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21st century media, fame, and other future aspirations: A national survey of 9-15 year olds

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Abstract

Past research found that messages in popular television promote fame as a top value, while social media allow anyone to reach broad audiences (Uhls & Greenfield, 2011; Uhls & Greenfield, 2012). During a sensitive developmental phase, preteens are the largest users of media, consuming over seven-and-a-half hours a day, seven days a week, outside of school. A nationwide survey in the United States asked 315 youth (M = 12 years; range: 9 -15 years) about their media habits as well as their aspirations for the future. Participants' answers about their future goals clustered around two factors, representing individualistic, self-focused and collectivistic, other-focused aspirations. Fame, image, money and status were items in the former; helping others in need, helping family, and living near family were items in the latter. Watching television and using a social networking site each predicted self-focused aspirations, above and beyond the influence of control variables of age and maternal education, while the two media activities together predicted a larger portion of the variance than either alone. Collectivistic, other-focused aspirations were associated with nontechnology activities, most of which had an important social component. The implication is that individualistic, self-focused aspirations are related to 21st century media, whereas more collectivistic, other-focused aspirations are related to nontechnology activities, particularly those with a social component.

Keywords: technology; social media; values; preteens; fame; self

Introduction

At the turn of the twentieth century, two widely known cultural products, *American Idol* and *Facebook,* did not exist. As of 2013, *American Idol,* a reality television show, had broadcast thirteen successful seasons and spawned over 350 Billboard charted songs ("American Idol," 2013). *Facebook*, a social networking site that began in 2004, currently has 1.2 billion members worldwide ("Facebook: Key Facts," 2014). Despite the fact that the first is a filmed reality television show and the second an online social networking platform, these media share similar underlying concepts. Both *American Idol*, which showcases ordinary people striving to become pop stars, and *Facebook*, which encourages people to share information about themselves in a semi-public manner online (Manago, Graham, Greenfield, & Salimkhan, 2008), capitalize on human beings' fascination with fame and recognition (Braudy, 1997). By creating the appearance that nearly anyone can capture a large audience, without gatekeepers such as major corporations creating barriers to entry, these contemporary cultural products became worldwide juggernauts, capturing global audiences in record time.

The media landscape in 2013, no doubt inspired by these successes, features a plethora of reality television shows and social media networks ("Reality TV, Wikipedia," 2013; Solis, 2013). This

programming, facilitated by the development of the Internet, mobile technologies, and the rapid proliferation of content distribution channels, seems unusual to older generations; but, to those born in the last fifteen years (sometimes called digital natives because they know only a world permeated with digital media), it is the norm (Prensky, 2006; Uhls & Greenfield, 2011; Uhls & Greenfield, 2012). This "new normal" is reflected in the popular fictional TV shows targeted to preteens, which often feature characters realizing lifestyles of enormous success, wealth and renown in their teenage years (Martin, 2009).

Greenfield's theory of social change and human development predicts that human development adapts to changes in sociodemographics such as wealth and technology by becoming more individualistic (Greenfield, 2009a). According to the theory, changes in sociodemographic factors shape cultural values, which in turn influence the learning environment. Accordingly, the learning environment, which today is increasingly dominated by media that promote fame and fortune (Uhls & Greenfield, 2011), influence social and cognitive development (Greenfield, 2009b).

Our study, a follow up to previous work on the connection between media and values (Uhls & Greenfield, 2011; Uhls & Greenfield, 2012), expanded our sample size and reach to further examine whether an important task of social development, the acquisition of values, is influenced by the dominant cultural products of popular television programming and online social networking platforms. Using an online survey format, we asked 315 children from across the United States, ages 9 to 15, to report on their values and media consumption patterns.

Media as a Socialization Force in the 21st Century

The rapid progression of technology and media, in particular their use by children, is well documented; extant research demonstrated conclusively that children adopted media at an extraordinary pace (Common Sense Media, 2013; Rideout, Foehr, & Roberts, 2010). For example, the Kaiser Family Foundation's nationally representative survey of 3rd to 12th graders recorded the rapid increase of media consumption over a period of ten years; their last iteration of the survey, from 2009, found that children, ages 8-18, spend an average of seven hours and thirty eight minutes a day, seven days a week using media (defined as television content, music/ audio, computer, video games, print and movies; does not include texting) (Rideout et al., 2010). Thus, in many cases, children spend more time with media than they do with their parents or in school (Gunn & Donahue, 2008). As such, media are a significant socialization force with connections to salient developmental tasks in early adolescence such as social learning and identity formation (Subrahmanyam & Smahel, 2010).

Television – Reflection of Cultural Norms and Socialization Mechanism

Even though television is an older content delivery platform, it is still the most popular, with children ages 8-18 years reporting to watch an average of 4 hours and 29 minutes per day, seven days a week (Rideout et al., 2010). Social learning theory suggests that social models, such as those provided by the entertainment environment of mass media, convey a large amount of information about human values, styles of thinking, and behavior (Bandura, 2001). Television viewing cultivates perceptions of social reality (Gerbner, Gross, Morgan, & Signorelli, 1979). Research found that characters on television influence people's thoughts about work (Gerbner, Gross, Morgan, & Signorelli, 1980; Hoffner et al., 2006; Hoffner, Levine, & Toohey, 2008), moral values (Rosenkoetter, 2001), and family life (Comstock & Paik, 1991). Our own work found that Los Angeles preteens experienced the influence of fame-oriented TV shows (Uhls & Greenfield, 2012). Reiss and Wiltz (2004a) found that the more reality TV shows a person liked, the more status oriented they were. Consequently, when considering relevant forces in the learning environment, television should be factored into the discussion, not only as a socialization mechanism but also as a reflection of culture.

Social Networking Sites and Social Learning

Online social networking sites have become a core feature of daily life, with millions of social interactions being played out in the virtual space on a daily basis (Wilson, Gosling, & Graham, 2012). Social media bring the Internet's speed and scale to daily human interactions, making communication with another person, indeed hundreds to thousands to millions of other people, easily accessible at the click of a button (Chui et al., 2012). The reach of Facebook, the number one online social networking site in the world, has not gone unnoticed in the social sciences. A current literature review, which focused only on research about Facebook, identified 412 relevant articles (Wilson et al., 2012). Yet Facebook is only one of many popular social networking sites; others, whose members number in the multi-millions, include Twitter,

Instagram and YouTube; while many countries outside of the United States host their own heavily used sites, and more platforms are announced nearly every day (Solis, 2013).

