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The Role of Mothers and Media on Emerging Adults' Religious Faith and Practices by Way of Internalization of Prosocial Values

Carolyn McNamara Barry · Laura M. Padilla-Walker ·
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Abstract In the current study, we investigated the role of emerging adults' internalization of prosocial values as a mediator between maternal relationship quality and two types of media use (positive and negative) and religious faith and practices. Participants included 500 undergraduate students (ranging from 18 to 26 years; 75% European American) from five American universities. Structural equation modeling results indicated that both maternal relationship quality and positive media were related positively and indirectly (by way of prosocial values) to religious faith, and maternal relationship quality was related positively and directly to religious faith. In contrast, negative media use was related negatively and directly (and indirectly by way of prosocial values) to religious faith. The discussion focuses on the role of parents and media in promoting religious faith and practices, and the extent to which emerging adults' internalized prosocial values appear to be important in the socialization process of religious faith.

Keywords Maternal relationship quality · Media use · Religiosity · Internalization of prosocial values · Emerging adulthood

From the ages of 18 to the middle twenties, emerging adults experience tremendous self-exploration concerning

their values and beliefs (Arnett 2004). As part of this exploration, Arnett notes that emerging adults engage in the highest levels of risk behaviors of any time in the life span. Also during this time of exploration, most American university students report a stability, if not strengthening of their religious *beliefs* since the start of college (Lefkowitz 2005; Stoppa and Lefkowitz 2010), but their participation in religious *activities* declines over this time period (Hill 2009). Religiosity has long been found to buffer the engagement in risk behaviors (e.g., Wells 2010), so there may be a complex association between religiosity and risk behavior during emerging adulthood. Indeed, the potential link between religiosity and risk behaviors suggests that it is important to consider how religious beliefs and behaviors are shaped during this time of volatility in order to, in turn, promote emerging adults' adjustment. Because parental influences become gradually more indirect (Arnett 2007), there is evidence that other influences, such as the media, may take on additional significance (DuBow et al. 2007) in emerging adults' development.

According to Arnett (1995b), one of the main goals of socialization is the internalization of cultural values, attitudes, and beliefs. Given the developmental advances that take place between adolescence and the early twenties (e.g., Steinberg 2005), emerging adults are ripe for heightened self-development, including the socialization of religious beliefs and practices (Arnett 2004). More recent scholarly attention has been paid to children's and adolescents' religiosity (Boyatzis 2005); however, comparatively less is known about emerging adults' religiosity. Clearly, young people are influenced by (as well as influence) potential socialization agents, and influence is attributable to both selection and socialization effects (Urberg 1999). Given that socialization influences (e.g., parents) are shifting and autonomy is greatly increased for

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young people, more independent regulation of values and beliefs is possible for this time period. Thus, we focused on one of the admittedly several possible directions of this bidirectional relation in the extent to which it may relate to emerging adults' own values, and in turn behavior. Existing research has documented that socialization sources (e.g., mothers and media; see Barry et al. 2010) and emerging adults' internalized prosocial values (Padilla-Walker et al. 2008) are related to emerging adults' religiosity and that prosocial values serve as a mediator between socialization agents and emerging adults' outcomes (Barry et al. 2008). Given the dearth of studies on religious socialization processes, we examined internalization of prosocial values as a mediator between maternal relationship quality and two forms of media use (positive and negative media) on American emerging adults' religious faith and practices.

Religiosity During Emerging Adulthood

As an important dimension of development, religiosity has been associated with clear benefits to emerging adults' adjustment, such as life satisfaction (e.g., Fife et al. 2011), and protecting against depression (Jansen et al. 2010) and behaviors, such as heavy alcohol use (Wells 2010). According to Miller and Thoresen (2003), religiosity is conceptualized in terms of organizational and institutional aspects and typically has been subdivided into beliefs and practices. Religious beliefs have been found to be stable or increasing across emerging adulthood in American, primarily university-based samples (Astin and Astin 2003). Indeed, the university context affords an opportunity to reflect about one's worldviews, including religious beliefs (Braskamp 2008). However, religious practices among American representative samples of emerging adults tend to decline (Koenig et al. 2008), although most emerging adults retain their religious affiliation. Given this disconnect between typically higher levels of religious beliefs, yet decreased levels of practices (Barry et al. 2010), we chose to examine two religiosity outcomes: the strength of religious faith and the frequency of religious practices in the current study.

Parents and Media as Socialization Agents

Although a great deal of socialization takes place during adolescence (Grusec 2002), Arnett (2007) argues that internalization of values is not complete in adolescence, given that the majority of emerging adults report not being ready to become self-sufficient emotionally or financially. Rather, the process of coming to see oneself as an

independent adult occurs gradually as young people increase their autonomous decision-making, and cultural values are more fully internally regulated. Moreover, Arnett argues that socialization ranges from narrow (i.e., encouraging specific values and beliefs to maintain social order) to broad (i.e., encouraging individualism and is not aimed at any particular set of cultural values). He further contends that different sources of socialization provide varying degrees of influence on the internalization process, and different messages from these sources may differentially influence what values get internalized and what behaviors are expected.

Given their relevance during emerging adulthood, one narrow source and one broad source were selected for examination in this study. First, parents were examined as a narrow source because they typically have a vested interest in encouraging specific values in their children in order to become contributing members of society. Although parents of emerging adults in the United States often stress values of independence, they also emphasize conformity to societal norms and laws and taking care of themselves and their family (Nelson et al. 2007). In terms of religiosity, parents also often desire their children to continue in the faith tradition under which they have been raised (for a review see Boyatzis et al. 2006). In contrast, media options within the United States are immense and rarely communicate specific messages, so media is a broad source with respect to values, identity, and identification with the larger youth culture (Arnett 1995a). It was deemed important to contrast media with parents because emerging adults live in a "media-saturated environment" (Roberts et al. 2003) and spend considerably less time directly with their parents than at previous ages (Larson and Richards 1991). Thus, in the current study, we examined whether both parents (specifically parent-child relationship quality) and media (use of particular forms of media) were related to emerging adults' internalization of prosocial values and, in turn, to their religiosity.

Internalization of Prosocial Values

The process of internalization involves a child shifting his or her regulation of values from an external source of control (such as parents) to an internal one (Grolnick et al. 1997). This process ranges from external (i.e., external forces that determine motivation such as punishment avoidance) to internal or integrated regulation (i.e., autonomous motivation). According to self-determination theory (Deci and Ryan 1991), individuals slowly begin to internalize values over adolescence and in turn use such values to define themselves. Although internalization of societal and family values is a central socialization goal for many parents, researchers often assess internalization only as it is reflected

in positive or negative behavioral outcomes. For instance, self-reported internalization predicts emerging adults' religiosity (Padilla-Walker et al. 2008). Steinberg and Silk (2002) contend that parenting may matter less in a direct way to emerging adults because their own values and beliefs often become stronger predictors of their behaviors, which is likely the ultimate goal of parental socialization. Indeed, Hardy et al. (2008) documented that positive interactions with parents were associated with greater likelihood of internalization of values among adolescents. Additionally, internalization of prosocial values has been shown to mediate the relation between emerging adults' perceived mother-child relationship quality and their self-reported prosocial tendencies (i.e., intent to behave prosocially; Barry et al. 2008). Hence, we wanted to build upon this existing work by examining internalization of prosocial values as a mediator in the link between mothers and media, respectively, and emerging adults' religiosity.

