



## City Research Online

### City, University of London Institutional Repository

---

**Citation:** Sarwatay, D., Raman, U. & Ramasubramanian, S. (2021). Media Literacy, Social Connectedness, and Digital Citizenship in India: Mapping Stakeholders on How Parents and Young People Navigate a Social World. *Frontiers in Human Dynamics*, 3, 601239. doi: 10.3389/fhumd.2021.601239

This is the published version of the paper.

This version of the publication may differ from the final published version.

---

**Permanent repository link:** <https://openaccess.city.ac.uk/id/eprint/32289/>

**Link to published version:** <https://doi.org/10.3389/fhumd.2021.601239>

**Copyright:** City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

**Reuse:** Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.





# Media Literacy, Social Connectedness, and Digital Citizenship in India: Mapping Stakeholders on How Parents and Young People Navigate a Social World

Devina Sarwatay<sup>1\*</sup>, Usha Raman<sup>1</sup> and Srividya Ramasubramanian<sup>2</sup>

<sup>1</sup>Department of Communication, University of Hyderabad, Hyderabad, India, <sup>2</sup>Department of Communication, Texas A&M University, College Station, TX, United States

## OPEN ACCESS

### Edited by:

Kaveri Subrahmanyam,  
California State University, Los  
Angeles, United States

### Reviewed by:

Nandita Chaudhary,  
University of Delhi, India  
Shaimaa Lazem,  
City of Scientific Research and  
Technological Applications, Egypt

### \*Correspondence:

Devina Sarwatay  
devina.sarwatay@gmail.com

### Specialty section:

This article was submitted to  
Digital Impacts,  
a section of the journal  
Frontiers in Human Dynamics

**Received:** 31 August 2020

**Accepted:** 08 February 2021

**Published:** 30 March 2021

### Citation:

Sarwatay D, Raman U and  
Ramasubramanian S (2021) Media  
Literacy, Social Connectedness, and  
Digital Citizenship in India: Mapping  
Stakeholders on How Parents and  
Young People Navigate a Social World.  
Front. Hum. Dyn 3:601239.  
doi: 10.3389/fhumd.2021.601239

The ubiquity of digital and social media has led to considerable academic debate regarding their role in the lives of children and adolescents. The Global North, especially United States and Europe, has largely led this discussion in matters of research methods and approaches, as well as on conversations around screen time, wellbeing, media literacy, and digital citizenship. However, it is not clear to what extent and how these Anglo-Eurocentric approaches to digital literacy and social connectedness translate to the various local realities of the Global South, where increasing numbers of young people have either direct or indirect access to social media and the internet, but occupy very different social contexts. In India, for instance, low cost mobile phones, cheap data plans, and vernacularization of content have furthered access cutting across socioeconomic strata. What specific research priorities might emerge in this context? Which methods can be employed to study these issues? How can we contextualize existing knowledge to help support young people and their parents maximize the benefits of this digital/social world even as we take into account the nuances of the local? In this paper, we mapped local stakeholders and shared insights from in-depth personal interviews with community leaders from civil society, research and advocacy as well as professionals working with young people and parents in India as their work addresses some of these important questions. A thematic analysis of interview data helped the researchers scope out issues like lack of child-centered-design, dearth of knowledge about the opportunities and risks of social media among parents, and confusion on how to navigate this digital/social world. Suggestions about children's wellbeing, including what parents could do about this, the possibility of and the problems with regulation, and the need to focus on how parents can foster trust and a meaningful connection with young people that would frame their engagement with technology are made. Future research should consider these relationships within the new context of the COVID-19 pandemic and related issues such as degrees of digital connectivity and access, social isolation, virtual schooling, and parents working from home.

**Keywords:** India, digital citizenship, social connectedness, parent-child communication, children, young people, social media, media literacy

## INTRODUCTION

The rapid spread of digital/social media has led to considerable academic debate regarding their role in the lives of children and adolescents. The Global North, especially United States and Europe, has largely led this discussion in matters of research methods and approaches, conversations around screen time, wellbeing, media literacy, and digital citizenship (Ellison et al., 2007; Best et al., 2014; Livingstone, 2014; Frau-Meigs et al., 2017; Vlaanderen et al., 2020). Prior literature in the Global North on media literacy, social connectedness, and digital citizenship, especially with regard to parent-child relationships, has mostly focused on topics such as online risks (Staksrud et al., 2013; Livingstone, 2014; Livingstone et al., 2017), health and wellbeing (McDool et al., 2020; Best et al., 2014; Ellison et al., 2007; Valkenburg et al., 2006), creative expression (Subrahmanyam et al., 2020; boyd, 2008; Hogan, 2010; Lenhart et al., 2015), education and learning (Bennett et al., 2008; Burn et al., 2010; Friedman and Friedman, 2013), digital safety (Ringrose et al., 2013; Livingstone et al., 2014; Marwick and boyd, 2014), and parental mediation (Tripp, 2011; Duggan et al., 2015; Kalmus et al., 2015; Livingstone and Blum-Ross, 2020). However, it is not clear to what extent and how these Eurocentric approaches to digital literacy and social connectedness translate to various local realities of the Global South, where increasing numbers of young people have either direct or indirect access to social media and the internet, but occupy very different social contexts as compared to their counterparts in the Global North (Rangaswamy and Arora, 2016; Banaji, 2017).

In India, low cost mobile phones, cheap data plans, and vernacularization of content have furthered access cutting across socioeconomic strata (Rangaswamy and Arora, 2016). The Associated Chambers of Commerce and Industry of India (ASSOCHAM, 2015) conducted a survey on social media habits of children with 4,750 parents in metropolitan cities (Social Development Foundation, 2015) claiming 95% teens surveyed used the internet, 81% used social media and 72% logged into social media more than once a day. It also uncovered underage use: 65% kids under 13 years used social media. At the same time, media alarms us with stories like ‘Indian teenagers show risky behaviour online: McAfee’ (Press Trust of India (PTI), 2014) or ‘Addicted to You(Tube): To say that toddlers are nuts about YouTube would be an understatement’ (Kumar, 2015) or ‘One in three teens lose sleep over gadgets, social media’ (Dutt, 2016).

Social media and technology are not always portrayed in a bad light. There were articles about using social media for assignments and exam preparation (Pednekar, 2016) or experts wanting to include it in school curriculum (Pednekar, 2017)—but positive, or even more reflective, stories are harder to come by. Perhaps, the older generation mirrors its struggles and anxieties of navigating through the complex web of social media on young people and their protective instinct comes to the fore? Children are considered vulnerable and in need of protection

across almost all disciplines. However, young people’s engagement with digital/social media is very different from that of adults. Children’s practices online have evolved differently because they are (often described as) ‘digital natives’ (Burn et al., 2010). Of course, the impact of the COVID-19 related lockdown subsequent to March 2020 has shifted perspectives considerably in relation to some of these debates, with focus returning once more (in the popular discourse) to accessibility and digital literacy and sidelining concerns around screen time and other related debates.

In this paper, we share insights from in-depth personal interviews with community leaders from civil society, research and advocacy as well as professionals working with young people in India that address important questions relating to media literacy, social connectedness, and digital citizenship in a digital/social world. ‘Digital society’ is conceptualized as being governed by ‘datafication’ and ‘platformisation’ as Katzenbach and Bächle (2019) discussed the work (p. 4–5) of Meijas and Couldry who defined datafication as a, “cultural logic of quantification and monetisation of human life through digital information”, and Poell, Nieborg and van Dijck who conceptualized platformization as a “key development and narrative of the digital society”. Digital/social media platforms are now “indispensable infrastructures of private and public life...shifting cultural practices...becoming the dominant mode of economic and social organisation” (Katzenbach and Bächle, 2019, pp.5).

This paper addresses the following research questions:

- (1) What specific research priorities might emerge in the context of India around media literacy, social connectedness, and digital citizenship? How can these issues be studied in relation to the lived realities of young people and their carers?
- (2) How can we contextualize existing knowledge about digital media use and literacy to help support young people and their adult caregivers and maximize benefits of this digital/social world, while taking into account nuances of the local by mapping stakeholders and bringing in their voices?

In order to learn more about issues faced by parents and young people as they navigate a digital/social media world in India, we interviewed a range of stakeholders working directly or indirectly with parents and young people, schools and teachers, international institutions and organizations.

## MEDIA LITERACY, SOCIAL CONNECTEDNESS, AND DIGITAL CITIZENSHIP

Notwithstanding the recent efforts to expand the scope of media literacy scholarship, much of the literature on children and media has focused on Western countries and on dominant groups

within the middle classes, which some scholars have referred to as WEIRD families: those in Western, Educated, Industrialized, Rich, and Democratic contexts (Henrich et al., 2010; Alper et al., 2016). In Western democracies, citizenship is often tied to behaviors such as voting, campaigning, volunteering, petitioning, and protecting individuals' rights. For instance, Choi (2016) found that digital citizenship is conceptualized by scholars in four main ways: in terms of ethics/safety, as political or personalized participation, the ability to evaluate information, and critical resistance/activism. Below, we have discussed some key themes in the existing literature on digital citizenship among youth, including safety and privacy, engagement and participation, and the role of various stakeholders in different learning environments.

## Safety and Privacy

One way in which digital citizenship has been conceptualized has been through the lens of safety and privacy. Issues of ethics, mutual respect, creating a safe environment, and digital rights and responsibilities were central to such conceptualizations (Mossberger et al., 2007; Ohler, 2012; Robb and Shellenbarger, 2013; Frau-Meigs et al., 2017; Vlaanderen et al., 2020). The discussion around risks and literacy has related mainly to identifying different kinds of potential risks social media pose for children and youth and ways of mitigating them. Early work has also been about quelling fears regarding technopanics—moral panics over contemporary technology and its risks to young users—e.g., cyberporn and online predators and showing links between hyped media coverage and consequent content legislation (Cassell and Cramer, 2008; Marwick, 2008). The nuances of lived realities were often ignored but recent studies have attempted to address these, for example, in Livingstone (2014) and work by Staksrud and colleagues (2013) and more recent work has started focusing on strategies to help children minimize these risks (Livingstone et al., 2017; Desimpelaere et al., 2020). Some of these discussions have also revolved around digital rights and responsibilities, including free expression, respecting intellectual property, digital etiquette and wellbeing, and lawful use of online spaces (Robb and Shellenbarger, 2013; McDool et al., 2020; Subrahmanyam et al., 2020; Desimpelaere et al., 2020).

Concerns regarding safety (including bullying, shaming, violence, and sexting) of young people on social media were also important themes in the literature. Safety online has to do with the environment available to children and youth, just as one would expect safety at home, in school or at a mall. Livingstone et al. (2014) found that children encountered solicitation of sex, porn, violence, bullying, shaming, etc. online. They categorized these items into three types of risks: content related, conduct related and contact related. Ringrose et al. (2013) found a link between online and offline lives with gender issues reported in sexting and shaming (girls especially) on social networking sites (SNSs). Other contextual variables—apart from gender—were age, existing emotional issues, broader family context, and parents' familiarity with technology with reference to adolescents' excessive internet use and parental mediation in Europe (Kalmus et al., 2015). Additionally, Marwick and boyd (2014) described how 'drama' operates in teens' online lives and

how widespread use of social media among teenagers has altered dynamics of aggression and conflict. Recent scholarship focused on cyberbullying and how children can intervene to help victims as well as parents' role in imparting digital skills (Vlaanderen et al., 2020; Livingstone et al., 2017).