Young people initially fueled rapid growth of social networking sites, but today nearly every age group, beginning from the pre-school years to over 50 years of age, uses these communication technologies (Common Sense Media, 2013; Pew, 2013). Due to regulations on Internet access (i.e. the Children's Online Privacy Protection Act of 1998 whereby websites cannot collect any information on kids under 13), children under 13 are not allowed to use most social media without a parent's permission. However, one survey found that seven million children under the age of 13 have Facebook profiles, with five million of these under 10 years (Consumer Reports, 2011). During early adolescence, social media become increasingly prevalent, with 64% of 12-13 year olds, and 88% of 14-17 year olds, reporting the use of these websites, with a median number of "friends" at 300 for older adolescents (Madden, Lenhart, Duggan, Cortesi, & Gasser, 2013). Given the importance placed on peers during early adolescence (De Bryn & Cillessen, 2006; Harter, 1990), social networking sites are important spaces to examine social interactions and learning for this age group.

The Preteen Years: Developmental Tasks and Media

The transition from childhood to adolescence is a critical period of identity development and socialization (Eriksen, 1959). In late childhood and early adolescence, humans learn to think more abstractly about their environment, while acquiring the information-processing skills to more readily organize and use what they learn (Piaget, 1952). Children at this age, in experiencing their own daily worlds, as well as the values of society at large, begin to become more aware and sensitive to what is important and valued. For example, beginning at approximately seven years of age, children start to understand consumer values based on social meaning and significance. By the age of 12, impression formation also becomes more cogent, as children learn to make social comparisons on a sophisticated level (John, 1999).

Marketers, realizing the purchasing power of young people, now target this age group through direct media channels facilitated by the expansion of content on cable channels and other child-centered programming (Buckingham, 2007; Uhls & Greenfield, 2011). Cultural products such as television and movies are a constant source of information about what is desirable and confers status; while the public nature of today's social media promote social comparison, making salient group value priorities. The photos and status updates in these newer media lend themselves to crafting one's image, while the comments create a feedback mechanism that allows instant judgment (Salimkhan, Manago, & Greenfield, 2010). Most recently, Instagram, a photo centered social media platform, has become the most popular social media for young adolescents, perhaps underscoring how visual, and "skin-deep," this medium really is (Flaherty, 2013).

In addition, during this developmental phase, adults become less important in choosing the kinds of media their children consume, a situation that encourages adolescents, through their choice of media, to self-socialize (Arnett, 1995). Because children at this age frequently receive their first mobile phone, their ability to access content and peers anytime and anywhere is accelerated (Lenhart, 2012). Digital natives use these media to communicate and interact with their peers, and peers reinforce the messages in their media environment. Taken together, these factors may create the perfect storm for cultural product and communication technologies to impact preteen and early adolescent development.

The Importance of Values

Values, which inform attitudes and behaviors, reflect cultural norms and socio-historical trends (Bardi & Schwartz, 2003; Greenfield, 2009a; Rohan, 2000). Value priorities are important in cognitive networks of attitudes and beliefs (Rokeach, 1973). Values also influence family life and development because they are incorporated within cultural schemas that underlie family activities and give events their affective and moral meaning (Garnier & Stein, 1998).

Other factors besides family mediate the transmission of values including peers, societal institutions and the media. Accordingly, values are dynamic and can change depending on environmental influences (Greenfield, 2009a; Rokeach, 1973). For example, in an 18-year longitudinal study, Garnier and Stein found that adolescent values related not only to maternal values, but also differed from them; this differentiation was explained by taking into account sociohistorical influences (Garnier & Stein, 1998).

Individualistic and Collectivistic Value Systems

Values such as individualism and collectivism have been extensively studied and validated by researchers in the fields of culture and value systems (e.g. Schwartz, 1992; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988). Those who hold more individualistic goals tend to prioritize the self, with variability in behavior including independent thought and action as well a focus on status and power (Schwartz et al., 2012). Those who value collectivism tend to act in accordance with group norms and prioritize others (Rohan, 2000).

Fame, financial success and image: Relationship to individualism. A desire to differentiate oneself from others is an essential component of fame and a recognized factor in individualism (Maltby, 2010; Owens, 2008). Moreover, being famous requires extreme attention to image in order to capture the interest of audiences that can number in the multi-millions (Braudy, 1997). Inherent in the desire for fame is the anticipation of wealth. Indeed, in our content analysis of TV shows, which documented a rise in portrayed individualistic values in popular preteen TV shows broadcast in 2007 (Uhls & Greenfield, 2011), we found that both fame and fortune were at the top of the list of represented values. The relationship of fame, fortune and image, as they relate to individualistic aspirations, is important to ascertain; these particular values may be most in line with 21st century media.

The Rise of Individualism

Greenfield's theory of social change and human development predicts that individualistic values, behavior and psychology are adaptations to Gesellschaft (society) environments (Greenfield, 2009a). Greenfield and other social scientists (Triandis et al., 1988) suggest that affluence and economic growth are drivers of individualism. Triandis and colleagues found that an important aspect of individualism is the subordination of in-group to personal goals. This is already a feature of the United States, a prototypical individualistic culture whose identity is shaped by capitalism, a free-rights economic system. However, the rapid growth of technology in the last twenty years is a new characteristic in the environment, and its swift adoption by young people could be influencing development towards an even more individualistic value system. Indeed, catering to the self seems to be a feature of 21st century media. For example, while in past generations a single television with limited programming rested in the main living space; today, it is possible for many people to consume their own content on their personal devices, even while in the same room with other people (Turkle, 2012).

Change in value systems towards individualism in the United States. Examination of the span of history underscores a trend towards increasingly individualistic values. In an analysis of key words in books published in the United States and the United Kingdom over a period of two hundred years, Greenfield found that word frequencies with collectivistic meanings were reduced while words with individualistic and materialistic meanings increased (Greenfeld, 2013). A similar change occurred in the content of preteen television over the last 50 years with fame being the number one portrayed value in the two top shows in 2007, and financial success was listed at number five out of sixteen (Uhls & Greenfield, 2011).

Even the admired social models of teenagers have changed towards more self-focused individuals. Cowen (2000) reports that in 1898, a poll asked young teens, 'What person of whom you have ever heard or read would you most like to resemble?' Seventy eight percent of the list comprised of politicians, moral leaders and military heroes, all community leaders. Nearly 200 years later, in 1986, the list of ten most admired figures by teenagers was filled primarily with entertainers (Serazio, 2010). Self-focus is a characteristic of individualistic aspirations.

