

7 Culture and Digital Media in Adolescent Development

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Digital media are integrated into the lives of adolescents in almost every corner of the globe, yet the extent of integration, how media are used, and the effects of media in development are anything but universal. Much of what is known about adolescent digital media use and its consequences center on high-income economies – particularly in the USA and Western Europe (e.g., Twenge et al., 2019; Vanden Abeele, 2016). Comparatively less is known about media use in lower- and middle-income economies, where digital media use has risen exponentially – especially among youth – in a short period of time (Silver et al., 2019). Between 2000 and 2022, internet growth rates in Africa, Asia, Latin America/Caribbean, and the Middle East ranged from 2,300% to 13,000%, compared to 200–600% internet growth rates in Europe, North America, and Oceania/Australia during the same period of time (Internet Usage Statistics, 2022). Indeed, the increase in digital media use is now led by emerging and developing world regions (Poushter et al., 2018).

The international perspective on digital media and adolescent development we provide in this chapter is important for a number of reasons. First, international perspectives help Western-based developmental psychologists such as ourselves appreciate human diversity and understand our own WEIRD (Western, Educated, Individualistic, Rich, Democratic; Henrich et al., 2010) perspectives on technology and human development. Second, cross-cultural research helps us to see how digital media such as mobile devices and social media platforms are cultural tools in the sociocultural tradition of Lev Vygotsky, rather than separate, disconnected, “virtual” places. Cultural tools are material and symbolic resources that accumulate through social processes across generations and that mediate human thinking and action (Cole & Scribner, 1978). Tools enable children to master psychological functions like memory, attention, and interpretation, which become implicated in a culture’s definition of intelligence (Maynard et al., 2005). Although Vygotsky’s theory is generally applied to cognitive development, the idea that digital media are cultural tools transforming human activity and psychological functioning can also be applied to social skills and identity development during the transition to adulthood (Manago et al., 2008).

In conceptualizing digital media as cultural tools, we can examine the affordances or “opportunities for action” they offer, which are materially

and socially constituted (Hutchby, 2001). That is to say, the design of a social media platform or mobile device suggests to users how the technology should be used, but at the same time, these tools may be employed by communities in ways designers may have never imagined (Kling, 2007). Cultural beliefs, values, and institutions influence how and for what purpose adolescents use digital media, and thus the psychological outcomes of use. A relational perspective on affordances suggests that the design of digital tools structure (constrain and enable) certain actions (e.g., one-to-many communication) but have differing ramifications for psychological development depending on social constructions of digital media use (e.g., what is communicated). Furthermore, cultural tools are transformative in the process of mediation and adolescents are uniquely positioned in societies to be brokers of cultural change across generations (Manago et al., 2022). In short, we view youth as active participants in their socialization, and in cultural evolution more broadly, through their use of digital media to negotiate their everyday social lives.

In this chapter, we present cultural perspectives on adolescent development and digital media deriving from international research. Although our focus is international, many of the issues we touch upon can be applied to variability within multicultural societies such as the USA. In keeping with our transactional view, we explore how shared values, structures of community, and notions of selfhood shape, and are shaped by, digital media use. To balance the disproportionate representation of survey research with samples in North America and Western Europe, we looked to anthropological and ethnographic research, including our own fieldwork in Thailand (McKenzie) and a Maya community in Mexico (Manago).

Cultural Values and Digital Media Use around the World

Research suggests that digital communication technologies promote individualistic values and mobility, individual expression, and stimulation (Hansen et al., 2014; Manago & Pacheco, 2019; Pathak-Shelat & DeShano, 2014). But to what extent do such values displace collectivistic values and traditional models of interpersonal relationships – particularly in emerging and developing world regions, where values of collectivism, age-based hierarchy, and family obligation dominate? In the paragraphs that follow, we discuss how digital media are used and the effects of digital media in world regions experiencing a rapid rise in internet and social media use. We focus on how cultural values shape adolescent digital media use, and on how adolescents reshape cultural values through their digital media use. We also consider the implications of this digital media-inspired cultural value reshaping on adolescent well-being.

Africa

Quantitative research in Nigeria suggests that social media reshapes core values of respect for old age, traditional ways of dress, and language use (Asemah et al., 2013). The authors argue that Facebook, Twitter, and 2go are “potent tools of cultural imperialism” (Asemah et al., 2013, p. 67), for they encourage Nigerian youth to pattern their lives after foreign culture and drive the loss of traditional values. Yet the authors also highlight the potential utility of these social media in promoting traditional Nigerian values among youth. Certainly, digital media are powerful tools of globalization insofar as they reduce the distance between practices, values, and people from geographically distant world regions. Yet digital media may also encourage localization (the counterforce of globalization) by encouraging the maintenance and even expansion of local values and practices (Hermans & Dimaggio, 2007) in rapidly changing cultural contexts.

In Ethiopia, Hansen and colleagues’ quantitative work points to continuity and change in cultural values with the experimental introduction of laptops. In one study, Hansen et al. (2012) found that after one year of laptop use, adolescents more strongly endorsed individualistic values, yet there was no reduction in collectivistic value endorsement. In another study, Hansen et al. (2014) found that children and adolescents – particularly in rural regions – who were given laptops became significantly more positive about gender equality over time than those without laptops. Those with laptops also endorsed other “modern” cultural values (e.g., achievement, self-direction, universalism). Interestingly, though, they found that traditional values (i.e., religion, family) were also strengthened by the introduction of laptops. The effects of internet and social media use were not assessed in these studies because the laptops given were not connected to the Internet, but it is telling that even the use of offline laptops alter the cultural values endorsed by Ethiopian youth.

Asia

Although digital media are marketed as giving youth power and agency, Pathak-Shelat and DeShano’s (2014) qualitative research illustrates that traditional Indian values of obedience to elders are also reinforced by rural Indian adolescents’ internalization of parental moral panic about media as risky. They do so by modeling their digital media use around parental concerns ranging from interacting with strangers to developing cancer from new media technologies. Yet adolescents also subtly (re)negotiate age-based hierarchies and power by, for instance, friending those with whom they are unfamiliar (engaging in “risky” behavior) and not friending distant relatives (not respecting familial ties). Importantly, adolescents in this rural Indian context experience media as peripheral rather than central to their lives. Rural Indian youth have less access to mobile phones and computers with internet access

(Pathak-Shelat & DeShano, 2014); they also use digital media in ways that are distinct from youth in urban India – where media use reshapes adolescent cultural practices such as clothing and music choices (Rao et al., 2013).

Research in Thailand, too, points to gaps in media use across rural and urban contexts. The second author's mixed-methods study found that urban-dwelling Thais spend more time on digital media than rural-dwelling Thais, and that adolescents spend more time on digital media than their parents (McKenzie et al., 2022). The media-based opportunities and challenges experienced across generation and geographic location speak to continuity in cultural values. Rural and urban adolescents and parents alike perceive connecting with proximal others (e.g., friends, children) as a key technological affordance. That urban adolescents – who spend the most time on digital media – emphasize collectivistic goals illustrates that media are used in ways that align with and promote traditional cultural values. Yet the media-based challenges highlighted point to digital media paradoxes among those who spend the most time online. Urban adolescents simultaneously experience social media as expanding their presence in the world and restricting real-world experiences, and as enabling connections with, and fostering rejection from, friends. Their parents experience media both as tools for achieving closeness with their children and as endangering family bonds by cheapening time spent together.

In urban Thailand, qualitative research indicates that adolescents' media expertise renders them cultural brokers for their parents (McKenzie et al., 2019). Adolescents in this society traditionally marked by deference to elders train their parents to use digital technologies, which reshapes traditional power dynamics and hierarchical family relationships. It is noteworthy, though, that parents reassert their position of authority (e.g., by mobilizing their children's technological desires as opportunities to teach culturally salient lessons about necessity) and that adolescents use their digital media expertise to assist and serve their parents. This points to continuity of Thai values for age-based hierarchy, moderation, and filial piety, even in the face of rapid technological change.

Latin America/Caribbean

The work of Ferguson and colleagues highlights the influence of digital media on adolescent values and identity in Jamaica. Across two studies, they found that roughly one-third of urban Jamaican adolescents were remotely acculturated to American culture (Ferguson & Bornstein, 2012, 2015). One key avenue through which this remote acculturation occurs is indirect intercultural contact with the United States via media – including social media. Their quantitative research indicates that, compared to their “traditional Jamaican” counterparts, “Americanized Jamaican” adolescents are more affiliated with European American identity, hold weaker beliefs about family obligations, and experience greater conflict with their parents.