Religious Socialization during Emerging Adulthood

Role of Mothers

Researchers have shown that there are many ways in which mothers tend to influence their children's religiosity at various stages of development. Having a secure attachment to a primary caregiver (which traditionally has been the mother) has been associated with religious stability (Kirkpatrick and Shaver 1990), as well as gradual religious change and adoption of religious beliefs of one's primary caregiver (Granqvist 2002). Mothers have been found to serve as religious models for others (Spilka et al. 2003), and the presence of religious models during childhood and adolescence has been related positively to young adults' religiosity (Gunnoe and Moore 2002). Thus, mothers (particularly as manifested in the quality of their relationship with their children) play central roles in the lives of their children's religious formation (Boyatzis et al. 2006). As a result, we expected that mothers would still play an important role in their emerging adult children's religious development, albeit more indirectly given children's launching from the family nest. Indeed, a number of studies have suggested that parent-child relationship quality promotes an adolescent's internalization of values (Hardy et al. 2008) and mediates the relation between close relationships (e.g., parents and peers) and adolescent outcomes (Padilla-Walker and Carlo 2007). Thus, in the current study, we examined the internalization of prosocial values as a mediator between children's relationship quality with their mother, and their religious faith and practices. We based this hypothesis on the assumption that valuing helping others and being kind and honest (which are central

tenets to most mainstream religions) ought to be a motivation for religious beliefs and practices.

Role of Media

Given that media has become increasingly present in the world (DuBow et al. 2007), research has documented media to socialize emerging adults by influencing both their values (e.g., body image and political ideology) and behaviors (e.g., academic grades; Anand 2007; Brown 2006a). Of all the possible socializers, media is the least constrained or monitored during emerging adulthood given that there is less parental presence and not yet a pervasive presence of a live-in romantic partner (Arnett 2007). Given its prevalence, media may be a rather significant form of self-socialization for emerging adults in the process of identity exploration (Arnett 1995b). Indeed, in applying Brown's (2006a, b) media practice model to the identity exploration that occurs in emerging adulthood, she has proposed that who one is and the way one interacts with the world should influence what media an individual chooses. In turn, the way that individuals interact with and make sense of media should impact how they incorporate it into their daily lives and should influence their behaviors and views of the world which would include their religious behaviors and beliefs. An example of how media may influence religious and spiritual identity can be seen in Arnett and Jensen's (2002) study in which they demonstrated how some American emerging adults integrated the notion of the "force" from the movie *Star Wars* into their beliefs of a spirit or energy rather than a deified being. So while individuals may select the media they expose themselves to, this example demonstrates how, in turn, media can influence individuals' developing religious beliefs.

Since the messages conveyed via media are both broad and numerous, it is possible that media may be related to indices of both adjustment and maladjustment (e.g., risk behaviors; see Brown 2006a). Indeed, given the plethora of types and content of media, choices of media consumption may have significant and varied implications for development. For example, when used for what might be termed productive purposes (e.g., schoolwork), internet usage has been associated with a number of positive outcomes including less drug use, higher self-perceptions and self-worth, and positive parent-child relationships for young men (Padilla-Walker et al. 2010). However, when used in less productive ways (e.g., viewing pornography), it has been associated with risk behaviors (e.g., having more sexual partners and engaging in binge drinking), and lower levels of relationship quality with parents and friends (Padilla-Walker et al. 2010). Given the paucity of research on possible favorable effects of media use during emerging adulthood and the failure to distinguish between different

forms and content of media when examining these relations, this task was undertaken in the current study.

While studied to a lesser extent, the varied outcomes associated with different forms and content of media may be especially visible in the realm of religiosity. In particular, media conveys a wide range of values and worldviews and then consequent outcomes associated with them. For example, as noted previously, emerging adults have incorporated concepts from movies (e.g., *Star Wars*' "The Force") with traditional religious beliefs to form a highly individualized set of religious beliefs (Arnett and Jensen 2002). Then, as the famous movie series plays out, those who "use the Force," the main value represented in the film, triumph eventually over the forces of darkness and evil (resultant outcome). Additionally, it has been documented that young people who have become witches (i.e., people who ascribe to the Wiccan religion) did so predominantly because of the visual mass media representations of witches rather than interaction with actual witches (Berger and Ezzy 2009). In such depictions, witches' magical powers allow them to control their environment more effectively to attain desired and self-focused outcomes. Thus, the media has the potential to influence emerging adults' own values and beliefs, including those concerning religiosity. Albeit scant, there is emerging work documenting the relation between less productive media (viewing pornographic material) and religiosity. Specifically, in a study of emerging adult men who reported self-reported high religious beliefs and a belief that viewing pornography was unacceptable, those who then reported using pornography engaged in fewer religious practices than those who did not (Nelson et al. 2010). Further extant evidence (e.g., Padilla-Walker et al. 2010) suggests that exposure to media content that fails to promote religious ideals of prosocial behavior toward others and human dignity (rather than objectification of others' bodies) is less likely to be associated with having strong religious beliefs. Taken together, there is a growing body of work suggesting that media is related to the development of both religious beliefs and behaviors in emerging adulthood, thereby underscoring the importance of examining the extent to which media from diverse types of content is related to religiosity.

Finally, while the extant literature suggests possible direct relations between media and religiosity, there is a paucity of research on the mechanisms by which emerging adults' exposure to media is likely to relate to their religiosity. As described by Arnett (2007), the media depicts moral scenarios wherein some behaviors and attitudes (e.g., materialism and consumerism) are rewarded, while others are punished, and some personalities are lauded, while others are deplored. Therefore, based on the evidence that media is likely to shape one's values, and subsequently

one's behavior (Brown 2006a), we investigated internalization of prosocial values as a mechanism to explain the relation between media use and emerging adults' religiosity. Specifically, we expected that the content of the media would determine how media is related to the internalization of prosocial values and in turn to religious beliefs and practices.

Current Study

In the current study, we investigated the process by which maternal relationship quality and two types of content in media use (positive and negative) would be related to religious faith and practices by way of emerging adults' internalization of prosocial values. We hypothesized that maternal relationship quality would be related positively to religious faith and practices; moreover, we examined whether this relation would be direct or indirect (by way of internalization of prosocial values). We also explored whether positive media use to be related positively to religious faith and practices, whereas we expected negative media use to be related negatively to religious faith and practices, and again tested whether this relation would be direct or would be mediated by internalization of prosocial values.

