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Emerging in a Digital World: A Decade Review of Media Use, Effects, and Gratifications in Emerging Adulthood

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Abstract

This article reviews the recent literature on uses, effects, and gratifications of media during emerging adulthood. We examine traditional media forms, including television, films, video games, music, and books, and also newer media, such as cell phones, social networking sites, and other Internet use. We find that emerging adults spend more time using the media than they spend doing any other activity, with the most time being spent on the Internet and listening to music. We also find that exposure to certain types of media content can influence both positive and negative outcomes in emerging adulthood, including, aggressive and prosocial behavior, body image, sexual behavior, friendship quality, and academic achievement. We also show that emerging adults use the media to gratify certain needs; key among these are for autonomy, identity, and intimacy needs. Finally, we discuss areas for future research involving media and emerging adulthood.

Keywords

media, emerging adulthood, uses and gratifications, effects, college students

Emerging adulthood has been defined as the period between the age of 18 and the late 20s. It is characterized as a period that is developmentally distinct from adolescence and young adulthood, particularly for those from industrialized nations. Emerging adulthood has been identified as a time of identity exploration (primarily in the areas of love, work, and worldviews), instability (primarily in terms of residence changes), feeling in-between (not yet feeling like and adult, but no longer considering oneself a child), being self-focused, and feeling very positive and optimistic about future possibilities (Arnett, 2006; Nelson & Barry, 2005). It should be noted that, although research has found evidence of aspects of emerging adulthood in a variety of cultures (e.g., China, India, Romania; Nelson, Badger, & Wu, 2004; Seiter & Nelson, 2011), this time period may look significantly different as a function of culture and socioeconomic status (Arnett, 2006). In addition, the majority of the research in regard to media use during emerging adulthood has focused on college students, who likely are not representative of the heterogeneity that exists among emerging adults.

Regardless of where emerging adults are studied, it appears that one salient feature of emerging adulthood is media use (Brown, 2006). Because of the relative freedom of this time period (compared to adolescence or adulthood), it can function both as a socialization agent and as something that emerging adults purposefully seek out as a way of expressing autonomy, exploring identity, and building or maintaining relationships. Emerging adults spend more time each day using the media than in engaging in any other activity, including time spent in school, at work, with friends, and sleeping (Alloy Media & Marketing, 2009). Indeed, the current generation has been called *Generation M [edia]* and has been said to be "media saturated," highlighting the increasing time spent with media in any given day (Roberts, Foeher, & Rideout, 2005). In the current review, we will examine how emerging adults spend their time in regard to media, and will highlight specific forms of media that are typically used. We will also examine the effects of various media content and media usage on emerging adult outcomes, including aggression, academic achievement, sexual behavior, prosocial behavior, body image, and friendship and relationship outcomes. We will then examine the various reasons for which emerging adults use media, and how media use might assist with key developmental tasks in emerging adulthood, such as identity, autonomy, and intimacy (Arnett, 2006). Finally, we will suggest important directions for future research.

Media Use in Emerging Adulthood

Over the past 30 years, the media have increasingly dominated the leisure time of emerging adults. The emerging adults of

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today have been raised in a media saturated world; the Internet, cell phones, video games, and television have been commonplace since their infancy. Though figures vary, most emerging adults spend around 12 hr each day engaged with media (Alloy Media & Marketing, 2009). This figure is comparable to that of adolescents, who spend around 11 hr a day interacting with media content (Kaiser Family Foundation, 2010).

New Media

Technology has developed rapidly during the life span of today's emerging adults (see Norman, 2012). For examples, since the early 1990s when the current generation of emerging adults were born, the first search engines, web browsers, and webcams were just being developed. By the mid-1990s, computers were now becoming commonplace in the average American family, there were 10,000 different websites, "Yahoo," "Amazon," and "E-bay" were founded, and the first computer with wireless connectivity was produced. By the late 1990s, there were now 36,000,000 different websites, "Google" was founded, and DVDs and MP3s were introduced in to the mainstream markets. By the early 2000s, there were over 180,000,000 websites, "Pandora," "Wikipedia," "MySpace," and "Skype" were founded, and the iPod was released. Just a few years later, by the late 2000s, "Facebook," "YouTube," and "Twitter" were founded, personal blogs become common, over 90% of cameras being sold were digital, the first iPhone, tablet computer, Blu-ray, and e-reader were introduced, many newspapers were printing editions online, and more individuals were downloading their music as opposed to buying CDs. In just a few short years, smartphones, e-readers, and tablet computers have gone through a number of iterations, with new models being produced at a rapid rate. In sum, when the current generation of emerging adults was born, the majority of families did not own a computer, cell phone, laptop, or had access to the Internet. They were listening to music on CDs, watching movies on video home system (VHS), reading actual books, and a "social network" consisted of their parent's Christmas card list. During this generation alone, most American families now have home computers, access to the Internet, cell phones (many with Smartphones), iPods, and a "social network" is now a household word (Kaiser Family Foundation, 2010; Lenhart et al., 2011; Smith, 2011).