The first author's mixed-methods research with young adults in a Maya community in Mexico indicates that cultural values shape how young people think about the benefits and risks of information communication technologies (ICTs) (Manago & Pacheco, 2019). Examining indigenous beliefs about ICTs shortly after the installation of a communication tower, the study found that a commonly discussed ICT benefit was enabling frequent family communication and family closeness and that a commonly discussed ICT risk was their danger in drawing attention away from the family. That ICTs are perceived as promoting and hindering family relationships underscores the role of traditional, collectivistic values in shaping youth perspectives of digital media. ICT benefits also highlighted – particularly among those with higher educational attainment – values of stimulation and self-expression, which involve seeking new information and exploring outside of traditional community structures. Here we see the influence of exposure to Western values of individualism, which are spread via ICTs.

Middle East

For each of the preceding world regions discussed, it was possible to highlight research on adolescent media use and values in nations experiencing dramatic digital media expansion. Though the Middle East includes high-income nations with relatively long-standing digital media integration and low-income nations with dramatic digital media expansion in recent years (Internet Usage in the Middle East, 2022; World Bank Country and Lending Groups, n.d.), most relevant research focuses on the former. Mixed-methods research in high-income Israel, however, points to the role of digital media in reshaping cultural values and family relationships.

Abu Aleon et al. (2019) assessed values among three generations of Bedouins with vignettes that involved a disagreement between two characters: one that endorsed traditional values (family obligation, interdependence, and gender hierarchy) and other that endorsed modern Western values (individual achievement, independence, and gender equality). They found that younger generations of Bedouins were more likely to endorse gender equality than were older generations, and that females were a generation ahead of males in endorsing gender equality and independence. Importantly, time spent on the Internet and watching television were identified as “motors of change” toward Western value endorsement. Mesch's (2006) quantitative examination of Israeli adolescent internet use points to how adolescent internet use affects family cohesion. They found that the more time adolescents spent online, the less time they spent with their parents, and that the purpose of adolescent internet use mattered where family conflict is concerned. While adolescent internet use for social purposes was positively associated with intergenerational family conflict, internet use for educational purposes was not.

Summary

Cultural values influence how digital media are used and the effects of digital media. On the one hand, adolescents use and perceive digital media in ways that align with cultural values. On the other hand, adolescent digital media use reshapes cultural values and interpersonal relationships. The research discussed also illustrates how risks and opportunities of digital media are customized by developmental period, generational cohort, and cultural context. In emerging and developing world regions where technological change is particularly rapid, risks include the potential loss of traditional cultural values and an emergent cultural gap between adolescents and parents. Opportunities include emergent adolescent agency in shaping their development and in reshaping cultural values deemed incongruent with their lived 21st-century realities.

Considering adolescent well-being as it intersects with cultural values, digital media may act as a double-edged sword. The psychological task of encountering and reconciling diverse value systems likely facilitates adolescent perspective-taking and the development of multifaceted, dynamic thinking that is adaptive in our multifaceted and dynamic world. Yet the task of coherently integrating local and global value systems likely presents unique challenges for adolescents (McKenzie, 2020). The difficulties associated with knitting together potentially incompatible value systems and identities may render adolescents more at risk of developing bifurcated or differentiated selves (McKenzie, 2019), thereby threatening the development of an integrated self – a key task of adolescence (Erikson, 1963).

The effects of digital media in world regions experiencing rapid technological growth in some ways mirror the effects in the culturally diverse USA. As explained in this section, adolescent digital media use reshapes cultural values and parent–child power dynamics in India and Thailand. Among rural teenage girls in the Midwestern USA, especially rural girls of color, social media is used to gain and assert power and control, which is perceived as lacking in their offline lives (Rickman, 2018). Like Thai adolescents who act as media-based cultural brokers for their parents, lower-socioeconomic-status American youth frequently assist their parents with technology (Rideout & Katz, 2016) – likely renegotiating parent–child power dynamics in the process. Also highlighted in this section is that adolescent media use does not completely unroot traditional cultural values. From Nigeria and Ethiopia to India, Thailand, and Mexico, media are avenues for localization and local value reassertion. This aligns with Latino families in the USA, who often use digital media in ways that center collectivism (e.g., collaborative father–son searches, sister and brother producing media together) (Levinson & Barron, 2018). Research explicitly addressing the overlapping consequences between and within cultural communities would sharpen the cultural study of adolescent digital media use.

Structures of Community: The Nature of Social Ties in Digital Societies

Many sociological theorists have pondered questions about the impacts of digital communication on structures of community and the ways in which social relations are organized (Castells, 1996; Rainie & Wellman, 2012). One perspective is that communication technologies, particularly social network sites, have greatly reduced the time costs of maintaining relationships such that youth today have more opportunities to interact with larger swaths of diverse others than was possible in the past (Manago & Vaughn, 2015). Yet, much of our thinking on this issue is grounded in evidence from WEIRD samples and Western philosophical traditions. In this section, we interrogate a common framework for understanding social ties in digital societies and present alternative possibilities that may better account for the impact social media is having on the organization of adolescents' social relations.

The Mobility Narrative

Western theories regarding the consequences of communication technologies for human social relations often reflect a mobility narrative (Hampton, 2016). In this narrative, industrialization, transportation systems, urbanization, and communication technologies have brought about greater migration, occupational specialization, and shifts in social structures away from permanent, tight-knit groups grounded in shared geography, to impermanent, heterogeneous, and expansive person-centered networks spread across various contexts (e.g., Greenfield, 2009; Rainie & Wellman, 2012). Mobile devices and social media amplify historical trends toward increasing individual mobility by introducing new affordances into social life such as communication at a distance and asynchronous one-to-many (masspersonal) communication that allow people to transcend the limitations of time and space to construct looser networks of associations (Donath, 2008; Wellman, 2002). Digital communication technologies also extend individuals' capacities to connect through shared personal interests, rather than ascribed relationships such as kinship, and to overcome the constraints of social bonds while still deriving social resources from them (Rainie & Wellman, 2012).

The mobility narrative is useful for explaining certain patterns in the international social media research literature. In the West, Facebook has facilitated more extensive webs of associations with social resources for personal exploration and self-expression (Brandtzaeg, 2012; Ito et al., 2009; Manago et al., 2012). Bridging social capital resources such as nonredundant information and novel perspectives are more abundant in social structures with many weak ties (Granovetter, 1973; Williams, 2006) and studies have shown positive associations between social media use, network size, and bridging social capital among US college students (Ellison et al., 2007; Mariek et al., 2018), adolescents in

Australia (J. Y. Lee et al., 2016), and early adolescents in the Netherlands (Antheunis et al., 2016). Similar associations have also been found outside the West, among university students in Karachi, Pakistan (Raza et al., 2017), South Africa (Johnston et al., 2013), Beijing, China (Liu et al., 2013), and adolescents in South Korea (J. Y. Lee et al., 2016). In Manago's field site in the Maya community of Zinacantán, emerging adults who began using the Internet after a communication tower was installed in 2010 constructed social networks through a paper and pencil mapping activity (Antonucci, 1986) comprising greater proportions of nonpermanent social connections (nonkin) compared to emerging adults who did not have access to the Internet (Manago & Pacheco, 2019).

Nevertheless, some patterns in the research literature are not well understood through a mobility narrative. The degree to which young people use social media to build large networks of bridging social capital varies around the world and depends on other relational structures in their cultural contexts. Research has shown that in social contexts outside the USA where it is less normative to sever old ties and form new ones such as in France (Brown & Michinov, 2017), Japan (Thomson et al., 2015), South Korea (Cho, 2010), and among Palestinians in Israel (Abbas & Mesch, 2015), adolescents and emerging adults tend to use social media to construct smaller and more intimate networks based on their face-to-face relationships. The problem of "context collapse" identified in the West as the mixing of multiple, distinct, and even unknown audiences on social network sites leading to the disintegration of contextual cues for self-presentation (boyd, 2008; Vitak, 2012) is a nonissue in southeast Turkey, where people use Facebook to construct multiple closed groups for social interaction and make extensive use of the private chat feature (Costa, 2018). Even adolescents and emerging adults in the USA and UK who construct large online networks tend to use social network sites to maintain connections with existing face-to-face contacts, rather than to meet new people and expand social horizons (Livingstone & Sefton-Green, 2016; Manago et al., 2012; Subrahmanyam et al., 2008).