Methods

Participants

Participants for this study were drawn from a study of emerging adults and their parents entitled "Project Ready" Researching Emerging Adults' Developmental Years. This project is a collaborative multisite study that was conducted by a consortium of developmental and family scholars. The sample used in the current study consisted of 500 undergraduate and graduate students (292 women and 208 men) recruited from five college sites (a small, private liberal arts college and a medium-sized, East Coast religious university; two large, Midwestern public universities; and a large, public West Coast university). Response rate varied by site (ranging from 50 to 75%), with an overall response rate of approximately 63%. The mean age of the sample was 20.09 years ($SD = 1.86$, range = 18–26). Seventy-five percent of the participants were European American, 12% were Asian American, 4% were Latino American, 2% were African American, and 7% indicated that they were "mixed/biracial" or of another ethnicity. Participants reported a variety of religious affiliations: Roman Catholic, 31%; Conservative Christian, 21%; Liberal Christian, 15%; other faiths (e.g., Jewish, Greek Orthodox), 4%; Atheist/

Agnostic, 9%; and, no affiliation, 20%. Ninety percent of emerging adults reported living outside of their parents' home in an apartment, house, or residence hall. Ten percent reported living in their parents' home. Only 10% of emerging adults reported being financially independent of their parents, with the majority of participants (75%) reporting making a personal income of \$5,000 or less per year.

Procedure

Participants completed the Project Ready questionnaire via the Internet (www.projectready.net). The use of an online data collection protocol facilitated unified data collection across multiple university sites and allowed for the survey to be administered to emerging adults and their parents who were living in separate locations throughout the country (parent data were not used in this study). After receiving IRB approval from all five sites, participants were recruited through faculty's announcement of the study in undergraduate and graduate courses. Undergraduate courses were primarily Introduction to Psychology courses or large general education courses in an attempt to access a broad range of students. Professors at the various universities were provided with a student handout that had a brief explanation of the study and directions for accessing the online survey. Interested students then accessed the study website with a location-specific recruitment code. Informed consent was obtained online, and only after consent was given could the participants begin the questionnaires. Each participant was asked to complete a survey battery of 448 items. Sections of the survey addressed topic areas such as background information, family-of-origin experiences, self-perceptions, personality traits, values, risk behaviors, dating behaviors, prosocial tendencies, and religiosity. Participants were offered course/extra credit for their participation.

A number of analyses were conducted to determine whether outcome variables or participant demographics differed as a function of data collection site. Univariate analyses of variance (ANOVAs) were conducted to examine relationship quality with parents, media use, personal values, religiosity, and age. Chi-square analyses were conducted to examine gender and ethnicity. There were only two significant differences found as a function of site: first, one indicator of internalization of positive values (identified) was higher for the Midwestern sites than for the East Coast sites, $F(4, 484) = 7.13, p < .001$, and there were more Asian Americans from the West Coast site than from the Midwestern or East Coast sites, $\chi^2(12) = 27.94, p < .01$. No additional significant differences were found between sites on the variables of interest; thus, data were collapsed across sites.

Measures

Relationship Quality

Relationship quality with mothers was assessed using four subscales of the Social Provisions Questionnaire (Carbery and Buhrmester 1998). Emerging adults rated three items for each of the four subscales (companionship, intimate disclosure, nurturance, and reassurance) on a scale that ranged from 1 (*little or none*) to 5 (*the most*). These four subscales were used to create a latent variable for mother-child *relationship quality*. Sample items for each subscale include "How much free time do you spend together?" for companionship ($\alpha = .81$, factor loading = .78), "How much do you tell this person everything?" for intimate disclosure ($\alpha = .86$, factor loading = .83), "How much do you take care of this person?" for nurturance ($\alpha = .76$, factor loading = .61), and "How much does this person make you feel admired and respected?" for reassurance ($\alpha = .79$, factor loading = .68).

Media Use

To assess media use, emerging adults were asked how frequently they used or viewed media, both on- and off-line. More specifically, participants were asked how often in the last 12 months they played violent video games and viewed off-line pornography, and how often they used the Internet for pornography, entertainment (e.g., games, music, and movies), headline news (e.g., national events and politics), e-mail/instant messaging (IM), and school/work activities, on a scale ranging from 1 (*never*) to 5 (*very often*). These seven items were entered into an exploratory factor analysis. This factor analysis revealed two factors, the first of which accounted for 37% of the variance and consisted of violent video game use, pornography, and internet pornography. The second factor accounted for 19% of the variance and consisted of entertainment, headline news, e-mail/IM, and school/work. As a result of this analysis, two latent variables were created representing the two types of media use, including *negative media* (factor loadings for violent video game use, off-line pornography, and online pornography were .80, .82, and .79, respectively) and *positive media* (factor loadings for entertainment, news, e-mail, and school/work were .55, .62, .68, and .58, respectively).

Internalization of Prosocial Values

Internalization of prosocial values was assessed using a 14-item measure adapted from the Prosocial Self-Regulation Questionnaire (Ryan and Connell 1989). Participants responded to questions regarding kindness, honesty, and

fairness values, with seven items assessing two levels of values internalization that assess internalized values regulation: identified (e.g., “I am kind to others because it feels good to be kind”) and integrated (e.g., “I am kind to others because it is important to me to be a kind person”). Participants responded to statements on a scale ranging from 1 (*not at all true*) to 4 (*very true*). A latent variable of *pro-social values* was created using the two subscales, identified ($\alpha = .83$, factor loading = .87) and integrated ($\alpha = .80$, factor loading = .90).

Religious Faith

Religiosity was assessed using the Santa Clara Strength of Religious Faith Questionnaire (Lewis et al. 2001), which is a well-established measure that has demonstrated adequate reliability and validity with adolescent and adult populations. Participants responded to 10 items regarding their religious faith, regardless of religious denomination or affiliation (e.g., “My religious faith is extremely important to me” and “I look to my faith as providing meaning and purpose in my life”) on a Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). A latent variable using these 10 items was created to represent *religious faith*, and all items loaded with values of .81 or above.

Religious Practices

Emerging adults answered three questions assessing their involvement in religious practices and activities. On a scale ranging from 1 (*never*) to 7 (*more than once a week*), emerging adults were asked, on average, “How often have you attended religious/spiritual services in the past 12 months” and “Many churches, synagogues, and other places of worship have special activities for young adults—such as Bible classes, retreats, youth groups, or choir. In the past 12 months, how often have you taken part in such activities?” Emerging adults also were asked, “In an average week, about how many hours do you spend in religious/spiritual activities in your home (such as praying, meditating, and reading religious books)?” These three items were factor analyzed and were shown to load onto one factor, so they were combined to create a latent variable (factor loadings were .70, .89, and .53, respectively).