Accordingly, it is common for emerging adults to spend a substantial portion of the day using newer forms of media, including social networking sites (SNSs), other Internet use, and cell phones. For example, in a national study of Internet use, the Pew Foundation found that fully 92% of 18–24 years olds are Internet users, and for college students specifically, the number is nearly 100% (Jones, 2002). Padilla-Walker, Nelson, Carroll, and Jensen (2010) found that emerging adults spend about 3½ hr per day on the Internet, with most time being spent on e-mail/social networking, entertainment, and school/work. Other sources indicate that most college students use the Internet either every day or every other day, usually for between 30 and 60 min per sitting (Gordon, Juang, & Syed, 2007). Time spent on SNSs is high, around 52 min every day, with the overwhelming majority of that time being spent on Facebook (Jacobsen & Forste, 2011). Emerging adults also spend a large amount of time using cell phones; 96% of college students have a cell phone, and on average they spend nearly 45 min per day texting or making phone calls (Jacobsen & Forste, 2011). Though longitudinal studies of emerging adults and media have not yet been conducted, we suspect that these new forms (including the Internet, SNSs, and cell phones) have dramatically increased total media use and changed the way emerging adults communicate during this developmental period.

Traditional Forms of Media

Though emerging adults spend many hours using new forms of media, they also spend a substantial amount of time with traditional media. For example, music appears to be a particularly important form of media for emerging adults. Lonsdale and North (2011) found that emerging adults listened to music for about 3½ hr each day, comparable to the time they spend on the Internet. They also reported that music was more important to their everyday life than a number of other leisure activities, including television, video games, books, sports, and favorite hobbies. With the development of new technologies, such as MP3 players, listening to music has become increasingly portable and accessible for emerging adults.

Television, movie viewing, and playing video games are also common among emerging adults, though many programs and games are now being accessed online (Alloy Media & Marketing, 2009). Surveys report that college students spend between 1 and 2 hr a day watching television (Jacobsen & Forste, 2011; Mokhtari, Reichard, & Gardner, 2009), with popular dramas (e.g., *Grey's Anatomy*) and sitcoms (e.g., *The Office*) among the most commonly viewed (Alloy Media & Marketing, 2009). In terms of video game use, approximately 55% of emerging adult men play video games at least once a week, compared with only about 6% of women. Though Jones (2003) found that every single college student he surveyed reported playing a video, computer, or online game at least once in their life, the actual mean amount of time spent playing video games per day is only about 10 min (Jacobsen & Forste, 2011). This figure may be somewhat misleading, though, as many emerging adults do not play video games, while others play for several hours each day. Indeed, more than 50% of women say they *never* play video games, compared with only 15% of men and 81% of emerging adult women never play *violent* video games, compared with only 25% of men (Padilla-Walker, Nelson, Carroll, & Jensen, 2010).

Finally, emerging adults report reading at somewhat lower levels than other forms of media. A National Endowment for the Arts (2004) report revealed that approximately 65% of college freshmen read for pleasure less than 1 hr per week. However, a time-diary study involving college students found that 32% of students read for recreation almost every day, with the mean reading time being around 1 hr per day (Mokhtari et al., 2009). Interestingly, this same survey found that around 70% of college students reported really enjoying recreational

reading, compared with only 52% who really enjoy watching television.

As a whole, emerging adults spend their media time in various ways, with most time being spent listening to music or on the Internet. Less time is spent with television, movies, video games, and reading books, though these still account for several hours of media time each day. Though emerging adults spend different amount of times each day with different media, it should be noted that we could not find a single study where there was evidence that any emerging adult spent absolutely no time with the media in any given week. Accordingly, we would feel comfortable stating that some media use across emerging adulthood is nearly ubiquitous.

Theories of Media in Emerging Adulthood

There are two competing theoretical rationales in terms of the role of media during emerging adulthood. One involves media effects theories. Such theories include social learning theory (Bandura, Ross, & Ross, 1961), cultivation theory (Gerbner & Gross, 1976), information processing theory (Huesmann, & Eron, 1986), and the general aggression model (Anderson & Bushman, 2002), and would suggest that the media have some effect (both good and bad) on emerging adults, either on behavior or attitudes. In these theories, the media generally drives any effects on viewers. A competing line of theory is the uses and gratifications theory (Katz, Blumler, & Gurevitch, 1974), which purports that emerging adults have specific needs and they gravitate toward the media to fulfill and satiate these needs (Rubin, 2002; Swanson, 1979). A careful examination of the literature reveals that emerging adults both seek out various types of media to fulfill certain needs, but are also influenced by such media in a number of ways. Accordingly, we will examine both effects of media use and reasons why emerging adults use certain types of media.

Effects of Media Use

By the time they leave adolescence, emerging adults have already experienced 18 years of media socialization, with evidence suggesting that this socialization continues well into emerging adulthood. There are many different ways that emerging adults might be influenced by the media. A thorough examination of each is beyond the scope of this review. However, we will focus on the areas that have received the most scholarly attention or that are most relevant to issues specific to emerging adults, including academic achievement, friendships and relationships, aggression, prosocial behavior, sexual behavior, body image, and problematic media use.