Additionally, a networked structure of social ties is not endemic to the design of social media. On Renren in China and Cyworld and Kakaostory in Korea, relationships are organized in closed structures of concentric circles, and norms of reciprocity and mutual obligations are central to activities on the site (Hjorth, 2010; J. Y. Lee et al., 2016; Li & Chen, 2014). As social media continue to evolve and proliferate, youth are increasingly alternating between different platforms and tools to manage different kinds of relationships in an integrated environment of affordances, what Madianou and Miller (2013) call "polymedia" environments. For example, US college students use Twitter and Instagram to generate bridging social capital, Facebook for family, and Snapchat to increase intimacy with close others (Phua et al., 2017; Shane-Simpson et al., 2018) while Chinese international students use Facebook as a tool for generating bridging capital and Renren for maintaining connections to home life (Li & Chen, 2014).

Alternatives to a Mobility Narrative

Hampton (2016) proposes that *meta-modernity* is a better narrative metaphor for understanding social media and social structures in contemporary times. In his view, both individual mobility and social accountability are becoming amplified with social media. Communicative affordances for persistent contact and pervasive awareness are reinstating some preindustrial relational structures that counteract growing individual mobility. Mobile devices and social media amplify social obligations and commitments, making people constantly accessible in the present and to people of the past, connecting us *more permanently* across lifespans and generations. Indeed, studies with adolescents in Europe (Mascheroni & Vincent, 2016) and college students in the USA (Hall & Baym, 2012) exemplify how mobile phones have increased norms for perpetual communication, creating new pressures that promote dependence and satisfaction with close others but also feelings of overdependence and dissatisfaction. In addition, one-to-many forms of asynchronous communication via status updates on social media supply everlasting streams of social information that persist and scale (boyd, 2010), recreating the passive informal watchfulness of small, tight-knit communities where the audience is ambiguous and the watchers are also being watched (Hampton, 2016; Marwick, 2012). Pervasive awareness can be found in the ways youth often exhibit heightened conformity to community expectations for gender in their photographs on social media, whether those expectations involve carefully curating sexually attractive selfies in the south of Italy (Nicolescu, 2016) or upholding modesty and family honor in New Delhi (Mishra & Basu, 2014), rural China (McDonald, 2016), and southeast Turkey (Costa, 2016).

Another theoretical perspective is scalable sociality, posited by Miller and colleagues (2016) in a multivolume series of ethnographies on social media use in southeast Turkey, south Italy, northern Chile, south India, rural China, industrial China, emergent Brazil, an English village, and Trinidad. These authors argue that social media have “colonized a space of group sociality between the private and the public” (Miller et al., 2016, p. 286), introducing new structures of relations and genres of communication at various points on continuums from small groups and intimacy to large groups and publicness. To illustrate, Miller et al. show how 11- to 18-year-olds in the English village use dyadic mobile phone messages to talk to their best friends, Snapchat to develop trust in small groups, WhatsApp to communicate with classmates (often same-sex groups discussing other-sex classmates), Twitter to engage in school-wide banter, Facebook to interact with groups outside school such as family, neighbors, and workmates, and Instagram to entertain strangers with visual images. Sociality can also be scaled within a single platform through various functionalities (e.g., use of privacy settings) or through communication strategies themselves (e.g., social steganography – embedding private, hidden messages in public communication, Marwick & boyd, 2014).

Connecting the idea of scalable sociality back to cultural tools, we can see how social media would extend adolescents' capacities to develop skills for social relations at various scales of interaction.

Importantly, the consequences of social media for adolescent development depend on what is being scaled relative to youths' social contexts. Just as Facebook in the USA and QQ in China have scaled public broadcasting (e.g., TV, newspapers, radio) down to individuals contributing to large groups, WhatsApp in Latin America and WeChat in China have scaled intimacy up from face-to-face interactions and the telephone (Miller et al., 2016). In some cases, mobile devices and social media have intensified intimacy by creating new genres of intimate romantic relations, particularly in cultures with greater family mediation in romantic partnering such as south India (Venkatraman, 2016), rural China (McDonald, 2016), Muslim southeast Turkey (Costa, 2016), and in Zinacantán, Mexico (de Leon-Pasquel, 2018). Intimacy and mobility can also be scaled together as is the case with social media facilitating reinforcement of emotional bonds in cross-national families in Trinidad (Sinanan, 2017), allowing families to stay connected when miners are absent for long periods of time in Chile (Haynes, 2016), and helping migratory industrial workers maintain stable connections in industrial China (Wang, 2016). Social media also introduce new opportunities to reinforce and scale traditional social structures, such as in south India where symbolic kinship structures of extended families in caste traditions have become a metaphor for how youth arrange contacts on social media (Venkatraman, 2016). Counter to the linear direction of cultural change toward individualism in the mobility narrative, new scales of sociality may have unexpected consequences for psychological development. For example, Miller and colleagues (2016) found a new kind of openness to strangers with the introduction of social media in rural China but wariness of strangers through social media in Italy and England.

Summary

A mobility narrative may not be comprehensive enough to capture the multifaceted structures of community that are evolving with the spread of digital tools. Digital tools afford customizable sociality and mobility, but also introduce new kinds of communities, as well as social pressures and constraints at different scales of interaction. Moreover, the ramifications of digital media for adolescent development depend on what is being scaled relative to youths' everyday lives, which is quite different across the globe and across groups in a multicultural society such as the USA. For example, social media create new opportunities for community and critical consciousness raising among racial and ethnic minority youth (Tynes et al., 2011) but also new capacities for racial and ethnic discrimination to occur (Lozada et al., 2021). For LGBTQ+ youth, social media are new avenues for intimacy (Marston, 2019) and also

public visibility (Rubin & McClelland, 2015). As adolescents negotiate risks and opportunities at various scales of sociality they are learning new kinds of social skills adaptive for digitally mediated societies that contribute to their identity development and well-being.

The Culturally and Digitally Mediated Self

Western ideals and notions of personhood tend to dominate developmental science on the digitally mediated self. Optimistically, we see interactive media as offering enhanced opportunities for exploration, expression, reflection, and curation in the process of self-construction in the transition to adulthood (Ito et al., 2009; Manago et al., 2008). A more pessimistic view blames social media for narcissism in the USA and greater preoccupation with superficiality and external validation among young people (Twenge, 2013). As we hope to make clear in the following paragraphs, these opportunities and risks for self-development are not functions of digital tools themselves; instead, they reflect social constructions of digital media use, including hopes, fears, and expectations for how the self should be represented. In this section, we compare Western-based norms and meanings for digital self-presentation with those outside the West. This comparison will call into question universal claims about the impact of digital media on self-development and highlight how digital tools are used for both cultural reproduction and transformation.

Is Social Media an Identity Playground?

The popular *New Yorker* cartoon published in 1993, “on the internet nobody knows you’re a dog,” cleverly illustrates early perspectives in the USA regarding the Internet’s impact on identity. Research at this time suggested that the disembodied nature of computer-mediated communication (i.e., reduced social cues, asynchrony, and geographical distance) would facilitate anonymity, pretense, exploration, and transcendence of offline limitations in self-presentations (McKenna & Bargh, 2000; Rodino, 1997; Turkle, 1997). But as the social media landscape evolved, becoming more visual and less anonymous (e.g., Facebook’s real-name policy), concerns shifted to adolescents’ self-disclosures and risks to their personal privacy (Livingstone, 2008; Tufekci, 2008). Research also began to emphasize how authenticity in combination with positive curation in online self-presentations generated audience support and greater self-regard (Marwick & boyd, 2011; Yang & Brown, 2016). Other studies, both in the USA and Europe, showed that the presentation of false selves online was an indication of lower degrees of identity synthesis (Michikyan et al., 2015) or a response to offline dysfunction, occurring at higher rates among lonely adolescents (Valkenburg & Peter, 2008) and those with poor social skills and social anxiety (Harman et al., 2005).

Ethnographic approaches during this period of time documented more nuanced combinations of authenticity and experimentation happening among adolescents online. Fieldwork in the USA (boyd, 2014) and the UK (Livingstone & Sefton-Green, 2016) captured the polymedia nature of adolescents' lived experiences with social media and how they were learning to express different sides of themselves depending on affordances for visibility and privacy in various social milieus. For example, Livingstone and Sefton-Green described how teenagers in a London secondary school used Tumblr to explore emerging facets of the self anonymously while using Facebook to perform "civil" selves that conformed to expectations of the school community and that engendered shallow social acceptance. Case studies of adolescents in the USA have also depicted different genres or conventions of participation across platforms including "hanging out," "messing around," and "geeking out" – the latter of which involves in-depth identity exploration of niche interests (Ito et al., 2009).

