#### **EMPIRICAL RESEARCH**



# Maternal and Family Correlates of Intrinsic Religiosity Profiles Among Low-Income Urban African American Adolescents

Wendy Kliewer • • Melissa Washington-Nortey • Joana Salifu Yendork • David W. Sosnowski • Anna W. Wright • Kristina McGuire

Received: 13 May 2019 / Accepted: 25 July 2019 / Published online: 6 August 2019 © Springer Science+Business Media, LLC, part of Springer Nature 2019

#### **Abstract**

National trends show that African American adolescents, relative to most other demographic groups, are more religious, and show fewer declines in religiosity, despite drastic decreases in religiosity among youth over the past 25 years. These broad findings are limiting because they fail to acknowledge religious heterogeneity among African American teens. Further, there are few empirical investigations of the transmission of religiosity within African American families. Building on a recent study that identified three distinctive profiles of intrinsic religiosity in a sample of low-income African American adolescents who were followed over four years (N = 326; Youth  $M_{\rm age} = 12.1$ , SD = 1.6 years; 54% female), the present study examined contributions of maternal religiosity and family emotional climate in distinguishing these profiles. Univariate analyses revealed that maternal religious attendance and commitment, adolescents' felt acceptance from mothers and the emotional climate in the home differentiated youth who retained high levels of intrinsic religiosity (41%) from youth who declined in religiosity (37%) or who had low levels of religiosity (22%). Multivariate analyses showed that after accounting for demographic covariates, felt acceptance from mothers differentiated adolescents with high versus low levels of religiosity; both maternal religious attendance and felt acceptance from mothers distinguished adolescents who retained high levels of religiosity from youth who declined in religiosity. Implications for family dynamics in African American adolescent religious development and well-being are discussed.

Keywords African American · Intrinsic religiosity · Parenting · Family climate

#### Introduction

National trends show that African American adolescents, relative to most other demographic groups, are currently more religious, and show relatively fewer declines, despite drastic decreases in religiosity among youth in the United States over the past 25 years (Twenge 2017; Twenge et al. 2015). Although important to recognize given the emphasis on religiosity within the African American population (Taylor and Chatters 2010), these broad findings may be

**Supplementary information** The online version of this article (https://doi.org/10.1007/s10964-019-01095-y) contains supplementary material, which is available to authorized users.

- Wendy Kliewer wkliewer@vcu.edu
- Virginia Commonwealth University, Richmond, VA, USA
- <sup>2</sup> University of Ghana, Accra, Ghana

limiting because they fail to acknowledge diverse patterns of religiosity among African American adolescents. This omission is critical because of the known protective effects religiosity confers on the mental health and psychological and social well-being of African American youth (Butler-Barnes et al. 2017; Cotton et al. 2006; Lee and Neblett 2019; Mattis and Mattis 2011; Wong et al. 2006). In a recently published paper (Wright et al. 2018), three different profiles of intrinsic religiosity were identified in a lowincome African American adolescent sample, attesting to religious heterogeneity. Differences in well-being, specifically goal-directedness, coping, emotion management, and life satisfaction, across the religiosity profiles were reported in that study, however parent and family correlates of these profiles were not examined. Given the importance of family in African American culture (Belgrave and Alison 2018), the principal role of families in shaping the religious development of their children (Flor and Knapp 2001; Mattis 2005), and the fact that there have been few empirical investigations of the transmission of religiosity within



African American families (Gutierrez et al. 2014), the current study focused on associations of maternal and family factors with these previously identified profiles of religiosity in this low-income African American adolescent sample.

Although adolescents are given increasing autonomy as they age (Smetana 2000), parents still exert a great deal of influence on adolescents, particularly in areas of values. With respect to adolescent religiosity, parents may influence their children through a number of mechanisms including modeling, the religious activities and practices in which they engage, and through the family context, including the general environment of the home and the quality of the parentadolescent relationship (Jennings et al. 2014). The present study builds on two lines of work, both of which touch on the mechanisms of modeling and family context: (1) research focused on parent and family influences on African American adolescents' religiosity generally, and (2) research focused on the benefits of religiosity for low-income, urban African American youth. The first line of work cuts across African American families at all socioeconomic levels, and taps into cultural values important for many African Americans (Taylor and Chatters 2010). The second line of work specifically tests the potential protective effects of religious involvement for low-income African American youth.

As noted by Taylor and Chatters (2010), a majority of African Americans report that religion is critical to their lives. African Americans also emphasize interdependence and connectedness among family members, and care and concern for all members of the family, including extended family, strong work ethics, reciprocity, restraint, and reverence or respect for authority (Belgrave and Alison 2018). Although sparse, several researchers have conducted empirical investigations that reflect this cultural focus or have examined linkages between African American parents' religiosity—beliefs, practices, or a combination of the two—and adolescents' religiosity.

In a study of 166 early adolescents and their mothers from diverse socioeconomic backgrounds, almost half of whom were African American, Laird et al. (2011) assessed maternal and adolescent views of the personal importance of religion and the frequency of their attendance at religious services. They also linked these constructs to adolescent outcomes. Maternal and adolescent importance and attendance were highly correlated. The importance adolescents ascribed to religion and their religious attendance was associated with higher levels of self-control, which in turn was associated with lower levels of antisocial and rulebreaking behavior. In a similar study with 154 African American Christian middle-class adolescent-parent dyads (adolescents were ages 12–17), Butler-Barnes et al. (2017) examined associations between parents' religious socialization—assessed with a 5-item measure encompassing both religious beliefs and practices—and adolescents' selfreported relationship with God, communication with God, and psychological well-being. Although parents' religious socialization was not associated with adolescents' relationship with God or communication with God in correlational analyses, religious socialization interacted with adolescents' reported relationship with God and communication with God to affect psychological well-being. This was particularly evident for the model with communication with God. Communication with God was positively associated with psychological well-being, but having parents with moderate to high levels of religious socialization enhanced this effect. Finally, Halgunseth et al. (2016) interviewed African American adolescents and parents from 130 two-parent households in a study that explicitly examined the roles of both mothers' and fathers' religiosity on African American adolescents' religious beliefs and practices. Maternal religious beliefs and practices (e.g., time spent in prayer, attending services) were associated with the beliefs and practices of both sons and daughters. However, fathers' beliefs were only associated with sons' beliefs; fathers' practices were linked to the practices of both sons and daughters, but were stronger for daughters than for sons. The above empirical studies illustrate that African American parents from diverse socioeconomic backgrounds communicate their religious beliefs and practices to their children. Further, evidence suggests that this communication affects their offspring, either by shaping the religious beliefs and practices of children in the home, altering the family environment, directly affecting adolescents' behavior, or some combination of these mechanisms.