Academic Achievement. Since the majority of emerging adults spend at least some time enrolled in a college or university (National Center for Education Statistics, 2002), it is important to consider the effects of media use on academic achievement. Jacobsen and Forste (2011) reported that with every hour of electronic media exposure reported by college students, grade point average was reduced between 0.05 and 0.07 points. As well as simply taking time away from studying, approximately two thirds of students reported using electronic media while in class, studying, or doing homework, thereby affecting performance directly through distraction (Jacobsen & Forste, 2011). As a specific example, though the Internet is a rich resource for academics studies, the Internet is more often used for less productive endeavors, such as social networking, shopping, or entertainment (Englander, Terregrossa, & Wang, 2010). However, other studies have shown that including media use in the classroom (such as using the SNS Twitter for class discussions) can facilitate student engagement rather than hinder it (Junco, Heiberger, & Loken, 2011). Thus, the effects of media on academic achievement for emerging adult college students are generally negative, but can also be positive if utilized to foster learning in the classroom.

Friendships and Relationships. Since SNSs, such as Facebook and Twitter, allow friends and acquaintances to share information without ever meeting in person, many are concerned that media use and online communication are detracting from real-life friends and relationships (Stout, 2010). There is mixed evidence for this. Research has found that video game use and using the Internet to view pornography are negatively associated with relationship quality with friends, while using e-mail is positively associated with relationship quality with friends during emerging adulthood (Padilla-Walker et al., 2010). In addition, though general time spent on the Internet is related to problems communicating in real life for some users (e.g., Kraut et al., 1998; Parks & Roberts, 1998), and heightened use of Facebook has been associated with increased jealousy and obsessive behavior in some users (Muise, Christofides, & Desmerais, 2009), most research suggests that the use of SNSs complements communication and relationships offline (Ellison, Steinfield, & Lampe, 2007; Kujath, 2011). For each hour increase on average in SNS exposure or cell phone communication, average face-to-face social interaction increased about 10–15 min (Jacobsen & Forste, 2011). The authors hypothesize that college students are likely using cellular phone communication and SNSs to plan face-to-face communication with friends, as well as using them as additional mechanisms for meeting new people and keeping in touch with others. Users of SNSs also report higher levels of perceived social support than non-SNS users (Manago, Taylor, & Greenfield, 2012). The benefits of social networking are most likely to support a "rich get richer" hypothesis, where those have strong friendships and relationships, high self-esteem, and low social anxiety showing the most benefits of use (Kraut et al., 2002; Mehdizadeh, 2010; Sheldon, Abad, & Hinsch, 2011). Although the effects of media on relationships varies as a function of medium, it appears that for most emerging adults, use of SNSs compliments or facilitates real-world relationships, rather than replacing or harming them.

Aggression. Unlike adolescents, emerging adults are legally able to purchase M-rated video games and R-rated films, many of which contain frequent and graphic portrayals of violence

(e.g., Potts & Belden, 2009). The connection between violent media exposure and aggressive attitudes and behaviors in childhood has been well established by research (Anderson et al., 2003), but although violent media content is extremely prevalent in the media choices of emerging adults, there is more disagreement about its effects at this age. By emerging adulthood, short-term effects of media violence are stronger than long-term effects (Bushman & Huesmann, 2006; Huesmann, Moise-Titus, Podolski, & Eron, 2003). Literally, hundreds of experimental studies have shown that college students are more aggressive (both physically and relationally), have more aggressive thoughts, show less empathy, and are less likely to help those in need immediately after exposure to media violence (e.g., Anderson et al., 2003; Anderson & Bushman, 2001; Bushman & Anderson, 2009; Coyne, Linder, Nelson, & Gentile, 2012; Fraser, Padilla-Walker, Coyne, Nelson, & Stockdale, 2012; Hasan, Bègue, & Bushman, 2012; Strasburger, 2009). These studies were all conducted with college students, who represent a nice convenience sample for psychology experiments, but illustrate that media violence can, at least in some measure, influence behavior and attitudes in emerging adults in the short term.

However, little research indicates strong long-term effects of violent media use in emerging adulthood (Bushman & Huesmann, 2006). Theoretically this makes sense, as emerging adults are more likely than young children to have developed and internalized strong norms against aggression and are better able to interpret violent content. Yet, exposure to media violence as a child (and the corresponding childhood aggression) is a far better predictor of aggression in adulthood than exposure to media violence as an adult (Huesmann, Moise-Titus, Podolski, & Eron, 2003), and so it is possible that much of the direct damage may have already been done by the time a child reaches emerging adulthood. Playing violent video games or watching violent movies in emerging adulthood may simply reinforce a long history of media violence exposure and may exacerbate aggressive tendencies developed throughout childhood and adolescence (see Anderson & Bushman, 2002). However, media violence may be affecting emerging adults in more subtle ways, such as increasing positive attitudes toward institutional or military violence (Brady, 2007) or in improving firing aim and accuracy when using firearms (Whitaker & Bushman, in press).