A different story of the digitally mediated self has emerged in South Korea and Japan. In South Korea, the first country in the world where widespread use of a social networking site (Cyworld) occurred among youth, digital self-presentation has not been about the exploration of new horizons but about the mundane (Hjorth, 2007; D. Lee, 2010). In her ethnographic research with university students in Korea in the early 2000s, Hjorth found Cyworld was used to create reels of everyday lived content that could be shared, mimicking the gift-giving in Korean culture that reinforces social ties. Youth used digital tools to capture the ordinary and thus deeply personal aspects of themselves to overcome, rather than exploit, the lack of social presence in computer-mediated communication. This finding is similar to studies with Japanese youth at this time who used early forms of social media to foster a new kind of co-presence and shared perspective of daily life, akin to the intimacy of being together without having to say anything (Ito & Okabe, 2005). The greater emphasis on tethering in these studies is also present in the language for digital tools; in contrast to the term "mobile phone" in the West that means a device that travels, the term "keitai" in Japan signifies a device connected to the body as an appendage, the emphasis on attachment (Ito et al., 2005). Similarly in Singapore, the term is "hand phone," suggesting alternative social constructions of self in relation to digital media that may reflect broad differences between Eastern and Western cultures.

A cross-cultural perspective on mobile devices and social media reveals how these tools are not generally used to escape social norms for self-representation but to conform to them. Kim and Papacharissi (2003) analyzed US and Korean Yahoo! Geocities home pages and found US virtual actors were more likely to present themselves with text-based communication and to describe themselves directly (i.e., stating personality traits) – a reflection of low-context communication in which independent selves transmit explicit and direct messages that can be separated from the context without loss of meaning. Korean

virtual actors tended to communicate their identities through more ambiguous multimedia imagery – a reflection of high-context communication where interdependent selves are less direct and more implicit, relying on contextual factors to transmit meaning (see also Gudykunst et al., 1996). A departure from individualistic self-presentation norms of the USA has also been documented more recently in Turkey. Comparing Turkish and American adolescents' self-presentations on Facebook, researchers found adolescents in the USA were more likely to use promotion strategies in their self-representations, conforming to ideals for exalting the self, while those in Turkey tended to conform to Turkish ideals by presenting themselves through exemplification strategies that demonstrated their moral principles (Boz et al., 2016).

Conformity to gender norms on social media is widely observed in the research literature and further demonstrates how cultural expectations for self-presentation are projected to screens. Some researchers have interpreted consistent international gender differences in Facebook profiles (e.g., men present objects to convey status, women present family photos) as due to biology and natural selection (e.g., Tifferet & Vilanai-Yavets, 2014). However, this interpretation fails to recognize historical formations of the patriarchal arc that has spread east and west from the invention of the plow in the Middle East, and through colonization, shaping hierarchical gender relations in particular ways (Quinn, 2019). Within the patriarchal arc there are also cultural differences in gender that are translated into digitally mediated contexts. One content analysis comparing photos of US and Chinese athletes at the 2016 Rio Olympics on Twitter and Sina Weibo found that Chinese female athletes were more likely to incorporate smiling and a tilted head position compared to their Chinese male counterparts; US female athletes were more likely to depict themselves posed on a knee or body arched compared to their male counterparts, who tended to post photos of themselves upright (Xu & Armstrong, 2019). This study also found evidence of greater egalitarianism in US photos compared to Chinese photos, which could be due to the ongoing influence of Confucian ideals for male dominance in China and the attenuating effects of Title IX on male dominance in US sports.

Research on gender self-presentation via digital media reveals cultural continuity but also cultural change. Studies on Facebook use in Muslim cultural contexts show how young women resist traditional constraints such as sexual purity and responsibility for family reputation by segmenting their audiences on social media (Al-Saggaf, 2011; Shen & Khalifa, 2010). One interview study with Muslim university students in New Delhi found that young women negotiated multiple audiences on Facebook, presenting themselves as “nice” and virtuous to uphold their family's honor but also using privacy settings to restrict surveillance and judgment from more conservative parts of their kin networks and express themselves outside traditional norms (Mishra & Basu, 2014). Similarly, ethnographic research in South Korea describes how young women presented themselves on their Cyworld mini-homepages to achieve conventional patriarchal definitions of submissive

female beauty in South Korea; yet, in the process of framing, editing, manipulating, and curating their images, the young women also took control of the gaze, which opened up new experiences of power in their identity development (D. Lee, 2005).

Is the Selfie Narcissistic?

A variety of studies have found associations between narcissistic personality traits and social media use, mostly among college students on Facebook but also among social media users in China, Japan, Europe, Australia, and Russia (see meta-analysis by McCain & Campbell, 2018). The assumption in the framing and interpretation of these studies is that posting photos and status updates on social media is ultimately self-promotional and therefore cultivates an unrealistic, self-serving, entitled, and inflated sense of self as special and unique (Gentile et al., 2012). The so-called selfie, a photo taken by the self of the self, has been an emblem of this assumption, construed as an indication of vanity and often employed to accuse young women of self-indulgence, triviality, and attention-seeking (Burns, 2015).

International research has brought to light the existence of alternative paradigms surrounding the selfie that likely have very different consequences for youth self-development. In a favela of Brazil, adolescents post selfies on Facebook to reflect on themselves and the violence in their neighborhoods and to send a signal to their parents (who regularly check the site) that they are safe as they navigate daily life (Nemer & Freeman, 2015). Selfies in this context are not fostering narcissism but instead helping youth contest the power and surveillance of local drug lords. The banal self-portraits that Japanese and South Korean youth exchanged in early iterations of social media created ongoing togetherness in daily life, not inflated sense of selves (Hjorth, 2007; Ito & Okabe, 2005; D. Lee, 2010). However, relational selfies are not just found outside of WEIRD contexts. American and British university students also use selfies relationally when they exchange unedited and disappearing images on Snapchat as a form of intimate conversation; as one participant in a study said, "I've literally had a ten-minute conversation with my friend just doing facial expressions" (Katz & Crocker, 2015, p. 1869). Katz and Crocker report that Chinese university students used WeChat in similar ways but instead of facial expressions, animations symbolizing emotions and actions were used to maintain visual conversations. It is impossible to disentangle whether this observed difference is due to the alternative affordances via Snapchat versus WeChat or due to cultural differences in ideals for emotional expression (see Tsai, 2017).

Understandably, selfies in more public social media contexts tend to involve greater deliberation and curation. But does crafting favorable social impressions through selfies in more public contexts equate to an unrealistic and inflated sense of self? In their compilation of international ethnographies, Miller and colleagues (2016) show that, indeed, posting idealized versions of

the self occurred throughout their field sites; yet what the ideal looks like and what it means to people vary widely. While young factory workers in industrial China posted aspirational photos of economic wealth and consumption on the platform QQ, their counterparts in rural China posted photos of family life that combined collectivistic (gratitude to elders) and individualistic (romantic love) aspirations. Selfies among evangelicals in their Brazilian field site showcased material wealth to signify one's religiosity, and in Trinidad, to demonstrate the virtue of hard work. Sometimes the ideal self, such as those presented in selfies in Chile and in an English village, was about demonstrating authenticity through conformity to the ordinary. The authors describe the "footsie" version of the selfie that was popular in Chile where photographers take photos of their feet in a lounging position watching television or playing video games. The footsie is curated to communicate authenticity out of casualness. The footsie would not travel well to Chinese selfie celebrity culture, where photoshopping is an expected and normative courtesy such that *not* using software editing applications to enhance one's images and those of one's friends is considered impolite (see Fan, 2017).

Summary

This section illustrates that social media are not generally used to escape norms and construct an inflated sense of self but instead, to construct a self in line with cultural norms and ideals. Universal claims about the impacts of digital media on adolescent self-development are problematic because norms and ideals for online self-presentation differ across cultures. In a multicultural society such as the USA, race, class, and gender shape how adolescents present themselves through social media and how those self-presentations are interpreted and evaluated (e.g., Daniels & Zurbriggen, 2016; Kapidzic & Herring, 2015). Senft and Baym (2015) argue that although selfies are an expression of human agency, they are also "created, displayed, distributed, tracked, and monetized through an assemblage of nonhuman agents" (p. 1589). Once an image is digitized, it takes up space in the "digital superpublic" and persists outside of the context in which it was first produced, shared, and viewed. As adolescents negotiate online self-presentations and make decisions about who they are and how they want to appear, they contribute to the cultural artefacts circulating in their communities.