More recently, Twenge and colleagues found that today's emerging adults, more so than past generations, have increasingly narcissistic personalities (Twenge, Konrath, Foster, Campbell, & Bushman, 2008). Narcissism is a personality characteristic associated with fame (Raskin & Novacek, 1991) and individualism (Cai, Kwan, & Sedikides, 2012). Conversely, Konrath and colleagues found that dispositional empathy (i.e. concern for others) declined from 1979 to 2009, with the biggest decline occurring after the year 2000 (Konrath, O'Brien, & Hsing, 2010).

Links Between Media and Individualistic Aspirations and Attitudes

Some social scientists suggest that the recent rise in individualistic traits could be influenced by the rise of communication technologies that encourage and promote self-display (Park, Twenge, & Greenfeld, 2013). An online survey with adults in the United States showed that the appeal of being visibly famous (e.g.,

being on a magazine cover; being recognized in public) showed a significant positive correlation both with narcissism and with active (vs. passive) behaviors on Facebook and Twitter (Greenwood, 2013; Greenwood, Long, & Cin, 2013). Reported frequency of imagining being famous correlated significantly with active Facebook use, while the perceived realism of future fame correlated with active Twitter use. In addition, Reiss and Wiltz (2004) found that the motivation for social status was most strongly related to reality TV consumption.

Research with emerging adults supports the idea that newer social media promote crafting one's image for a virtual audience (Salimkhan et al., 2010). An experimental manipulation of college students found that social media are linked to positive self-views (Gentile, Twenge, Freeman, & Campbell, 2012). A field experiment that examined what utility motivates people to post on Twitter found that image-related utility was larger than intrinsic-utility for most users (Toubia & Stephen, 2013).

How early in development could these relationships begin? In our discussions with focus groups of 4th and 6th grade children in Los Angeles, we found that participants used social media, and online video sharing to seek audiences beyond their immediate community (Uhls & Greenfield, 2012). This finding led to the current study.

The Current Study

Despite this research, little is known about how the values of today's early adolescents may be affected by the new informal learning environment (Greenfield, 2009b). As digital natives in a sensitive developmental period of high media use, media may especially influence preteens. Our line of research began with an examination of television content and followed with focus-group discussions; we found that preteens made connections between the social models of fame-seeking young people on TV and their own ability to reach a broad audience online by posting photos, videos and status updates, as well as by collecting "friends," on social networks (Uhls & Greenfield, 2012). The next step was to test this link between media activities and children's future aspirations with a large sample. We also wished to explore whether future aspirations were structured into individualistic and collectivistic clusters that each related to specific types of media and other activities. To reach these goals, we carried out a national survey of children in the United States during the transition from late childhood to early adolescence.

Hypotheses

1a. A carefully curated image is a component of being famous (Braudy, 1997). In line with Greenfield's (2009a) theory and our past research, *we predict that fame, financial success, image-oriented goals, achievement, and self-acceptance will cluster together forming an individualistically oriented aspirational system*.

1b. *Helping others and being close to family will cluster together to form a collectivistically oriented aspirational system* (Greenfield, Keller, Fuligni, & Maynard, 2003).

2a. In line with our past research (Uhls & Greenfield, 2012), *individualistic aspirations will be predicted by watching more TV and spending more time on social networking sites, with the two combined activities predicting this aspirational system more strongly than each on its own.*

2b. Our content analysis of popular preteen TV content found that community feeling was a top depicted value in the years 1967, 1977, 1987 and 1997 (Uhls & Greenfield, 2011). These years were before communication technologies saturated the media landscape ("Internet growth statistics," 2011; Rideout et al., 2010). In contrast, it was well below the mean in the value hierarchy in 2007. Therefore current TV is no longer presenting collectivistic or other-focused models. This situation could lead to the absence of an effect on collectivistic aspirations. Or, alternatively, if television and newer communication technologies are displacing the sort of offline activities that are hypothesized to promote prosocial aspirations (see Hypothesis 4), then they could undercut the development of other-focused or collectivistic aspirations. *Therefore we hypothesize that collectivistic aspirations, will have either no relationship, or will be negatively related, to TV or social networking sites.*

3. Our focus group study found that a majority of children had posted videos about themselves online (Uhls & Greenfield, 2012). In other words, they had performed for an audience beyond their family and social circle and were very aware of their audience size. Accordingly *we predict that children who post videos on video sharing sites such as YouTube will have more individualistic aspirations than those who do not post videos online.*

4. Because almost all the measured nontechnology activities involve in-person social interaction and/or cooperative or helping behaviors, *collectivistic or other-focused aspirations will have a positive relationship with nontechnology activities (i.e. helping others, playing outside, playing sports and hanging out with others).* Note that most of these activities require in-person social interaction. *These activities will not be related to individualistically oriented aspirations.*

Method

Participants

Three hundred twenty seven children participated in an online survey posted on the software Survey Monkey. Participants were recruited by asking parents of children ages 10 to 14 to allow their children to take the survey online on their own computer, tablet, or smart phone. Respondents were offered entry into a raffle for a $100 gift card upon completion of the survey. The announcement was placed on the online Craig's List and Patch (a community based online newspaper) in cities across the United States. We also placed a notice in a free subscription-based online newsletter sent by Greatschools.net, a national website targeted to parents, and this is where the majority of participants came from. Because signed parental permission could not be obtained electronically, UCLA's IRB determined that the research qualified for a waiver of signed parental permission; as such, parental assent was assumed if the participant took the survey.

Twelve participants reported living outside the United States and were thus not included in the final analysis (N = 315; 38.4% boys). Final ages of participants ranged from 9-15 years (M = 12; See Table 1 for breakdown).

Table 1. Age Breakdown of Sample.

	9 years	10 years	11 years	12 years	13 years	14 years	15 years
Number	28	44	59	50	51	45	38
Percentage	8.9%	14.0%	18.7%	15.9%	16.2%	14.3%	12.0%

Ethnic make-up was 53% European American, 6% Hispanic/Latino, 4% African American, 5% Asian American, 15% mixed ethnicities, 2% other, and 15% declined to answer. Participants reported that 4% of their mothers and 5% of their fathers did not complete high school; respectively, 26% and 29% did not complete college; 34% and 30% completed college; 32% and 28% went to school beyond college; 4% of the participants did not know their mother's educational attainment, and 8% did not know their father's educational attainment.

In addition to basic demographic questions, participants were asked about daily activities, favorite kinds of television, and social media practices. At the end of the survey, emails were requested for entry into the raffle, and respondents were thanked for their participation.