A related concern is that of privacy, which centers around the control one exerts over the nature and amount of personal information that is shared on social media and how knowledge about protecting one's privacy online can help children (Lee 2013; Desimpelaere et al., 2020). Youth are sharing more personal information on their profiles than in the past. They choose private settings for Facebook, but share with large networks of friends. Most teen social media users said they aren't very concerned about third-party access to their data (Madden et al., 2013). Marwick and boyd (2014) also noted that social media has changed the ways in which one practices visibility and information sharing, and offered a model of networked privacy to explain how privacy is achieved in networked publics. Another more recent study reported that young people did not see their online and offline lives as different and there was a relation between face-to-face and digital interactions and self-esteem (Palfrey, 2016; Subrahmanyam et al., 2020).

## Participation and Social Connectedness

Participation has been conceptualized as both political and civic participation as well as personal or cultural participation. Work on uses (including expression and presentation) of social media by children dealt with self-expression, identity formation, status negotiation and peer-to-peer sociality as observed by boyd (2008). Hogan (2010) described the splitting of self-presentation into performances—synchronously situated—and artifacts—asynchronously exhibited—derived from Goffman's work on dramaturgy. Lenhart et al. (2015) described teens' use of social media for romantic purposes like flirting, wooing, breaking-up, controlling/abusing and sharing a (usually offline) relationship online. Participation was also analyzed from a uses and gratifications perspective (Dunne et al., 2010; Quan-Haase and Young, 2010).

Within the United States, social connectedness and digital citizenship have been viewed largely through the lens of participation, creative expressions, and popular culture. For instance, Jenkins (2006) argued for policy and educational interventions to address the "participation gap" in how young people access and use media to develop competencies and experiences to more fully express themselves as engaged cultural citizens. However, other scholars have emphasized that it is essential to foreground ethical and social justice issues by reimagining media literacies and social connectedness through civic engagement and anti-oppression literacies (Scharrer and Ramasubramanian, 2015; Mihailidis 2018; Ramasubramanian and Darzabi, 2020).

Scholars also found association between social media use and children's wellbeing. While social media use was found to be strongly associated with social capital, it was not directly linked with wellbeing (Ellison et al., 2007; Best et al., 2014). Researchers have noted an absence of robust causal research regarding this

direct impact. However, McDool et al. (2020) used proxy data to point to potential adverse effects of increasing time spent online on children's wellbeing. Nonetheless, given that increase in social capital enhanced adolescents' self-esteem, and in turn, a sense of wellbeing, this perspective merits further research (Valkenburg et al., 2006). Holmes (2009) outlined opportunities provided by socialization online as it leads to increased social capital and support and fosters connectedness, thus making it possible for young people to have possible positive experiences in the future. Work has also been done on using social media to engage with youth on health related matters (Byron et al., 2013; Evers et al., 2013; Hsuen et al., 2013; Hausmann et al., 2017; Coyne et al., 2020). Swist et al. (2015) and, more recently, Coyne et al. (2020) acknowledged the link between children's social media use and their wellbeing. In their exhaustive review, Swist et al. (2015) observed that social media impacts children's physical and mental health, identity and relationships, learning and play, and risk and safety, among other aspects and those positive and negative impacts must be seen in context. On the other hand, Coyne et al. (2020), in their eight-year longitudinal study based on the Flourishing Families Project at Brigham Young University, United States revealed that increased time spent on social media was not associated with increased mental health issues and implored research to move beyond its focus on screen time. This is especially relevant in the context of our pandemic world.

## Factors Influencing Learning Environments

Several external factors influence how youth engage with social media. For instance, access to technology, parental involvement, school curricula, and sociopolitical factors influence both formal and informal learning environments. Using social media to enhance education and learning (especially online) (Friedman and Friedman, 2013), addressing the 'digital divide' (differential levels of access to digital devices and networks as well as the capacity to use them in productive and meaningful ways), suggesting media education as a bridge and the creation of a 'third space' as a way to address the divide (Burn et al., 2010), and advising caution in dealing with the moral panic related to it (Bennett et al., 2008) were the ideas dealt with in this theme. Other scholars have emphasized on the need for formal education of students on the professional use, design and implementation of social media systems (Jacobs et al., 2009).

In the realm of parenting, it was noticed that mothers were likely to give and receive support on social media and use it as a parenting tool (Duggan et al., 2015). Active parental involvement was detected when the child had experienced online harm (Kalmus et al., 2015). Parenting strategies reflected anxieties about online risks and inadvertently contributed to limiting children's opportunities (Tripp 2011). Clearly, a balance needs to be found between panicking about risks online and opportunities that a digital/social world offers young people. A Euro-American parenting perspective emphasizes independence and autonomy, and other evidence (Ho et al., 2008; Smetana 2017) points towards cultural differences in parenting styles and its impact on children's behavior.

Parental mediation was key to influencing children's beliefs and behaviors (Gelman et al., 2004), thus making the development of open communication and trust in parent-child relationships significant to young people's wellbeing (Lee and Chae, 2012; Padilla-Walker et al., 2012). This was true in case of media ranging from television to the Internet (Livingstone and Helsper, 2007; Clark, 2011) and included approaches like modeling and co-use (Connell et al., 2015; Harrison, 2015). Parental mediation was often categorized into two broad styles: active and restrictive (Lee and Chae, 2007) and Padilla-Walker and Coyne (2011) — while accepting this categorization — characterized it as prearming and cocooning respectively. The active/prearming style was a more conversational, open, and trust based relationship between the parent and child(ren) grounded in communication, modeling and co-use strategies, whereas a restrictive/cocooning style was more about rules and restrictions set by parents for their children to protect them from online harms and risks. Livingstone, in her study with Helsper and more recently in her work with Blum-Ross that extensively used interviews with parents, has described parental mediation as active, restrictive, and co-using (Livingstone and Helsper, 2008) and as embrace, balance, and resist (Livingstone and Blum-Ross, 2020). Livingstone and Blum-Ross also tended to associate the embrace and resist strategies as potentially risky in the sense of planning towards the long-term digital future of young people, favoring balance in a world fraught with uncertainty.

## Beyond Media Literacy Perspectives From the Global North

While literature reviewed thus far is important for understanding key themes and factors influencing media literacy, digital citizenship, and social connectedness, it draws almost entirely on scholarship from the Global North. The paucity in literature from the Global South is only now being remedied. In the case of India, the problem might be partially alleviated by decolonizing research and the way it is reported, and by building more diverse networks of scholarship both amongst scholars from within the Global South and across regions. Other researchers have argued for the need for a global approach to media literacy scholarship in a digital context (Mihailidis, 2012; Byrne et al., 2016; De Abreu et al., 2016; De Abreu et al., 2017).

Despite acknowledgement of the need to diversify and internationalize media literacy scholarship, most often it is discussed within the context of non-United States Western countries in the Global North rather than including countries and contexts from other parts of the world. Consequently, there are productive and active collaborations across Europe (fuelled partly by European Research Council grants) and trans-Atlantic partnerships. In other words, such internationalization efforts to media literacy scholarship often end up unintentionally reinforcing Euro-centric notions of media literacy constructed and perceived through a Western lens. We need to widen this view, which situates media literacy as originating from the United States, Canada, and Britain, to acknowledge multiple sociocultural locations from which knowledge about literacies



and media technologies have evolved and continue to evolve. It is important to further complicate and challenge the dominant Eurocentric narrative given the diverse nature of communities even in the geographic region that falls into the “Global North”, due to historical and contemporary migrations.

Examining central issues in non-Western contexts, Mihailidis (2009) discovered that finding support for media literacy work among decision-makers and policymakers is often a challenge. Several media literacy educators in the Global South continue to draw on curricula developed in United States and European contexts, and stemming from Western models of media education and a certain cultural understanding of childhood. These curricula tend to focus on democratic practice, freedom of expression, and advertising literacies, which might not necessarily be relevant in all contexts. Additionally, there are other challenges in terms of building collaborations across various sectors focusing on children and media such as government, nonprofits, industry, and education. A respondent from the Middle East interviewed by Mihailidis cited in his study (2009, p. 14) said, “Media literacy is about more than just analyzing media messages, and a barrier to entry in the public school system is that there are many different official bodies who believe they should have a say in the implementation (of media literacy curricula)”.

Ramasubramanian and Yadlin-Segal (2017) conducted interviews with scholars and educators from various youth and media contexts from around the world to bring to light cultural differences in definitions, practices, resources, and policymaking, which need to be considered in media literacy scholarship. For instance, Livingstone and Bulger (2014) discussed cross-cultural differences between how children in the Global North access the internet mostly through a computer whereas those from the Global South typically access it through mobile phones, with a single device often being shared among several members of a family. They pointed to barriers such as lack of access to technology, teacher training, parental knowledge, and culturally-relevant or locally produced curricular materials in the Global South. Similarly, a team of researchers (Byrne et al., 2016) who examined cross-national data from Argentina, Philippines, Serbia, and South Africa found that children typically accessed the internet at home using mobile phones. They also found that children in South Africa and Philippines engaged in fewer online practices and had a lower level of digital literacy compared to those in Argentina and Serbia.

Within Asian contexts, existing research focused on topics such as ICT adoption, censorship, cybersafety, and more broadly on protectionism (Cheung, 2009; Lee, 2010; AlNajjar, 2019). For example, AlNajjar (2019) found that in the Middle Eastern context, much of the discourse surrounding youth media use has focused narrowly on media risks with little attention paid to the role of digital media in the betterment of self and society. From a conservative Singaporean context, Yue et al. (2019) called for more research on digital citizenship from the Global South. In their focus group discussions with Singaporean youth, they found that media literacy skills influence negotiations of public opinions in ways that challenged mainstream ideologies. Similarly, among young Indonesian Muslim women, they found that issues of piety, religious obedience, and ethical entrepreneurship were

emphasized. Patankar et al. (2017) observed the critical need for digital literacy in a country like India that is diverse in its populace and inequalities and described government efforts to make rural India digitally literate. Focusing on unemployed women in India, Mukherjee et al., 2019, examined the impact of these programs and their perceived value and found they enabled rural women to get jobs in, for example, BPOs (Business Processing Outsourcing units). Akram and Kumar (2017) offered a broad view of the positive and negative effects of social media on society, while Kumar and Rangaswamy (2013) drew on actor-network theory to flip notions of piracy and viewing pirated content, arguing that it fuels media consumption, technology adoption, and digital literacy.

## Examining Digital Citizenship and Social Connectedness Within Indian Contexts

Media literacy and media literacy education in India began receiving government attention only in early 2000s with perceptible growth of the internet, both as a driver of the economy (with a focus on skills and capacities) and as a space for leisure activity and communication, and, perhaps most importantly, in relation to children, as a vehicle for information and knowledge dissemination and the potential to “democratise” access to education, especially in the pandemic context. The discussion on media and children therefore proceeds on two occasionally intersecting pathways: one is education through media and the other is education about media (both production and consumption). Our interest in this project is the latter. In this regard, the National Curriculum Framework proposed in 2005 that education in India should be connected with knowledge to life outside school which led to the introduction of a course on media studies for secondary students. The Central Institute of Educational Technology helped in creating Media Clubs in schools to promote media literacy in India in 2009–2010 up to 2014–15 (NCERT, 2017), with further records being unavailable. However, their focus was on media production—as students brought out school newspapers as part of the Media Club—rather than a critical engagement with media. State level bodies implemented and executed such media literacy and education activities at lower levels. These tend to include literacies about media as well as media used to develop multiple literacies—thus confounding the two pathways mentioned above. For instance the Gujarat Institute of Educational Technology, Education Department, Government of Gujarat produced television programmers for teachers and children of 6–14 years of age (GIET, 2010) on media literacy. However, it was found that programs were often broadcast during school hours, when children could not watch, although some schools scheduled time for viewing in school and college (for undergraduate students) (Govindaraju and Banerjee, 1999).