Challenges and Future Directions in the Study of Culture and Digital Media

Digital media are cultural tools that at once reflect the cultural values and biases of the creators (Manago et al., 2022) and whose use is shaped by the cultural values of the users (McKenzie et al., 2019). As reflected in this

chapter, adolescents and emerging adults – who lead digital and social media use around the world (Pew Research Center, 2019; Silver et al., 2019) – also contribute to cultural change through their media use. Given the inherently cultural nature of digital media, foregrounding culture in media studies is critical.

Cultural Challenges

Popular discourse and research articles alike are awash with broad claims about how digital and social media affect teens (e.g., Crone & Konijn, 2018; Schrobsdorff, 2016; Twenge, 2017), without adequately attending to how culture shapes media use and its effects. When culture is attended to by media scholars, it is often treated as synonymous with “nation.” This treatment of nations as monolithic cultural entities is problematic for media studies, as significant within-nation heterogeneity exists in media access and use, and in its effects on adolescents (McKenzie et al., 2022; Sheldon et al., 2020). Although within-culture variation sometimes exceeds between-culture variation (Sheldon et al., 2020), digital media research that takes culture into account typically ignores variations within cultural groups (Cardon et al., 2009). In our increasingly multicultural world, we must go beyond investigating the influence of national culture to examine the roles of ethnicity, race, religion, generation, and geographic location in adolescent digital media use and its consequences. With globalization, we must also consider processes of remote acculturation that may increasingly apply to European-American youth (i.e., the rising popularity of K-pop in the USA) and the unique perspectives of immigrant and bicultural youth, who are negotiating multiple worldviews across different social media platforms (Bae, 2010; Bae-Dimitriadis, 2015).

Another cultural challenge is that adolescent digital media use is typically examined in wealthy nations with more established digital media integration. Findings from these populations tend to be interpreted in terms of a universal biologically governed individual, which masks the way that culture is operating in the West. Moreover, a significant gap exists in our understanding of digital media use and its influence on adolescents in poorer nations experiencing a rapid rise in digital media integration. For example, adolescent media use studies in the Middle East overwhelmingly focus on Israel (e.g., Abu Aleon et al., 2019; Mesch, 2006), a high-income economy with a 451% internet growth rate from 2000 to 2021; far less is known about media use in low-income Yemen (with a staggering 52,592% internet growth rate during that time) and in middle-income Iraq and Iran (with 196,100% and 31,135% internet growth rates during that time, respectively) (Internet Usage in the Middle East, 2021). In nations with a dramatic rise in digital media integration, such as Yemen, Iraq, and Iran, we are likely to see cultural clashes between values promoted by digital media (e.g., individualism, self-expression, and stimulation) and indigenous cultural values. Such clashes, in turn, likely

reshape adolescent development, well-being, and intergenerational relationships in these nations in rather profound ways. Alternatively, adolescents in these regions may be using social media as cultural tools to reproduce and reshape culture. These possibilities should be of great interest to adolescent media scholars, as an estimated 84% of the world's population reside in low- and middle-income countries experiencing a rapid rise in digital media use among youth (Ortiz-Ospina, 2017; Silver et al., 2019).

Finally, cultural and cross-cultural adolescent media scholars are tasked with prioritizing youth perspectives. Though helpful, survey-based research typically enters with a priori assumptions about what constitutes risk and opportunity, what identity development looks or should look like, what friendship looks like, what well-being looks like, and so on. But conceptions of risk and opportunity are culturally constructed (Manago & Pacheco, 2019; McKenzie et al., 2022); so too are pathways of identity development (e.g., Sugimura, 2020), definitions of and meanings ascribed to friendship (e.g., French, 2015), and conceptions of well-being (Weisner, 2014). Tuning ourselves to the meanings that adolescents themselves ascribe to these concepts is a critical starting point in furthering our understanding of digital media use and its consequences across diverse cultural communities. Doing so will push us to particularize our claims about how digital and social media affect adolescents and ensure that our research aligns with the lived realities of those we aim to represent.

Future Directions

To address the challenges raised above, media scholars must work to understand how culture operates in the lives of adolescents, and how culture structures their digital media use and perspectives of digital media. To be sure, experimental, survey-based, and quantitative approaches to cross-cultural studies of adolescent media offer important insights. The work of Hansen and colleagues, for example, illustrated that cultural panic about the eradication of traditional values with the integration of new media are not entirely founded, as traditional Ethiopian values are not threatened by (Hansen et al., 2012) and even increase with (Hansen et al., 2014) the introduction of laptops. This begs an important question, though: Why is this the case? In order to understand the processes whereby cultural values change via, and are maintained through, media use, ethnographic research that foregrounds culture and works to understand how it interacts with digital and social media in the lives of young people will provide invaluable insights.

Cultural foregrounding at each stage of studying adolescent media use – including study design, data collection instruments and procedures, and interpretation – is also essential. This requires that researchers calibrate to, and design measures and materials that are grounded in an understanding of local cultural norms, which may be in flux. Such cultural attunement may require that qualitative data collection methodologies (e.g., interviews, focus groups,

social network mapping) be used in place of surveys. This is likely to be especially important when researchers are interacting with marginalized populations in multicultural societies, such as racial, ethnic, sexual, and gender minority youth who may operate on a different set of assumptions from researchers. Such methods are also generally useful for cross-cultural examinations of adolescent digital media use, given the potential for cross-cultural differences in survey response styles to be mistakenly interpreted as cultural differences in the measures being compared (Johnson et al., 2010). This cultural foregrounding is promising in deepening our understanding of the diverse experiences adolescents have with digital media.

Conversely, we must consider how cultural change is inhibited – and adolescent development is controlled – by governments through digital and social media. This is achieved by way of broad-scale internet bans, censorship, and mass surveillance. In North Korea, for example, the government allows only tightly controlled domestic intranet (King, 2019). In Iran, government-issued internet blackouts aim to quell internal unrest and protest (Wolff, 2019). It is also achieved by denying and controlling the use of certain social media platforms. Iran, China, and North Korea have a 100% ban on Facebook (Frenkel, 2018; King, 2019; Leskin, 2019); China further bans Instagram, WhatsApp, Twitter, Snapchat, Reddit, Pinterest, YouTube, and Google (Leskin, 2019). Finally, it is achieved by using digital media to surveil its citizens and reassert cultural values. Egypt, for instance, has come under international spotlight in recent years for police use of dating apps to locate, imprison, and torture LGBT citizens (AP News, 2020; Culzac, 2014) – thereby limiting sexual expression and exploration and enforcing homophobia. China’s “social credit” system also restricts freedom of expression by using social media surveillance to reassert cultural values of collectivism, conformity, and reputation maintenance (Chen & Zhou, 2019; Wong & Dobson, 2019). In 2019, 23 million Chinese citizens were banned from traveling due to poor social credit scores (Reisinger, 2019). Also in the West, digital algorithms encode and perpetuate racial inequalities (Benjamin, 2019) while media companies are increasingly exploiting personal data for profit, trading on human behavioral futures in what Zuboff (2019) calls “surveillance capitalism.” Each example provided here serves to limit or deny intercultural and intracultural contact, thereby inhibiting cultural change and limiting youth agency over their own development.

We set out in this chapter to explore how digital media are cultural tools in adolescent social development. In bringing together alternative cultural perspectives on digital media use and adolescents’ values, social ties, and self-development, we have begun to shed light on cultural processes in digital media use that often go unacknowledged in developmental psychology research with WEIRD samples. By examining international research and questioning dominant Western paradigms, we hope to inspire more contextual and critical approaches to understanding the effects of social media for adolescent development.