In addition to research that emphasizes the relevance of religion to African Americans across the socioeconomic spectrum, the current study builds on a second line of work focused on the benefits of religiosity for low-income, urban African American youth. This line of research acknowledges the heightened levels of stress to which low-income, urban, African American youth are exposed, especially compared to non-minority youth, and specifically tests the potential protective effects of religious involvement for these youth. A limited number of empirical studies have tested the protective function of religious constructs in samples of low-income, urban, African American adolescents. Among them, Grant et al. (2000) tested the protective effects of religious involvement in the relation between life stressors and internalizing symptoms in a sample of 224 low-income African American middle school youth. Religious involvement mitigated the impact of life stressors on symptoms for girls, but not boys. In a second study, Butler-Barnes et al. (2011) examined religious coping as one of two protective factors in the relation between exposure to community violence and achievement motivation beliefs in a sample of 380 low-income African American high school students who were at risk for academic failure. Butler-



Barnes et al. found that in their sample of low-income youth, religious coping had both main (direct) effects and protective effects. That is, youth who reported relying on their faith to cope in times of difficulty had higher overall levels of achievement motivation beliefs. Additionally, for males, but not females, religious coping helped to mitigate the negative impacts of exposure to community violence on achievement motivation. These studies, while limited, illustrate the potential promotive and protective effects of adolescent religiosity for African American youth who are at risk for high levels of exposure to stressors. A limitation of the extant literature, however, is the lack of empirical data on associations between parent religiosity and adolescent religiosity among low-income, urban African American samples.

## The Current Study

The present study addressed this gap in the literature, building on work that described three distinctive profiles of intrinsic religiosity during adolescence in a sample of low-income, urban, predominantly African American youth (Wright et al. 2018). Operating from a socialization perspective (Jennings et al. 2014), the present study examined multiple maternal and family influences on adolescent intrinsic religiosity, both for their independent and unique contributions. Intrinsic religiosity, in contrast to extrinsic religiosity, refers to religious beliefs ("I have faith in a power greater than me") and private religious practices (e.g. prayer); these beliefs and practices generally demonstrate a commitment or devotion to the divine (Levin et al. 1995), and are not as overt or observable as extrinsic religiosity. It was anticipated that mothers of youth whose intrinsic religiosity remained high would have higher levels of religious attendance, religious coping, and religious commitment than mothers of youth whose religiosity was low and remained low or mothers of youth whose religiosity declined over the study period. It also was anticipated that youth high in religiosity would report higher levels of felt acceptance by mothers than youth in the other two profiles. In terms of emotional climate, it was anticipated that mothers of youth high in religiosity would report a more favorable emotional climate. That is, lower hostility, higher positive emotions at home, and lower negative emotions at home, than mothers of youth whose religiosity declined or whose religiosity was low.

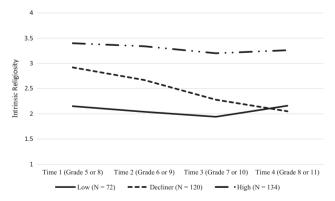
## Method

## **Participants**

Participants included 326 African American adolescents and their maternal caregivers who participated in a larger

four-year longitudinal study (with annual assessments) on stress, coping, and adjustment, which took place in a midsized city in the mid-Atlantic region of the U.S. At baseline, 54% of the adolescents were female ( $M_{age} = 12.1$ , SD = 1.6 years). Most (85.3%) of the maternal caregivers were the youth participants' biological mothers, but grandmothers (7.7%), other female relatives (4.4%), adopted mothers (2.1%), stepmothers (0.6%), and fathers' girlfriends (0.3%) also were represented in the sample. Most (87.7%) of the youth reported they lived with their biological mother most of the time; only 20.1% reported that they lived with their biological father most of the time. Family structure varied: 42.5% of caregivers never married, 31.7% were married or cohabitating, 23.7% were separated or divorced, and 2.1% were widowed. Socioeconomic status (SES) also varied, but most of the sample came from low SES backgrounds. Median weekly household income at time 1 was \$301-400, with 17.6% reporting household earnings of \$200 or less per week. The most common reports on maternal education level were no high school diploma (23.1%), high school diploma or General Education Diploma (GED) (31.2%) or some college but no degree (24.4%). Thirteen percent of the maternal caregivers had an Associate's or Vocational degree; only 8.3% of maternal caregivers had a bachelor's degree or higher.

In the previous study (Wright et al. 2018) youth had been classified, using Latent Class Growth Analysis (LCGA), into three profiles based on their pattern of intrinsic religiosity over the four study years. Figure 1 presents these profiles for the African American youth in the current study, which represented 91% of the original sample. These profiles included groups with: (1) low levels of intrinsic religiosity that changed little over the study period (n = 72, 22.1%), (2) levels of intrinsic religiosity that began moderately high but declined significantly over the study period (n = 120, 36.8%), and (3) levels of intrinsic religiosity that began high and remained high (n = 134, 41.1%). Only



**Fig. 1** Results from latent class growth analyses (LCGA) for African American adolescents, collapsed across grade level. This graph displays changes in means levels of intrinsic religiosity across the study period for the three identified profiles



participants identifying as African American were included in the present study in order to evaluate the contributions of maternal and family factors to African American adolescent intrinsic religiosity. Data were collected between December 27, 2004 and June 17, 2009.