Different state and central boards of education in India also periodically share guidelines regarding social media usage at school and to keep stakeholders notified of activities that are encouraged for children’s learning. But, there appears to be a gap between research, praxis, and policy in a manner that

contextualizes existing knowledge, and helps support young people and carers maximize the benefits of this digital/social world even as we take into account nuances of the local. Current policies do not insist on evidence-based decision-making or draw on experiences and expectations of a wide range of stakeholders, and clearly, young people's voices are not driving them—nor have they been expected to, in what has largely been a top-down, non-participatory policy process. Similarly, media is quick to offer basic parenting advice regarding children's online practices, without attention to specific circumstances, sometimes forcing relationships between the latest fad and its adverse effects.

There is a slowly emerging body of interdisciplinary literature that looks at the need to build critical skills among young people in India. These skills will allow them to negotiate a digitally mediated world, in terms of relationships and political and cultural realities (Bhatia and Pathak-Shelat, 2017). It will also help children unpack media representations (Sreenivas, 2011) as their engagement with social media like YouTube and WhatsApp deepens (Sarwatay, 2017). Examining attitudes towards advertising literacy among Indian tweens, Trehan (2017) found low levels of comprehension of persuasive intent, exaggeration, and misinformation but high levels of celebrity recognition, visual literacy, and a gender divide in terms of perceived sexual objectification of women in advertising. As part of a ten-country comparative study of youth and digital media use, Raman and Verghese (2014) observed that political and civic socialization of urban Indian youth was largely dependent on social media—a fact that was similar to their counterparts in most parts of the world. Such scholarship, being guided by the vision of developing an inclusive and multicultural mindset, will thus fill out the idea of what it means to be an informed citizen.

The present study adds to the sparse literature on media literacy from the Global South, especially in terms of the role of policymakers such as educators, nonprofit leaders, and community leaders. It examines how they shape discourses about digital citizenship and social connectedness within the Indian youth and media context. The uncertainties of the online world have led parents in India to depend on media discourse, digital/social media, teachers, local parenting experts, digital media experts, and organizations working with children for advice on how to deal with young people's experiences online. Questions of access, uses, practices, risks and opportunities are common but many parents lack access to well-researched answers. Newspapers largely run stories motivated by technopanics; there is a generational digital divide, and parents often do not model what they preach—especially when their mediation follows a restrictive style. They tend to believe that regulation of some kind is a solution: at the family level by restricting use or accepting only certain kinds of access; at the societal level by depending on schools/teachers; or at the institutional level with governmental bans or board guidelines.

While some parents and teachers cited media literacy as a possible solution (Sarwatay, 2017), policy and implementation are lacking in this regard. As children (digital natives) might navigate through these digital/social worlds differently than their elders,

there is confusion about the dos and don'ts and, while advice is available, access to parental mediation and communication strategies in a digital world is unequal. As more of our existence is digitally datafied, citizenship itself is being digitized but there are myriad issues of how this existence is structured and designed and how parents can guide young people and learn from them as they navigate through these worlds (ideally) together. This is why it is important to examine the underlying systems that enable young people and their parents in these online worlds. What helps them dispel notions fuelled by technopanics? Can regulation help? What is the role of media literacy? How can social connectedness lead to better communication and engagement between parents and children and reduce navigation confusion? How do we become digital citizens even as structures and designs are evolving and getting optimized?

## METHODS

In this project, we take an ecosystem-based approach to understanding digital citizenship and social connectedness in the Indian context, using a series of in-depth interviews with a selected group of stakeholders. As literature reviewed in the previous section suggested, informal and formal learning environments have shaped how youth engaged with digital citizenship, how media literacies are practiced, and how social connectedness emerged in various contexts. Various types of contextual factors such as family environments, school curricula, sociopolitical climate, and technological access influenced how youth used media to connect, learn, and participate in creative, personal, political, and civic activities. Therefore, it is important to examine the role of stakeholders such as parents, teachers, social workers, children's advocates, and others who shape the media environment for young people.

Several educational and research organizations as well as the media in India have shown interest in youth and social media and have considered—in varying levels of detail—how parents and children navigate experiences online. Specific research priorities have emerged in the Indian context, and, given the relative recency of such research in the Global South, most often, quantitative methods like surveys (questionnaires and structured interviews) have been employed, the main target of these being teachers and parents. However, little attention has been paid to other influencers of youth and media spaces such as social workers, industry experts, and children's advocacy groups, all of which also influence meso-level and macro-level policies and practices related to digital media literacy.

From the management of technology and innovation standpoint (Tsujimoto et al., 2018), one of the significant ecosystems perspectives is the multi-actor network perspective. The actors are government, universities, consumers, firms, policymakers, user communities, etc. and they deal with key variables like power, regulation, and knowledge, among others. This multi-actor network is but one aspect of the wider ecosystem of connective media theorized by van Dijck (2013) that includes invisible technical dimensions of online platforms including business and commerce aspects as well as infrastructures that

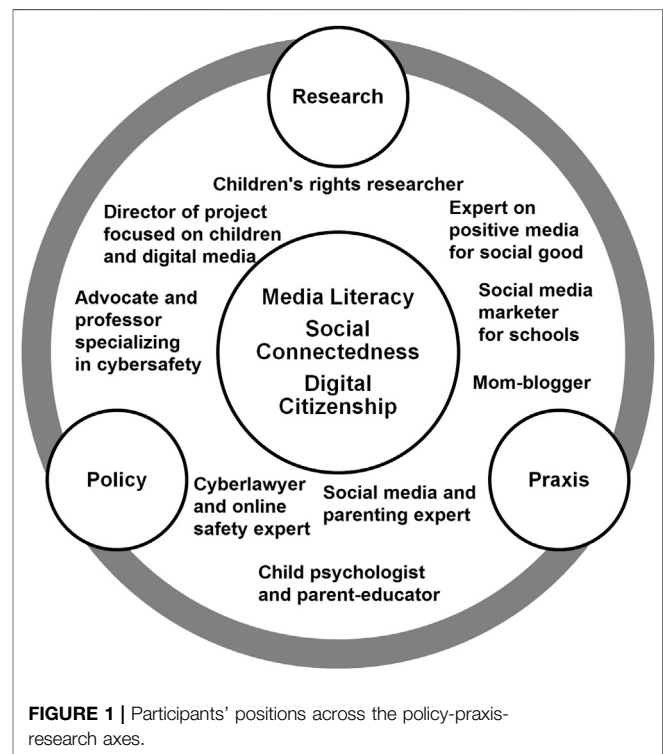


**TABLE 1** | Details about the participants.

Sr No	Pseudonym	Gender	Socio-economic background	Work	Details
1	ABC	Female	Upper middle class	<i>Civil Society</i> : Child psychologist and parent-educator	Founder-director of a preschool and consultant for usually well-to-do families on parenting issues including those related to digital and social media usage
2	DEF	Female	Middle class	<i>Civil Society</i> : Social media and parenting expert	Involved with several social media initiatives some of which focus on how parenting needs for middle and upper-middle class families must adapt to a digital/social media world
3	GHI	Female	Upper middle class	<i>Civil Society</i> : Mom-blogger	Assists relatively high-end private schools with their web presence, organizes events related to parenting for the school's clientele which is generally middle to upper middle class
4	JKL	Male	Upper middle class	<i>Professionals</i> : Head, Digital and social media marketing company	Works with corporate organizations and schools to cater to their digital/social media marketing needs, clientele usually comes from middle to upper middle class
5	MNO	Male	Upper middle class	<i>Professionals</i> : Cyber lawyer	Trains corporate and government employees on cybersafety and runs an initiative on online safety for schools and colleges across the socioeconomic spectrum
6	PQR	Female	Upper middle class	<i>Professionals</i> : Advocate and professor	Managing director of an organization that works for victims of cyber crimes, deals with people from different castes and classes
7	STU	Male	Upper middle class	<i>Research and Advocacy</i> : Head, Child rights centre	Research and capacity building activity at a centre working on child rights that is supported by UNICEF in a reputed private university
8	VYW	Female	Upper middle class	<i>Research and Advocacy</i> : Director, Centre for development communication	Associated with Global Kids Online and UNICEF Innocenti that aims to reach young people across the spectrum regarding their online habits
9	XYZ	Male	Middle class	<i>Research and Advocacy</i> : Expert in digital and social media	Interest in media for social change; his work tends to focus on organizations engaged with disadvantaged communities/ vulnerable people

enable and support online activities as well as social and democratic dimensions (van Dijck et al., 2019). Experts interviewed in this study are actors in this network of connective media who juggle key variables mentioned above to ensure balance in business, social, and democratic dimensions of the ecosystem. Interviews as a method to map stakeholders and ecosystems have been used across several fields (Ginige et al., 2018; Raum, 2018; Prieto et al., 2019; Woods et al., 2019) and was thus the chosen method for this study as well.

There has been some thoughtful dialogue on issues relating to digital media and children's digital lives; however these discussions tend to happen in rarefied and often disparate spaces, and have not yet begun to make a dent on policy. This paper attempts to understand how key stakeholders understand these issues, and what they see as key concerns based on their deep understanding of the culture, and socioeconomic contexts in which Indian children live their varied lives. In-depth personal interviews were conducted from October to December 2019 (pre-COVID-19 period) in Ahmedabad, Gujarat, India with professionals working directly and indirectly with young people and their parents in India in both informal and formal learning contexts. These individuals collectively represent a group that plays a significant role, some as policymakers and others as key influencers of media discourse and interlocutors of media practice within and outside educational institutions.

**FIGURE 1** | Participants' positions across the policy-praxis-research axes.

The main questions that guided the interviews were:

- (1) How do they frame and perceive issues related to young people's media literacy, social connectedness and digital citizenship?
- (2) What insights have they gained through working with parents and children?

In this paper, we define media literacy as young people's ability to safely access and use digital/social media for identity and relationships, learning and play, and consumer and civic practices. Social connectedness is characterized as the sense of belonging between young people and their adult caregivers in a digital/social world. Digital citizenship is closely tied to the two concepts above in the broader context of engaging with the society around them in a digital/social world.

Local ecosystem mapping through interviews was conducted to better understand how these experts describe and examine the current scenario in India. The nine experts interviewed are briefly described (in **Table 1**) with their relative positioning (in **Figure 1**) along the policy-praxis-research axes. Pseudonyms have been used to protect their identities.

These stakeholders are either directly or indirectly working with parents and young people, schools and teachers, international institutions and organizations to become part of the ecosystem of connective media through their practice, research, and/or eventually policy and have their ear to the ground as to how young people and parents navigate a digital/social media world. They come from a relatively privileged section of the Indian society to be in a position to impact policy directly or indirectly within their local ecosystem while their work covers people across the socioeconomic spectrum. These experts engaged with the first author in semi-structured interviews around the following topics:

- (1) New media (specifically the Internet, digital/social media).
- (2) Children and media in the local context.
- (3) Understanding of existing systems, media discourse around this topic.
- (4) Gaps in research, advocacy, policy, and academia.