Prosocial Behavior. Violent media does not have a monopoly on socialization; exposure to prosocial media can also influence attitudes and behavior. Prosocial behavior is defined as any voluntary act meant to benefit another (beyond mere sociability or cooperation) and can include volunteering, donating, sharing, complimenting others, or rescuing those in dire need (Eisenberg, Fabes, & Spinrad, 2006). Prosocial content certainly exists in the media used by emerging adults. For example, 73% of all prime time television shows feature at least one instance of helping and/or sharing, at a rate of almost three incidents per hour (Smith et al., 2006). Exposure to prosocial content in the media, such as in television and in video games, increases the accessibility of prosocial thoughts, empathy, and helping behavior in emerging adults (e.g., Greitemeyer, 2011). Even listening to prosocial lyrics in songs (e.g., "Heal the world") increases the likelihood that emerging adults will give larger tips after dining in a restaurant (Jacob, Guéguen, & Boulbry, 2010). Accordingly, exposure to prosocial media may have a positive influence on prosocial behavior during emerging adulthood.

Sexual Behavior. Research suggests that exposure to sexual content in mainstream media can influence both sexual attitudes and behavior in emerging adulthood. For example, for male college students, greater exposure to mainstream media (mainly movies, magazines, and music videos) was associated with sexual beliefs that privilege nonrelational sex and the male sex drive (Ward, Epstein, Caruthers, & Merriwether, 2011). Endorsement of nonrelational sex was in turn associated with a greater number of sexual partners. Similarly, another study of undergraduate students found that greater exposure to sexual content on television led to a more positive attitude toward recreational sex (Ward, Gorvine, & Cytron, 2002).

Other research has focused on pornography use during emerging adulthood. Pornography use tends to be highest during emerging adulthood (as compared to any other developmental period Buzzell, 2005). Indeed, Carroll et al. (2008) termed emerging adults today as *Generation XXX* and found that upward of 87% of emerging adult men use pornography, with around 20% using it nearly every day. Women are much less likely to use pornography during emerging adulthood, with only about 30% reporting some level of use. Importantly, higher levels of pornography use were associated with emerging adults' sexual values and behavior. Specifically, higher levels of pornography use were associated with having more sexual partners and being more likely to endorse extramarital, premarital, and casual sexual behavior (Carroll et al., 2008). Though these studies indicate that media use is associated with sexual attitudes and behavior, most research on this topic is cross-sectional; accordingly, we do not yet know how exposure to sex in mainstream media and pornography influences such behavior and attitudes over the course of emerging adulthood.

Body Image. The media can also influence both perceptions of body image and self-esteem in emerging adulthood, especially among women. When it comes to body size and weight, the media often does not provide an accurate reflection of the world in which emerging adults live. Compared with the general population, below average weight characters are overrepresented on television, with average and obese characters often receiving negative comments on their weight (Fouts & Burggraf, 1999; Fouts & Vaughan, 2002; Kaufman, 1980; Silverstein, Perdue, Peterson, & Kelly, 1986). The same bias can be found in magazines (Malkin, Wornian, & Chrisler, 1999), on YouTube (Hussin, Frazier, & Thompson, 2011), and even in animated cartoons (Klein & Shiffman, 2005). Given emerging adult exposure to such content, it is not surprising that body dissatisfaction and eating disorders are on the increase as well (Silverstein & Perlick, 1995; Wiseman, Gray,

Mosimann, & Ahrens, 1992; Wiseman, Gunning, & Gray, 1993). Laboratory experiments have shown decreased body satisfaction among female college students with as little as 15 min of exposure to fitness and health magazines (Cameron, & Ferraro, 2004). Several meta-analyses have established a significant association between exposure to media and body satisfaction at any age (Cafri, Yamamiya, Brannick, & Thompson, 2005; Groesz, Levine, & Murnen, 2001), but eating disorders are especially prevalent during late adolescence and emerging adulthood, with the most common onset reported to be 18 years of age (Thelen, Mann, Pruitt, & Smith, 1987). However, longitudinal studies show that body dissatisfaction, chronic dieting, and eating disorders generally diminish in the 10 years following college (Heatherton, Mahamedi, Striepe, Field, & Keel, 1997), suggesting that once emerging adults have developed autonomy from external influences and a strong positive identity, they are less susceptible to the negative influences of media in regard to body image.

Pathological Media Use. There is also a growing amount of literature on pathological media use among emerging adults. Any type of media can be used to an extent that could be considered pathological, but most research has focused on excessive video game or Internet use. Media use becomes problematic when it is chronically misused in a way that harms other important areas in life, including, relationships, friendships, health, and psychological well-being (Gentile, Coyne, & Bricolo, 2013). Although most emerging adults are not pathological users of media; indeed, only around 8% of gamers in the United States show signs of pathological video game use (Gentile, 2009), some heavy users of media report feeling ''addicted'' and report symptoms of withdrawal when attempting to stop media use (Gentile, 2009).