Geography. Participants were asked to give the city and state they lived in. Based on which state they entered, each respondent was grouped into one of four regions, defined by the United States Census ("Census classification of regions of US," 2013). Participants lived in regions across the country with 21% from the Northeast, 14% from the Midwest, 28% from the South, and 38% from the West ("Census classification of regions of US," 2013).

Data. We first checked the data for repeated IP addresses. Although two people in the same house could have used the same device to take the survey, we could not be sure the same person hadn't taken the survey two times and thus deleted these few cases. In sum, the reported results include only participants with unique IP addresses who said that they lived in the United States.

Independent Variables

Activities. Participants were asked how much time they spent on a variety of activities on an average day. A list of 14 activities included watching television, playing video games, texting, playing team sports etc. scaled from 0 (never) to 5 (4 hours or more). The survey software randomly ordered the activities for each participant.

In order to determine whether the list of 14 activities would form distinct categories, an exploratory factor analysis was run (maximum likelihood, promax rotation) which yielded three factors. As suggested by factor analysis literature (Walker, 2012), all items that loaded above .4 were included. Reading for fun loaded at .34 and was therefore dropped from the analysis; the analysis was then rerun with the other 13 activities. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, *KMO* = .83, and the Bartlett's test of sphericity was significant (χ^2_c = 1314.8, p = .00). The three factors had eigenvalues over Kaiser's criterion of 1 and in combination explained 58.79% of the variance. A description of the factors with their constituent activities and factor loadings (after rotation) will be found in the Results section (Table 2).

Television shows. In the activity questions detailed above, we asked participants to report on total amount of TV watching on an average day, scaled from 0 (Never) to 5 (4 Hours or More). These data were used as an independent predictor variable for measuring the amount of television watched.

Social networking sites. We asked participants to tell us whether they had a profile on a social networking site. All respondents who answered that they did not have a profile were coded at 0. Those who answered affirmatively were asked to answer 10 randomly ordered questions, which asked how frequently respondents performed a series of activities particular to their most used social networking site on a five-point Likert scale from 1 (Not at all) to 5 (Almost Always). Examples of activities were how often they posted photos or updated their status (Entire list of questions is in the Appendix). These scores were added together and averaged across all items. A variable called *Social Media Sum* was created to include respondents who did not have profiles, coded at 0, and those who did have profiles and reported on their activities, coded from 1(have a profile, but not performing any activities on it) to 5 (having a profile and almost always performing all the activities). Providing construct validity *Social Media Sum* was significantly correlated with the social networking question in the activities portion of the survey (i.e. "On an AVERAGE day, how long do you post on social networking sites) (r(306) = .70, p = .00). We used the *Social Media Sum* measure in our analysis as it more completely captured the different ways that children use social networking sites.

Online video sharing sites. In addition, questions relating to online video sharing activities on Internet sites primarily for this purpose (e.g. YouTube) were asked: participants were asked whether they had an online video sharing account; whether they posted video content on this account; and to list from memory the number of views and comments they had on their most popular posted video. While we recognize that asking participants to remember rather than check their actual views and comments could introduce memory bias, this request was specifically designed in order to judge whether the number of comments and views was noteworthy. If participants cared enough to memorize the number, as they had in our focus group discussions, our reasoning was that they were likely focused on their "audience" (Uhls & Greenfield, 2012).

Dependent Variable: Aspirational Systems

We asked ten questions about the importance of future aspirations (e.g. In the future, you will be famous) that implied values (i.e., fame, community feeling, financial success, self-acceptance, achievement, tradition, image, and kindness) (Kasser & Ryan, 1996; Uhls & Greenfield, 2012). Because our interest was in the value of fame, we asked three questions related to this construct, concerning importance of future recognition, admiration and fame. All answers were Likert scaled from 1 (Not at all important) to 5 (very important). We performed a confirmatory factor analysis (maximum likelihood), and used the promax method of oblique rotation; this method is suggested when theory indicates that your variables may be correlated (Rohan, 2000; Walker, 2012). The first run yielded three factors, but one question, "You will know and accept who you are," showed cross loadings, so we dropped it and reran the analysis. In the second run, two factors emerged, but "You will be successful in your chosen field" showed cross loadings and was dropped. The final factor analysis yielded two distinct factors based on eight items, with a *KMO* of .80 and significance (χ^2_c = 643, p = .00). The two factors had eigenvalues over 1 and explained over 60.65% of the variance. A description of the factors with their constituent activities and factor loadings (after rotation) will be found in the Results section (Table 3).

Factor Analysis: Weighted versus Unweighted Variables

The literature on factor analysis suggests that weighting individual items by their factor loading can be useful because items that have higher loadings have larger effects on the factor score. However, a potential problem with this method is that the factor loadings may not be an accurate representation of the differences among factors due to the researcher's choice of extraction model and/or rotation method

(DiStefano, Zhu, & Mindrila, 2009). In other words, to simply weight items based on factor loadings might not result in a noteworthy improvement over unweighted items. Since the literature suggested that either method could be valid, we created and test weighted sum variables as well as unweighted sum variables. We found no differences in our results with either and hence report on unweighted sums.

Results

Descriptive Survey Findings

National surveys of preteen media use, in particular social networking and video sharing, are infrequent. As such we report on our descriptive survey findings.

Daily activities. Factor analysis revealed three clusters of activities: 1) *Communicating with media,* which includes texting and talking on cell, instant messaging, and social networking; 2) *Consuming media,* which includes watching TV and movies, surfing the Internet, playing videogames and watching videos online; and 3) *Nontechnology* which includes helping others, playing outside, playing sports and hanging out with friends. The three factors, with their constituent activities and factor loadings are shown in Table 2. The activities in each factor were summed and averaged in order to create three independent variables used in the analyses.

Table 2. Factor Loadings for Daily Leisure Activities.

Item On an AVERAGE day, how long do you do the following?	**Factor 1** (Media communication)	**Factor 2** (Media consumption)	**Factor 3** (Nontechnology)
Text on your cell/ mobile phone.	**.744**	-.070	.050
Talk on your cell/ mobile phone.	**.464**	.218	.133
IM/ Chat	**.905**	-.122	-.025
Post on Social Networking Sites	**.859**	-.047	-.007
Watch TV shows (on set, online, on phones)	-.125	**.678**	-.071
Watch videos online (YouTube, etc)	.138	**.631**	-.032
Play videogames.	-.134	**.555**	-.025
Watch movies	.006	**.581**	.121
Surf the Internet for Fun	.317	**.530**	-.070
Play outside.	-.133	-.084	**.896**
Hang out with friends (not doing homework)	.023	.211	**.540**
Play team sports	.139	-.110	**.461**
Help out others	.080	.013	**.535**

Note: Bolded items represent highest loading items on each factor (order of items changed from subject to subject). Oblique rotation provided two matrices, and we report on pattern matrix.