Results

Descriptive Statistics and Correlations

A number of ANOVA analyses were conducted to determine whether variables of interest differed as a function of demographics (i.e., gender, age, income, living arrangement, and

data collection site). The only significant differences were found as a function of gender (see Table 1). Namely, young women reported higher levels of companionship, $F(1, 493) = 8.78, p < .01$, intimate disclosure, $F(1, 494) = 9.83, p < .01$, and nurturance, $F(1, 493) = 9.55, p < .01$, toward mothers than did young men. Young men reported playing violent video games, $F(1, 497) = 300.82, p < .001$, viewing off-line pornography, $F(1, 498) = 341.58, p < .001$, viewing online pornography, $F(1, 497) = 318.20, p < .001$, viewing online entertainment, $F(1, 498) = 23.02, p < .001$, and viewing online headline news, $F(1, 498) = 8.65, p < .01$, more frequently than did young women. In turn, young women reported using e-mail/IM, $F(1, 498) = 9.86, p < .01$, and using the Internet for school/work activities, $F(1, 498) = 27.96, p < .001$, more frequently than did young men. Finally, young women reported higher levels of identified, $F(1, 496) = 47.16, p < .001$, and integrated, $F(1, 497) = 38.80, p < .001$, prosocial values and reported higher religious faith, $F(1, 497) = 5.89, p < .05$, than did young men.

Despite mean differences on the majority of variables of interest as a function of gender, patterns of correlations did not differ as a function of gender; thus, bivariate correlations were conducted on all study variables for the entire sample (see Table 2). Most notably, aspects of maternal relationship quality were related positively to internalization of prosocial values and religious faith. In addition, negative media use items were related negatively to internalization of prosocial values, religious faith, and

Table 1 Mean differences in study variables by gender

Variable	Young men M (SD)	Young women M (SD)	F-test
Companionship	2.59 (.94)	2.85 (.92)	8.78**
Intimate disclosure	2.91 (1.11)	3.22 (1.09)	9.83**
Nurturance	3.36 (1.03)	3.65 (1.00)	9.55**
Reassurance	3.89 (.93)	4.03 (.84)	2.87
Violent video games	2.05 (1.58)	.27 (.64)	300.82***
Off-line pornography	2.34 (1.40)	.48 (.03)	341.58***
Online pornography	2.46 (1.07)	1.19 (.48)	318.20***
Entertainment	3.71 (1.02)	3.24 (1.14)	23.02***
Headline news	3.13 (1.08)	2.84 (1.01)	8.65**
E-mail/IM	4.37 (.90)	4.59 (.69)	9.86**
School/work activities	4.32 (.88)	4.67 (.61)	27.96***
Identified values	3.22 (.57)	3.53 (.44)	47.16***
Integrated values	3.33 (.49)	3.58 (.40)	38.80***
Religious faith	2.51 (.90)	2.71 (.94)	5.89*
Church attendance	3.25 (1.90)	3.37 (2.00)	.48
Youth activities	1.95 (1.53)	2.07 (1.75)	.64
Personal study	1.68 (3.07)	2.05 (3.70)	1.40

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 2 Correlations between all study variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Companionship	–															
2. Int Disclosure	.66***	–														
3. Nurture	.52***	.49***	–													
4. Reassurance	.51***	.57***	.45***	–												
5. Violent games	–.10*	–.08	–.15***	–.08	–											
6. Off-line porn	–.12*	–.12**	–.12**	.42***	–											
7. Online porn	–.15***	–.15***	–.15***	.45***	.84***	–										
8. Entertainment	.04	–.07	.01	.28***	.18***	.25***	–									
9. Headline news	.06	–.04	.05	.01	.09	.13**	.14***	.34***	–							
10. E-mail/IM	.07	.04	.10*	.13**	–.10*	–.05	–.01	.18***	.13**	–						
11. School/work	.07	.07	.10*	.19***	–.21***	–.15***	–.16***	.02	.12**	.26***	–					
12. Identified values	.17***	.22***	.22***	.25***	–.24***	–.28***	–.31***	.01	.04	.14**	.17***	–				
13. Integrated values	.17***	.21***	.19***	.25***	–.18***	–.29***	–.29***	.03	.07	.13**	.19***	.78***	–			
14. Religious faith	.21***	.16***	.16***	.17***	–.13**	–.28***	–.25***	–.13**	–.05	–.02	.06	.21***	.29***	–		
15. Attendance	.09	.05	.10*	.10*	–.05	–.22***	–.19***	–.10*	–.06	.00	–.01	.12**	.20**	.74***	–	
16. Youth activities	.02	.02	–.02	–.05	–.05	–.17***	–.14**	–.11**	–.09	–.04	–.03	.01	.10*	.52***	.63***	–
17. Personal study	.12**	.15***	.11**	.03	.02	–.18***	–.15**	–.11**	–.02	.01	.01	.03	.10*	.48***	.42***	.45***

* $p < .05$, ** $p < .01$, *** $p < .001$

religious practices, while aspects of positive media use were either unrelated to prosocial values (e.g., entertainment and news) or were positively related to prosocial values (e.g., e-mail and school work). Finally, with the exception of entertainment, aspects of positive media were unrelated to religious faith or practices.

Mothers and Media Related to Internalization of Positive Values, and Religious Faith and Practices

The current model was conducted using structure equation modeling (SEM) with Analysis of Moments Structure (AMOS) software (Arbuckle 2007). Because of mean differences on variables as a function of gender, multiple group comparison (Brown 2006b) was used to determine measurement and structural invariance across gender. Model comparison indices indicated that factor loadings and structural paths (regression coefficients) could be constrained across gender without model fit declining. Similar analyses were conducted as a function of living arrangement (outside parental home vs. within) and religious affiliation (affiliated, atheist/agnostic, and non-affiliated) and again suggested that the model could be constrained across groups without model fit decreasing. Thus, the final model was a single group (see Fig. 1). First, a measurement model was estimated to confirm that the observed variables loaded on the latent factors of interest. This model included latent constructs for mother–child relationship quality, negative media, positive media, internalization of prosocial values, religious faith, and religious practices. Estimation of the measurement model yielded an acceptable fit, $\chi^2(281) = 744.495, p < .05, CFI = .953, RMSEA = .057$. Correlations between the latent constructs showed that use of media for negative and positive uses were correlated with one another ($r = .41, p < .001$) and that religious faith and religious practices were correlated with one another ($r = .82, p < .001$).