There are a number of important predictors of pathological media use in adolescence and emerging adulthood including impulsivity, depression, attention deficit/hyperactivity disorder (ADHD), social anxiety, hostility, and emotional instability (Charlton & Danforth, 2010; Choo et al., 2010; Yoo et al., 2004). However, even after controlling for these initial conditions, pathological media use shows long-term negative effects including increased impulsivity, aggression, victimization, anxiety, ADHD symptoms, social phobia, and depression; as well as decreased social competence, emotional regulation, empathy, and academic achievement over time (Gentile et al., 2011).

It is possible that emerging adulthood might represent a particularly salient time for the development of pathological media use, as emerging adults are often away from their parents (and thus the media regulation and/or supervision their parents provided) for the first time. With complete autonomy over media time, use may become problematic if not well regulated. Furthermore, the media may become an important aspect of identity development, with emerging adults identifying with groups such as ''gamers.'' Though this area of the field is in its infancy, it may be that if gaming or other media use is central to one's identity as an emerging adult, such media use might become more internalized and problematic over time. Future research should certainly examine this possibility.

Uses and Gratifications of Media in Emerging Adulthood

Thus far, we have treated emerging adults as passive receivers of media outputs, but in reality much of their exposure (and thus much of what they are influenced by) is self-selected. Uses and gratifications theory (Katz et al., 1974) purports that people are aware of their social and psychological needs, and thus make media selections that are most likely to fulfill those needs (Rubin, 2002). Given that emerging adults often have more control over their media use then they did previously, it becomes more important than ever to examine the reasons behind the media choices that are made.

Emerging adults are still developing in many different areas. Though most physical development is complete, there is much development in terms of autonomy, identity, and intimacy during emerging adulthood. Indeed, from a uses and gratifications perspective, emerging adults might be turning to the media as a way of self-socializing themselves in terms of these important developmental tasks (Arnett, 1995). There are many reasons why emerging adults use different media; however, based in part on uses and gratifications theory and also on key developmental tasks of emerging adulthood, we have chosen to focus on three key uses: autonomy, intimacy, and identity.

Autonomy. The development of autonomy is one key task during emerging adulthood, with the majority of emerging adult college students (and their parents) seeing themselves as an adult in some ways, but not in others (Nelson et al., 2007). When asked to identify the necessary criteria for adulthood, the majority of emerging adults listed ''taking responsibility for one's actions'' and ''making independent decisions'' among their top two criteria (Nelson & Barry, 2005). For many, this process of gaining autonomy was started during adolescence, but most individuals do not truly become independent in terms of their emotions, behavior, values, and finances until emerging adulthood or later. Inasmuch as emerging adults are striving for adulthood, they may use the media as a way to exercise autonomy regarding their own decision making. Choosing which forms of media to view may be the most rudimentary way that media use is related to autonomy development during emerging adulthood. During childhood and adolescence, parental monitoring of media is more common, and individuals are not completely free to make their own decisions regarding the time spent viewing or the content of media (e.g., Padilla-Walker, Coyne, Fraser, Dyer, & Yorgasen, 2012). However, during emerging adulthood, most individuals are now free to choose their own media, both in terms of content and time. Media restrictions, such as the inability to enter an R-rated movie or buy an M-rated video game are lifted at age 18. Additionally, though many adolescents do view pornography, emerging adults are now of an age where they can legally enter websites offering pornographic material. This can open up a whole new world concerning the media for emerging adults,

and they must increasingly exercise their autonomy to decide what types of media are acceptable and consistent with their value system.

Intimacy. Although parents continue to be an important source of intimacy and social support throughout emerging adulthood (Nelson, Padilla-Walker, Christensen, Evans, & Carroll, 2011), it is also a time where new relationships with friends and romantic partners often take an even more prominent position. Given the high residential instability of individuals between the ages of 18 through the late 20s, it becomes increasingly up to the individual to maintain ties of intimacy that are formed and then potentially threatened because of distance (e.g., changing of residence, entering or completing college, changing jobs, etc; Collins & van Dulmen, 2006). This development of intimacy may be enhanced or undermined through the use of media. Newer forms of media might be particularly suited to assisting in the development of intimacy. Emerging adults can meet, contact, communicate, and develop relationships with a host of individuals on SNSs, ranging from extremely superficial relationships to deep, intimate ones. Importantly, emerging adults specifically report that they use social media sites to fulfill social needs (Wang, Tchernev, & Solloway, 2012). Indeed, according to social penetration theory (Taylor & Altman, 1987), emerging adults use certain types of new media to increase their levels of intimacy with others. According to Yang and Brown (2009), becoming Facebook friends is the least intimate form of communication for emerging adults. If this is well received, and the individual successfully manages appropriate levels of intimacy on a social network site, the person might go to the "next step" of media intimacy by instant messaging another, either on the site or elsewhere. After this is broached, an individual might send another person a text by mobile phone, and finally, to show the highest levels of intimacy, might call the other person on the phone. These steps show how emerging adults might use newer forms of media as a way to develop intimacy with others, going from rather impersonal forms to more intimate ones.

