009) expresses it, "safety initiatives to reduce risk tend also to reduce opportunities" (p.189). Research compellingly shows that, for the majority of children, some exposure to risk is necessary in order to develop the skills, competencies and resilience to manage those risks (d'Haenens et al., 2013: 2; Green et al., 2011), as well as to unlock more of the benefits (d'Haenens et al., 2013; Collier, 2013b). Digital resilience fosters children and young people's digital literacy and emotional resources to "face, overcome and be strengthened by whatever it is they encounter online" (Dr Michael Carr-Greg as cited in Third et al., 2014b). Resilience develops over time and with exposure to a diversity of experiences online, and enables users to seek advice when required, solve problems when they arise, and recover when faced with adversity.

Proactive, intergenerational approaches to promote safe and supportive social media engagements

Guided by these insights, there have been recent calls for policy and practice responses to seek to develop approaches to children's safe social media usage that can foster their right to protection from harm while simultaneously empowering them to maximize the benefits of their participation. As Davies et al note, "safety must sit alongside, and be integrated with, a broader range of considerations, including promoting positive uptake of online opportunities, promoting skills relevant to a digital economy, and encouraging the development of accessible, democratic online spaces in which rights to both play and participate, amongst others, can be realised" (2011: 1). It is in this context that strengths-based approaches to children's safe and supportive social media engagements have taken shape, leading to growing emphases on children's digital citizenship, literacy, resilience and rights-based approaches to promoting safe social media interactions. In other words, recently, there have been concerted attempts on the part of research, policy and practice to balance children's *protection* from online risks with strategies that foster their *provision* and *participation* rights (See Collier, 2015; and Collier, 2014).

Australian research, policy and practice is embracing these new emphases, investing in particular in approaches that make sense of the risks and opportunities of children's and young people's online and social media through a wellbeing lens (see, for example, the work of the [Young and Well Cooperative Research Centre](#)), and which use technology to nurture resilience in children and young people, both online and offline. This is an encouraging trend that should be bolstered and enriched by more evidence and the trialling and rigorous evaluation of innovative strategies that promote children and young people's safe social media practices.

Importantly, research shows that children and young people worry about the risks associated with their social media participation and the majority take active steps to keep themselves safe (Third et al., 2014a). AU Kids Online research shows that Australian children are most concerned about exposure to conduct-related risks (30 per cent) – including bullying, sexting, hacking, and a range of other misuses of personal information or data – and pornographic content (27 per cent) via their social media and other online interactions (Green et al., 2011: 5; and for comparable statistics with the EU Kids Online research, see Livingstone et al., 2013: 2).

Younger children tend to be more concerned about content related risks, while older children (aged 9–12) are more concerned about contact and conduct risks (Livingstone et al., 2013: 2), reflecting older children's more expansive embrace of the full social capabilities of social media. The same research shows that children

and young people understand risk as platform specific. Video sharing platforms like YouTube are seen as most risky (32 per cent), followed by websites (29 per cent), dedicated social networking sites (13 per cent) and games (10 per cent) (Livingstone et al., 2013: 2).

However, children and young people don't always worry about the same kinds of risks that adults worry about. Children and young people's experiences of risk and safety in social media settings sometimes differ sharply from those encapsulated by commonly accepted adult-definitions. For example, in a recent international study, when talking about content risks, a boy from the USA highlighted that it is social media news coverage, not pornography or game-based violence, that most often exposed him to images and facts about the world for which he feels ill-prepared (Third et al., 2014a). The same study highlighted that, in addition to the conventional meanings of privacy, children and young people conceptualise privacy as entailing a space beyond the gaze of 'nosey' and intruding parents (Third et al., 2014a). Ethnographic work with young people living in the United States similarly finds that young people:

genuinely care about their privacy, but how they understand and enact it may not immediately resonate or appear logical to adults. When teens—and, for that matter, most adults—seek privacy, they do so in relation to those who hold power over them. Unlike privacy advocates and more politically conscious adults, teens aren't typically concerned with governments and corporations. Instead, they're trying to avoid surveillance from parents, teachers, and other immediate authority figures in their lives (boyd 2014, p.56).

boyd's work also shows that young people who are growing up with social media experience privacy in ways that differ from previous generations. Whereas previous generations assume everything is private until they choose to make things public, young people work on the basis that everything is potentially public and they must choose to make things private. These examples underline the need for child-centred definitions of their rights in the digital age, and the risks and opportunities associated with digital media.