Next, a structural model was estimated with both direct and indirect regression paths, and the model fits the data well, with a comparative fit index (CFI) of .954 and a root mean square error of approximation (RMSEA) of .056 ($\chi^2 = 729.097, p < .001, df = 283$). Table 3 presents unstandardized and standardized coefficients and standard errors for all significant paths. Most notably, maternal relationship quality and positive media were related positively, and negative media was related negatively to prosocial values. In turn, positive values were related positively to religious faith (but not religious practices). Maternal relationship quality was related positively, and negative media was related negatively to religious faith, while negative media was related negatively to religious practices, but was only a trend. In order to assess indirect or mediation effects, we conducted a Sobel’s test, which provides a direct test of simple mediation by comparing the strength of the indirect effect to the null hypothesis (Preacher and Hayes 2004). From these analyses, it was determined that maternal relationship quality, negative media, and positive media were related indirectly to religious faith (Sobel = 2.63, $p < .01$; Sobel = 2.73, $p < .01$; Sobel = 2.29, $p < .01$) via prosocial values.

Discussion

The purpose of the current study was to explore the role of maternal and media influences on the internalization of prosocial values and religious faith and practices during emerging adulthood. It was hypothesized that maternal relationship quality and media use would be related both indirectly (by way of prosocial values) and directly to religious faith and practices, although it was predicted that the type of media content would determine the directionality of the relations. Results indicated that maternal relationship quality and positive media were related positively

Fig. 1 Path model of socialization influences related to emerging adult’s internalization of prosocial values, religious faith, and religious practices. Note: Omitted from the figure are non-significant paths, and error and latent variable covariances. † $p < .10, *p < .05, **p < .01, ***p < .001$

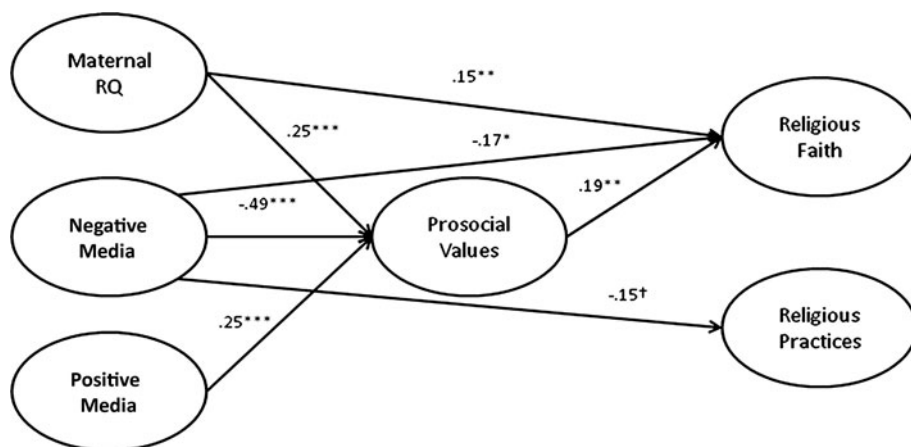


Table 3 Unstandardized coefficients, standard errors, standardized coefficients, and significance levels for model in Fig. 1 ($N = 500$)

Parameter estimate	Unstandardized	SE	Standardized
Maternal RQ → Prosocial values	.170	.036	.246***
Negative media → Prosocial values	−.295	.054	−.488***
Positive media → Prosocial values	.235	.071	.246***
Maternal RQ → Religious faith	.218	.073	.150**
Negative media → Religious faith	−.210	.099	−.165*
Positive media → Religious faith	−.188	.133	−.093
Maternal RQ → Religious practices	.144	.148	.054
Negative media → Religious practices	−.353	.202	−.151†
Positive media → Religious practices	−.371	.274	−.101
Prosocial values → Religious faith	.398	.126	.189**
Prosocial values → Religious practices	.405	.257	.105

$X^2(283) = 729.097, p < .001,$
CFI = .954, RMSEA = .056

† $p < .10,$ * $p < .05,$ ** $p < .01,$
*** $p < .001$

by way of prosocial values to religious faith, and maternal relationship quality was related directly to religious faith. Further, negative media use was related negatively both directly and indirectly to religious faith and was related directly to religious practices (albeit a trend). Surprisingly, maternal relationship quality and positive media were neither directly nor indirectly related to religious practices.

Religious Socialization

Maternal Relationship Quality and Emerging Adults' Religious Beliefs

As expected, emerging adults who perceived their current relationship with their mothers to be nurturing, reassuring, having opportunities for companionship, and open to intimate disclosure were more likely to have internalized prosocial values and, in turn, were more likely to report high levels of religious faith. These findings are consistent with both theoretical and empirical literature regarding the prominent role of mothers in supporting the moral development of their children (Spilka et al. 2003). Thus, these findings add to the growing body of research on the link between parenting and psychosocial adjustment in emerging adulthood (Padilla-Walker et al. 2008), particularly with respect to the role of mother–child relationship quality. Indeed, spiritual disclosure (Brelsford and Mahoney 2008) between mothers and their late adolescent children has been associated with relationship quality as well as adolescent religiousness, even if only one party is religious. Although the current study did not assess spiritual disclosure between parents and children, it reiterates the continued importance in emerging adulthood of the mother–child relationship and underscores the need for future research to consider how mother–child relationship quality may be the setting for and thereby predict spiritual disclosure and subsequent values internalization.

Future work also might examine how values internalization may explain emerging adults' religious faith not only during this phase in their lives, but also as these young people transition fully into adulthood. Further, there is an emerging literature on the role of religious fathers in the faith development of their children (Wilcox 2002); thus, the dimensions of the father–child relationship and how fathers may contribute to their emerging adult children's values internalization and religiosity warrant further scholarly attention. Finally, future work should examine other possible mediators in the link between maternal influences and young people's developing religious beliefs. Given the correlational and cross-sectional nature of the data used in the current study, it is important to acknowledge that alternate models could exist for these findings. For instance, perhaps as children take on the religious beliefs of their mothers, the quality of the mother–child relationship might increase. Similarly, it is possible that identity achievement is what really underlies the significant relations among strong mother–child relationship quality, prosocial values, and religious faith compared to those less advanced in their identity progress (perhaps identity foreclosed). Certainly, it would be important for future work to include additional potential mediators (e.g., identity status) and to track emerging adults longitudinally in order to understand the direction of effects better in the links between maternal relationship quality and young people's religious beliefs.

Maternal Relationship Quality and Emerging Adults' Religious Practices

Unlike religious faith, maternal relationship quality was not directly related to religious practices. Given that emerging adults are questioning their religiosity, and their religious practices tend to be at the lowest level they experience throughout the life span (Smith and Snell 2009), the results suggest a clear disconnect between such practices and the

relationship qualities they report having with mothers. This is not altogether surprising given that very few things have been found to predict religious practices during emerging adulthood, as the decline of religious practices during this period of life is so pervasive (see Barry et al. 2010). Indeed, studies reveal that practices only again begin to increase once emerging adults transition to adulthood and their religious identity becomes achieved (O'Connor et al. 2002). In other words, there appears to be a moratorium on behaviors as exploration of beliefs occurs, even though *beliefs* remain stable if not increase across the college years (Stoppa and Lefkowitz 2010). Therefore, the effects of the mother–child relationship on children’s religious behaviors may not be seen until further down the road. Scholars should examine longitudinally whether maternal relationship quality may be related to this “rebounding” of religious practices among emerging adults, either directly or indirectly. Moreover, since parents’ religiosity is a strong predictor of emerging adults’ own religious practices (Smith and Snell 2009), it should be included in future longitudinal work. Regardless of whether a rebounding effect emerges, the current finding (or lack thereof) underscores the need to examine these religious constructs (i.e., beliefs and practices) separately among this age group.