Other media forms might also allow for the development of intimacy in emerging adulthood. For example, friends might get together in social contexts to enjoy a variety of media, such as movies, television shows, or video games. The experience and the resulting discussion might be opportunities for increased intimacy between friends or romantic partners (e.g., Barton, 2009). Music might be another way to develop intimacy; anecdotally, many couples specifically report having "a song" that defines their relationship, suggesting that the given song was important in establishing their relationship in some way (Knobloch & Zillmann, 2003). Some individuals might view certain programs specifically to learn about intimate relationships; for example, viewers of the romance reality television program, *The Bachelor,* report that they use the program as a way to inform their own views of intimate relationships (Cherry, 2010). Other studies find that emerging adults report using music specifically for social interaction, such as getting together for a dance or to hear live music, or as a way to strike up conversations with others (Lonsdale & North, 2011). Video games might also influence intimacy during emerging adulthood. For example, Ravaja et al. (2006) found that playing video games with a friend, as opposed to a stranger, increased arousal and positive affect toward that friend. Massive multiplayer online role-playing games (MMPORGs) also might encourage intimacy, as individuals can meet and interact with a host of individuals online. Indeed, Cole and Griffiths (2007) found that gamers saw MMPORGs as highly sociable environments that were a key way to develop and maintain friendships over time. In their own perception, emerging adults use a variety of media to further friendships and relationships and as a way of developing intimacy over time.

Identity. Emerging adulthood has perhaps most consistently been identified as a time of identity exploration, particularly in the areas of love, work, and worldviews (Arnett, 2006), as well as ethnic identity (Phinney, 2006) and sexuality (Lefkowitz & Gillen, 2006; Regnerus & Uecker, 2011). Though there is much research on how media influences identity development in adolescence (e.g., Arnett, 1995), less research has examined whether media plays a role in identity development during emerging adulthood. Given that identity development is a long process, and much identity exploration is still occurring during emerging adulthood (Waterman, 1999), we would suspect that the media can certainly play a role in multiple aspects of identity, including gender, ethnic, sexuality, political, religious, and other types of identity formation. More importantly, it is clear from research on adolescents (and we have no reason to believe this would not also extend to emerging adults), that individuals seek media out as a means of exploring their identity, especially in terms of gender, sexuality, and ethnicity (Arnett, 1995; Padilla-Walker, 2007; Phinney, 2006). While this can be a meaningful form of exploration, media's misrepresentation of reality (e.g., gender, ethnicity) is particularly influential for those who do not have additional exposure to related information about which they can think critically (e.g., if they do not know any African Americans personally). Depending on the content and medium of media used for identity exploration, the outcomes are likely varied.

A few studies have specifically focused on how emerging adults use the media in terms of identity development. For example, Lonsdale and North (2011) found that emerging adults report using music as the most common way to both construct and express their identity, as compared to other leisure activities. Importantly, they report using music as a way to explore possible identities and to discover who they really are because there is more choice in regard to music than other types of media. There are literally hundreds of thousands of songs to choose from, ranging from Christian Rock to Death Metal, and many different themes and ideologies are present in music. Different music genres also offer a culture with which one might identify; a culture that could help define behavior and attitudes (Selfhout, Delsing, ter Bogt, & Meeus, 2008).

After music, emerging adults reported using print media (books, magazines, and newspapers), and then TV and movies

as a way of constructing and expressing identity (Lonsdale & North, 2011). Again, there are many different messages and philosophies in these forms of media, with books representing a bit more depth than other forms. Finally, emerging adults reported that they rarely use video games in terms of identity development. Certainly, some video games might have complicated storylines and may represent deeper ideologies; however, the vast majority are rather superficial, with a focus on action as opposed to deep thinking.

There is also a growing body of research that suggests that SNSs might be another way for emerging adults to explore identity (Back et al., 2010; Hum et al., 2011; Pempek, Yermolayeva, & Calvert, 2009; Zhao, Grasmuck, & Martin, 2008). What an individual posts on a SNS makes a statement about who he or she is, and emerging adults might experiment with posting various content, photos, and information as ways to try on possible selves (e.g., Manago, Graham, Greenfield, & Salimkhan, 2008). Such identities tend to be expressed implicitly through what the individual chooses to post, as opposed to explicit statements regarding identity (though such expressions can and sometimes are included on SNSs; Zhao et al., 2008). Indeed, some studies suggest that emerging adults specifically use SNSs, such as Facebook, as forums to explore and express their ''true identity'' (Back et al., 2010; Tosun, 2012), though such exploration might have a detrimental effect on social connectedness with others (Zwier, Araujo, Boukes, & Willemsen, 2012).