Children say that their online and social media interactions come with real responsibilities (Third et al., 2014a). These include understanding the consequences of their engagements, being personally accountable for the ways their social media interactions impact others, and knowing when to exercise self-control. They want adults to understand how and why they use social media, and they want to be trusted to use it wisely (Third et al., 2014a).

It is crucial that strategies to promote safe social media use prepare children for the higher risk transition years, when they begin to make full use of the social media capabilities associated with connectivity. This preparation is best achieved when children are aged seven to eight years, as these “are the years where children are most likely to learn, adopt and sustain positive online behaviours” (Barr, 2010: 6). Research has shown that adult supervision and active mediation is important to ensure children have clear ground rules, develop healthy consumption habits and learn basic media literacy (e.g. the difference between fiction, fact and advertising). Research also indicates that children aged eight to 11 years prefer to receive cyber safety information from their parents or educators, as opposed to their peers (Green et al., 2011: 10). As such, strategies that encourage and support parents to engage in regular conversations with their children about their social media practices, and family’s values, should be a priority.

Finally, as Australian Communications and Media Authority reports, “older siblings influence their young siblings’ behaviour by allowing them to watch what they do from an early age. They also teach them how to use a computer and the internet, set up their accounts and ultimately set the level of trust between parent and child” (ACMA, 2009b: 51). It is thus vital that cyber safety strategies consider sibling relationships and use them for positive effect.

Key insights

- Risk does not necessarily translate into harm. However, the more time children and young people spend on social media, the more they are likely to be exposed to both opportunities *and* risks. For the majority of children, some exposure to risk is necessary in order to develop the skills, competencies and resilience to manage those risks. There is an urgent need for child-centred definitions of the risks and opportunities associated with digital media, to underpin strategies to promote children and young people’s safety in social media settings.
- Cybersafety education and campaigns that aim to raise children’s awareness of potential online risks do not necessarily result in behaviour change that supports their safety in social media settings. Young people recognise that engaging online comes with responsibilities. They are keen to protect their safety, and want to be trusted to use social media safely.
- Policy and practice responses must foster children and young people’s right to protection from harm while simultaneously empowering them to maximize the benefits of their participation. To promote effective behaviour change, educational products, programs and policies need to foster experiential

learning in which children develop technical skills and literacies to support their safe engagement with social media. Strategies to promote safe social media use must prepare children for the higher risk transition years (ages eight to 11), when they begin to make full use of the social media capabilities associated with connectivity.

- Approaches to children and young people's safety on social media that prioritise wellbeing and resilience are effective and need to be explored further and bolstered by rigorous research and evaluation. Children and young people who are more vulnerable offline are most vulnerable online, and safety efforts need to focus on supporting these children to participate in social media safely. Social media safety strategies must more effectively promote intergenerational dialogue in order to improve parents' capacity to enhance children and young people's safe social media engagement.

Family and intergenerational relationships

The Australian Research Alliance for Children and Youth (2013) identified how:

The needs of our children and youth are well beyond the capacity of any one government to address. Federal, state and local governments, along with business, schools, health systems, non-government agencies, parents, the general community, as well as young people, will make a difference if we work together toward a shared agenda. This collective action, enabled through an evidence-based national plan, is essential if we are to turn the curve on child and youth wellbeing in Australia. (p. 26).

This process of building a shared agenda and collective action is an integral part of fostering social inclusion for young and old alike. Being socially included means people having the resources, opportunities and capabilities they need to learn, work, engage, and have a voice (Australian Government, 2012: 12). With children and young people's social media expertise and experiences sometimes distinct or outpacing the skills and familiarity of adults, examining the role of family and intergenerational relationships to support social inclusion and literacies in the digital age is vital.

Integrating social media into the design of family and intergenerational communication aimed at enhancing children and young people's literacies

It is becoming increasingly clear that parental, adult care-giver, community and institutional perceptions of children and young people's social media practices need to transform in order to better account for and respond to children and young

people's *lived experiences* of engaging with social media. Indeed, research from the Young and Well CRC has shown that an emerging priority for organisations invested in maximizing the benefits of children and young people's social media engagement must be that of producing greater intergenerational understanding about these practices in order that effective policy and practice can be developed (Third et al., 2011).