#### **Procedure**

The Institutional Review Board at the first author's University approved all study procedures for the larger investigation. Families were recruited through community events and agencies, by participant referral, and through flyers distributed in low-income neighborhoods. To be eligible, participants had to be the female caregiver of a 5th or 8th grade child during the first time point of data collection, and speak English. Sixty-three percent of the eligible families who were approached enrolled in the study. This figure is better than those of many community-based studies for recruiting participants from disadvantaged neighborhoods (Luthar and Goldstein 2004; Tingen et al. 2013). Caregivers provided written consent and adolescents provided written assent for participation in the study. Interviews were conducted face to-face with visual aids in families' homes, unless otherwise requested by the family. Two trained research team members interviewed the caregiver and adolescent separately in different rooms. The research team was diverse and included both white and African American interviewers and male and female interviewers. Comparisons to assess for systematic biases by interviewer race or gender revealed none (all p's > 0.05). Interviews lasted approximately 2.5 h and families were compensated \$50 in Wal-Mart gift cards for each time of participation.

#### Measures

## **Demographics**

Demographics assessed in the study and used as covariates in the analyses included adolescent gender (coded 0 =female, 1 = male) and grade level, both reported by the adolescent. Maternal education (highest grade completed) and weekly (after tax) household income from all sources were completed by the maternal caregiver. Response options for maternal education included: no diploma; high school diploma; GED; some college, no degree; associate's degree; vocational degree (e.g., beauty school, electrician, mechanical); bachelor's degree; master's degree; and advanced degree (e.g., PhD, JD, MD). Response options for weekly household income included: less than \$100 per week; \$101-200 per week; \$201-300 per week; \$301-400 per week; \$401-500 per week; \$501-600 per week; \$601-700 per week; \$701-800 per week; \$801-900 per week; and \$901 or more per week.



At each time point, caregivers responded to the question "How often do you attend religious services?" using the following response scale: 0 (never), 1 (rarely), 2 (on holidays), 3 (several times a year), 4 (about once a month), 5 (more than once a month), 6 (about once a week), or 7 (more than once a week).

## Maternal caregiver religious commitment

Religious commitment was assessed at each time point with the 10-item Religious Commitment Inventory-10 (RCI-10; Worthington et al. 2003) which is appropriate for individuals in a variety of faiths. A sample item is "I spend time trying to grow in understanding of my faith." Caregivers rated each item on a scale ranging from 1 (not at all true of me) to 5 (totally true of me). Worthington et al. (2003) report good reliability and validity. We did not collect data on the specific faiths with which individuals were affiliated. Cronbach alphas in the present study ranged from 0.95 to 0.96 across time points.

## Maternal caregiver religious coping

Coping by turning to religion was assessed at each time point with a 4-item subscale from the COPE (Carver et al. 1989). A sample item is "I try to find comfort in my religion." Caregivers responded to items using a scale ranging from 1 (*I don't do this at all*) to 4 (*I do this a lot*). Carver et al. (1989) provide extensive reliability and validity information on the COPE. Cronbach alphas in the present study ranged from 0.84 to 0.92 across time points.

## Maternal hostility

Maternal hostility was self-reported at each time point with the five-item subscale from the Brief Symptom Inventory (BSI; Derogatis and Melisaratos 1983). A sample item is "Feeling easily annoyed or irritated." Items were rated on a 5-point scale from 1 (not at all) to 5 (extremely) with higher scale scores indicating higher symptom levels. The BSI, a brief form of the Symptom Checklist (SCL-90), is a valid and reliable measure of symptomatology (Derogatis and Melisaratos 1983). Cronbach alphas in the present study ranged from 0.74 to 0.80 across time points.

## Felt acceptance from maternal caregiver

At each time point adolescents reported on the extent to which they felt accepted by their maternal caregiver using the 20-item parental acceptance-rejection subscale of the Child Report of Parent Behavior Inventory (CRPBI;



Schaefer 1965). A sample item on the CRPBI is "Understands your problems and worries." The CRPBI has good discriminate validity (Schaefer 1965), distinguishing between delinquent and non-delinquent youth. Using a 3-point Likert scale, adolescents rated the extent to which they felt the statements were representative of their maternal caregiver/mother, from 1 (*like my mother*) to 3 (*not like my mother*). Items were reverse coded so that higher scores indicated greater felt acceptance. Cronbach alphas in the present study ranged from 0.86 to 0.91 across time points.

#### Family emotional climate

The 10-item negative dominant and the 10-item positive dominant subscales of the Family Expressiveness Questionnaire (FEQ; Halberstadt 1986), reported by maternal caregivers at each time point, were used to assess family emotional climate. Items represent a range of negative and positive emotions and behavioral actions typical of many families. A sample item from the positive dominant subscale is "Expressing deep affection or love for someone" and a sample item from the negative dominant subscale is "Quarreling with a family member." Items are rated on a 9point scale ranging from 1 (not at all frequently in my family) to 9 (very frequently in my family). Caregivers were instructed to complete the measure with respect to the family with whom they currently lived, including themselves, their spouses/partners (if applicable), children, and other individuals living in the household. Halberstadt (1986) reports good reliability and validity for the measure. Cronbach alphas in the present study ranged from 0.81 to 0.84 for positive emotional climate and 0.78 to 0.83 for negative emotional climate across time points.

## **Data Analyses**

An initial series of repeated measures analyses of variance were conducted for each predictor (i.e., maternal caregiver religious attendance, religious commitment, and religious coping; maternal hostility; felt acceptance from caregiver, positive emotional climate in the home, and negative emotional climate in the home) to determine if there were any effects of time, or if the construct could be collapsed across time. These models were run with and without imputing data to determine how imputation might affect the results. Profile membership was the predictor in these models, and adolescent gender, grade level, household income, and maternal education were included as covariates. There were no significant effects of time, no significant interactions of time with profile, nor any substantive differences between the models run with and without imputed data for any of the seven predictors. Based on these analyses, summary scores were computed for each of the seven predictor variables that averaged data across the four study time points using all available data. See supplemental Table 1 for a summary of these analyses.