There are also some studies that indicate that emerging adults use the media to inform their own beliefs and attitudes in a variety of contexts. In this context, media could certainly influence identity development on a variety of levels. At a superficial level, Greenwood and Long (2009) found that emerging adults often use favorite television characters as ''social surrogates'' that enable them to feel connected to others, but also enhance self-discovery through identification. Other media might help emerging adults form opinions regarding a variety of behaviors and philosophies. For example, college students with heavy television viewing habits hold more stereotypes about ethnic and racial minorities, and the majority of these stereotypes are negative (Lee, Bichard, Irey, Walt, & Carlson, 2009). Certain media genres are also associated with either acceptance or rejection of homosexuality, depending on the content (Calzo & Ward, 2009). Prosmoking media exposure increases college student's future smoking risk (Shadel, Martino, Setodji, & Scharf, 2012) and exposure to political material online increases civic engagement and a belief in self-efficacy—the ability to make a difference in the political process (de Zúñiga, 2012; Kushin & Yamamoto, 2010). Clearly, emerging adults use the media in diverse ways as a means to develop their sense of identity.

Collectively, it appears that there is research to support the view that media can act as a socializing agent during emerging adulthood, but that emerging adults also choose their own media to gratify various needs and desires. Though some models attempt to integrate these two views, they are not used very frequently or tested as much as other theories. In one example specific to emerging adults, Brown (2006) uses the media practice model to discuss how individuals choose their own media for certain reasons, but are also influenced by such use, specifically through interaction and application with whatever media they consume. Accordingly, we would hope that future research would examine both uses and gratifications *and* socializing effects when examining media use during emerging adulthood.

Future Directions

Media Use in a Developmental Context. Though the field contains hundreds of studies on media and college students, we could only find a very few that specifically focused on media and emerging adults in a developmental context. Namely, recent empirical support has been found highlighting the five aspects of emerging adulthood mentioned earlier (identity exploration, instability, feeling in-between, self-focus, and possibilities; Reifman, Arnett, & Colwell, 2007). It will be important for future research to examine both how media serves to facilitate or undermine key tasks of this time period (e.g., identity, self-focus) and how media use and patterns are driven by these particular foci. Other developmental approaches focus on the criteria that young people have for adulthood, and the steps young people take in order to achieve those criteria. For example, emerging adult college students feel that obtaining maturity in relationships, having the capacities needed for a family, and complying with cultural and societal norms are among the most important criteria necessary for adulthood (Nelson & Barry, 2005; Nelson et al., 2007). It would be enlightening to understand how emerging adults might use media to move toward the criteria they hold as important for adulthood, and how this may vary depending on how the time period is viewed by the individual (e.g., Nelson & Padilla-Walker, 2012). More specifically, it is possible that media are used very differently by those who view emerging adulthood as a time of fun and freedom versus those who view emerging adulthood as a time of stress and negativity or as a time to prepare for the future (Nelson, Willoughby, & Padilla-Walker, 2012), and future research would benefit from examining media use during emerging adulthood within a developmental framework.

Changes in Media Use From Adolescence. We also know very little about how media use changes from adolescence to emerging adulthood. Certainly, media use is high at both ages; however, in cross-sectional reports, some forms of media, such as Internet use, is higher in emerging adulthood, while other forms, such as television viewing and playing video games, appear to be higher during adolescence (Alloy Media & Marketing, 2009; Kaiser Family Foundation, 2010). These studies seem to indicate that media use does change over time, however, we need well-conducted longitudinal studies to examine how media are used across the transition from adolescence to emerging adulthood. In this same vein, we also do not know whether the uses and gratifications for media change from adolescence to emerging adulthood. Furthermore, the reasons

for using certain types of media might change as emerging adults fully develop a sense of identity, autonomy, and intimacy. Accordingly, future research should examine uses and gratifications of all types of media across emerging adulthood.

Media During the Transition to Adult Roles. Similarly, we know little about how media use impacts or plays a role in the transition from emerging adulthood to more adult roles. For example, how does media use change (if at all) when emerging adults make the transition to full-time work, marriage, or parenthood, and what is the impact of this potential change? It is possible that media use would diminish sharply as emerging adults fully move toward adulthood and heightened responsibility in multiple areas of life. On the other extreme, it would be particularly interesting to examine how pathological video game (or other media) users handle these transitions, and whether such use during emerging adulthood is seen as excessive once the transition to adulthood is made. Do those who use media excessively in emerging adulthood continue to have problems with the media? Or is the transition to work, marriage, or parenthood enough to help them prioritize and overcome their problems? We certainly know that pathological video game use can cause problems in adulthood (Yee, 2001; Young, 1996); however, we do not know what such use looks like during these important transitions, or what the effect of high (but not yet pathological) media use might have on relationships and behavioral outcomes during adulthood. The content of media may also change with the transition from emerging adulthood to marriage or parenthood. Perhaps, "higher risk" types of media, such as particularly violent video games or pornography use, would decrease as emerging adults take on more adult roles and obligations. Again, longitudinal studies, paying strict attention to the uses and gratifications, would be extremely useful to show how media use changes over time.