Participants spent about half their leisure time (50.7%) on an average day consuming and communicating with electronic media. Figure 1 shows the breakdown of the three categories of activities, which are 1) *Communicating with media*: texting and talking on cell, instant messaging, and social networking; 2) *Consuming media*: watching TV and movies, playing videogames, surfing the Internet, and watching videos online; and 3) *Nontechnology activities*: helping others, playing outside, playing sports and

hanging out with others. The graph also includes reading for fun, the only one of the 14 activities that did not load with any of the three factors.

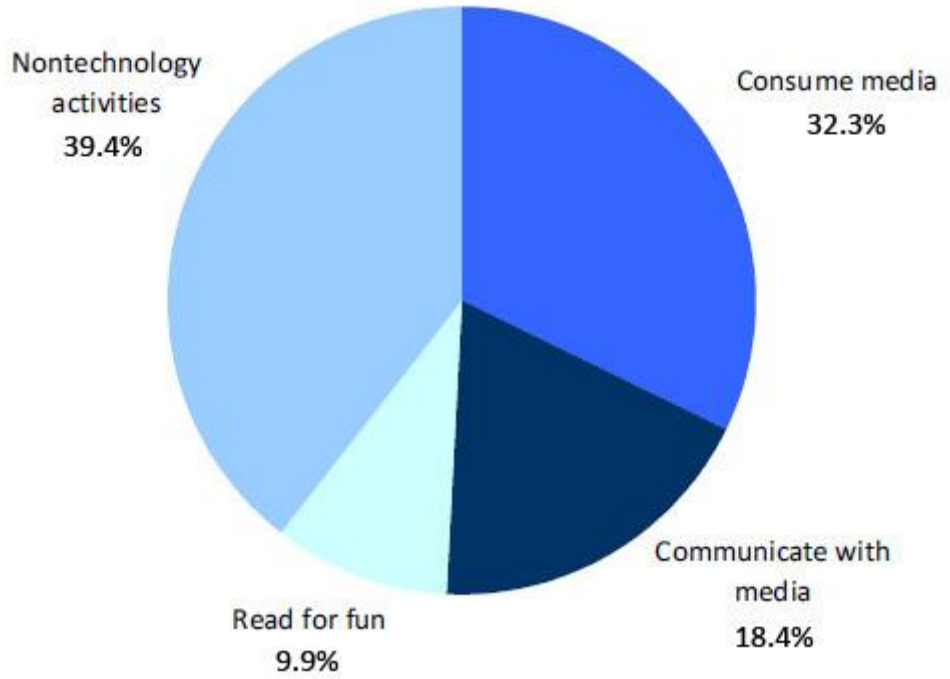

Figure 1. Percentage of leisure time spent on each activity category. Communicating with media: texting and talking on cell, instant messaging, and social networking; Consuming media: watching TV and movies, surfing the Internet, playing videogames, and watching videos online; and Nontechnology: helping others, playing outside, playing sports and hanging out with others. Reading for fun, which did not load with any of the three factors, is also shown.

Social media practices and age. One hundred and forty three children reported having a social networking profile. Twenty-three percent of children under 13 reported having a social networking profile, in contrast to 77% 13 and over (see Figure 2). Facebook was by far the most used network. If the participant reported that they did not have a social networking profile, we asked whether their parents wouldn't allow it or whether they didn't want one. The majority of those who reported they did not have a profile were under 13. Reasons for not having a profile were: they were not allowed (59%); and they didn't want one (41%). In addition, respondents answered how many "friends" they had on their most used social networking site; the median was 150. We report the median rather than the mean because a few respondents had a large number of "friends," which pulled the mean much higher (to 639) and did not accurately reflect the sample as a whole.

Online video sharing. Participants answered whether they had an online video account (e.g. YouTube); 106 said yes. Twenty-six percent of preteens and 47% of teenagers reported having a video account. Next they were asked whether they posted video content to this site; 56 children said yes, while 20 said someone else posted a video of them (these categories were mutually exclusive). If they reported that a video was posted, participants were asked to report from memory (i.e. without opening their account and checking the figure) the number of views their most popular video had. Sixty-one participants responded with a range of zero to 1.2 million, and a median of 60. In addition, when asked about comments, 59 respondents answered how many comments were on their most popular video with a range of zero to 13,350 and a median of two. Neither number of comments nor number of views were related to values.

Age and parental education. We ran a first order correlation analysis to examine which demographic variables were associated with our dependent variables. As expected from prior research (Greenfield & Quiroz, 2013), age was negatively associated with collectivistic aspirations ($r(258) = -.19$, $p = .00$): younger participants had more collectivistic aspirations than did older participants. Age was not associated with individualistic aspirations. Neither maternal nor paternal education was associated with either aspirational system. The two systems were moderately correlated ($r(255) = .22$, $p = .00$). This is

theoretically valid, as one typically holds several aspirations at the same time (e.g., one can want to be famous and to help one's family) (Schwartz & Bilsky, 1987). Due to previous research suggesting that maternal education informs the development of values (Garnier & Stein, 1998), we included both maternal education and age as control variables in all analyses.