Descriptive analyses were conducted first, including comparisons of means of the predictor variables across each profile, and inter-correlations among predictors. Multivariate analyses were conducted next, in order to evaluate the unique contributions of maternal religious constructs and emotional climate variables to intrinsic religiosity profile membership, after accounting for demographic covariates. Two sets of logistic regression analyses were conducted, with three models in each set. The first model included demographic covariates (adolescent gender, grade level, household income, and maternal education). The second model included demographic covariates and maternal religious constructs (attendance, commitment, and coping). The third model added family climate variables (felt acceptance from parents, parental hostility, positive climate, negative climate). This approach enabled a comparison of the relative contribution of maternal religious constructs over and above demographic covariates, and of family context variables over and above demographics and maternal religious constructs. In the first set of analyses, youth in the low religiosity profile (coded 0) were compared with youth in the high religiosity profile (coded 1). In the second set of analyses, youth in the decliner religiosity profile (coded 0) were compared with youth in the high religiosity profile (coded 1).

#### Results

## **Attrition Analyses**

Seventy percent of the sample was retained across the four study time points. Adolescents who had data at all four time points (N = 228) were compared with adolescents who were missing data at Time 4 (N = 98) on adolescent gender and grade level using Chi square analyses and on maternal education, household income, maternal religious attendance, commitment, and coping, maternal hostility, felt acceptance from parents, and positive and negative emotional climate in the home at Time 1 using independent samples t-tests. Chi square analyses indicated that adolescents in middle school (76%) were more likely to remain in the study than adolescents in high school (64%)  $[X^2](1) =$ 5.51, p = 0.02]; there were no differences by adolescent gender  $[X^2(1) = 3.13, p = 0.09]$ . There were no differences at Time 1 on maternal education, t(322) = -0.93, p = 0.36, household income, t(321) = 0.74, p = 0.46, maternal religious attendance, t(322) = -0.80, p = 0.43, maternal



religious commitment, t(322) = -0.29, p = 0.77, maternal religious coping, t(319) = -0.21, p = 0.83, maternal hostility, t(322) = 0.03, p = 0.98, positive emotional family climate, t(323) = -1.67, p = 0.10, negative emotional family climate, t(323) = 0, p = 1.00, or felt acceptance from parents, t(320) = 0.69, p = 0.40.

## **Descriptive Information on the Study Constructs**

Table 1 presents descriptive information on the religious and emotional climate predictor variables by religiosity profile. There was a significant mean group difference on maternal religious attendance, F(2, 323) = 10.63, p < 0.001. Youth with low levels of religiosity (p = 0.001), and youth who declined in their religiosity (p < 0.001) differed from youth with high levels of religiosity. There also was a significant mean group difference on maternal religious commitment, F(2, 323) = 9.54, p < 0.001. In this case, youth with low levels of religiosity differed from youth who declined (p = 0.007) or who had high levels (p < 0.001) of religiosity. Mean group differences were significant for parental acceptance, F(2, 323) = 11.97, p < 0.001, and the patterns mirrored those for religious attendance: youth with low (p < 0.001) or declining (p < 0.001) levels of religiosity differed from youth with high levels of religiosity. Mean group differences were observed for both a positive, F(2,323) = 3.69, p = 0.026, and negative F(2, 323) = 6.12, p = 0.002 home emotional climate. For a positive home emotional climate, differences were observed been youth with low and high levels of religiosity (p = 0.007); for a negative home emotional climate, differences were observed between youth with declining levels and youth with high levels of religiosity (p = 0.001). There were no significant mean group differences on parental religious coping, F(2,

323) = 2.74, p = 0.066, or parental hostility, F(2, 323) = 2.81, p = 0.062. Table 2 presents correlations among the predictor variables in the study. The predictors were uncorrelated with adolescent gender (not shown), and only felt acceptance from mothers was correlated with grade level, r = -0.15, p = 0.008, indicating that younger adolescents felt more accepted. Maternal education was significantly positively correlated with religious attendance (r = 0.28, p < 0.001), religious commitment (r = 0.19, p = 0.001), religious coping (r = 0.13, p = 0.023), and a positive emotional climate in the home (r = 0.14, p = 0.012). Household income was significantly positively correlated with religious attendance (r = 0.17, p = 0.002) and significantly negatively associated with maternal hostility (r = -0.13, p = 0.025).

## **Multivariate Analyses**

Table 3 presents the results of the logistic regression models predicting membership in low versus high religiosity profiles from demographic, maternal religiosity, and family climate variables. As seen in Table 3, in Model 1, both higher maternal education level and lower grade level were associated with membership in the high versus low religiosity profile. In Model 2, grade level remained significant, and none of the maternal religious constructs was significant. In Model 3, felt acceptance from mothers, in addition to grade level were uniquely associated with membership in the high versus low religiosity profile.

Table 4 presents the parallel results for the models comparing membership in high versus decliner religiosity profiles from demographic, maternal religiosity, and family climate variables. As seen in the table, in Model 1, higher maternal education, lower grade level, and being female

Table 1 Descriptive information on study predictors by intrinsic religiosity profile

		low level ity $(n = 7)$	s of intrinsic 2)		levels of	intrinsic ed $(n = 120)$		high leve ity $(n = 1)$	ls of intrinsic 34)
Variables	$\overline{M}$	SD	95%CI of <i>M</i>	M	SD	95%CI of <i>M</i>	$\overline{M}$	SD	95%CI of <i>M</i>
Maternal religious attendance <sup>a</sup>	3.72	2.03	3.24-4.20	4.12	1.99	3.76-4.48	4.96	2.00	4.62-5.31
Maternal religious commitment <sup>a</sup>	31.66	10.38	29.22-34.10	35.63	9.45	33.92-37.34	37.97	10.00	36.26-39.68
Maternal religious coping <sup>a</sup>	13.82	2.10	13.33-14.31	14.10	4.10 2.18 13.71–14.50			2.03	14.16-14.86
Maternal hostility <sup>a</sup>	8.04	2.88	7.37-8.72	8.32	2.94	7.79-8.85	7.53	2.34	7.13-7.93
Felt acceptance from mother <sup>b</sup>	48.44	6.62	46.87-50.01	48.99	5.47	48.00-49.98	51.92	5.42	50.99-52.84
Positive emotional home climate <sup>a</sup>	66.99	11.26	64.34-69.63	69.93	10.33	68.06-71.79	69.84	10.92	68.65-71.03
Negative emotional home climate <sup>a</sup>	44.80	11.53	42.09-47.51	46.89	11.54	44.80-48.98	41.56	13.05	39.33-43.79