A recent international study found that the risk and safety paradigm dominates children and young people's ways of talking about and making sense of their social media engagements, with the result that children and young people sometimes find it difficult to narrate the opportunities and benefits of social media for their everyday lives (Third et al., 2014a). That is, children and young people's sense making about their social media use is profoundly shaped by adult-centred ways of viewing the world and this sometimes limits their capacity to effectively use social media to support their informal and formal learning, develop and sustain healthy social connections, and foster their mental health and wellbeing. It is therefore important to recognise that a child's "arguments and activities (sometimes covert, sometimes censored) help demonstrate the broader social literacies that encompass digital activities, and the fact that these literacies are forged in, and respond to, a broader communication context" (Green 2014).

An effective way of fostering intergenerational understanding is to develop strategies that embed experiential and scenario-based learning models that position young people as the expert educators of adults (Third et al., 2011). In response to parental concerns about their children's safety in social media settings, a 2011 Young and Well Cooperative Research Centre study trialled an intergenerational learning model in which young people trained adults to use social media and keep themselves safe in the process. The study found that, when adults and young people are given the opportunity to sit with each other in front of their devices and work together to navigate scenario-based exercises, this led to "the demystification of social networking services and an increased understanding for adults about the role of social networking in young people's lives; a greater level of familiarity and comfort for adults in navigating the technologies and services their children use; a better understanding by adults of how they could assist their children to participate online in a smart, safe and responsible way; and a sense of achievement and self-efficacy for the young participants" (Third et al., 2011: 8). Scaling this kind of model to reach larger numbers of parents and young people can potentially enable parents to more realistically assess the risks of engaging with social media and to work with their children to develop strategies to address the risks in ways that best align with their family values and practices (Third et al., 2011). Importantly, such strategies can

assist parents to understand *how* (technical dimension) their children are participating in social media and, more importantly, *why* they do so (motivational dimension), positioning social media to play a more positive role in family life and beyond.

For example, an Australian study exploring preschool children's technology use in the home highlights the range of environmental factors, such as location, devices, activities – and people present in the space (Given et al 2014). The authors highlight how greater awareness of how children are learning from and engaging with devices, content (such as YouTube videos) and people in the home can inform strategies for further promoting positive interactions with social media as they grow older.

Another Australian study which focused on 'talk in activity during young children's use of digital technologies in the home' (Danby et al 2013) points to the value of further research focusing on how family communication influences children's interaction with devices and content. Significantly, understanding "social interaction that constitutes digital practices in the home may be a powerful tool in attempts to transform literacy practices in the early years" (Davidson et al 2014, p. 51). Also important to recognise are some of the barriers to social learning and interpersonal engagement which have implications for young people's broader literacy practices. For example, a study of students from low-income families in the United States highlighted the creative and communicative aspects of SNS use, but also the challenges of "having to share technology resources with family members, intermittent, itinerant patterns of internet use, and lack of computer resources and internet use at school" (Greenhow & Robelia 2009, p. 1153). In addition, a resource about families and digital media in young children's learning (Harvard Family Research Project, 2014) highlights the value of 'joint media engagement' and how effective uses of technology and media "are active, hands-on, engaging, and empowering for children" (p. 2).

Re-balancing media coverage and public debate about children and young people's social media practices

There is an urgent need to work with media and communications professionals to promote balanced media coverage and public debate about children and young people's social media practices. Mainstream media commentary often inflates the prevalence and/or overstates the potential for significant harm arising from children and young people's social media practices; recent reports highlight that there is a need to 'demystify online influence' (Yasmeen 2015). Social media is frequently constructed as a space of danger and risk, and children and young people are

generally portrayed as vulnerable and sometimes careless subjects with little understanding or respect for the responsibilities and legal ramifications of engaging online. Sensationalist accounts are rarely balanced adequately by stories about how children and young people who have encountered these risks have managed them effectively. Tragic events and major policy or legislative changes are often the focus of media reporting where technology is often posited as a root cause of harm (e.g. in debates about youth suicide).