References

- Abbas, R., & Mesch, G. S. (2015). Cultural values and Facebook use among Palestinian youth in Israel. *Computers in Human Behavior, 48*, 644–653.
- Abu Aleon, T., Weinstock, M., Manago, A. M., & Greenfield, P. M. (2019). Social change and intergenerational value differences in a Bedouin community in Israel. *Journal of Cross-Cultural Psychology, 50*, 708–727.
- Al-Saggaf, Y. (2011). Saudi females on Facebook: An ethnographic study. *International Journal of Emerging Technologies and Society, 9*(1), 1–19.
- Antheunis, M. L., Schouten, A. P., & Kraemer, E. (2016). The role of social networking sites in early adolescents' social lives. *Journal of Early Adolescence, 36*(3), 348–371.
- Antonucci, T. C. (1986). Social support networks: A hierarchical mapping technique. *Generations, 10*(4), 10–12.
- AP News. (2020, October 1). *Egypt police arbitrarily arrest, torture LGBT people.* <https://bit.ly/3iGdAEU>
- Asemah, E. S., Ekharefo, D. O., & Olaniran, S. (2013). Nigeria's core values and the use of social media to promote cultural values. *International Journal of Information and Communication Technology Education, 9*(4), 58–69.
- Bae, M. S. (2010). Go Cyworld! Korean diasporic girls producing new Korean femininity. In S. R. Mazzarella (Ed.), *Girl wide web 2.0: Revisiting girls, the internet and the negotiation of identity* (pp. 91–116). Peter Lang.
- Bae-Dimitriadis, M. (2015) Performing “planned authenticity”: Diasporic Korean girls' self-photographic play. *Studies in Art Education, 56*(4), 327–340.
- Benjamin, R. (2019). Assessing risk, automating racism. *Science, 366*(6464), 421–422.
- boyd, d. (2008). Facebook's privacy trainwreck: Exposure, invasion, and social convergence. *Convergence, 14*(1), 13–20.
- boyd, d. (2010). Social network sites as networked publics: Affordances, dynamics, and implications. In Z. Papacharissi (Ed.), *Networked self: identity, community, and culture on social network sites* (pp. 39–58). Routledge.
- boyd, d. (2014). *It's complicated: The social lives of networked teens.* Yale University Press.
- Boz, N., Uhls, Y. T., & Greenfield, P. M. (2016). Cross-cultural comparison of adolescents' online self-presentation strategies: Turkey and the United States. *International Journal of Cyber Behavior, Psychology and Learning (IJCBPL), 6*(3), 1–16.
- Brandtzaeg, P. (2012). Social networking sites: Their users and social implications – A longitudinal study. *Journal of Computer-Mediated Communication, 17*(4), 467–488.
- Brown, G., & Michinov, N. (2017). Cultural differences in garnering social capital on Facebook: French people prefer close ties and Americans prefer distant ties. *Journal of Intercultural Communication Research, 46*(6), 579–593.
- Burns, A. L. (2015). Self(ie)-discipline: Social regulation as enacted through the discussion of photographic practice. *International Journal of Communication, 9*, 1716–1733.
- Cardon, P. W., Marshall, B., Choi, J., et al. (2009). Online and offline social ties of social network website users: An exploratory study in eleven societies. *Journal of Computer Information Systems, 50*(1), 54–64.

- Castells, M. (1996). *The rise of the network society*. Blackwell.
- Chen, S. H., & Zhou, Q. (2019). Cultural values, social status, and Chinese American immigrant parents' emotional expressivity. *Journal of Cross-Cultural Psychology, 50*(3), 381–395.
- Cho, S. E. (2010). *Cross-cultural comparison of Korean and American social network sites: Exploring cultural differences in social relationships and self-presentation* [Doctoral dissertation, Rutgers University-Graduate School-New Brunswick].
- Cole, M., & Scribner S. (1978). Introduction. In M. Cole, S. Scribner, V. John-Steiner, & E. Souberman (Eds.), *Mind in society* (pp. 1–15). Harvard University Press.
- Costa, E. (2016). *Social media in Southeast Turkey: Love, kinship and politics*. UCL Press.
- Costa, E. (2018). Affordances-in-practice: An ethnographic critique of social media logic and context collapse. *New Media & Society, 20*(10), 3641–3656.
- Crone, E. A., & Konijn, E. A. (2018). Media use and brain development during adolescence. *Nature Communications, 9*, 1–10.
- Culzac, N. (2014, September 17). Egypt's police 'using social media and apps like Grindr to trap gay people.' *Independent*. <https://bit.ly/2GA6ViL>
- Daniels, E. A., & Zurbriggen, E. L. (2016). The price of sexy: Viewers' perceptions of a sexualized versus nonsexualized Facebook profile photograph. *Psychology of Popular Media Culture, 5*(1), 2–14.
- de León-Pasquel, L. (2018). Between romantic texting and Ethnorock on YouTube: Repertoires of identity in the virtual landscapes of Tsotsil Mayan youth. *Revista LiminaR. Estudios Sociales y Humanísticos, 16*(1), 40–55.
- Donath, J. (2008). Signals in social supernets. *Journal of Computer-Mediated Communication, 13*(1), 231–251.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends": Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication, 12*(4), 1143–1168.
- Erikson, E. H. (1963). *Childhood and society* (2nd ed.). Norton.
- Fan, J. (2017, December 18). China's selfie obsession. *The New Yorker*. <https://www.newyorker.com/magazine/2017/12/18/chinas-selfie-obsession>
- Ferguson, G. M., & Bornstein, M. H. (2012). Remote acculturation: The "Americanization" of Jamaican islanders. *International Journal of Behavioral Development, 36*(3), 167–177.
- Ferguson, G. M., & Bornstein, M. H. (2015). Remote acculturation of early adolescents in Jamaica towards European American culture: A replication and extension. *International Journal of Intercultural Relations, 45*, 24–35.
- French, D. (2015). Cultural templates for child and adolescent friendships. In L. A. Jensen (Ed.), *The Oxford handbook of human development and culture: An interdisciplinary perspective* (pp. 425–437). Oxford University Press.
- Frenkel, S. (2018, January 2). Iranian authorities block access to social media tools. *The New York Times*. <https://nyti.ms/3jEgv2k>
- Gentile, B., Twenge, J. M., Freeman, E. C., & Campbell, W. K. (2012). The effect of social networking websites on positive self-views: An experimental investigation. *Computers in Human Behavior, 28*(5), 1929–1933.
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology, 78*(6), 1360–1380.

- Greenfield, P. M. (2009). Linking social change and developmental change: Shifting pathways of human development. *Developmental Psychology*, *45*(2), 401–418.
- Gudykunst, W. B., Matsumoto, Y., Ting-Toomey, S., Nishida, T., Kim, K., & Heyman, S. (1996). The influence of cultural individualism-collectivism, self construals, and individual values on communication styles across cultures. *Human Communication Research*, *22*(2), 510–543.
- Hall, J. A., & Baym, N. K. (2012). Calling and texting (too much): Mobile maintenance expectations, (over) dependence, entrapment, and friendship satisfaction. *New Media & Society*, *14*(2), 316–331.
- Hampton, K. (2016). Persistent and pervasive community: New communication technologies and the future of community. *American Behavioral Scientist*, *60*, 101–124.
- Hansen, N., Postmes, T., Tovote, K. A., & Bos, A. (2014). How modernization instigates social change: Laptop usage as a driver of cultural value change and gender equality in a developing country. *Journal of Cross-Cultural Psychology*, *45*(8), 1229–1248.
- Hansen, N., Postmes, T., van der Vinne, N., & van Thiel, W. (2012). Technology and cultural change: How ITC changes self-construal and values. *Social Psychology*, *43*(4), 222–231.
- Harman, J. P., Hansen, C. E., Cochran, M. E., & Lindsey, C. R. (2005). Liar, liar: Internet faking but not frequency of use affects social skills, self-esteem, social anxiety, and aggression. *CyberPsychology & Behavior*, *8*, 1–6.
- Haynes, N. (2016). *Social media in Northern Chile: Posting the extraordinarily ordinary*. UCL Press.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, *33*(2–3), 61–83.
- Hermans, H. J., & Dimaggio, G. (2007). Self, identity, and globalization in times of uncertainty: A dialogical analysis. *Review of General Psychology*, *11*(1), 31–61.
- Hjorth, L. (2007). Snapshots of almost contact: The rise of camera phone practices and a case study in Seoul, Korea. *Continuum*, *21*(2), 227–238.
- Hjorth, L. (2010). The game of being social: Web 2.0, social media, and online games. *Iowa Journal of Communication*, *42*(1), 73–92.
- Hutchby, I. (2001). Technologies, texts and affordances. *Sociology*, *35*(2), 441–456.
- Internet Usage in the Middle East. (2021, May 27). *Internet world stats: Usage and population statistics*. Retrieved March 10, 2022, from <https://bit.ly/2I8jL8r>
- Internet Usage Statistics. (2022, March 8). *Internet world stats: Usage and population statistics*. Retrieved March 10, 2022, from <https://bit.ly/34xUfky>
- Ito, M., Baumer, S., Bittanti, M., et al. (2009). *Hanging out, messing around, and geeking out: Kids living and learning with new media*. MIT Press.
- Ito, M., Matsuda, M., & Okabe, D. (2005). *Personal, portable, pedestrian: Mobile phones in Japanese life*. MIT Press.
- Ito, M., & Okabe, D. (2005). *Intimate visual co-presence*. Paper presented at UbiComp 2005, Takanawa Prince Hotel, Tokyo, 11–14 September. <http://www.itofisher.com/mito/>
- Johnson, T., Shavitt, S., & Holbrook, A. (2010). Survey response styles across cultures. In D. Matsumoto & F. Van de Vijver (Eds.), *Cross-cultural research methods in psychology* (pp. 130–176). Cambridge University Press.