Response scale for maternal religious attendance included: 0 (never), 1 (rarely), 2 (on holidays), 3 (several times a year), 4 (about once a month), 5 (more than once a month), 6 (about once a week), and 7 (more than once a week)

<sup>&</sup>lt;sup>b</sup>Measure completed by adolescent



<sup>&</sup>lt;sup>a</sup>Measures completed by maternal caregiver

**Table 2** Correlations among the predictors variables in the study

Variables	1	2	3	4	5	6	7
1 Religious attendance <sup>a</sup>		0.80***	0.43***	-0.18**	0.07	0.20**	-0.12*
2 Religious commitment <sup>a</sup>			0.60***	-0.15**	0.09	0.26***	-0.09
3 Religious coping <sup>a</sup>				0.02	0.12*	0.18***	0.02
4 Maternal hostility <sup>a</sup>					-0.07	-0.14*	0.54***
5 Felt acceptance from mother <sup>b</sup>						0.20***	-0.15**
6 Positive emotional home environment <sup>a</sup>							-0.15**
7 Negative emotional home environment <sup>a</sup>							

Response scale for maternal religious attendance included: 0 (never), 1 (rarely), 2 (on holidays), 3 (several times a year), 4 (about once a month), 5 (more than once a month), 6 (about once a week), and 7 (more than once a week). N = 326

were associated with membership in the high religiosity profile versus the decliner profile. In Model 2, adolescent gender and grade level remained significant, and higher maternal attendance at religious services was associated with membership in the high versus decliner religiosity profile. In Model 3, adolescent gender, grade level, maternal religious attendance, and felt acceptance from mothers were uniquely associated with membership in the high versus decliner religious profile.

In a final exploratory analysis (not shown) we repeated the above analyses, comparing membership in the decliner religiosity and low religiosity profiles. The only significant term in the model that differentiated these two profiles was maternal religious commitment (Unstd B = 0.085, SE B = 0.031, OR = 1.089 95%CI [1.024–1.157], p = 0.006).

## **Sensitivity Analyses**

As noted in the Data Analyses section, the first set of analyses for the manuscript included repeated measures ANCOVAs in order to determine if there were any significant changes in any of the seven predictor variables over the four time points of the study (a time effect), or if religiosity profile membership interacted with time (a change in a predictor differed for one religiosity profile versus another). These analyses were run both with and without imputed data to see how data imputation affected the results. There were no significant effects of time, no significant interactions of time with profile, nor any substantive differences between the models run with and without imputed data for any of the seven predictors. Therefore, each of the seven predictor variables were collapsed across time using all of the available data.

## **Discussion**

As a group, African American adolescents are more religious than their peers, and have experienced fewer declines in religiosity despite a historic rise in secularism in American culture over the past 25 years. Yet, broad characterizations of this demographic fail to acknowledge the diverse patterns of religiosity among African American youth. Further, there is a paucity of empirical investigations focused on the transmission of religiosity within African American families. A recent study with low-income African American teens identified three distinct profiles of intrinsic religiosity; operating from a socialization perspective, the present investigation addressed gaps in the literature by examining multiple maternal and family influences as contributors to religious profiles identified among adolescents in the previous study. Both the independent and unique contributions of these influences were assessed.

Univariate analyses revealed that the modeling variables—specifically maternal religious attendance and religious commitment—as well as family climate variables—specifically felt acceptance from mothers and the emotional climate of the home—differed across the three adolescent religiosity profiles, but in unique ways. At the univariate level, maternal religious attendance and maternal acceptance appeared to be important in differentiating both the low and declining religiosity profiles from the high religiosity profile. In contrast, maternal religious commitment appeared to matter in differentiating the low religiosity profile from the declining and high religiosity profiles. Family climate operated in different ways, depending on whether the climate was positive or negative. A positive emotional home environment distinguished low versus high



p < 0.05; p < 0.01; p < 0.01

<sup>&</sup>lt;sup>a</sup>Measures completed by maternal caregiver

bMeasure completed by adolescent

Table 3 Summary of logistic regression models predicting membership in high versus low intrinsic religiosity profiles from demographic, maternal religiosity, and family climate variables

	Model 1				Model 2				Model 3			
Variable	В	S.E. of $B$ OR	OR	95%CI for OR	В	S.E. of B	OR	95%CI for OR	В	S.E. of $B$	OR	95%CI for OR
Maternal education	0.187	0.187 0.088	1.206	1.016–1.432	0.142	0.093	1.152	0.961–1.382	0.150	0.097	1.161	0.961–1.404
Household income	0.041	0.062	1.042	0.922-1.178	900.0	0.068	1.006	0.881-1.148	0.004	0.007	1.004	0.876-1.152
Adolescent gender	-0.100	0.325	0.758	0.478-1.711	-0.186	0.340	0.830	0.426-1.617	-0.194	0.354	0.824	0.412-1.647
Grade level	-1.520	0.329	0.219	0.115-0.416	-1.582	0.345	0.206	0.105 - 0.404	-1.475	0.358	0.229	0.113 - 0.462
Religious attendance					0.097	0.142	1.102	0.834-1.456	0.104	0.146	1.110	0.834-1.476
Religious commit.					0.050	0.033	1.051	0.986-1.121	0.038	0.035	1.038	0.970-1.112
Religious coping					-0.063	0.106	0.939	0.763-1.157	-0.085	0.113	0.919	0.737-1.145
Maternal hostility									-0.037	0.081	0.964	0.823-1.129
Positive environment									0.018	0.016	1.018	0.986-1.050
Negative environment									-0.008	0.016	0.992	0.961 - 1.024
Maternal acceptance									0.075	0.030	1.078	1.017-1.142

Intrinsic religiosity profiles were coded 0 = low; 1 = high. Odds ratios significant at p < 0.05 are in bold. Adolescent gender was coded 0 = female, 1 = male. Adolescent gender, grade level, and maternal acceptance were reported by adolescents; the remaining measures were reported by maternal caregivers

B unstandardized beta weight, SE standard error, OR odds ratio, CI confidence interval

Table 4 Summary of logistic regression models predicting membership in high versus decliner intrinsic religiosity profiles from demographic, maternal religiosity, and family climate variables