Informed consent was obtained from participants at the start, and a scanned copy of the form was sent to them after completion of the interview. Interviews were recorded, and transcribed. Interviews were conducted in English with conversation sometimes slipping into Hindi or Gujarati. An interesting methodological side-note is that an application was used to transcribe interviews instantly and while it performed fairly decently in English, it had trouble recognizing the Indian accent in some places and failed to transcribe non-English spoken words correctly. We had to correct those parts by listening to the recording and editing the mistakes out. With the exception of two, who were interviewed by phone and email respectively due to their strict preference, all interviews took place at their offices/homes. Interviews were scheduled after explaining the purpose, with each lasting between 30 min to 1 h. All participants remarked on the importance of the topic in current times.

The interviews began with broad questions aimed at drawing out their ideas about digital/social media and their understanding of the local children and media landscape. Across participants, there was a common theme of children and adolescents being inundated by media messages, the compounding effect of digital/social media, and increased importance of parenting in these times to safeguard children's rights. This led to a deeper dive into issues they outlined to elicit responses related to existing systems, perceived gaps, media discourse, and possible solutions. Responses to these questions varied, reflecting their different locations.

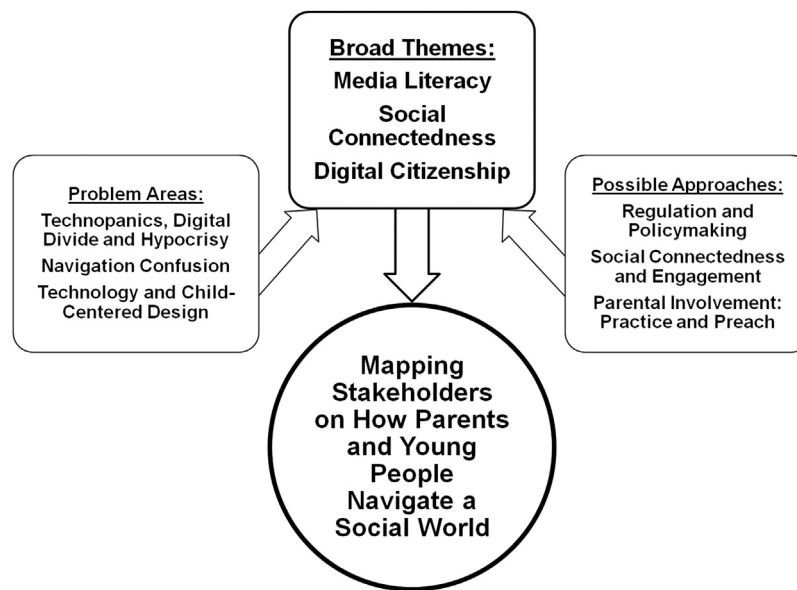
The child psychologist focused on the importance of goal setting and communication, those involved with social media spoke about co-use and balanced consumption, experts who dealt in cyber crime took a cautionary stance, and academic and research experts focused on the need for research and foregrounding children's voices. Many asked why this topic was chosen, perhaps to place it in loop of the discourse surrounding these issues. Data from interviews was supplemented with researchers' observations, background/peripheral conversation with experts, and field notes, suggesting:

- (1) Nearly all interviewees had children and brought some context from existing experiences or voiced concerns about anticipated problems.
- (2) Solutions cited came from personal experience, peer discussions, events about digital parenting, and other professional avenues.
- (3) Identification of relevance of this topic and gaps in research, advocacy, policy, and academia stemmed from reflections above.

While guided by literature, we did not approach data with preexisting themes and used an inductive approach, allowing themes to emerge from the data. A semantic approach was applied to thematic analysis. The transcripts were coded and themes were generated as shown below.

## FINDINGS

In-depth interviews help participants express themselves and guide the interview, thereby allowing the researcher to rectify and add to the process and remain open to developing ideas further, even seeking new directions and interpretations (Brenner, 2006; Glesne, 2011). A first order of themes from the interview data was extracted which was further consolidated into a second order which were the basis of this section. Analysis was done and quotes were pulled from interviews to give a layered, detailed context. Issues of child-centered-design, dearth of knowledge about opportunities and risks of social media among parents, and confusion around how to navigate this digital world were some of the themes that emerged as interpreted from the interview data. Questions were raised about children's wellbeing, including what parents could do about this, the possibility of (and the problems with) regulation, and the need to focus on how parents could foster



**FIGURE 2 |** Main themes from the interview data.

trust and a meaningful connection with young people that would frame their engagement with technology.

Main themes from the interview data are shown in **Figure 2**. Respondents pointed to what they saw as problem areas, such as technopanics, digital divide, navigation confusion, and technology design that was not child-centric, but also indicated possible approaches to addressing these issues, through regulation, improved parental engagement, and more open communication with all stakeholders. These were grouped into three broad themes, of media literacy, social connectedness and digital citizenship, roughly corresponding to the themes in the global scholarship as outlined in an earlier section of this paper.

Some experts spoke from a cautionary perspective while others focused on safeguarding young people's interests. ABC was vehemently against giving social media access to very young children observing that handing over phones to toddlers as a behavioral incentive was a bad idea. She also opined that teenagers are going through a rough phase in life as it is, and parents need to be extra careful when they observe behavioral changes in their adolescent children, possibly due to digital/social media. DEF was a big believer in co-using digital/social media with children as a strategy to digital parenting. While she or her child had not faced cyber crime personally, she was wary of coming across unpleasant or dangerous experiences and felt one needed to be prepared. Many sessions she organized for her mothers' club focused on this theme. Her mantras were 'practice what you preach' and 'precaution is better than cure' and this reflected throughout the interview. GHI and JKL believed parents exert a lot of control over children's media diets (especially younger children) and they needed to be aware of the digital/social world to make the right decisions for their wards. They had identified an acute lack of awareness about several issues like

privacy, safety, tools to safeguard young people online and hence organized/participated in events aimed at parents to spread awareness and aid parental mediation regarding children's technology use.

MNO and PQR had seen many cases of cyber crime and victimization. They were aware of the level of ignorance related to risks in a digital/social world. They hold frequent workshops and training/counseling sessions for young people, victims or high-risk individuals or organizations like corporate and government entities. While STU's work is not directly focused on the impact of social media on young people, he works on children's rights and capacity building which ties in with awareness and training. VYW strongly believes young people's attention span and sleep are adversely affected and this needs research attention. When confronted with the argument that young people love to binge watch, she countered with the nuance of viewership vs. engagement and how the latter is getting more superficial. XYZ posited a generational shift in media consumption and engagement patterns. Young people are moving towards a visual medium of expression, however many of them struggle with communicating verbally, he said. He also mentioned a lack of acknowledgment of personal responsibility for your actions on social media and opined how that might contribute to increasing cases of cyberbullying.

Based on these interviews and the researcher's field notes, the average middle-class school-going urban-based young person with access to digital/social media would have a full day's routine with school, extracurricular, and other activities in a media rich and dense environment as follows: Waking up in the morning as the radio is playing, tinkering with the smartphone (usually mom's) and television, getting to school while passing by hoardings and billboards, studying in a class with a smartboard/projector/computer, talking about latest on YouTube/TikTok/

Snapchat/Instagram/PUBG with peers, sharing memes, assignments, tuition timings, banter on WhatsApp, FaceTiming/VideoCalling family and friends, and using laptop/computer/internet-enabled television/voice assistant for education and entertainment.

Parents, on the other hand, oscillated between how much access should be given to young people in this digital/social world and were occasionally swayed by media discourse on technopanics to limit usage leading to tensions in relationships with their wards. This gets further complicated when parents can't/don't/won't practice what they preach and young people call them out on these contradictions. Parents tend to perceive computer/laptop use as productive behaviour while television/smartphone use as unproductive behaviour leading to disagreements and disharmony, sometimes leading to breakdown of trust and communication between the parent and child.

While the opening questions helped build context regarding the local realities, specific questions as the interviews progressed, helped identify the following themes.

### **Technopanics, Digital Divide, and Hypocrisy**

Issues of risks and literacy, health and wellbeing, safety (including bullying, shaming, violence, and sexting), and privacy were raised by experts who work directly and indirectly with young people and parents, schools, organizations, etc. Lack of (digital/social) media literacy was cited as one of the reasons why most parents and some young people were concerned regarding their online uses, practices, and experiences. Media discourse also added fuel to fire as coverage about social media addiction, challenges like blue whale and momo (Pednekar, 2017), and safety and privacy issues were sensationalized. However, this is a challenge that can be met by inculcating media literacy and digital-smart parenting which is an uphill climb because we are still battling technopanics, digital divide and hypocrisy. DEF was frank in her admission when she said, "We held a panel discussion recently on 'digital media parenting'...on what should be the role of parents in today's digital media scenario, how do we cut down on screen time? But, sometimes we act like hypocrites. We ask them [children] not to use it and as parents we use it so it [a part of the panel] focused on how to balance it [screen time]."

MNO had the strong opinion that privacy does not exist in a datafied world. This problem is compounded by a lack of awareness regarding online safety among majority citizens. PQR concurred when she opined that usually people become aware of risks when something untoward happens.

"The new media forms are much more easily accessible than the other forms of media and they are up to date. However, we must also note that such media is also plagued by fake news, non consensual images, revenge porn contents etc. This makes the young minds sometimes glued to such media because they may have never seen such things and due to adolescent curiosity they may be more than willing to share such things in groups secretly which may increase the humiliation of the victims."

To this end, recognizing the need for steering discourse, the Central Board of Secondary Education (CBSE)—a national level board of education in India managed by the Union Government

and implemented in several public and private schools throughout the country—issued the 'Guidelines for Safe and Effective Use of Internet and Digital Technologies in Schools and School Buses' (2017) including 'Tips to stay safe on social networking sites for students' (p. 4). This serves as a primer for ideal online behaviour and can guide parents regarding technology mediation at home as well.

Experts also insisted that parents need to set aside their reservations about the digital divide and not being tech-savvy enough. They have to be more digitally/socially clued in so they could pass on literacy lessons to children. PQR found patterns in levels of awareness and corresponding styles of parenting in different regions of the country. She reported, "...my organization receives cases from all across India. However, I can highlight [patterns] from three regions...Tamil Nadu, West Bengal and Gujarat, specifically. Parenting style may differ as per the culture of the region. I have seen that compared to Gujarat and West Bengal, Tamil Nadu parents are more aware and stricter when it comes to using of internet and social media by children...Parents may be busy and they may not be able to monitor children always. Cyber safety issues still remain lagging behind when it comes to comparing Southern, Western and Eastern regions."

Clearly, given the diversity and breadth of India, one may find different trends in different regions. She opined that awareness regarding cyber victimization was higher in South India compared to West and East India as they seemed to only spring to action after a crime has been committed. However, it is important to note that preexisting notions regarding adults' or children's digital/social abilities influenced by technopanics or digital divide will only exacerbate the problem at hand. This gets compounded when parents give out and act on contradictory sets of norms for uses and practices online as children tend to follow in the parents' footsteps.

### **Navigation Confusion**

ABC was of the firm opinion that digital and social media technologies do more harm than good for especially young and impressionable minds that can be swayed by the glamour and glitz of online platforms if a certain opportunity-based perspective was not built into young people's psyche. She insisted, "It is our responsibility as parents and teachers to show the younger generation, through our actions, that these are but tools you use in life after receiving due instruction in how to effectively utilize them for your benefit becoming ideal digital citizens."