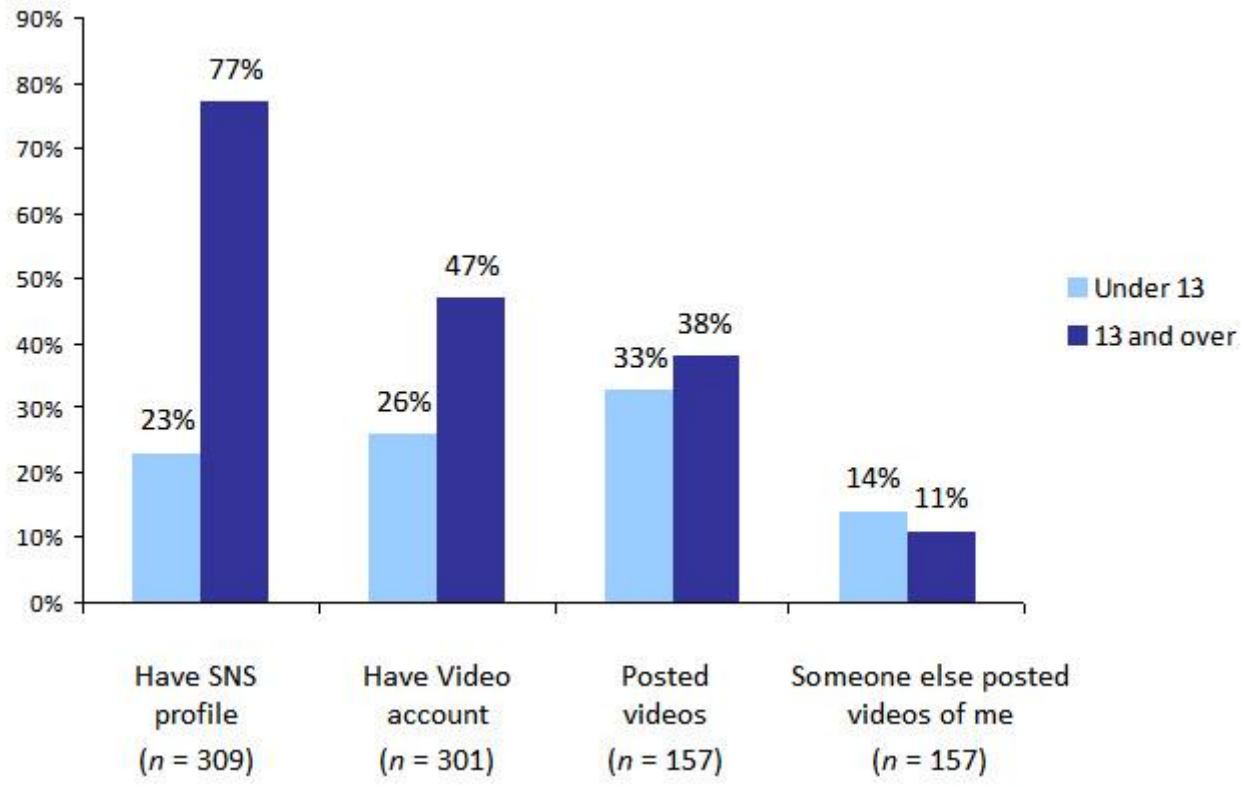

Figure 2. Social media, online video, and age. For each social media activity, a pair of bars shows the percentage of respondents under thirteen and thirteen or over reporting that activity.

Ethnicity, gender and regional differences. A primary goal of this study was to examine a large sample of youth from across the country, so we tested whether regional differences were related to the two values by performing MANOVAs. In addition, we looked for differences stemming from gender and ethnicity. This analysis did not reveal a significant relationship between either of the value systems and the variables of gender, ethnicity, or region of the country.

Testing the Hypotheses

Hypothesis 1a: Fame, financial success, image-oriented goals, achievement, and self-acceptance will cluster together to form an individualistic aspirational system. The items that loaded onto each factor were summed and averaged. The first factor held items (i.e. name known by many people, be famous, admired by many people, be rich and achieve the "look" you want) that imply a self-oriented, individualistic aspirational system (Table 3). Thus, the factor analysis confirmed part of Hypothesis 1a, that fame and image-oriented goals would group together forming a self-focused cluster of aspirations. However, contrary to prediction, achievement and self-acceptance were not part of the cluster.

Hypothesis 1b. Helping others and being close to family will cluster together to form a collectivistic aspirational system*.* The items (i.e. live near your family and follow in their footsteps, help your family, and help others in need) constituted the second factor (Table 3). These items imply a cluster of collectivistic aspirations. Thus, the factor analysis confirmed Hypothesis 1b.

Table 3. Outcome Variables: Factor Loadings for Aspirations.

Item Tell us how important the following will be to your future. IN THE FUTURE…	**Factor 1** (Individualistic)	**Factor 2** (Collectivistic)
Your name will be known by many people.	**.823**	.056
You will be admired by many people	**.696**	.100
You will be famous.	**.827**	.008
You will achieve the "look" you want.	**.655**	-.090
You will be rich.	**.598**	-.076
You will help your family.	-.111	**.714**
You will live near your family and follow in their footsteps.	.119	**.436**
You will help others in need.	-.004	**.650**

Note: Bolded items represent highest loading items on each factor (items were asked in random order on survey). Summing the bolded items yielded each factor score. Oblique rotation provided two matrices and we report on the pattern matrix.

Hypotheses 2: (a) Individualistic aspirations will be predicted by watching more TV and spending more time on social networking sites, with the two combined activities predicting this aspirational system more strongly than either one alone;

(b) Collectivistic aspirations either will have no relationship or will be negatively related to TV or social networking sites.

We ran a hierarchical regression model in order to determine whether social media use and viewing TV jointly predicted either of the two aspirational systems. Age and maternal education were entered in the first step, TV watching was entered in the second step and social-networking sum was entered in the third. While Model 2 (showing the influence of just television on the individualistic aspirational system) was significant, the last model, with both television and social networking entered, predicted the largest portion of the variance for individualistic aspirations; the model did not predict collectivistic aspirations. Thus, children who had profiles and were more active on online social networking sites held more individualistic aspirations above and beyond the influence of watching television. Table 4 reports the results. Similarly, when social networking sum was entered into the same model before television viewing, television viewing added significantly to the prediction of individualistic aspirations. These findings confirm Hypothesis 2a: individualistic aspirations related to both TV watching and online social networking, with each medium making its own contribution. It also confirms one of the alternatives of Hypothesis 2b, that these media would have no relationship to collectivistic aspirations.

We also ran two hierarchical regression analyses with the three categories of activities (i.e. media consume, media communicate and nontechnology) as predictors of individualistic aspirations. Age and maternal education were entered at the first step, with all of the activities entered at the second step. Individualistic aspirations were not related to any category of activity, and the overall model was not significant. Hence, it was specifically television - not media consumption in general – and social networking – not media communication in general – that predicted individualistic aspirations.

Hypothesis 3. Children who post videos on video sharing sites such as YouTube will have more individualistic aspirations than those who do not post videos online. We did not find a significant difference in individualistic aspirations for youth who did or did not post online videos. Thus, Hypothesis 3, that children who post videos to online video sharing sites will have more individualistic aspirations than those who do not post videos online, was not supported.

Table 4. Television and Social Networking Predict Individualistic Aspirations.