Media Use in Noncollege Samples. As mentioned earlier, we also know very little about media use in noncollege samples, as the vast majority of the research we could find was focused on college students. Emerging adults who do not attend college may use media very differently; we might see greater use of some forms of media and less of others. If noncollege students are working full time, they may simply have less time to spend engaging in media. On the other hand, if they are not working at all, they might spend colossal amounts of time with the media. Noncollege students also likely use the media for different reasons. For example, noncollege students who are working might already have a firm sense of identity and would use the media less for this specific purpose. On the other hand, college is a time of moratorium for many emerging adults, as they try to decide what they want to do, and who they are. Accordingly, college students might use the media more for identity development than noncollege students. Social networking use might also be different when examined across these two groups. College is inherently social, and students might feel they have plenty of opportunities for social encounters, while noncollege students might have a particularly high use of SNSs if they feel like they are not getting social interaction, especially if they are still living at home and their high school friends have left for college. All of this is speculation, and we would encourage future research to specifically compare emerging adult media use in a college and a noncollege setting.

Cultural Differences. Similar to the need to examine noncollege populations, the field should attempt to learn more about media use during emerging adulthood in different cultures, particularly non-Western cultures. Research suggests that emerging adulthood may vary across cultures in diverse countries such as Romania (Nelson, 2009), China (Nelson et al., 2004), and India (Seiter & Nelson, 2011). As such, it is possible that media use also might look different and that it might be used for different purposes across cultures. In addition, subcultures within Western culture should be more carefully examined, as research has found, for example, that highly religious emerging adult college students have different patterns of media use (particularly in terms of pornography use), than do nonreligious emerging adults (Nelson, Padilla-Walker, & Carroll, 2010).

Parental Involvement in Media Use. We also recommend that more research examine how parents might be involved with emerging adults and their media use, and how media use might be used to maintain parent–child relationships once emerging adults leave the parental home. During adolescence, parents are involved in monitoring their teen's media use to varying degrees (Kaiser Family Foundation, 2010; Padilla-Walker & Coyne, 2011), but little is known regarding parental involvement in media monitoring during emerging adulthood, and how this might be associated with the quality of the parent–child relationship.

One form of monitoring is parental involvement in media with their children. Indeed, recent research has found that adolescents report greater feelings of connection with their parents when they use media together, such as cell phones (Coyne, Padilla-Walker, Lambert, Coutts, & Finchim, 2012), SNSs (Coyne, Padilla-Walker, & Stockdale, 2012), television, video games (Coyne, Padilla-Walker, Stockdale, & Day, 2011), and more (see Padilla-Walker, Coyne, & Fraser, 2012). Emerging adults, on the other hand, are often demographically distant from their parents, and it is not fully known how this distancing affects parental involvement in media. It is likely more difficult for parents to use some types of media with their children (e.g., television or video games), but some types of media use between parent and child may actually increase during emerging adulthood. For example, cell phones can enable emerging adults to connect with their parents on a regular basis, and some research seems to indicate that cell phone use can decrease loneliness among university students (Igarashi & Yoshida, 2003). Emerging adults might also use Skype or other forms of video chat to talk with their parents, possibly making the physical separation slightly easier as parents can actually "see" their emerging adult wherever they are. Emerging adults and parents might also use blogs, SNSs, or other Internet sites as a way to connect and keep in touch. If done in the context of

a positive parent–child relationship, the use of this media may foster relationships during this time period.

Additionally, certain proactive media monitoring strategies parents use during adolescence, such as setting rules about media content or time, may be nearly impossible during emerging adulthood. Some parents might try to use active monitoring during emerging adulthood, where the parent discusses certain media content with the child in order to promote critical thinking regarding media content, but it is unknown whether parents still try to monitor the media in this way and whether it is successful. It is also unknown whether parental involvement may have a negative effect on the parent–child relationship during emerging adulthood. For example, if media are used as a form of parental control (e.g., helicopter parents; Padilla-Walker & Nelson, 2012), emerging adult children may perceive such involvement as overly intrusive. Unfortunately, we know almost nothing about how emerging adults and parents use media and this represents a particularly useful area for future research.

Conclusion

In sum, emerging adults spend more time using the media than doing any other daily activity, spending nearly 12 hr each day with media of some form (Alloy Media & Marketing, 2009). This review has revealed the diverse ways in which emerging adults use media and the effects media can have on a number of key behaviors including aggression, prosocial behavior, and body image. We have also explored the many ways emerging adults might use the media to facilitate key developmental processes, including identity, intimacy, and autonomy. Though literally hundreds of studies have been conducted on a ''convenience sample'' of college students, there is still much to learn about media and emerging adulthood from a developmental standpoint. We encourage researchers to examine media use through a developmental lens when studying emerging adulthood. Research in this vein will help us truly understand how and why emerging adults use various forms of media and what influence the media have on development.

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