The emphasis on extreme cases that characterises mainstream media coverage of young people's social media practices potentially fuels the fears of parents and other community members. Indeed, mainstream media reporting provides an important backdrop against which public attitudes towards and debates about online safety unfold. Parents report that the mainstream media is a key source of information about online safety for them (boyd, 2014). Many organisations anecdotally report that the mainstream media often reproduce fear-based messaging uncritically, and that this represents a key challenge for implementing effective social media-based interventions. There is a need to foster balanced and evidence-based mainstream debate that foregrounds both the risks and opportunities of social media in order that the positive potential of social media practices can be leveraged for children and young people's wellbeing. Part of this re-balancing process is to begin to highlight the peer, familial and communicative practices which positively influence children and young people's literacies.

Translating research into practice

The policy and practice debate continues to be dominated by the risk and safety paradigm, limiting the potential to use children and young people's social media practices to support their wellbeing and achieve other positive objectives (e.g. digital inclusion). Nonetheless, there have been concerted cross-sector efforts to establish good processes for translating research and evidence about the potential opportunities inherent in children and young people's social media use into policy and practice settings. An exemplary entity in this regard is the Technology and Wellbeing Roundtable, a knowledge sharing alliance, auspiced by Telstra and ReachOut.com, that brings together representatives from over thirty organisations from across the corporate, not-for-profit, government and research sectors. Over the eight years of its history, the Roundtable has fostered productive cross-sector dialogue that has played a key role in setting a progressive agenda for policy and practice relating to children and young people's online practices, including an emphasis on social media usage (Third, forthcoming).

Similarly, the Young and Well Cooperative Research Centre is an interdisciplinary, cross-sector research entity that conducts research that can be used to promote the use of technology to support children and young people's wellbeing. The scope of the Young and Well CRC's research is broad but has included several innovative studies that demonstrate the positive potential of social media to support children and young people's wellbeing (see, for example Third et al., 2011), and has played a key role in shaping related policy and practice since its establishment in 2010 (Third, forthcoming). In particular, researchers associated with the Young and Well CRC have identified the need to better develop and support the digital literacy needs of professionals who support the mental health and wellbeing of young people (mental health workers, teachers, social workers, and so on) in order that services can better embed social media in professional practice and capitalise on the potential to use it to enhance quality of care (Blanchard, 2011).

Key insights

- Organisations invested in maximizing the benefits of children and young people's social media engagement should prioritise growing intergenerational understanding about children and young people's social media practices to support development of effective policy and practice.
- Multiple factors influence children and young people's technology use in the home, for example: location, devices, activities and people in the space. Insights into how families interact and communicate can foster shared understandings and promote critical literacies in relation to social media use.
- Efforts must be made to generate more balanced media coverage and public debate about the impacts of young people's social media practices.
- Although the policy and practice debate continues to be dominated by the risk and safety paradigm, there have been concerted cross-sector efforts to establish good processes for translating research and evidence about the potential opportunities inherent in children and young people's social media use into policy and practice settings (e.g. Technology and Wellbeing Roundtable).

Key Findings

The challenges and opportunities related to children and young people's social media use are rapidly evolving. Research on the social media practices of children, in particular, struggles to keep up with the pace of digital and social change and there is a need for more systematic, long-term research. As children's social media uptake and practice begins to reflect that of older groups it is even more important that research on younger age groups is undertaken and informs policy and practice

innovation. Furthermore, although social media is increasingly integrated in many online platforms and practices, the research tends to look at SNS, rather than taking a more holistic view. Consequently the impacts of social media on children and young people's wellbeing may be underestimated.

Early uptake with practices and motivations changing, intensifying and diversifying as children get older

Many Australian children are engaging with social media from an earlier age. This rapidly increases in their early teens, associated with increasing internet use via mobile devices and phones, migration from closed and adult-managed social media environments to general public platforms, and an interest in remixing and sharing digital content. The social networks of children and young people are fostered and expand as a result of social media practices. By age 17, 99 per cent of Australian young people have used an SNS with 87 per cent using Facebook regularly (Australian Communications and Media Authority, 2013).

Interrelated dimensions of children and young people's social media use

The diversity of children and young people's social media use points to a range of online and offline influences upon their wellbeing. For example, the impacts of social media on children and young people vary considerably according to the online and offline places they are situated in, the material produced online, people they interact with physically and digitally – plus the motivations, or purpose, for their engagement. These features do not exist in isolation from one another, but highlight the online and offline places, property, people, and purposes which frame children and young people's social media use.