	Model 1				Model 2				Model 3			
Variable	В	S.E. of $B$ OR	OR	95%CI for OR	В	S.E. of <i>B</i>	OR	95%CI for OR	В	S.E. of <i>B</i>	OR	95%CI for OR
Maternal education	0.175	0.073	1.191	1.033-1.374	0.100	0.077	1.105	0.950-1.285	0.104	0.081	1.109	0.946–1.301
Household income	0.039	0.056	1.040	0.933-1.160	0.028	0.057	1.028	0.919-1.151	0.022	0.061	1.022	0.907-1.151
Adolescent gender	-0.611	0.282	0.543	0.313-0.943	-0.747	0.294	0.474	0.266-0.844	-0.771	0.312	0.463	0.251 - 0.852
Grade level	-1.50	0.287	0.223	0.127 - 0.392	-1.659	0.304	0.190	0.105-0.345	-1.690	0.322	0.184	0.098-0.347
Religious attendance					0.338	0.131	1.403	1.085-1.814	0.340	0.139	1.405	1.070 - 1.846
Religious commit.					-0.034	0.029	0.966	0.913-1.023	-0.038	0.031	0.963	0.906 - 1.024
Religious coping					0.105	0.185	1.110	0.940-1.311	0.116	0.092	1.123	0.938-1.345
Maternal hostility									-0.043	0.072	0.958	0.831-1.104
Positive environment									-0.017	0.015	0.983	0.954-1.013
Negative environment									-0.028	0.014	0.973	0.946 - 1.001
Maternal acceptance									0.097	0.028	1.102	1.043-1.164

Intrinsic religiosity profiles were coded 0 = decliner; 1 = high. Odds ratios significant at p < 0.05 are in bold. Adolescent gender was coded 0 = female, 1 = male. Adolescent gender, grade level, and maternal acceptance were reported by adolescents; the remaining measures were reported by maternal caregiver

B unstandardized beta weight, SE standard error, OR odds ratio, CI confidence interval



religiosity profiles, while a negative emotional home environment distinguished decliner versus high religiosity profiles. These findings highlight the importance of taking a multi-faceted approach when studying the transmission of religiosity within African American families (Gutierrez et al. 2014). These findings also are consistent with reports showing that maternal religiosity is crucial to the religious socialization of their children (Bengtson et al. 2008; Guttierez et al. 2014). In an intergenerational study of religious socialization, Gutierrez et al. (2014) found that family religious socialization predicted adult self-reports of religious importance, commitment and, spirituality beyond the effects of control variables such as age, gender, education, and household income. Furthermore, they found that maternal religious influence contributed the greatest proportion of the total explained variance in the model. Moreover, within the family religious influence variables that were explored (mother, father, grandmother, grandfather, and siblings), grandmothers' religious influence contributed the second largest proportion of the overall variance. This finding has been attributed to gender orientation roles, which describe women as the bearers of culture in households: responsible for transmitting important cultural traits and values to children (Gutierrez et al. 2014; Thompson and Remmes 2002). The findings in the current study extend these reports by identifying specific activities that affect the religious profiles of African American adolescents: maternal religious attendance and maternal level of religious commitment.

Findings from the multivariate analyses revealed that, after accounting for demographic covariates, only felt acceptance from mothers uniquely differentiated adolescents in the low intrinsic religiosity profile from adolescents in the high religiosity profile, while both maternal religious attendance and felt acceptance from mothers uniquely differentiated adolescents in the decliner intrinsic religiosity profile from adolescents in the high religiosity profile. Findings on the significance of felt acceptance in differentiating adolescents in the three religiosity profiles are consistent with previous work highlighting the importance of perceived acceptance on general adolescent development. Perceived acceptance has been associated with better academic outcomes and psychosocial adjustment among adolescents (De Los Reyes and Ohannessian 2016; Khaleque and Rohner 2002; Makri-Botsari 2015). Findings in the present study contribute to this body of literature by illustrating how felt acceptance from mothers is associated with the religiosity profiles of African American adolescents.

It is interesting to note that adolescents in both the high and decliner profiles started off with fairly high levels of intrinsic religiosity. Youth who declined in their intrinsic religiosity, versus youth who remained high, came from homes rated by mothers as having a more negative

emotional climate, reported feeling less accepted by their mothers, and had mothers who reported attending religious services less frequently. Conversely, youth who had high levels of intrinsic religiosity and remained high over the study period, reported feeling more accepted by their mothers and their mothers reported attending religious services more frequently than youth who declined in religiosity. The extent to which adolescents perceived their mothers' behavior as congruent or incongruent with general religious philosophies in the household likely affected the likelihood of adolescents experiencing declines in their own religious beliefs. Perceived congruence may facilitate stable religious development while incongruence may increase the likelihood of losing or forsaking previously ingrained or socialized practices. The linkage of congruence with stability in intrinsic religiosity and incongruence with a decline in intrinsic religiosity during adolescence may be directly connected to newly developed cognitive skills, specifically abstract thought, and the ability to think and reason about the possible. With the development of abstract thought, adolescents are much more critical of inconsistencies they see in the behaviors of others around them (Elkind 1998).

These findings strongly suggest family context variables that are crucial for religious development, an important index of positive development, in African American adolescents. They reveal that beyond prescribed religious beliefs, behaviors also are essential: behaviors that foster a positive family climate at home promote stable religious development. However, exhibiting behaviors that are inconsistent with acceptable religious beliefs and practice, and behaviors that cultivate a negative family climate in the household, negatively affect the religious development of African American adolescents and increase the likelihood of witnessing declining religious beliefs and practices. This has implications for interventions targeting the volatile period of adolescence, which can be tasking for many family units. It also reinforces the importance of mothers' own behaviors, family dynamics, and practices in this stage of child growth and development.