Reflecting on her practice as a child psychologist, she gave the analogy of children being soft as clay and how we can mold them through our words and actions. She gave the example of a goal setting exercise and how it is important to ensure children forge and follow a certain path for themselves. She added, "And, that we can't just teach them this by talking about it, we have to show it to them to avoid navigation confusion. Digital and social media can work for or against our children's positive experiences depending on how we have shaped their perspective about it."

She elaborated how this works by citing a phenomenon she has come across many times, especially among teenagers,

“...because they are in the phase where they want to show off. They want to show that they are something! ‘I have friends. I have boyfriends. I have done this...’ as a status symbol. So, for teenagers, I firmly believe that, in their formative years, if we get them into the habit of goal setting, then [social] media can be of good use because then it will serve as a positive influence. Like, when they follow celebrities on social media they will focus on how Virat Kohli (cricketer) became such a great sportsperson, what does Bill Gates (businessman) say [about becoming successful]. But, if this connection [between goal setting and how social media is perceived and can be used for our benefit], has not been established, then they [teenagers] get into the show off mode where they try to put up a show of that which doesn’t exist!”

What she is saying can be tied to our existing understanding that technology is neither good nor bad and it depends on how we use it. Opportunities and risks exist in a digital/social world just like they did before and we need tools like goal setting to utilize the affordances to our advantage. DEF agreed as she ruminated about ‘sharenting’—parents sharing about kids’ lives and their photos and videos online—as she goes back to issues of hypocrisy and lack of policies to protect children from online risks. She insisted that we are confusing children when we create social media accounts for infants and then insist they shouldn’t use these platforms because they are bad for them. She also attributed a lack of awareness among parents and young people about safely navigating online to making contradictory and/or restrictive decisions. She believed cybercrime is hard to face, “Consequences of cybercrime also affect you mentally, so we must know about online safety precautions. Every school and college should have sessions on cybercrime.”

She mentioned that while guidelines (like the CBSE ones above) are helpful, we need more to spread awareness and help parental mediation of children’s technology use. This is because parents in India can sometimes go from one extreme of sharenting and making accounts for underage children to another extreme of announcing blanket bans for adolescents usually based on academic performance and feedback. This can confuse young people and raise questions like: How do we navigate in this social media world? What can be the consequences of navigation confusion? How can we stop negative consequences? These were also some of the questions raised by the stakeholders. The next issue gives us more insight into the genesis of this navigation confusion.

## Technology and Child-Centered Design

Digital and social media are considered ideal platforms for connection, communication, and community building. However, sometimes platforms can alienate people even as we have a false sense of security from being on the application or website as we take its benefits for granted. GHI shared how websites she creates for schools to keep parents clued in on attendance, homework, and performance of students, sometimes fosters a deeper disconnect while maintaining the illusion of information richness. This is where an emphasis on social connectedness becomes important. Issues of technology and child-centered design enable you to have access to (sometimes

large scale aggregated) data, but you miss out on nuances that are unique to an individual. She shared, “...there is no communication between the teacher and the parents. Everything is updated on the website or application; in a way, technology does lessen the burden, but there is no personal touch. But it depends on the school as well. I have enrolled my daughter in a school that uses technology [like smart board, WhatsApp groups] but also believes in personal connection and communication.”

Navigating a digital/social media world also depends on the intrinsic composition of the platform. JKL who heads an online marketing firm insisted that a lack of child-centered-design is to blame for risks faced by young people and added that low levels of awareness among adults is also problematic. He cited examples of cyber crimes and cyberbullying and made his case by explaining, “Online safety is currently not taken too seriously until they become victims or someone closer [to them] becomes a victim and at that time they surrender [to the situation] and say ‘Oh I should do that [take precautions].’...we are not [a] kids-driven [society]...like [for e.g.] finding a restaurant that has kid-friendly food! You only realize these things when you experience them.”

GHI insisted that technology is only an enabler and it is our responsibility to lean toward or away from it to balance the communicative aspect of our relationship with and surrounding children. She posited that there is a three-way relationship between parents, children and teachers/schools and this triad is mediated by technology and personal communication. The child needs to be at the focal point of this triad and technology should help, not harm while centering young people in a mediated communication design. Social media technologies respond to user behaviors; their affordances can be shaped by deliberate (and informed) patterns of use. We can either create silos and echo chambers or actively seek multiple perspectives to foster understanding.

## Regulation and Policymaking

Media literacy is often cited as one of the solutions to risks that new media bring along with its benefits. However, is it too much to ask of individuals to be aware of everything and its repercussions? Should the industry self-regulate? Should the government bring legislative regulation? VYW agreed that this problem needs industry and government involvement and added, “If we give free rein to corporate and media companies they do what they do and then every time [something new comes out], the individual or parent has to constantly worry about what new [impact] it will have on me or my kid...But at the same time censorship and regulation will always be problematic, right?”

XYZ, who is also part of a think tank on digital media platforms, asserted the importance of keeping discourse around digital and social media and its impact on society alive and current. He urged, “It’s important to bring experts together to put forth their ideas and perspectives on how digital and social media is impacting people’s health and mental wellbeing. Young people are digital natives and we are witnessing a generational shift in the way these new media technologies are being used.”

However, experts pointed that young voices are distinctly absent in the policymaking process. A possibility in regulation



could be evidence-based policy and decision-making where digital natives participate along with older generations. However, currently there is a massive gap between what happens on ground vs. legislation or even advocacy around these issues. Illustrative in this regard are recent bans on TikTok and PUBG, etc. popular platforms, which young people used for identity creation, self-expression, community building, among others. While current bans are for political reasons, earlier bans (due to sensationalist media stories) were later lifted, only to be reinstated again. Many young people, especially from marginalized backgrounds, used these platforms and these decisions overlooked impact on said audiences/users.

## Social Connectedness and Engagement

Social connectedness in a digital/social world depends on our communication and engagement with and demonstration of it to our children. ABC emphasized, “[Social] media is absolutely fine because that’s the world we live in where everything is digital and that’s how it’s going to be and there is nothing to worry about. But as a parent or educator or school, which direction do you show your children towards? Do they think [social] media is a resource for learning or to show off?” DEF echoed the sentiment, “Parenting in a digital and social media world is just like a coin with two sides...the internet has everything from porn to [tips on] parenting. It is up to us where we draw the line and choose and tell our kids what is good and bad. Kids are after all kids and we as parents need to control ourselves and check our behavior...practice what we preach.”

Some experts, though, thought social media for very young children was a complete no-no. If social media was having a bad impact on teenagers, parents were encouraged to limit/rescind access for older children too. Nonetheless, the quantity and quality of social connectedness depends on goal setting as you help create a systematic template for children to follow. They have a sense of direction and will most likely find ways to optimize opportunities and disarm risks in this online experience, navigating these social worlds without confusion and with confidence. ABC added, “Assigning specific responsibilities to and setting goals with/for your children ensures they use their screen time wisely. And this needs to start at the young age of two to two-and-a-half years, because this approach becomes the way of life as your child becomes a teenager.”

This becomes easier to do when you share a communicative and engaging relationship with your children. DEF shared, “I heard a panel expert say, ‘we should always add ‘co-’ in front of everything we do with our kids like co-play, co-sleep, co-read in the initial years’...because we cannot completely shun these new technologies and their exposure in today’s world. How long will you not tell your kid not to use any of the gadgets when you yourself are using it for hours.”

This brings an interesting dynamic to notions of trust and communication between parents and children. Parents can bond with children over the latest online or do things together like watch a movie. This helps foster and strengthen social connectedness and engagement and is in line with parental mediation techniques like ‘balance’ (Livingstone and Blum-

Ross, 2020) where the parent-child relationship is about doing things together and in moderation.

## Parental Involvement: Practice What Preach

The involvement of parents in children’s digital/social lives is crucial towards ensuring young people’s long term wellbeing. A healthy relationship must be based on communication and trust. It is important that parents practice what they preach and remember that young people have rights in this digital age just as in other spheres of life. STU, who heads an initiative for children’s rights, reiterated, “Children need guidance regarding their online practices just as they need guidance in education, sports, career, and life; this is their right and digital citizenship is becoming an essential in our ever-changing world.”

VYW recounted that ordinary people use media positively i.e., using media to enhance life, “...getting new friends, getting new knowledge, making you aware of something that enriches your life, making you feel valued as a citizen: all of these things [enhance life]...[it’s not unimportant] just because it’s on new media.”

She added that parent-child communication can foster discipline and moderation in use, chalk up multiple options for activities, and ensure certain minimum hours of sleep for everyone as essential—something that people are missing out on these days. Parents and young people could navigate a social world better by understanding how media literacy, social connectedness, and digital citizenship can help them with:

- (1) A better sense of links between policy, governance, and regulation.
- (2) Social connectedness and engagement with young people.
- (3) Practicing what they preach.

There could be many social factors along with emergence of digital and social media contributing to trends in children’s uses, practices, and experiences online. Additionally, as PQR noted, parenting styles may differ as per the regional culture, and given the world we live in, MNO reiterated digital parenting as the need of the hour. We need to understand why and how young people use social media to express and present themselves and focus on opportunities like education and learning to make the best use of these platforms.

## DISCUSSION

A range of issues such as a lack of child-centered-design, dearth of knowledge about opportunities and risks of social media, and confusion about navigating this digital/social world emerged from a thematic analysis. Based on these insights, we offer ways to think about children’s wellbeing, how adult caregivers can maximize children’s wellbeing, the possibility of and problems with regulation, and recommendations for parents to foster trust and meaningful connection with young people to

frame their engagement with technology, while pointing to research gaps and directions for future scholarship in India.

In most conceptions of society, children are considered a group that is vulnerable and in need of protection. This responsibility to protect and care is placed by society largely on the shoulders of parents and other adults like teachers, caregivers, etc. and more broadly, on the institutions that play a role in children's growth and development. Children have from their very inception been treated as a special group by law, academia and the market, and in this regard, media studies are no exception. As our review indicated, scholarship has been equivocal and often polarized regarding children's media (especially digital/social media) access, usage and its moderating role in identity formation and social interactions, and, more recently, on how children develop civic, cultural, and political ideas and notions of citizenship (Nolas et al., 2016). Concerns articulated in research and policy circles about children's literacies, rights and parental cautions about appropriate and productive media use/participation have also been reflected in mainstream media discourse.

In regard to the first concern articulated in this paper, of identifying research priorities specific to the Indian context, these conversations offer some direction that research could take to inform developing digital media literacy programmers that address the fears, anxieties, hopes, and everyday realities of Indian families. As some of the informants in this study have suggested, this has led to a multi-pronged yet somewhat uncoordinated response to managing anxieties and promises of digital media in relation to children in the Indian context. Across all the themes that emerged, a well conceived media literacy effort was seen as pivotal to mitigating risks and facilitating a positive relationship with media for young people. It is interesting that parents too are seen as important participants in such literacy efforts—both as targets of critical media literacy programs and as facilitators. This may be particularly important in the Indian context, as parents' experiences with media (both digital and pre-digital) vary widely depending on socioeconomic and cultural milieu.