Variable	*b*	*SEb*	*ß*	R^2 *F* Change	*F*
Step 1				.01 1.58	1.58
Age	-.00	.03	-.00		
Maternal Ed.	.09	.05	.11		
Step 2				.06 13.28**	5.53**
Age	-.00	.03	-.01		
Maternal Ed.	.10*	.05	.12*		
Watch TV shows	.17**	.05	.23**		
Step 3				.08 4.05*	5.22**
Age	-.04	.04	-.08		
Maternal Ed.	.11*	.05	.16*		
Watch TV shows	.175*	.05	.20**		
Social Networking Sum	.10*	.05	.15*		

Notes: * $p < .05$; ** $p < .01$.

Hypothesis 4. Because many of the measured nontechnology activities involve in-person social interaction and/or cooperative or helping behaviors, collectivistic aspirations will have a positive relationship with nontechnology activities (i.e. helping others, playing outside, playing sports and hanging out with others). After controlling for age and maternal education, nontechnology activities indeed predicted collectivistic aspirations (B = .24) but did not predict individualistic aspirations. Thus, Hypothesis 4, which predicted the collectivistic aspiration system rather than the individualistic one would be related to nontechnology (mainly social) activities, was supported. Variables in the model are summarized in Table 5.

Table 5. Nontechnology Activities Predict Collectivistic Aspirations.

Variable	*b*	*SEb*	*ß*	R^2 *F* Change	*F*
Step 1				.03 3.71*	3.71*
Age	-.06*	.03	-.16*		
Maternal Ed.	.03	.04	.05		
Step 2				.08 4.45**	4.22**
Age	-.05	.03	-.14		
Maternal Ed.	.03	.04	.05		
Media Communicate	-.07	.07	-.09		
Media Consume	-.01	.06	-.01		
Non Technology	.17**	.05	.24**		

Notes: * $p < .05$; ** $p < .01$.

Discussion

Age and Social Media

Due to regulations on Internet access in the United States (i.e. the Children's Online Privacy Protection Act [COPPA]) whereby websites (e.g. social media and online video sharing sites) cannot collect any information on children under 13, children under 13 are not legally allowed to sign up for most social networking sites. Accordingly many surveys do not measure the social media use of children ages 12 and under. Our sample allowed us to determine whether children under 13 use social media and online video-sharing sites (Figure 2). Despite COPPA, we found that 26% of children under 13 years of age had video accounts and 23% had social networking profiles. Nonetheless, the prevalence of social networking profiles tripled between the preteen and teen developmental periods.

Fourteen percent of preteens and 11% of teenagers reported that someone else posted a video of them. In more than half the cases where someone else posted, the participant did not have a video sharing account. This finding replicates what we found in our focus groups (i.e. several examples were given of an adult who had posted a video of the participants). It thus seems that adults sometimes validate the practice of online video sharing even before children begin to post their own videos.

Children's Daily Activities

Our exploratory factor analysis found that children tended to perform specific kinds of daily leisure activities, with media falling into two distinctive categories, consumption and communication. Children, like adults, use media for a variety of different needs, including socializing and hanging out (Ito et al., 2009). These distinctions were made clear in this sample. Use of the print medium to read for fun did not cluster with either of the media factors or or with the (mostly social) nontechnology cluster. This pattern suggests unique features of the print medium (Greenfield, 2009b).

Hypotheses

Hypotheses 1a: Fame, financial success, image-oriented goals will cluster together to form an individualistic aspirational system. Our confirmatory factor analysis revealed an individualistic aspirational system. As predicted, the final cluster of individualistic aspirations included fame, having a known name, status/admiration, money, and image. However, we expected that achievement and self-acceptance would also be part of this cluster. Contrary to this prediction, these two aspirations did not fall squarely in the individualistic cluster. This unexpected finding may indicate a shift from older forms of individualism, which emphasized self-acceptance and working hard to achieve for the common good (Spence, 1985; Waterman, 1981) to newer forms featuring self-expression, as typified by our individualistic cluster of aspirations (Inglehart, 2008; Yankelovitch, 1998). In line with this interpretation, work centrality for emerging adults has been in fact declining (Twenge, Campbell, Hoffman, & Lance, 2010). Perhaps this result signifies that these older aspects of individualism, such as achievement in the sphere of work, are becoming distinct from the newer forms of expressive individualism represented in our cluster.

Hypothesis 1b: Helping others and being close to family will cluster together to form a collectivistic aspirational system. Helping family, living near them, following in their footsteps, and helping others in need formed a distinct cluster of collectivistic aspirations that prioritize family relationships. Our findings show that the development of this cluster of aspirations is socialized during the preteen years.

Hypotheses 2 a: Individualistic aspirations will be predicted by watching more TV and spending more time on social networking sites, with the two media variables jointly predicting this value system more strongly than each on its own. In past research we found that preteen television shows and reality TV shows model fame and fortune as a realizable goal for children (Uhls & Greenfield, 2011). In our follow up study, we found that the messages in these shows were absorbed by preteens in Los Angeles and that online video sharing and other social media practices appeared to encourage desire for attention and audience (Uhls & Greenfield, 2012). While that study did not directly correlate individual values with media consumption, the implication was that messages about fame in passive media are amplified by the ability to act on these messages using interactive media, thus promoting the value of fame as a top value in the group as a whole. Confirming the findings in our smaller sample, in this study we found that children who used social networking sites more frequently and watched more TV held individualistic aspirations that feature self-focus and self-expression.

When we constructed two broader categories of media, media consumption and media communication, neither of these more broadly defined variables was significantly related to the cluster of individualistic aspirations. In fact, the other activities in these categories (i.e. *Communicating with media*: texting and talking on cell and instant messaging and *Consuming media*: watching movies, playing videogames, surfing the Internet and watching videos online) do not necessarily promote fame-oriented messages. As expected from our prior research, television, which features messages of fame (Uhls & Greenfield, 2011), and social networking, which allows users to become "e-famous" (Uhls & Greenfield, 2012) both contributed to individualistic aspirations while jointly predicting a larger percentage of the variance. While this cross-sectional study was not able to determine whether children who watch more television and use social networking sites are socialized by these media to have self-focused, individualistic aspirations, or whether self-focused children select these media, the relationship was significant. Thus, this finding, one that connects these specific kinds of media with individualistic aspirations for fame and image, during a particularly sensitive developmental stage, deserves further explorations designed to isolate causal relations.

Hypothesis 2b: Collectivistic aspirations will have either no relationship to or will be negatively related to TV and social networking sites. As expected, these particular media activities were not related to other-focused, collectivistic aspirations. Because these aspirations focused primarily on family relations, this finding is in line with the decline of the family unit in popular preteen television shows over the decades (Uhls & Greenfield, 2011). It is also in line with the fact that many parents feel that social networking is interfering with family life (Rosen, 2007).