Media Use

Given that religiosity serves as a protective factor against risk behaviors (Wells 2010), we expected and not surprisingly found that negative media was related negatively both directly and indirectly (by way of internalization of prosocial values) to religious faith. These findings support emerging evidence that certain forms of emerging adults’ media use may be related to maladjustment, such as risky attitudes and behaviors (e.g., Carroll et al. 2008), and lower relationship quality with friends and parents (Padilla-Walker et al. 2010). Furthermore, pornography tends to be a behavior that many religions explicitly teach as being immoral and have even led “crusades” against its use in recent years (see Sherkat and Ellison 1997). Taken together, neither the form of media nor its related behaviors tend to fit with mainstream religious beliefs or practices. Hence, young people who seek out high levels of media that they perceive as inconsistent with mainstream religion may be lead to question just what their beliefs are. Although the cross-sectional design makes it impossible to determine the direction of effects, scholars should continue to examine the values that are promoted by negative media use (e.g., hedonism or stimulation values), and how this may relate to emerging adults’ beliefs and behaviors. Indeed, as was the case with mother–child relationship,

quality future work should explore for other possible pathways between media use and religiosity as factors such as identity status may account for these relations among media use, prosocial values, and religiosity. Moreover, scholars should expand upon work by Nelson et al. (2010) that documents how instances of cognitive dissonance between religious beliefs and pornography use are associated with emerging adults’ lower identity development, religious practices, well-being (e.g., depression), and self-worth.

While results of the current study demonstrate links between negative media use and lower levels of religious faith, findings demonstrate that not all media appear to be negative when it comes to religiosity. Results showed that positive media use was related to internalization of prosocial values and religious faith (indirectly). Therefore, using the internet for productive purposes (e.g., for school or work purposes) may actually promote or reinforce prosocial values. Again, it is equally likely that individuals with strongly internalized prosocial values will choose different types of media (that may then reinforce existing values), and future longitudinal and especially experimental research is needed to determine direction of effects. However, taken together, we can conclude that the role of media on values, beliefs, and behaviors is clearly complex and related to the content of the media. In studying the correlates of internet use, Padilla-Walker et al. (2010) found that content matters. Specifically, they found that when emerging adults used the internet for school or work purposes, they reported lower drug use, higher self-perceptions and self-worth, and positive parent–child relationships. Hence, the current study’s findings in regard to religiosity add to the growing evidence that positive media may be an important predictor of emerging adults’ psychosocial adjustment.

Internalization of Prosocial Values

While thus far we have focused mainly on the direct effects of the mother–child relationship and various forms of media, the most notable aspect of our findings may be the mediating role of the internalization of prosocial values. Results found that maternal relationship quality and positive media were related positively by way of prosocial values to religious faith, and negative media use was related negatively via prosocial values to religious faith. This is an important finding because it underscores just what a personal and highly individualized process the acquisition of religious beliefs is. Fowler’s (1981) notion of *individuated-reflective faith* captures this process by explaining how at this age young people’s beliefs and behaviors are shifting from an external source, such as parents, to reside within the self. Consequently, emerging

adults are more strongly motivated by their own internalized behaviors than by those of parents. While findings suggest that the mother–child relationship and media directly influence the internalization of values, the prominent role of values internalization demonstrated in the findings underscores the central role of the individual in this process. In other words, each emerging adult matters in explaining the process whereby parents and media have the potential, but not the determining role, to shape young people’s religious faith. In sum, it is the emerging adult and his or her own internalized values that determine behavior rather than external factors (e.g., parents and media).

This might help to explain why religious behavior was not related directly to either form of media (a negative trend only for negative media) or the mother–child relationship, as these external factors may be related to beliefs, but the individual him or herself (i.e., personal values and beliefs) has the potential to determine actual behavior. Given that emerging adulthood is a period of exploration and more importantly solidification of beliefs, it stands to reason that beliefs would precede behaviors and, therefore, again might explain why religious behaviors do not increase until young people’s religious identity becomes achieved toward the end of emerging adulthood (O’Connor et al. 2002).

Limitations and Future Directions

Although the study’s findings provide support for the role of socialization agents on religious faith by the way of values internalization, we assessed only one point in time. Clearly, both longitudinal and experimental designs are needed to determine the complex bi-directionality of the specific constructs delineated in the socialization process that does occur over time. Indeed, the cross-sectional design precludes us from testing the direction of effects; thus, it remains possible that religiosity and values internalization are related to socialization agents (i.e., relationship quality and media use) rather than the other way around. Again, it is likely that this is a fluid and bidirectional process, with socialization agents influencing values internalization and religiosity, which in turn influence relationships and media use. This dynamic process seems particularly likely in the case of the broad socialization that occurs with media. Because media does not promote any specific set of cultural values, emerging adults’ existing internalized values and behaviors likely lead them to select particular types of media, which then further internalize existing values. This seems less likely in regard to narrow socialization sources such as parents, whose values are often agenda driven and can rarely be selected by children, but future research is needed to clarify this complex process.

Although the sample was somewhat religiously, geographically, and ethnically diverse, scholars also should examine the proposed relations, particularly among more economically diverse samples of emerging adults who are not attending 4-year universities. Indeed, emerging adults who are not university students may be less likely to have effective and stable mentors, as well as contexts from which to explore their religious and spiritual beliefs and practices fully; this issue may be especially the case among the most marginalized emerging adults (e.g., homeless, see review of such populations by Osgood et al. 2005). As part of preliminary analyses, we investigated and found no differences in the model comparing religious, non-affiliated, and atheist/agnostic emerging adults from the model presented in this paper. Nevertheless, scholars should investigate differences in religious affiliation particularly among emerging adults who are more crystallized in their religious beliefs than this university sample, wherein differences among socialization processes would be more likely.