This brings us to the second research question we set out to address: how can such media literacy programmers address the nuanced needs of local cultures while working with existing [often civic] literacy gaps? There is also an important—but in these conversations a less perceptible—shift from the language of responsibility to that of rights and participation. In such a framework in the context of India, communication rights are realized through media literacy—where children discover or are sensitized to issues of representation and participation in digital and other media through deliberately thought out literacy programmers designed bearing in mind the very diverse contexts that Indian children occupy. Shakuntala Banaji's work, for instance, brings into conversation historical ideas about children and childhood in India with everyday lived experiences of children from the margins—drawing from this the understanding that intervention for and about children must involve children's voices and recognition of their agency (Banaji 2017). This perhaps is one way to respond to concerns expressed by some of the stakeholders around the top-down approach to

technology design as well as the relatively little effort put into actually involving children in conversations around their mediated/media lives. Such conversations of course cannot ignore the fundamental truth about India—that (as is the case in other diverse cultures) there is no one group of children that represents the whole, and that even as we think about policy broadly, there must be room for multiple local variations in application.

In recent years, some multilateral agencies such as UNICEF and UNESCO have attempted to define and advocate for children's rights drawing on research-based inputs from activists and academics, taking forward—to some extent—a media literacy movement that emerged in the wake of the spread of television. In most of these projects there has been recognition that children occupy complex worlds and a shared understanding of these diverse realities based on rigorous research must inform policy and programmatic interventions. These have engendered partnerships between development agencies and academics, with a slowly increasing representation from the Global South. The Global Kids Online project initiated by UNICEF, the London School of Economics and Political Science, for instance, while starting off with a Eurocentric focus, has now broadened to include a network of researchers from 15 countries, India among them. The interdisciplinary and international nature of such networks holds promise for a widening of the lens that informs policy in areas such as education and technology development, both key to realizing any media literacy agenda. However, what seems to be missing is the link with the state institutions that allow for interventional ideas to be supported at scale in sustainable ways.

But no matter where one looks, it is difficult to escape the ambivalence that pervades thinking in the area of children and media, and the usefulness of media literacy efforts in the face of a rapidly changing, increasingly interconnected world where children—and the adults in their lives—seem to have to continually recalibrate their ways of being, learning and relating. While some hail social media developments as opportunities for children to learn and grow, others fear risks of exposure to a world we do not fully know and understand (Livingstone and Helsper, 2008). There is also the fear of the older generation (parents, teachers, etc.) of being left behind due to their lack of understanding and ability of maneuvering these media, as compared to the younger generation which is identified as 'digital natives' (Burn et al., 2010). Some also question the skills of these natives in navigating the complicated world of social media. Hence, the emergence of literature around literacy—ranging from information literacy to media literacy and digital literacy to social media literacy—to enable children and parents to skillfully and safely engage with this virtual environment (Buckingham, 2006; Bennett et al., 2008; Livingstone 2014). All these questions acquire different nuances and meanings in different cultures, and in India, as perhaps in other transitional societies, they must be considered against a range of social, political, and economic issues. In the deeply paternalistic and patriarchal family structures, for instance, how might children's autonomy and parental engagement operate? How might social media use, or device

ownership and control vary across demographic categories? What in fact might social connectedness or digital citizenship for children mean in a context where even adults find themselves multiply disadvantaged and disenfranchised? How does media literacy then work alongside other urgently required literacies to empower children and facilitate their growth?

There is no doubt that there is a rich and rapidly growing body of scholarship on children's engagement with digital technologies, and many convincing arguments for robust media literacy programs. While opinions will always range and often fall into sharply divided buckets, together they open up questions for future research, some of which are alluded to above. As noted earlier, much of the work that is currently drawn upon by researchers, educators and policy makers and cited here originates from the United States and United Kingdom, to a lesser extent Europe and Australia. In this review, there was one study from Saudi Arabia, one on Latino immigrants, with a few featuring sections on Asian countries like China and India. In the Indian context, the authors could only find limited industry research on this topic (from organizations like ASSOCHAM, TCS, etc.), some academic research done by students which came to the foreground because of local/regional newspaper coverage and a spot of mainstream media work circling around sensational stories, like underage use, social media crises (such as the Blue Whale game and the more recent #BoisLockerRoom incident) and tips to parents. While issues related to digital media use and practice comes into public attention during such incidents, there has been little sustained scholarly engagement that spans the spectrum from educators to media scholars to policy makers to program implementers—the full complement of perspectives and disciplinary knowledge that may be required to make media literacy in the country an evidence based project.

In terms of methodology, the larger research projects currently underway in India are modeled on or directed largely by Western frameworks—including the Global Kids Online project, which of course offers room for cultural contextualization. Deeper ethnographic engagements that allow for a contextualized understanding of children's media practices, and qualitative interviews with teachers and parents, would help build a more robust evidence base that can inform policy. It may be worthwhile to think back on efforts such as Newspapers in Education programs that were led by the media industry (recognizing their need to build a consumer base among younger readers) and understand how they also served as media literacy efforts, so as to gain some sense of what might work today, and with what kinds of partners—industry, the state, educational institutions, and parents. After all, digital media are here to stay, and whether we like it or not, we need to make productive use of them, as tools, as environments, or as interfaces.

Despite the considerable technopanics generated around the negative aspects of social/digital media like violence, bullying, hate, addiction, and privacy there are also positives, including the possibility of agentic self representation, productive interactions and rich relational experiences, increased access to education and learning opportunities, and even employment. We need more research that looks at the differential ways in which media penetration and access might affect children's opportunities in

this regard, and how media literacy could be a way to mitigate some of these issues. There is also a need to consider such issues as young people's understanding of ethics in the digital world, their adoption of and thoughts about technologies like virtual reality, augmented reality and artificial intelligence and how they use their networked self to cross over into adulthood—again, all within the cultural contexts of India. For instance, how might we understand ethical decision-making within the framework of a religious community? What forms does bullying take online where students of diverse backgrounds might be interacting—and can the lessons from race-based discrimination stand in for caste-based discrimination in India? How can children activate their agency through and with digital media? The example of UNICEF's Children as Media Producers (CAMP, 2014) suggests that children even in resource poor contexts can engage with media technology when given a chance, and when equipped with the right tools of critical literacy. But to build such media literacy programs one requires the understanding gained from robust research, using methods that are appropriate to a particular context and the participants who occupy it.

All these issues have gained a new salience in the global experience of the COVID-19 pandemic, and its wide-ranging impact on social life, particularly on children's education. As briefly alluded to earlier, this has brought in a new urgency to the issue of digital/social media literacy for both children and caregivers. It also forces us to recognize and address in literacy programs, the complexities introduced when children need to learn online, where parental involvement takes on a completely new texture, and the granularities of lived context (access, connectivity, space, familial structures, and responsibilities) determine the ways in which young people relate not only to the digital but also to life in general.

The informants in this study offered media literacy as a broad umbrella approach that could address most of the issues that they themselves identified as problematic in relation to children's engagement with digital media. But they could point to almost no locally generated knowledge that could undergird a culture-centered approach to media literacy. This then becomes an area that is ripe for exploration by young scholars in not only media and communication but also education, child development, sociology and social policy studies. In other contexts, scholars have called out the need to decolonize digital culture studies (Risam, 2018; Arora, 2019); it is important that we begin this process in relation to media literacy studies as well. Given that media literacy is a “second order” research area, dependent on diverse bodies of knowledge including those mentioned previously, this would mean that we need to develop creative collaborations across disciplines and engage not only in extensive primary research but also actively dialogue across subject borders.

## LIMITATIONS AND CONCLUSION

This paper is a starting point for more dialogue and support first, for developing a culture-centered approach to understanding core issues, developing argumentation taking into account multiple socioeconomic realities, and ultimately, for using media literacy

for active engagement and participation by youth in a pluralistic, non-Western, democratic context. We acknowledge that a major limitation of this study is its dependence on a narrow range of stakeholders, which gives us only a slight flavor of the range of opinions and experiences that could inform further research. The larger project (this data is from) will also bring in additional insights from in-depth interviews with children themselves, parents, and educators. Nevertheless, while stakeholder participants interviewed were privileged in many ways, their work spread across the socioeconomic spectrum which means that their views are certainly informed by sensitivity to larger Indian contexts.

Policy formulation in this area, and more importantly implementation, needs to take a flexible approach that is sensitive to multiple lived realities of children across India. Certainly contextual factors like age, gender, family background, education, income, and rural/urban location feed into these differences. But this is both the challenge and value of qualitative research—that while drawing out broad themes likely to resonate across situations, there is acknowledgment of variations therein.

Another limitation is digital learning and social connectedness have been greatly affected in the pandemic-related lockdown. While this study was conducted pre-COVID-19, future research must consider how these relationships affect young people and media literacy in India in the context of virtual learning, working from home, and greater social isolation during the pandemic. Further research using culture-centered approaches to media literacy and digital citizenship are needed within the Global South, including in India. Additionally, as this study reveals, beyond youth and parents, conducting research on other stakeholders who shape media and educational policies are important to consider within media literacy scholarship in order to fully understand the various systems, values, and priorities that shape digital media use by young people.

## REFERENCES

- Akram, W., and Kumar, R. (2017). A study on positive and negative effects of social media on society. *Int. J. Comput. Sci. Eng.* 5 (10), 351–354. doi:10.26438/ijcse/v5i10.351354
- AlNajjar, A. (2019). Abolish censorship and adopt critical media literacy: A proactive approach to media and youth in the Middle East. *J. Media Literacy Edu.* 11 (3), 73–84. doi:10.23860/JMLE-2019-11-3-7
- Alper, M., Katz, V. S., and Clark, L. S. (2016). Researching children, intersectionality, and diversity in the digital age. *J. Child. Media* 10 (1), 107–114. doi:10.1080/17482798.2015.1121886
- Arora, P. (2019). Decolonizing privacy studies. *Television New Media* 20, 366–378. doi:10.1177/1527476418806092
- ASSOCHAM (2015). “76% minors under age of 13 use ‘Youtube’ : ASSOCHAM Survey”. Assocham.Org. Available at: <http://www.assocham.org/newsdetail.php?id=5400> (Accessed January 22, 2018).
- Banaji, S. (2017). Children and media in India. New York and London: Routledge.
- Bennett, S., Maton, K., and Kervin, L. (2008). The ‘digital natives’ debate: A critical review of the evidence. *Br. J. Educ. Technol.* 39 (5), 775–786. doi:10.1111/j.1467-8535.2007.00793.x
- Best, P., Manktelow, R., and Taylor, B. (2014). Online communication, social media and adolescent wellbeing: A systematic narrative review. *Child. Youth Serv. Rev.* 41, 27–36. doi:10.1016/j.childyouth.2014.03.001

## DATA AVAILABILITY STATEMENT

The datasets presented in this article are not readily available because this data is part of a long-term project related to the doctoral thesis of Devina Sarwatay under the guidance of Prof. Usha Raman at the Department of Communication, University of Hyderabad, India. Requests to access the datasets should be directed to Devina Sarwatay, [devina.sarwatay@gmail.com](mailto:devina.sarwatay@gmail.com).

## ETHICS STATEMENT

Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

## AUTHOR CONTRIBUTIONS

The paper was jointly conceptualized by the three authors. DS conducted the interviews, analyzed the data and wrote a substantial portion of the literature review and the analysis. UR supervised the study design and wrote portions of the Discussion. SR contributed to the literature review and helped frame parts of the analysis. Both UR and SR offered critical comments on drafts of the paper and helped rewrite sections.

## ACKNOWLEDGMENTS

The authors are grateful to the experts who participated in the study and acknowledge the assistance of Emily Riewestahl in proofreading the paper. We are also thankful to our home institutions as well as the editorial team, the reviewers, and the journal offices for their support.