- Johnston, K., Tanner, M., Lalla, N., & Kawalski, D. (2013). Social capital: The benefit of Facebook 'friends.' *Behaviour & Information Technology*, 32(1), 24–36.
- Kapidzic, S., & Herring, S. C. (2015). Race, gender, and self-presentation in teen profile photographs. *New Media & Society*, 17(6), 958–976.
- Katz, J. E., & Crocker, E. T. (2015). Selfies and photo messaging as visual conversation: Reports from the United States, United Kingdom and China. *International Journal of Communication*, 9, 1861–1872.
- Kim, H., & Papacharissi, Z. (2003). Cross-cultural differences in online self-presentation: A content analysis of personal Korean and US home pages. *Asian Journal of Communication*, 13(1), 100–119.
- King, R. R. (2019, May 15). North Koreans want external information, but Kim Jong-Un seeks to limit access. *Center for Strategic and International Studies*. <https://bit.ly/3nlK6jk>
- Kling, R. (2007). What is social informatics and why does it matter? *The Information Society*, 23(4), 205–220.
- Lee, D. (2005). Women's creation of camera phone culture. *Fibreculture Journal*, 6(6), 1–11.
- Lee, D. (2010). Digital cameras, personal photography and the reconfiguration of spatial experiences. *The Information Society*, 26(4), 266–275.
- Lee, J. Y., Park, S., Na, E., & Kim, E., (2016). A comparative study on the relationship between social networking site use and social capital among Australian and Korean youth. *Journal of Youth Studies*, 19(9), 1164–1183.
- Leskin, P. (2019, October 10). Here are all the major US tech companies blocked behind China's 'Great Firewall.' *Business Insider*. <https://bit.ly/2SxDRe8>
- Levinson, A. M., & Barron, B. (2018). Latino immigrant families learning with digital media across settings and generations. *Digital Education Review*, 33, 150–169.
- Li, X., & Chen, W. (2014). Facebook or Renren? A comparative study of social networking site use and social capital among Chinese international students in the United States. *Computers in Human Behavior*, 35, 116–123.
- Liu, H., Shi, J., Liu, Y., & Sheng, Z. (2013). The moderating role of attachment anxiety on social network site use intensity and social capital. *Psychological Reports: Relationships & Communication*, 112(1), 252–265.
- Livingstone, S. (2008). Taking risky opportunities in youthful content creation: Teenagers' use of social networking sites for intimacy, privacy and self-expression. *New Media & Society*, 10(3), 393–411.
- Livingston, S., & Sefton-Green, J. (2016). *The class: Living and learning in the digital age*. New York University Press.
- Lozada, F. T., Seaton, E. K., Williams, C. D., & Tynes, B. M. (2021). Exploration of bidirectionality in African American and Latinx adolescents' offline and online ethnic-racial discrimination. *Cultural Diversity and Ethnic Minority Psychology*, 27(3), 386–396.
- Madianou, M., & Miller, D. (2013). Polymedia: Towards a new theory of digital media in interpersonal communication. *International Journal of Cultural Studies*, 16(2), 169–187.
- Manago, A. M., Graham, M. B., Greenfield, P. M., & Salimkhan, G. (2008). Self-presentation and gender on MySpace. *Journal of Applied Developmental Psychology*, 29(6), 446–458.

- Manago, A. M., & Pacheco, P. (2019). Globalization and the transition to adulthood in a Maya community in Mexico: Communication technologies, social networks, and views on gender. [In J. McKenzie (Ed.), *Globalization as a Context for Youth Development Special Issue*] *New Directions for Child and Adolescent Development*, 164, 11–25.
- Manago, A. M., Santer, N. D., Barsigian, L. L., & Walsh, A. S. (2022). Social media as tools for cultural change in the transition to adulthood. In K. C. McLean (Ed.), *Cultural methods in psychology: Describing and transforming cultures* (pp. 146–173). Oxford University Press.
- Manago, A., Taylor, T., & Greenfield, P. (2012). Me and my 400 friends: The anatomy of college students' Facebook networks, their communication patterns, and well-being. *Developmental Psychology*, 48(2), 369–380.
- Manago, A. M., & Vaughn, L. (2015). Social media, friendship and happiness in the millennial generation. In M. Demir (Ed.), *Friendship and happiness: Across the lifespan and in different cultures* (pp. 187–206). Springer.
- Mariek, M. P., Vanden, A., Marjolijn, L. A., et al. (2018). Does Facebook use predict college students' social capital? A replication of Ellison, Steinfield, and Lampe's (2007) study using the original and more recent measures of Facebook use and social capital. *Communication Studies*, 69(3), 272–282.
- Marston, K. (2019). Researching LGBT+ youth intimacies and social media: The strengths and limitations of participant-led visual methods. *Qualitative Inquiry*, 25(3), 278–288.
- Marwick, A. (2012). The public domain: Surveillance in everyday life. *Surveillance & Society*, 9(4), 378–393.
- Marwick, A. E., & boyd, d. (2011). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media & Society*, 13(1), 114–133.
- Marwick, A. E., & boyd, d. (2014). Networked privacy: How teenagers negotiate context in social media. *New Media & Society*, 16(7), 1051–1067.
- Mascheroni, G., & Vincent, J. (2016). Perpetual contact as a communicative affordance: Opportunities, constraints, and emotions. *Mobile Media & Communication*, 4(3), 310–326.
- Maynard, A. E., Subrahmanyam, K., & Greenfield, P. M. (2005). Technology and the development of intelligence. In R. J. Sternberg & D. Preiss (Eds.), *Intelligence and technology: The impact of tools on the nature and development of human abilities* (pp. 54–97). Erlbaum.
- McCain, J. L., & Campbell, W. K. (2018). Narcissism and social media use: A meta-analytic review. *Psychology of Popular Media Culture*, 7(3), 308–327.
- McDonald, T. (2016). *Social media in Rural China*. UCL Press.
- McKenna, K. Y. A., & Bargh, J. A. (2000). Plan 9 from Cyberspace: The implications of the internet for personality and social psychology. *Personality and Social Psychology Review*, 4(1), 57–75.
- McKenzie, J. (2019). Shifting practices, shifting selves: Negotiations of local and global cultures among adolescents in northern Thailand. *Child Development*, 90(6), 2035–2052.
- McKenzie, J. (2020). Negotiating local and global values in a globalized world: The envisioned futures of Thai adolescents. *Journal of Research on Adolescence*, 30(4), 856–874.