Beyond sampling issues, all data were based upon the emerging adults’ perception, thereby increasing shared method variance and being constrained by potential social desirability bias (particularly in the case of negative media variables and internalization of prosocial values). Multi-method assessments (e.g., observational data of mother interactions) are clearly needed to test the role of these socialization agents in emerging adults’ religiosity further. Moreover, alternate close relationships (e.g., fathers and friends) should be considered. Given that the quality of romantic relationships appears to be related to different aspects of emerging adulthood than the qualities of friendship (Barry et al. 2009), scholars also should investigate these alternate attachment relationships beyond the parent–child relationship to determine their role in socializing religious beliefs and practices during this time period. As discussed previously, a larger variety of variables to assess media use and content type, as well as alternate mediators such as goal pursuit and identity development, are worthy of consideration. Lastly, since there are subgroups of emerging adults who are not at all religious, but who are exploring their spiritual beliefs and practices actively, scholars also should explore agents and processes that support spirituality to describe this subgroup (see Barry et al. 2010). Thus, further investigation into young people’s religiosity and spirituality is necessary to understand more fully the high level of self-exploration during this transition to adulthood.

Conclusion

Despite these limitations, the current study adds to our understanding of religious socialization during emerging adulthood. Results supported both direct and indirect paths

to religious faith, with particular emphasis placed on the influences of the mother–child relationships, negative media, and positive media, as well as the partially mediating role of internalization of prosocial values. In the future, scholars should continue to explore the role of mothers and media in greater depth, but also should explore the role of other close relationships (e.g., fathers and romantic partners) on both religious as well as spiritual beliefs and practices, particularly among emerging adults not attending a university. Nevertheless, the findings document the continued role of the mother–child relationship and media use in explaining one aspect of young people’s self-exploration during their transition to adulthood and underscore the role that individuals (i.e., values internalization) play in their own development.

References

- Anand, V. (2007). A study of time management: The correlation between video game usage and academic performance markers. *CyberPsychology & Behavior*, *10*, 552–559. doi:10.1089/cpb.2007.9991.
- Arbuckle, J. L. (2007). *Amos 16.0 user’s guide*. Chicago, IL: SPSS, Amos Development Corporation.
- Arnett, J. J. (1995a). Adolescents’ uses of media for self-socialization. *Journal of Youth and Adolescence*, *24*, 519–533. doi:10.1007/BF01537054.
- Arnett, J. J. (1995b). Broad and narrow socialization: The family in the context of a cultural theory. *Journal of Marriage and Family*, *57*(3), 617–628. doi:10.2307/353917.
- Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York, NY: Oxford University Press.
- Arnett, J. J. (2007). Socialization in emerging adulthood: From the family to the wider world, from socialization to self-socialization. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 208–231). New York, NY: Guilford.
- Arnett, J. J., & Jensen, L. A. (2002). A congregation of one: Individualized religious beliefs among emerging adults. *Journal of Adolescent Research*, *17*, 451–467. doi:10.1177/0743558402175002.
- Astin, A. W., & Astin, H. S. (2003). *Spirituality in college students: Preliminary findings from a national study* (pp. 1–6). Los Angeles, CA: UCLA.
- Barry, C. M., Madsen, S. D., Nelson, L. J., Carroll, J. S., & Badger, S. (2009). Friendship and romantic relationship qualities in emerging adulthood: Differential association with progress on identity development and societal tasks. *Journal of Adult Development*, *16*(4), 209–222. doi:10.1007/s10804-009-9067-x.
- Barry, C. M., Nelson, L. J., Davarya, S., & Urry, S. (2010). Religiosity and spirituality during the transition to adulthood. *International Journal of Behavioral Development*, *34*(4), 311–324. doi:10.1177/0165025409350964.
- Barry, C. M., Padilla-Walker, L. M., Madsen, S. D., & Nelson, L. J. (2008). The impact of maternal relationship quality on emerging adults’ prosocial tendencies: Indirect effects via regulation of prosocial values. *Journal of Youth and Adolescence*, *37*(5), 581–591. doi:10.1007/s10964-007-9238-7.
- Berger, H. A., & Ezzy, D. (2009). Mass media and religious identity: A case study of young witches. *Journal for the Scientific Study of Religion*, *48*(3), 501–514. doi:10.1111/j.1468-5906.2009.01462.x.
- Boyatzis, C. J. (2005). Religious and spiritual development in childhood. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 123–143). New York, NY: Guilford.
- Boyatzis, C. J., Dollahite, D. C., & Marks, L. D. (2006). The family as a context for religious and spiritual development in children and youth. In E. C. Roehlkepartain, P. E. King, L. Wagener, & P. L. Benson (Eds.), *The handbook of spiritual development in childhood and adolescence* (pp. 297–323). Thousand Oaks, CA: Sage.
- Braskamp, L. A. (2008). The religious and spiritual journeys of college students. In D. Jacobsen & R. H. Jacobsen (Eds.), *The American university in a postsecular age* (pp. 117–134). New York, NY: Oxford University Press. doi:10.1177/0165025409350964.
- Brelsford, G. M., & Mahoney, A. (2008). Spiritual disclosure between older adolescents and their mothers. *Journal of Family Psychology*, *22*(1), 62–70. doi:10.1037/0893-3200.22.1.62.
- Brown, J. D. (2006a). Emerging adults in a media-saturated world. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 279–299). Washington, DC: APA. doi:10.1037/11381-012.
- Brown, T. A. (2006b). *Confirmatory factor analysis for applied research*. New York, NY: Guilford.
- Carbery, J., & Buhrmester, D. (1998). Friendship and need fulfillment during three phases of young adulthood. *Journal of Social and Personal Relationships*, *15*(3), 393–409. doi:10.1177/0265407598153005.
- Carroll, J. S., Padilla-Walker, L. M., Nelson, L. J., Olson, C. D., Barry, C. M., & Madsen, S. D. (2008). Generation XXX: Pornography acceptance and use among emerging adults. *Journal of Adolescent Research*, *23*(1), 6–30. doi:10.1177/0743558407306348.
- Deci, E. L., & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. A. Dienstbier (Ed.), *Nebraska symposium on motivation, 1990: Perspectives on motivation* (pp. 237–288). Lincoln, NE: University of Nebraska Press.
- DuBow, E. F., Huesmann, R., & Greenwood, D. (2007). Media and youth socialization: Underlying processes and moderators of effects. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 404–430). New York, NY: Guilford.
- Fowler, J. W. (1981). *Stages of faith*. San Francisco, CA: Harper Collins.
- Fife, J., Adegoke, A., Obafemi, A., McCoy, J., & Brewer, T. (2011). Religious commitment, social support and life satisfaction among college students. *College Student Journal*, *45*(2), 393–400. doi:10.1111/j.2150-1092.2011.00029_36.x.
- Granqvist, P. (2002). Attachment and religiosity in adolescence: Cross-sectional and longitudinal evaluations. *Personality and Social Psychology Bulletin*, *28*(2), 260–270. doi:10.1177/0146167202282011.
- Grolnick, W. S., Deci, E. L., & Ryan, R. M. (1997). Internalization within the family: The self-determination theory perspective. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting and children’s internalization of values: A handbook of contemporary theory* (pp. 135–161). Hoboken, NJ: Wiley.
- Grusec, J. (2002). Parental socialization and children’s acquisition of values. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 5: Practical issues in parenting* (2nd ed., pp. 143–168). Mahwah, NJ: Lawrence Erlbaum.
- Gunnoe, M. L., & Moore, K. A. (2002). Predictors of religiosity among youth aged 17–22: A longitudinal study of the National