Hypothesis 3. Children who post videos on video sharing sites such as YouTube will have more individualistic aspirations than those who do not post videos online. We found no difference in individualistic aspirations between children who posted videos on online video sharing sites and those who did not. Since the content of online videos can vary greatly, from featuring the self, to featuring pets, to portraying many other activities, perhaps the specific kind of videos posted, self oriented or other oriented, would have had a relationship.

Hypothesis 4. Because almost all the measured nontechnology activities involve in-person social interaction and/or cooperative or helping behaviors, collectivistic aspirations will have a positive relationship with nontechnology activities (i.e. helping others, playing outside, playing sports and hanging out with others). Confirming Hypothesis 4, we did find that activities that did not involve technology were positively related to collectivistic, other-focused aspirations; most of the activities in this factor - helping others, playing outside, playing sports and hanging out with friends – involve the child in community or social participation. This finding is in line with research showing that in-person social interaction, in the absence of mediated communication, improves social skills of preteens (Uhls et al., 2014). Social skills are undoubtedly both a facilitator and byproduct of carrying out the other-focused activities that compose the collectivistic aspirational cluster.

The Learning Environment and the Connection to Individualism

In his seminal article, Triandis and colleagues (1988) detailed characteristics of individualistic cultures: they have highly segmented in-groups, requiring contributions only at certain times or place. Other listed attributes were being good at meeting outsiders, forming new in-groups, and getting along with new people. These are all features that are easily afforded on social networking sites (Manago, Taylor, & Greenfeld, 2012). Indeed, although the following quote is from 1988 and is about individualism in general, it could well be applied to online social networking:

> People in individualistic cultures often have greater skills in entering and leaving new social groups. They make "friends" easily, but by "friends" they mean nonintimate acquaintances. (Triandis et al., 1988, p. 325)

These features of individualistic cultures effortlessly map onto social networking sites (Bessiere, Kiesler, Kraut, & Boneva, 2008), a dominant mode of communicating technologically in the 21st century.

In the past fifteen years, the informal learning environment for children has changed. Television, one of the primary cultural products for young people, reflects this shift, with programming now targeted to children that promotes fame and status with highly salient social models (Uhls & Greenfield, 2011). Meanwhile, at around 11 years of age, children realize that material goods are scarce and cost money, and their meaning becomes aligned with social status; thus messages about material goods in these media become relevant for this age group (John, 1999). Interactive media also cater to these desires,

allowing people to display themselves in a semi-public format (Manago et al., 2008). The rapid growth in interactive media, and their exponential adoption by young people, indicates the primal attraction of these tools, which seem to appeal to human beings' need to belong (Baumeister, 1995; Nadkarni & Hofmann, 2012). Adolescents, who are striving towards identity formation and a desire for popularity, accordingly use these tools to curate their images and search for status through gathering large number of friends, likes, and comments (Uhls & Greenfield, 2012).

Television on its own predicted the individualistic, self-oriented aspirational system but with a smaller portion of the variance. Social media, above and beyond the influence of television, contributed to self-focused individualistic aspirations; this pattern of findings, indicates that the power of this new communication medium, with its ability to allow nearly anyone to manage and mediate their identity, is a strong influence on the association between media and adolescent aspirations. As Dunbar (1992) noted, most humans tend to form stable social relationships with approximately 150 people. Those who focus on attracting several hundreds to thousands "friends" online may be more inclined towards superficial friendships, developed through status symbols and image.

Limitations and Future Directions

Our study was a convenience sample, and the children of the parents who subscribe to Greatschools.net, where the majority of our respondents came from, are probably not representative of all the socioeconomic variation in the United States. For example, parents who subscribe are those who want to know more about schools and their children's education; these kinds of parents likely pay attention to their children's media habits and may set limits on their use. Future research would benefit from a nationally representative sample of children. Moreover, since this was an online survey that relied on self-report, we cannot be certain that participants reported truthfully on their age and other items.

There was overlap between the activity measure and the aspiration measure in one item: helping others. While this overlap facilitated the positive relationship between community-oriented aspirations and nontechnology activities, this pattern also shows that children's activities and aspirations are mutually reinforcing.

We did not force one choice for each rank, and, as a result, ended up with data we could not use about aspiration priorities and ranking of favorite TV shows. Future research should force a single choice for each rank. In addition, problems in structuring the questions on posting videos, notably their forced choice format, made these quantitative results less reliable than our other findings.

The cross-sectional nature of this study means that it is difficult to determine whether children who value fame seek these kinds of media or whether it is the other way around. Thus, this study is limited in distinguishing selection effects from socialization effects. Future research should seek to determine whether a causal relationship could be inferred between media and aspirations with studies that use longitudinal data and/ or experimental manipulation.

Implications

We found that more traditional non-mediated activities, such as playing sports and hanging out with others, are related to collectivistic, other-focused aspirations. Such activities, requiring one to be in the presence of, cooperating with, or helping others, may lend themselves to building a sense of community. Communication technologies, on the other hand, along with the television content that reflects the cultural zeitgeist, may be influencing aspirations towards self-focused, individualistic activities.

That television viewing and social network use were not linked to other-focused aspirations gives pause to the claim that new communication technologies' such as social networking sites are creating a participatory and engaged culture, where all can access its many benefits to connect and engage with others (Jenkins, 2009). By contrast, other scholars posit that these technologies may be isolating and pushing humans further apart (Turkle, 2012). Our findings here concerning the link between media use and individualistic aspirations support this latter view. So does a study by Sherman, Michikyan, and Greenfield (2013) that found the greatest subjective sense of bonding and bonding behaviors occurred in face-to-face communication, compared with various forms of mediated communication. Also relevant is our field experiment showing that five days in a social environment without any electronic media enhances preteen social skills (Uhls et al., 2014). This study, through an examination of aspirations that relate to self, family, and community, indicates that some of these newer technologies may be pushing us further apart.

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Appendix

List of Survey Questions about Social Media Use: Likert Scaled from 1 (Not at all) to 5 (Almost Always)

How often do you do the following on your MOST USED Social Networking Site?

Chatting with friends
Posting comments
Looking at other people's activities
Looking thru photos of others
Looking thru friends list/ followers of others
Tagging photos of friends
Posting photos of myself/ friends
Posting videos of myself/ friends
Updating my status
Updating my profile page

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