The study had a number of strengths. Methodologically, these included use of multiple indicators of maternal religious involvement as correlates of adolescent religiosity; use of multiple indicators of the quality of the family environment; focusing on intrinsic religiosity, which has been studied less frequently than extrinsic religiosity; focusing on different profiles of intrinsic religiosity over the course of adolescence; including both maternal and adolescent perspectives in the models; and focusing on a low-resourced sample that broadens the understanding of linkages between maternal influences on adolescent religiosity within this demographic. Despite these strengths, the exclusive focus on low-income African American families limits the generalizability of the study. Second, due to budgetary constraints, fathers were not recruited into this

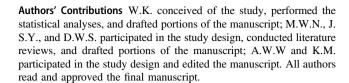


study and therefore the influence of paternal religiosity on adolescent religiosity profiles could not be examined. Some studies examining the effects of parent religiosity patterns on adolescent religiosity show that specific paternal beliefs and behaviors may influence child behaviors (Gutierrez et al. 2014; Halgunseth et al. 2016). However, in comparison to the influence of maternal beliefs and behaviors, paternal beliefs and actions seem to carry less weight. Nevertheless, it is important for future studies to examine possible unique influences of paternal religiosity patterns on the outcomes of African American youth from low-resourced settings. Finally, this study used longitudinal data summed across time, strengthening the inferences that can be drawn from its results. However, the data is still correlational in nature and thus precludes the ability to make causal inferences.

## **Conclusion**

African American adolescents are more likely than their peers in other racial/ethnic groups in the United States to subscribe to religious beliefs and practices (Twenge 2017; Twenge et al. 2015). However, a focus on African Americans as a group fails to recognize the religious heterogeneity within this demographic—an omission with real consequences given the known protective effects of religiosity on adolescent well-being. Further, there is a paucity of literature examining parent and family contributions to African American adolescent religiosity. Building on a previous study, the current investigation examined specific maternal and family correlates of three previously identified profiles of intrinsic religiosity among African American adolescents from low-resourced neighborhoods. The results suggested that both maternal behavior-attendance at religious services and religious commitment that evidenced in the form of concrete behaviors—as well as the emotional climate of the home—the extent to which adolescents felt loved, valued and accepted by their mothers, and the care and concern family members expressed to one anothercontributed to adolescents' intrinsic religiosity profiles. Feeling loved, valued, and accepted by one's mother in concert with having her model frequent attendance at religious services uniquely predicted whether adolescents "kept the faith" or declined in their intrinsic religiosity over the study period. These findings contribute to a more nuanced understanding of the role of family contexts in the socialization of religiosity in African Americans households and may help to explain factors associated with well-being and risk-taking in this demographic.

**Acknowledgements** We thank the families who participated in this study and the research staff who supported this work. Dr. David Sosnowski is now at the Johns Hopkins University.



**Funding** This research was supported by National Institute on Drug Abuse Grants K01 DA015442 01A1 and R21 DA 020086-02 awarded to Wendy Kliewer.

**Data Sharing and Declaration** This manuscript's data will not be deposited.

## **Compliance with Ethical Standards**

Conflict of Interest The authors declare that they have no conflict of interest.

**Ethical Approval** All procedures performed in this study were in accordance with the ethical standards of Virginia Commonwealth University and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The study was approved by the Institutional Review Board at Virginia Commonwealth University (VCU).

**Informed Consent** Written informed consent was provided by the maternal caregiver and assent was provided by the adolescent prior to initiating the data collection.

**Publisher's note:** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

## References

Belgrave, F. Z., & Alison, K. W. (2018). African American psychology: from Africa to America. 4th ed. New York, NY: Sage.

Bengtson, V. L., Copen, C. E., Putney, N. M., & Silverstein, M. (2008). Religion and intergenerational transmission over time. In K. W. Schaie & R. P. Abeles (Eds.), Social structures and aging individuals: continuing challenges (pp. 304–331). New York, NY: Springer.

Butler-Barnes, S. T., Chavous, T. M., & Zimmerman, M. A. (2011). Exposure to violence and achievement motivation beliefs: moderating roles of cultural-ecological factors. *Race and Social Problems*, 3, 75–91. https://doi.org/10.1007/s12552-011-9044-4.

Butler-Barnes, S. T., Martin, P. P., & Boyd, D. T. (2017). African American adolescents' psychological well-being: the impact of parents' religious socialization on adolescents' religiosity. *Race and Social Problems*, *9*, 115–126. https://doi.org/10.1007/s12552-017-9199-8.

Carver, C., Scheier, M., & Weintraub, J. (1989). Assessing coping strategies: a theoretically based approach. *Journal of Personality* and Social Psychology, 56, 267–283. https://doi.org/10.1037/ 0022-3514.56.2.267.

Cotton, S., Zebracki, K., Rosenthal, S. L., Tsevat, J., & Drotar, D. (2006). Religion/spirituality and adolescent health outcomes: a review. *Journal of Adolescent Health*, 38, 472–480. https://doi.org/10.1016/j.jadohealth.2005.10.005.

De Los Reyes, A., & Ohannessian, C. M. (2016). Introduction to the special issue: discrepancies in adolescent–parent perceptions of the family and adolescent adjustment. *Journal of Youth and* 