- Survey of Children. *Journal for the Scientific Study of Religion*, 41(4), 613–622. doi:10.1111/1468-5906.00141.
- Hardy, S. A., Padilla-Walker, L. M., & Carlo, G. (2008). Parenting dimensions and adolescents' internalisation of moral values. *Journal of Moral Education*, 37(2), 205–233. doi:10.1080/03057240802009512.
- Hill, J. P. (2009). Higher education as moral community: Institutional influences on religious participation during college. *Journal for the Scientific Study of Religion*, 48(3), 515–534. doi:10.1111/j.1468-5906.2009.01463.x.
- Jansen, K. L., Motley, R., & Hovey, J. (2010). Anxiety, depression and students' religiosity. *Mental Health, Religion & Culture*, 13(3), 267–271. doi:10.1080/13674670903352837.
- Kirkpatrick, L. A., & Shaver, P. R. (1990). Attachment theory and religion: Childhood attachments, religious beliefs, and conversion. *Journal for the Scientific Study of Religion*, 29(3), 315–334. doi:10.2307/1387805.
- Koenig, L. B., McGue, M., & Iacono, W. G. (2008). Stability and change in religiousness during emerging adulthood. *Developmental Psychology*, 44(2), 532–543. doi:10.1037/0012-1649.44.2.532.
- Lefkowitz, E. S. (2005). "Things have gotten better:" Developmental changes among emerging adults after the transition to university. *Journal of Adolescent Research*, 20, 40–63.
- Larson, R., & Richards, M. (1991). Daily companionship in late childhood and early adolescence: Changing developmental contexts. *Child Development*, 62(2), 284–300. doi:10.2307/1131003.
- Lewis, C. A., Shevlin, M., McGuckin, C., & Navrtil, M. (2001). The Santa Clara strength of religious faith questionnaire: Confirmatory factor analysis. *Pastoral Psychology*, 49(5), 379–384. doi:10.1023/A:1010370728546.
- Miller, W. R., & Thoresen, C. E. (2003). Spirituality, religion, and health: An emerging research field. *American Psychologist*, 58(1), 24–35. doi:10.1037/0003-066X.58.1.24.
- Nelson, L. J., Padilla-Walker, L. M., & Carroll, J. (2010). "I believe it is wrong but I still do it:" A comparison of religious young men who do versus do not use pornography. *Psychology of Religion and Spirituality*, 2, 136–147. doi:10.1037/a0019127.
- Nelson, L. J., Padilla-Walker, L. M., Carroll, J. S., Madsen, S. D., Barry, C. M., & Badger, S. (2007). "If you want me to treat you like an adult, start acting like one!" Comparing the criteria for adulthood among emerging adults and their parents. *Journal of Family Psychology*, 21(4), 665–674. doi:10.1037/0893-3200.21.4.665.
- O'Connor, T. P., Hoge, D. R., & Alexander, E. (2002). The relative influence of youth and adult experiences on personal spirituality and church involvement. *Journal for the Scientific Study of Religion*, 41, 723–732. doi:10.1111/1468-5906.00157.
- Osgood, D. W., Foster, E. M., Flanagan, C., & Ruth, G. R. (2005). *On your own without a net: The transition to adulthood for vulnerable populations*. Chicago, IL: The University of Chicago Press.
- Padilla-Walker, L. M., Barry, C. M., Carroll, J. S., Madsen, S. D., & Nelson, L. J. (2008a). Looking on the bright side: The role of identity status and gender on positive orientations during emerging adulthood. *Journal of Adolescence*, 31(4), 451–467. doi:10.1016/j.adolescence.2007.09.001.
- Padilla-Walker, L. M., & Carlo, G. (2007). Personal values as a mediator between parent and peer expectations and adolescent behaviors. *Journal of Family Psychology*, 21(3), 538–541. doi:10.1037/0893-3200.21.3.538.
- Padilla-Walker, L. M., Nelson, L. J., Carroll, J. S., & Jensen, A. C. (2010). More than just a game: Video game and internet use during emerging adulthood. *Journal of Youth and Adolescence*, 39(2), 103–113. doi:10.1007/s10964-008-9390-8.
- Padilla-Walker, L. M., Nelson, L. J., Madsen, S. D., & Barry, C. M. (2008b). The role of perceived parental knowledge on emerging adults' risk behaviors. *Journal of Youth and Adolescence*, 37, 847–859. doi:10.1007/s10964-007-9268-1.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717–731. doi:10.3758/BF03206553.
- Roberts, D. F., Foehr, U. G., Rideout, V. J., & Brodie, M. (2003). *Kids and media in America*. New York, NY: Cambridge University Press.
- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, 57(5), 749–761. doi:10.1037//0022-3514.57.5.749.
- Sherkat, D. E., & Ellison, C. G. (1997). The cognitive structure of a moral crusade: Conservative Protestantism and opposition to pornography. *Social Forces*, 75(3), 957–982. doi:10.1093/sf/75.3.957.
- Smith, C., & Snell, P. (2009). *Souls in transition: The religious and spiritual lives of emerging adults*. New York, NY: Oxford University Press. doi:10.1093/acprof:oso/9780195371796.003.0010.
- Spilka, B., Hood, R. W., Jr., Hunsberger, B., & Gorsuch, R. (2003). *The psychology of religion: An empirical approach* (3rd ed.). New York, NY: Guilford.
- Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in Cognitive Sciences*, 9(2), 69–74. doi:10.1016.
- Steinberg, L., & Silk, J. S. (2002). Parenting adolescents. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 1: Children and parenting* (2nd ed., pp. 103–133). Mahwah, NJ: Erlbaum.
- Stoppa, T. M., & Lefkowitz, E. S. (2010). Longitudinal changes in religiosity among emerging adult college students. *Journal of Research on Adolescence*, 20(1), 23–38. doi:10.1111/j.1532-7795.2009.00630.x.
- Urberg, K. A. (1999). Introduction: Some thoughts about studying the influence of peers on children and adolescents. *Merrill-Palmer Quarterly*, 45(1), 1–12.
- Wells, G. M. (2010). The effect of religiosity and campus alcohol culture and collegiate alcohol consumption. *Journal of American College Health*, 58(4), 295–304. doi:10.1080/07448480903380250.
- Wilcox, W. B. (2002). Religion, convention, and paternal involvement. *Journal of Marriage and Family*, 64(3), 780–792. doi:10.1111/j.1741-3737.2002.00780.x.