- McKenzie, J., Castellón, R., Willis-Grossmann, E., Landeros, C., Rooney, J., & Stewart, C. (2022). Digital divides and dyadic gaps: A portrait of media use and perspectives of media in Thailand. [Under review].
- McKenzie, J., Rooney, J., Stewart, C., Castellón, R., Landeros, C., & Willis, E. (2019). Brokering culture and power in a media-driven world: Parents of adolescents in northern Thailand. *Journal of Cross-Cultural Psychology*, 50, 972–990.
- Mesch, G. S. (2006). The family and the internet: Exploring a social boundaries approach. *Journal of Family Communication*, 6(2), 119–138.
- Michikyan, M., Dennis, J., & Subrahmanyam, K. (2015). Can you guess who I am? Real, ideal, and false self-presentation on Facebook among emerging adults. *Emerging Adulthood*, 3(1), 55–64.
- Miller, D., Sinanan, J., Wang, X., et al. (2016). *How the world changed social media*. UCL Press.
- Mishra, S., & Basu, S. (2014). Family honor, cultural norms, and social networking: Strategic choices in the visual self-presentation of young Indian Muslim women. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 8, Article 3.
- Nemer, D., & Freeman, G. (2015). Empowering the marginalized: Rethinking selfies in the slums of Brazil. *International Journal of Communication*, 9(1), 1832–1847.
- Nicolescu, R. (2016). *Social media in Southeast Italy*. UCL Press.
- Ortiz-Ospina, E. (2017, February 22). *Children and poverty: Evidence from new World Bank data*. Our World in Data. <https://bit.ly/33CjpPu>
- Pathak-Shelat, M., & DeShano, C. (2014). Digital youth cultures in small town and rural Gujarat, India. *New Media & Society*, 16(6), 983–1001.
- Pew Research Center. (2019, June 12). *Social media fact sheet*. <https://pewrsr.ch/30KLM5V>
- Phua, J., Jin, S. V., & Kim, J. J. (2017). Uses and gratifications of social networking sites for bridging and bonding social capital: A comparison of Facebook, Twitter, Instagram, and Snapchat. *Computers in Human Behavior*, 72, 115–122.
- Poushter, J., Bishop, C., & Chwe, H. (2018, June 19). *Social media use continues to rise in developing countries but plateaus across developed ones*. Pew Research Center. <https://pewrsr.ch/30KH3rh>
- Quinn, N. (2019). Historical circumstances and biological proclivities surrounding patriarchy. In H. Mathews & A. Manago (Eds.), *The psychology of women under patriarchy* (pp. 31–50). SAR Press.
- Rainie, L., & Wellman, B. (2012). *Networked: The new social operating system*. MIT Press.
- Rao, M. A., Berry, R., Gonsalves, A., Hastak, Y., Shah, M., & Roeser, R. W. (2013). Globalization and the *identity remix* among urban adolescents in India. *Journal of Research on Adolescence*, 23(1), 9–24.
- Raza, S. A., Qazi, W., & Umer, A. (2017). Facebook is a source of social capital building among university students: Evidence from a developing country. *Journal of Educational Computing Research*, 55(3), 295–322.
- Reisinger, D. (2019, February 22). China banned 23 million people from traveling last year for poor ‘social credit’ scores. *Fortune*. <https://bit.ly/30Ip9Fv>
- Rickman, A. (2018). *Adolescence, girlhood, and media migration: US teens’ use of social media to negotiate offline struggles*. Lexington Books.

- Rideout, V. J., & Katz, V. S. (2016). *Opportunity for all? Technology and learning in lower-income families*. A report of the Families and Media Project. The Joan Ganz Cooney Center at Sesame Workshop.
- Rodino, M. (1997). Breaking out of binaries: Reconceptualizing gender and its relationship to language in computer-mediated communication. *Journal of Computer-Mediated Communication*, 3(3), JCMC333.
- Rubin, J. D., & McClelland, S. I. (2015). 'Even though it's a small checkbox, it's a big deal': Stresses and strains of managing sexual identity(s) on Facebook. *Culture, Health & Sexuality*, 17(4), 512–526.
- Senft, T. M., & Baym, N. K. (2015). What does the selfie say? Investigating a global phenomenon. *International Journal of Communication*, 9, 1588–1606.
- Schrobsdorff, S. (2016, October 27). Teen depression and anxiety: Why the kids are not alright. *Time*. <https://bit.ly/3jGr4Sv>
- Shane-Simpson, C., Manago, A., Gaggi, N., & Gillespie-Lynch, K. (2018). Why do college students prefer Facebook, Twitter, or Instagram? Site affordances, tensions between privacy and self-expression, and implications for social capital. *Computers in Human Behavior*, 86, 276–288.
- Sheldon, P., Herzfeldt, E., & Rauschnabel, P. A. (2020). Culture and social media: The relationship between cultural values and hashtagging styles. *Behaviour & Information Technology*, 39(7), 758–770.
- Shen, K. N., & Khalifa, M. (2010). *Facebook usage among Arabic college students: Preliminary findings on gender differences*. University of Wollongong Research Online. <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1074&context=dubaipapers>
- Silver, L., Smith, A., Johnson, C., Jiang, J., Anderson, M., & Rainie, L. (2019, March 7). *Use of smartphones and social media is common across most emerging economies*. Pew Research Center. <https://pewrsr.ch/2SCSMDL>
- Sinanan, J. (2017). *Social media in Trinidad*. UCL Press.
- Subrahmanyam, K., Reich, S. M., Waechter, N., & Espinoza, G. (2008). Online and offline social networks: Use of social networking sites by emerging adults. *Journal of Applied Developmental Psychology*, 29(6), 420–433.
- Sugimura, K. (2020). Adolescent identity development in Japan. *Child Development Perspectives*, 14(2), 71–77.
- Thomson, R., Yuki, M., & Ito, N. (2015). A socio-ecological approach to national differences in online privacy concern: The role of relational mobility and trust. *Computers in Human Behavior*, 51, 285–292.
- Tifferet, S., & Vilnai-Yavetz, I. (2014). Gender differences in Facebook self-presentation: An international randomized study. *Computers in Human Behavior*, 35, 388–399.
- Tsai, J. L. (2017). Ideal affect in daily life: Implications for affective experience, health, and social behavior. *Current Opinion in Psychology*, 17, 118–128.
- Tufekci, Z. (2008). Can you see me now? Audience and disclosure regulation in online social network sites. *Bulletin of Science Technology & Society*, 28(1), 20–36.
- Turkle, S. (1997). *Life on the screen: Identity in the age of the internet*. Simon & Schuster.
- Twenge, J. M. (2013). Does online social media lead to social connection or social disconnection?. *Journal of College and Character*, 14(1), 11–20.

- Twenge, J. M. (2017). *iGen: Why today's super-connected kids are growing up less rebellious, less happy – and completely unprepared for adulthood*. Simon & Schuster.
- Twenge, J. M., Martin, G. N., & Spitzberg, B. H. (2019). Trends in U.S. adolescents' media use, 1976–2016: The rise of digital media, the decline of TV, and the (near) demise of print. *Psychology of Popular Media Culture*, 8(4), 329–345.
- Tynes, B. M., Garcia, E. L., Giang, M. T., & Coleman, N. E. (2011). The racial landscape of social network sites: Forging identity, community, and civic engagement. *IIS: A Journal of Law and Policy for the Information Society*, 7, 71–100.
- Valkenburg, P., & Peter, J. (2008). Adolescents' identity experiments on the internet: Consequences for social competence and self-concept unity. *Communication Research*, 35(2), 208–231.
- Vanden Abeele, M. M. P. (2016). Mobile lifestyles: Conceptualizing heterogeneity in mobile youth culture. *New Media & Society*, 18(6), 908–926.
- Venkatraman, S. (2016). *Social media in South India*. UCL Press.
- Vitak, J. (2012). The impact of context collapse and privacy on social network site disclosures. *Journal of Broadcasting & Electronic Media*, 56(4), 451–470.
- Wang, X. (2016). *Social media in industrial China*. UCL Press.
- Weisner, T. S. (2014). Culture, context, and child well-being. In A. Ben-Arieh, F. Casas, I. Frønes, & J. Korbin (Eds.), *Handbook of child well-being* (pp. 87–103). Springer.
- Wellman, B. (2002). Little boxes, globalization, and networked individualism. In M. Tanabe, P. van den Besselaar, & T. Ishida (Eds.), *Digital cities II: Computational and sociological approaches* (pp. 10–25). Springer.
- Williams, D. (2006). On and off the 'net: Scales for social capital in an online era. *Journal of Computer-Mediated Communication*, 11(2), 593–628.
- Wolff, J. (2019, December 9). Iran cutting off its internet wasn't a show of strength. It was a sign of panic. The Washington Post. <https://wapo.st/2GIIEf0>
- Wong, K. L. X., & Dobson, A. S. (2019). We're just data: Exploring China's social credit system in relation to digital platform ratings cultures in Westernised democracies. *Global Media and China*, 4(2), 220–232.
- World Bank Country and Lending Groups. (n.d.). *The World Bank*. <https://bit.ly/3d6b21X>
- Xu, Q., & Armstrong, C. L. (2019). # SELFIES at the 2016 Rio Olympics: Comparing self-representations of male and female athletes from the US and China. *Journal of Broadcasting & Electronic Media*, 63(2), 322–338.
- Yang, C. C., & Brown, B. B. (2016). Online self-presentation on Facebook and self development during the college transition. *Journal of Youth and Adolescence*, 45(2), 402–416.
- Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. Public Affairs Books.