In addition to the technical dimension, children and young people's social media practices have a significant material dimension in that they produce digital traces, such as creative content as well as corporate data used to influence attitudes and behaviours. These practices also have a social dimension: strengthening existing relationships with friends and relatives and acting as an important space for forging new relationships and expanding the social networks of children and young people. The motivational dimension of children and young people's social media practices must be better understood and used to drive policy and practice relating to children and young people's social media practices. Children and young people's social contexts, along with their desires to maintain relationships, express themselves to

diverse audiences, and discover new information and ideas, profoundly shape their social media engagement.

The impacts of social media use on the wellbeing of children and young people

The review identified eight key themes through which to explore social media impacts on the wellbeing of children and young people:

- **Physical and mental health** showed key practices to consider that influence children and young people's engagement with formal and informal support. However, lack of cultural and linguistic protocols, unequal access and participation, higher-order skills and literacies and poor integration with information and services are limiting the benefits for many. Identified were key examples of innovative access and support for children and young people who are homeless, gender and sexuality diverse, from culturally and linguistically diverse backgrounds, plus children living with a disability, or in hospital (or home) care due to illness. Prominent to this theme were the diverse ways in which social media platforms can potentially be used to complement existing services and maximise access and support for children and young people's wellbeing. Further studies into specific population groups, as well as child-centred research (aged 16 and under), is highly recommended to address existing knowledge gaps.
- **Identity and belonging** highlighted how social media use is closely interwoven with the development of children and young people's sense of self, positive community-building and new creative practices. The rapid growth of these interest-led communities is motivating children and young people to express and share their passions and concerns in novel ways. While some circumstances of children and young people make them more vulnerable than others, social media is enabling new ways of building resilience and bridging isolation among these groups. Children and young people can also experience upsetting and potentially harmful content and practices via social media, raising the need to foster literacies that promote positive community building and social networks.
- **Formal and informal learning** explored how social media can support the self-directed learning and enabling aspirations of socially disadvantaged and marginalised youth – as well as extending formal and informal knowledge networks plus social support across more general youth populations. While there are emerging examples of social media being used to support the education of disadvantaged and marginalised youth, broader evidence of how

children and young people's social media use highlight opportunities and pathways for more extensive research regarding formal and informal learning networks among key population groups. There is some poor integration of social media within learning designs which can potentially reinforce exclusion, as well as possibilities for copyright confusion and cyber-plagiarism.

- **Play and recreation** illustrated that the impacts of gaming on children and young people's wellbeing do not necessarily depend on the specific game or the time spent gaming: rather, there is a range of complex and interconnected factors that determine the impacts. Although there are risks involved, gaming is providing new leisure spaces for children and young people, providing them with opportunities for learning, creativity, identity exploration, socialisation, relaxation and stress relief (among others), and there are significant opportunities for the exploration (and development) of games that enhance wellbeing.
- **Consumer practices** highlighted how some arrangements of children and young people's social media use can have negative impacts, such as: overspending and under-informing; personal and peer-tracking via consumer-generated content; promotion of low nutrition products and weak industry regulation; plus the normalisation of harmful consumption and behaviour. Also identified were how other arrangements of social media dimensions can have positive impacts, such as facilitating supportive networks and attitudes to financial wellbeing, plus increasing young people's financial literacy.
- **Civic and political engagement** revealed how traditional practices can at times perpetuate top-down, adult-centric communication approaches (rather than seeking young people's perspectives of civic and political engagement and social media use). Also identified were the ways in which the complexities of youth participation in the digital age are being arranged to open up opportunities for diverse participation, self-expression – as well as creatively addressing social issues.
- **Risk and safety** illustrated how children and young people can at times be configured as highly vulnerable to online risks – reflected in popular discourses simplifying the interrelationship between risk and harm (which often don't take into account children and young people's perspectives). It is clear there is potential for more extensive research regarding risk and safety with younger age-ranges in Australia, as well as with specific population groups. Also highlighted was how social media can be integrated with technology to promote digital resilience and experiential learning among children and young people – employing an intergenerational approach for empowering them to develop positive online behaviours.