- Bhatia, K., and Pathak-Shelat, M. (2017). Media literacy as A pathway to religious literacy in pluralistic democracies: designing A critical media education pedagogy for primary school children in India. *Interact. Stud. Commun. Cult.* 8 (2), 189–209. doi:10.1386/isc.8.2-3.189\_1
- boyd, d. (2008). “Why youth (heart) social network sites: the role of networked publics in teenage social life,” in *Youth, identity, and digital media the john D. And catherine T. Macarthur foundation series on digital media and learning*. 1st Edn, Editors D. John and T. Catherine (London: The MIT Press), 25.
- Brenner, M. E. (2006). “Interviewing in educational research,” in *Handbook of complementary methods in education research*. 1st Edn, Editors J. L. Green, G. Camilli, and P. B. Elmore (New York: Routledge), 357–370.
- Buckingham, D. (2006). “Is there A digital generation,” in *Digital generations: children, young people and the new media*. 1st Edn, Editors D. Buckingham and R. Willet (Mahwah: Lawrence Erlbaum Associates).
- Burn, A., Buckingham, D., Parry, B., and Powell, M. (2010). “Minding the gaps,” in *Adolescents’ online literacies: connecting classrooms, media, and paradigms*. Editors Donna E. Alvermann. New York: Peter Lang, 183–202.
- Byrne, J., Kardefelt-Winther, D., Livingstone, S., and Stoilova, M. (2016). Report No.: IRR\_2016\_01. Global kids online: research synthesis 2015–2016. Available at: <http://eprints.lse.ac.uk/67965/> (Accessed September 15, 2019).
- Byron, P., Albury, K., and Evers, C. (2013). “It would be weird to have that on Facebook”: young people’s use of social media and the risk of sharing sexual health information. *Reprod. Health Matters* 21 (41), 35–44. doi:10.1016/S0968-8080(13)41686-5



- CAMP (2014). Children as media producers. youtube. Available at: <https://www.youtube.com/channel/UCodYU5U-lJzU9ZlPdMlum5A> (July 24, 2020).
- Cassell, J., and Cramer, M.. (2008). "High tech or high risk: moral panics about girls online," in *Digital youth, innovation and the unexpected*. 1st Edn, Editor T. McPherson (Cambridge: MacArthur Foundation Digital Media and Learning Initiative).
- CBSE (2017). "Guidelines for safe and effective use of internet and digital technologies in schools and school Buses," in *Ebook*. Editor Ministry of Education, Government of India (New Delhi: Central Board of Secondary Education).
- Cheung, C-K. (2009). Media education across four Asian societies: issues and themes. *Int. Rev. Educ.* 55 (1), 39–58. doi:10.1007/s11159-008-9111-2
- Choi, M. (2016). A concept analysis of digital citizenship for democratic citizenship education in the internet age. *Theor. Res. Soc. Edu.* 44 (4), 565–607. doi:10.1080/00933104.2016.1210549
- Clark, L. S. (2011). Parental mediation theory for the digital age. *Commun. Theor.* 21 (4), 323–343. doi:10.1111/j.1468-2885.2011.01391.x
- Connell, S. L., Lauricella, A. R., and Wartella, E. (2015). Parental Co-use of media technology with their young children in the United States. *J. Child. Media* 9 (1), 5–21. doi:10.1080/17482798.2015.997440
- Coyne, S. M., Rogers, A. A., Zurcher, J. D., Stockdale, L., and Booth, M. (2020). Does time spent using social media impact mental health?: an eight year longitudinal study. *Comput. Hum. Behav.* 104, 106160. doi:10.1016/j.chb.2019.106160
- Abreu, D., Belinha, S., and Yildiz, M. N. (2016). *Global media literacy in a digital age: teaching beyond borders*. New York, NY: Peter Lang Publishing.
- D. Abreu, S. Belinha, M. Paul, Y. L. Alice, J. Melki, and J. McDougall (Editors) (2017). *International Handbook of media literacy education*. New York, NY: Taylor & Francis.
- Desimpelaere, L., Hudders, L., and Van de Sompel, D. (2020). Knowledge as a strategy for privacy protection: how a privacy literacy training affects children's online disclosure behavior. *Comput. Hum. Behav.* 110, 106382. doi:10.1016/j.chb.2020.106382
- Duggan, M., Lenhart, A., Lampe, C., and Ellison, N. B. (2015). *Parents and social media*. Washington: Pew Research Center, 16.
- Dunne, A., Lawlor, M. A., and Rowley, J. (2010). Young people's use of online social networking sites—a uses and gratifications perspective. *Jnl Res. Interact Mktng* 4 (1), 46–58. doi:10.1108/17505931011033551
- Dutt, A. (2016). One in three teens lose sleep over gadgets, social media: study. hindustan times Available at: <https://www.hindustantimes.com/health-and-fitness/one-in-three-teens-lose-sleep-over-gadgets-social-media-study/story-FzNGol7SmMnTJaOx0Lv6ZO.html> (Accessed January 22, 2018).
- Ellison, N. B., Steinfield, C., and Lampe, C. (2007). The benefits of Facebook "friends": social capital and college students' use of online social network sites. *J. Comput. Mediated Commun.* 12 (4), 1143–1168. doi:10.1111/j.1083-6101.2007.00367.x
- Evers, C. W., Albury, K., Paul, B., and Crawford, K. (2013). "Young people, social media, social network sites and sexual health communication in Australia" This is funny, you should watch it". *Int. J. Commun.* 7, 18.
- Frau-Meigs, D., Brian O', N., Soriani, A., and Tomé, V. (2017). *Digital citizenship education: volume 1: overview and new perspectives*. Strasbourg: Council of Europe Publishing.
- Friedman, L. W., and Friedman, H. (2013). Using social media technologies to enhance online learning. *J. Educators Online* 10 (1), 1–22. doi:10.9743/jeo.2013.1.5
- Gelman, S. A., Taylor, M. G., Nguyen, S. P., Leaper, C., and Bigler, R. S. (2004). Mother-child conversations about gender: understanding the acquisition of essentialist beliefs: I. *Monogr. Soc. Res. Child Develop.* 69 (1), 1–14. doi:10.1111/j.1540-5834.2004.06901002.x
- GIET (2010). GIET—activities main activities. Gujarat-Education.Gov. Available at: <http://gujarat-education.gov.in/giet/activities/main-activities.htm> (Accessed January 22, 2018).
- Ginige, K., Amaratunga, D., and Haigh, R. (2018). Mapping stakeholders associated with societal challenges: a Methodological Framework. *Proced. Eng.* 212, 1195–1202. doi:10.1016/j.proeng.2018.01.154
- Glesne, C. (2011). *Becoming qualitative researchers: an introduction*. 4th Edn. Boston, MA: Pearson.
- Govindaraju, P., and Banerjee, I. (1999). A retrospective view of the countrywide classroom in India. *J. Educ. Media* 24 (2), 103–116. doi:10.1080/1358165990240203
- Harrison, K. (2015). Media and the family. *J. Child. Media* 9 (1), 1–4. doi:10.1080/17482798.2015.997513
- Hausmann, J. S., Toulountzis, C., White, M. T., Colbert, J. A., and Gooding, H. C. (2017). Adolescent and young adult use of social media for health and its implications. *J. Adolesc. Health* 60 (6), 714–719. doi:10.1016/j.jadohealth.2016.12.025
- Henrich, J., Heine, S. J., and Norenzayan, A. (2010). Most people are not WEIRD. *Nature* 466 (7302), 29. doi:10.1038/466029a
- Ho, C., Bluestein, D. N., and Jenkins, J. M. (2008). Cultural differences in the relationship between parenting and children's behavior. *Dev. Psychol.* 44, 507–522. doi:10.1037/0012-1649.44.2.507
- Hogan, B. (2010). The presentation of self in the age of social media: Distinguishing performances and exhibitions online. *Bull. Sci. Technol. Soc.* 30 (6), 377–386. doi:10.1177/0270467610385893
- Holmes, J. (2009). Myths and missed opportunities. *Inf. Commun. Soc.* 12 (8), 1174–1196. doi:10.1080/13691180902769873
- Hswen, Y., Murti, V., Vormawor, A. A., Bhattacharjee, R., and Naslund, J. A. (2013). Virtual avatars, gaming, and social media: Designing a mobile health app to help children choose healthier food options. *J. Mob Technol. Med.* 2 (2), 8. doi:10.7309/jmtm.2.2.3
- Jacobs, S., Egert, C. A., and Barnes, S. B. (2009). "Social media theory and practice: lessons learned for a pioneering course," in 2009 39th IEEE Frontiers in education conference, October 2009, San Antonio, Texas (San Antonio: IEEE), 1–5.
- Jenkins, H. (2006). "Confronting the challenges of participatory culture: media education for the 21st century," in *An occasional paper on digital media and learning*. Editors D. John and T. Catherine (Chicago: MacArthur Foundation).
- Kalmus, V., Blinka, L., and Olafsson, K. (2015). Does it matter what mama says: evaluating the role of parental mediation in European adolescents' excessive internet use. *Child. Soc.* 29 (2), 122–133. doi:10.1111/chso.12020
- Katzenbach, C., and Bächle, T. C. (2019). Defining concepts of the digital society. *Internet Pol. Rev.* 8 (4), 1–6. doi:10.14763/2019.4.1430
- Kumar, D. (2015). Addicted to you(tube). The Hindu. Available at: <https://www.thehindu.com/features/metroplus/society/toddler-talk-addicted-to-youtube/article6823872.ece> (Accessed September 15, 2019).
- Kumar, N., and Rangaswamy, N. (2013). The mobile media actor-network in urban India. *Proc. Sigchi Conf. Hum. Factors Comput. Syst.*, 1989–1998. doi:10.1145/2470654.2466263
- Lee, A. Y. L. (2010). Media education: definitions, approaches and development around the globe. *New Horizons Educ.* 58 (3), 1–13.
- Lee, L. T. (2013). Privacy and social media. *Soc. Media Industries*, 146–165.
- Lee, S. J., and Chae, Y. G. (2007). Children's Internet use in a family context: influence on family relationships and parental mediation. *Cyberpsychol Behav.* 10 (5), 640–644. doi:10.1089/cpb.2007.9975
- Lee, S. J., and Chae, Y. G. (2012). Balancing participation and risks in children's Internet use: the role of internet literacy and parental mediation. *Cyberpsychol Behav. Soc. Netw.* 15 (5), 257–262. doi:10.1089/cyber.2011.0552
- Lenhart, A., Smith, A., and Anderson, M. (2015). *Teens, technology and romantic relationships*. Washington: Pew Res. Cent., 1–77.
- Livingstone, S., and Bulger, M. (2014). A global research agenda for children's rights in the digital age. *J. Child. Media* 8 (4), 317–335. doi:10.1080/17482798.2014.961496
- Livingstone, S., Kirwil, L., Ponte, C., and Staksrud, E. (2014). In their own words: what bothers children online?. *Eur. J. Commun.* 29 (3), 271–288. doi:10.1177/0267323114521045
- Livingstone, S., Ólafsson, K., Helsper, E. J., Lupiáñez-Villanueva, F., Veltri, G. A., and Folkvord, F. (2017). Maximizing opportunities and minimizing risks for children online: the role of digital skills in emerging strategies of parental mediation. *J. Commun.* 67 (1), 82–105. doi:10.1111/jcom.12277
- Livingstone, S., and Blum-Ross, A. (2020). *Parenting for a digital future: how hopes and fears about technology shape children's lives*. United States: Oxford University Press.
- Livingstone, S. (2014). Developing social media literacy: how children learn to interpret risky opportunities on social network sites. *Commun.* 39 (3), 283–303. doi:10.1515/commun-2014-0113
- Livingstone, S., and Helsper, E. (2007). Taking risks when communicating on the Internet: the role of offline social-psychological factors in young people's vulnerability to online risks. *Inf. Commun. Soc.* 10 (5), 619–644. Available at:



- <https://www.tandfonline.com/doi/abs/10.1080/13691180701657998> (Accessed 11 March 2019).
- Livingstone, S., and Helsper, E. J. (2008). "Parental mediation of children's internet use." *J. Broadcasting Electron. Media* 52 (4), 581–599. doi:10.1080/08838150802437396
- Madden, M., Lenhart, A., Cortesi, S., Gasser, U., Duggan, M., Smith, A., et al. (2013). *Teens, social media, and privacy*. Washington: Pew Internet & American life project.
- Marwick, A. E. (2008). To catch a predator? The MySpace moral panic. First Monday, [online]. 13 (6). Available at: <https://doi.org/10.5210/fm.v13i6.2152> (Accessed 12 April 2020).
- Marwick, A., and boyd, d. (2014). It's just drama': teen perspectives on conflict and aggression in a networked era. *J. Youth Stud.* 17 (9), 1187–1204. doi:10.1080/13676261.2014.901493
- McDool, E., Powell, P., Roberts, J., and Taylor, K. (2020). The internet and children's psychological wellbeing. *J. Health Econ.* 69, 102274. doi:10.1016/j.jhealeco.2019.102274
- Mihailidis, P. (2012). *News literacy: global perspectives for the newsroom and the classroom*. New York, NY: Peter Lang.
- Mihailidis, P. (2009). "The new civic education: media literacy and youth empowerment worldwide," in *A report for the center for international media assistance at the national endowment for democracy* (Washington DC: September: Center for International Media Assistance).
- Mihailidis, P. (2018). Civic media literacies: Re-imagining engagement for civic intentionality. *Learn. Media Technol.* 43 (2), 152–164. doi:10.1080/17439884.2018.1428623
- Mossberger, K., Tolbert, C. J., and McNeal, R. S. (2007). *Digital citizenship: the Internet, society, and participation*. Cambridge, MA: MIT Press.
- Mukherjee, T., Ilavarasan, P. V., and Kar, A. K. (2019). "Digital literacy training, impact & moderating role of perceived value among unemployed women in India," in Proceedings of the tenth international conference on information and communication technologies and development, January 2019, Ahmedabad, India, 1–4.
- NCERT (2017). CIET central Institute of educational technology. Available at: <https://ciet.nic.in/pages.php?id=projects-2014-15> (Accessed July 24, 2020).
- Nolas, S.-M., Varvantakis, C., and Aruldoss, V. (2016). (Im)possible conversations? Activism, childhood and everyday life. *J. Soc. Pol. Psychol.* 4 (1), 252–265. doi:10.5964/jsp.p.v4i1.536
- Ohler, J. (2012). Digital citizenship means character education for the digital age. *Edu. Dig.* 77 (8), 14–17. doi:10.1080/00228958.2011.10516720
- Padilla-Walker, L. M., and Coyne, S. M. (2011). "Turn that thing off!" parent and adolescent predictors of proactive media monitoring. *J. Adolesc.* 34 (4), 705–715. doi:10.1016/j.adolescence.2010.09.002
- Padilla-Walker, L. M., Coyne, S. M., FraserCoyne, A. M., FraserDyer, A. M. W. J., Dyer, W. J., and Yorgason, J. B. (2012). Parents and adolescents growing up in the digital age: latent growth curve analysis of proactive media monitoring. *J. Adolesc.* 35 (5), 1153–1165. doi:10.1016/j.adolescence.2012.03.005
- Palfrey, J. (2016). "Reframing privacy and youth media practices," in *Education and social media: toward a digital future*. Editors C. Greenhow, J. Sonnevend, and C. Agura (Cambridge: The MIT Press), 113–130.
- Patankar, R., Vyas, S. K., and Tyagi, D. (2017). "Achieving universal digital literacy for rural India," in Proceedings of the 10th international conference on theory and practice of electronic governance, March 2017, New Delhi, India, 528–529.
- Pednekar, P. (2017). Experts want Mumbai schools to include social media in their curriculums. Hindustan Times. Available at: <https://www.hindustantimes.com/mumbai-news/experts-want-mumbai-school-to-include-social-media-in-their-curriculums/story-0upnWHm7XhUtKO6h6zJdGN.html> (Accessed September 15, 2019).
- Pednekar, P. (2016). Most students in Mumbai use social media for assignments. Hindustan Times. Available at: <https://www.hindustantimes.com/mumbai/most-students-in-mumbai-use-social-media-for-assignments/story-BFGHV8VUV0ugAGEM2SIZCO.html> (Accessed September 15, 2019).
- Prieto, L. P., Rodríguez-Triana, M. J., Martínez-Maldonado, R., Dimitriadis, Y., and Gašević, D. (2019). Orchestrating learning analytics (OrLA): supporting inter-stakeholder communication about adoption of learning analytics at the classroom level. *Australas. J. Educ. Technol.* 35, 4. doi:10.14742/ajet.4314
- Press Trust of India (PTI) (2014). Indian teenagers show risky behaviour online: McAfee. Available at: <https://www.livemint.com/Industry/t7JUP4dxW2P9r9ICDNANHP/>
- Indian-teenagers-show-risky-behaviour-online-McAfee.html (Accessed January 22, 2018).
- Quan-Haase, A., and Young, A. L. (2010). Uses and gratifications of social media: a comparison of Facebook and instant messaging. *Bull. Sci. Technol. Soc.* 30 (5), 350–361. doi:10.1177/0270467610380009
- Raman, U., and Verghese, R. (2014). "Indian youth and social media: modes of engagement?," in *Social media, culture and politics in Asia*. Editors L. Wilnat and A. Aw (New York: Peter Lang), 195–202.
- Ramasubramanian, S., and Darzabi, R. (2020). "Civic engagement, social justice, and media literacy," in *Media literacy in a disruptive media environment*. Editors William G. Christ and Belinha S. De Abreu (New York: Routledge), 272–282.
- Ramasubramanian, S., and Yadlin-Segal, A. (2017). Stigma: media influence on. *Int. Encyclopedia Media Effects*, 1–10. doi:10.1002/9781118783764.wbieme0159
- Rangaswamy, N., and Arora, P. (2016). The mobile internet in the wild and every day: digital leisure in the slums of urban India. *Int. J. Cult. Stud.* 19 (6), 611–626. doi:10.1177/1367877915576538
- Raum, S. (2018). A framework for integrating systematic stakeholder analysis in ecosystem services research: stakeholder mapping for forest ecosystem services in the UK. *Ecosystem Serv.* 29, 170–184. doi:10.1016/j.ecoser.2018.01.001
- Ringrose, J., Harvey, L., Gill, R., and Livingstone, S. (2013). Teen girls, sexual double standards and 'sexting': gendered value in digital image exchange. *Feminist Theor.* 14 (3), 305–323. doi:10.1177/1464700113499853
- Risam, R. (2018). *Decolonizing the digital humanities in theory and practice*. New York: Routledge Companion Media Studies Digital Humanities, 78–86.
- Robb, M., and Shellenbarger, T. (2013). Promoting digital citizenship and academic integrity in technology classrooms. *Teach. Professor* 27 (8), 10–13.
- Sarwatay, D. (2017). "Requirement Of Media Literacy Among Children In India." In *Presentation, International Association for Media and Communication Research, IAMCR 2017*, in Cartagena, Colombia from 16–20 July, 2017.
- Scharrer, E., and Ramasubramanian, S. (2015). Intervening in the media's influence on stereotypes of race and ethnicity: the role of media literacy education. *J. Soc. Issues* 71 (1), 171–185. doi:10.1111/josi.12103
- Smetana, J. G. (2017). Current research on parenting styles, dimensions, and beliefs. *Curr. Opin. Psychol.* 15, 19–25. doi:10.1016/j.copsyc.2017.02.012
- Sreenivas, D. (2011). Telling different tales: possible childhoods in children's literature. *Childhood* 18 (3), 316–332. doi:10.1177/0907568211407531
- Staksrud, E., Olafsson, K., and Livingstone, S. (2013). Does the use of social networking sites increase children's risk of harm?. *Comput. Hum. Behav.* 29 (1), 40–50. doi:10.1016/j.chb.2012.05.026
- Subrahmanyam, K., Frison, E., and Michikyan, M. (2020). The relation between face-to-face and digital interactions and self-esteem: A daily diary study. *Hum. Behav. Emerg. Tech* 2 (2), 116–127. doi:10.1002/hbe2.187
- Swist, T., Collin, P., McCormack, J., and Third, A. (2015). Social media and the wellbeing of children and young people: a literature review. Available at: [http://www.uws.edu.au/\\_data/assets/pdf\\_file/0019/930502/Social\\_media\\_and\\_children\\_and\\_young\\_people.pdf](http://www.uws.edu.au/_data/assets/pdf_file/0019/930502/Social_media_and_children_and_young_people.pdf) (Accessed July 24, 2020).
- Trehan, K. (2017). Advertising literacy to empower the young media consumers in India: a critical exploration of the advertised mind. *Media Asia* 44 (3–4), 149–160. doi:10.1080/01296612.2018.1448522
- Tripp, L. M. (2011). The computer is not for you to be looking around, it is for schoolwork': challenges for digital inclusion as Latino immigrant families negotiate children's access to the internet. *New Media Soc.* 13, 552–567. doi:10.1177/1461444810375293
- Tsujimoto, M., Kajikawa, Y., Tomita, J., and Matsumoto, Y. (2018). A review of the ecosystem concept - towards coherent ecosystem design. *Technol. Forecast. Soc. Change* 136, 49–58. doi:10.1016/j.techfore.2017.06.032
- Valkenburg, P. M., Peter, J., and Schouten, A. P. (2006). Friend networking sites and their relationship to adolescents' well-being and social self-esteem. *Cyberpsychol. Behav.* 9 (5), 584–590. doi:10.1089/cpb.2006.9.584
- van Dijk, J., José, D. N., and Poell, T. (2019). Reframing platform power. *Internet Pol. Rev.* 8 (2), 1–18. doi:10.14763/2019.2.1414
- van Dijk, J. (2013). *The culture of connectivity: a critical history of social media*. Oxford: Oxford University Press.
- Vlaanderen, A., Bevelander, K. E., and Kleemans, M. (2020). Empowering digital citizenship: an anti-cyberbullying intervention to increase children's intentions

- to intervene on behalf of the victim. *Comput. Hum. Behav.* 112, 106459. doi:10.1016/j.chb.2020.106459
- Woods, L., Duff, J., Roehrer, E., Walker, K., and Cummings, E. (2019). Representing the patient experience of heart failure through empathy, journey and stakeholder mapping. *Patient Experience J.* 6 (1), 55–62. doi:10.35680/2372-0247.1324
- Yue, A., Nekmat, E., Annisa, R., and Beta (2019). Digital literacy through digital citizenship: online civic participation and public opinion evaluation of youth minorities in Southeast Asia. *Media Commun.* 7 (2), 100–114. doi:10.17645/mac.v7i2.1899

**Conflict of Interest:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright © 2021 Sarwatay, Raman and Ramasubramanian. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.