- **Family and intergenerational relationships** highlighted the dominance of an often adult-led, risk and safety paradigm which takes a narrow, deficit-approach toward children, young people and their technology use. The potential of a strengths-based and intergenerational approach was identified; this capitalises on children and young people's expertise and knowledge about technology alongside the knowledge and skills of their peers, family and other adults. Supplementing this is the potential for innovative strategies that integrate social media alongside experiential and scenario-based learning models for enhancing children and young people's wellbeing. The immense value of intergenerational approaches and communicative practices which promote shared understandings to inform policy, practice and literacies in the digital age is increasingly apparent.

Good practice and opportunities

Based upon the examination of positive and negative impacts, this review identified a selection of good practice and opportunities aimed at fostering children and young people's wellbeing in relation to social media; these are characterised by strengths-based approaches, including:

- Fostering 'digital age literacies' among children and young people which span media, internet and social-emotional literacies that consider not only the safe use of social media, but the moral and ethical repercussions of their everyday practices.
- Promoting peer, family and broader intergenerational support (both online and offline) to enhance children and young people's wellbeing in the digital age.
- Collaborating with children and young people in the design of social media platforms, mobile devices, policies and programs for wellbeing. In these processes cultural and linguistic protocols, technology access opportunities to participate should be considered.
- Cross-sector research which takes into account the complex circumstances of children and young people (geographical, social, cultural, political, emotional and psychological), plus the specificities of social media platforms and mobile technologies.
- Encouraging industry involvement in considering the impact of social media on children and young people's wellbeing and supporting strategies to promote digital inclusion and efficacy.
- Role of formal, informal and shared learning networks enabled through social media, cloud computing and mobile technology that recognises diverse

- pathways, knowledge and expertise.
- Promoting policy debate and public dialogue exploring the social, legal, moral and ethical intersections of social media use.

Examples of good practice and opportunities to engage with and/or deliver services and information to children and young people have been identified from the literature to inform advocacy efforts. Initiatives and interventions co-created with young people in general, would be recommended as a priority.

Gaps and emerging research

While research on children and young people's social media practices and wellbeing is burgeoning, there is relatively little research on the practices of children under the age of twelve. While internet access for children under the age of nine has significantly increased in recent years, there are major gaps in research and evidence about their activities and skill levels, and the risks and benefits of their online practices. More research on this demographic – and particular populations – is needed so that findings from older groups are not simply extrapolated to younger children. This will require building rigorous local, national, regional and international strategies for the study of children and young people's social media use. Such strategies must keep pace with technological change, address restrictions and challenges on researching younger age groups, and be sensitive to diverse contexts and communities in order to enable policy and practice to leverage the benefits of children and young people's social media practices for their wellbeing. Moreover, research which looks more specifically at the commercial imperatives and technical affordances of particular social media platforms, alongside the complex circumstances of children and young people (geographical, social, cultural, political, emotional and psychological) would offer particular guidance to policy and service interventions.

Emerging research suggests that, rather than designing social media and wellbeing strategies for the mainstream population and then tailoring these initiatives for vulnerable populations, efforts need to focus on designing for our most vulnerable populations and then mainstreaming such initiatives. This idea forms a key principle of the Young and Well CRC's research agenda from 2016 onwards (Young and Well CRC Strategic Research Agenda, 2015). On the horizon is a range of recent and forthcoming research to consider closely, such as: ['Digital Play: Social network sites and the well-being of young children'](#), the Young and Well CRC's [Gaming Research Group](#) and [Children's Rights in a Digital Age](#), the [EU Kids Online](#) research network – as well as the United States-based [Connected Learning Research Network](#).

Conclusion

This review provides a high level snapshot of the evidence of children and young people's social media use and the effects on wellbeing. It shows the effects are broadly positive, but are mediated by the social contexts and familial conditions in which children and young people live. Children and young people bring to their social media use pre-existing social, cultural, political, emotional and psychological experiences and status. It is the ways in which they interact with social media to produce identity, community and culture that provide the clearest insight into the role of social media for wellbeing. Moreover, how policy-makers, carers, professionals and service providers respond to social media in policy, service delivery and practice all contribute to the broader debates and practices by which social media affects the wellbeing of children and young people. The benefits and risks of social media use map to broader patterns of communicative and literacy practices, as well as socio-economic and cultural disadvantage. Intervening in this cycle has the potential to generate a steep change in the wellbeing of the children and young people who stand most to benefit. Such efforts must not only be informed by research, but by the views and preferences of children and young people themselves.

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