- Adolescence, 45, 1957–1972. https://doi.org/10.1007/s10964-016-0533-z.
- Derogatis, L. R., & Melisaratos, N. (1983). The brief symptom inventory: an introductory report. *Psychological Medicine*, 13, 595–605. https://doi.org/10.1017/S0033291700048017.
- Elkind, D. (1998). Egocentrism in adolescence. In R. E. Muuss & H. D. Porton (Eds.), Adolescent behavior and society (pp. 91–101). New York, NY: McGraw-Hill.
- Flor, D. L., & Knapp, N. F. (2001). Transmission and transaction: predicting adolescents' internalization of parental religious values. *Journal of Family Psychology*, 15, 627–645. https://doi. org/10.1037/0893-3200.15.4.627.
- Grant, K. E., O'Koon, J. H., Davis, T. H., Roache, N. A., Poindexter, L. M., & Armstrong, M. L., et al. (2000). Protective factors affecting low-income urban African American youth exposed to stress. *The Journal of Early Adolescence*, 20, 388–417. https:// doi.org/10.1177/0272431600020004002.
- Gutierrez, I. A., Goodwin, L. J., Kirkinis, K., & Mattis, J. S. (2014).
  Religious socialization in African American families: the relative influence of parents, grandparents, and siblings. *Journal of Family Psychology*, 28, 779–789. https://doi.org/10.1037/a 0035732.
- Halberstadt, A. G. (1986). Family socialization of emotion expression and nonverbal communication styles and skills. *Journal of Personality and Social Psychology*, 51, 827–836. https://doi.org/10. 1037/0022-3514.51.4.827.
- Halgunseth, L. C., Jensen, A. C., Sakuma, K., & McHale, S. M. (2016). The role of mothers' and fathers' religiosity in African American adolescents' religious beliefs and practices. *Cultural Diversity and Ethnic Minority Psychology*, 22, 386–394. https://doi.org/10.1037/cdp0000071.
- Jennings, J., Kliewer, W., Gsell, M., & Worthington, E. (2014).
  Religion and spirituality during adolescence. In T. P. Gullotta & M. Bloom (Eds.), Encyclopedia of primary prevention and health promotion. 2nd ed (pp. 1424–1433). New York, NY: Kluwer.
- Khaleque, A., & Rohner, R. P. (2002). Perceived parental acceptance-rejection and psychological adjustment: a meta-analysis of cross-cultural and intracultural studies. *Journal of Marriage and Family*, 64, 54–64. https://doi.org/10.1111/j.1741-3737.2002.00054.x.
- Laird, R. D., Marks, L. D., & Marrero, M. D. (2011). Religiosity, self-control, and antisocial behavior: religiosity as a promotive and protective factor. *Journal of Applied Developmental Psychology*, 32, 78–85. https://doi.org/10.1016/j.appdev.2010.12.003.
- Lee, D. B., & Neblett, E. W. (2019). Religious development in African American adolescents: growth patterns that offer protection. *Child Development*, 90, 245–259. https://doi.org/10.1111/cdev. 12896.
- Levin, J. S., Taylor, L. M., & Chatters, L. M. (1995). A multidimensional measure of religious involvement for African Americans. *The Sociological Quarterly*, 36, 157–173. https://doi. org/10.1111/j.1533.8525.1995.tb02325.x.
- Luthar, S. S., & Goldstein, A. (2004). Children's exposure to community violence: implications for understanding risk and resilience. *Journal of Clinical Child and Adolescent Psychology*, 33, 499–505. https://doi.org/10.1207/s15374424jccp3303\_7.
- Makri-Botsari, E. (2015). Adolescents' unconditional acceptance by parents and teachers and educational outcomes: a structural model of gender differences. *Journal of Adolescence*, 43, 50–62. https:// doi.org/10.1016/j.adolescence.2015.05.006.
- Mattis, J. S. (2005). Religion, spirituality and families: spotlight on theory. In P. Dilworth-Anderson (Ed.), Sourcebook in theory and methods (pp. 527–528). Thousand Oaks, CA: Sage.
- Mattis, J. S., & Mattis, J. H. (2011). Religiosity and spirituality in the lives of African American children. In N. E. Hill, T. L. Mann &

- H. E. Fitzgerald (Eds.), *African American children and mental health* (pp. 125–149). Santa Barbara, CA: Praeger/ABC-CLIO.
- Schaefer, E. (1965). Children's reports of parental behavior: an inventory. Child Development, 36, 413–424. https://doi.org/10. 2307/1126465.
- Smetana, J. G. (2000). Middle-class African American adolescents' and parents' conceptions of parental authority and parenting practices: a longitudinal investigation. *Child Development*, 71, 1672–1686. https://doi.org/10.1111/1467-8624.00257.
- Taylor, R. J., & Chatters, L. M. (2010). Importance of religion and spirituality in the lives of African Americans, Caribbean Blacks, and non-Hispanic Whites. *The Journal of Negro Education*, 79, 280–294. https://doi.org/10.2307/20798349.
- Thompson, Jr, E. H., & Remmes, K. R. (2002). Does masculinity thwart being religious? An examination of older men's religiousness. *Journal for the Scientific Study of Religion*, 41, 521–532. https://doi.org/10.1111/1468-5906.00135.
- Tingen, M. S., Andrews, J. O., Heath, J., Turnmire, A. E., Waller, J. L., & Treiber, F. A. (2013). Comparison of enrollment rates of African-American families into a school-based tobacco prevention trial using two recruitment strategies in urban and rural settings. American Journal of Health Promotion, 27, e91–e100. https://doi.org/10.4278/ajhp.110204-QUAN-53.
- Twenge, J. M. (2017). iGen: why today's super-connected kids are growing up less rebellious, more tolerant, less happy—and completely unprepared for adulthood—and what that means for the rest of us. New York, NY: Atria Books.
- Twenge, J. M., Exline, J. J., Grubbs, J. B., Sastry, R., & Campbell, W. K. (2015). Generational and time period differences in American adolescents' religious orientation, 1966–2014. *PLoS One*, 10, e0121454 https://doi.org/10.1371/journal.pone.0121454.
- Wong, Y. J., Rew, L., & Slaikeu, K. D. (2006). A systematic review of recent research on adolescent religiosity/spirituality and mental health. *Issues in Mental Health Nursing*, 27, 161–183. https://doi. org/10.1080/01612840500436941.
- Worthington, E. L., Wade, N. G., Hight, T. L., Ripley, J. S., McCullough, M. E., & Berry, J. W., et al. (2003). The religious commitment inventory-10: development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology*, 50, 84–96. https://doi.org/10.1037/0022-0167-50-1-84.
- Wright, A. W., Salifu Yendork, J., & Kliewer, W. (2018). Patterns of spiritual connectedness during adolescence: links to coping and adjustment in low-income urban youth. *Journal of Youth and Adolescence*, 47, 2608–2624. https://doi.org/10.1007/s10964-018-0886-6.

**Wendy Kliewer** is a Professor in the Department of Psychology at Virginia Commonwealth University. Dr. Kliewer's research centers on the broad theme of risk and resilience, with specific attention to cumulative stressors, their impacts on a broad array of functioning, and protective factors that mitigate risk. She has long-standing interests in interdisciplinary, cross-cultural research, and is committed to training the next generation of scholars to continue to do research that matters. Dr. Kliewer earned her Ph.D. in Social Ecology from the University of California, Irvine, and completed postdoctoral training in prevention science at Arizona State University.

**Melissa Washington-Nortey** is a doctoral student in Psychology—developmental program concentration at Virginia Commonwealth University. Her research interests focus broadly on parenting and cultural factors that influence the socio-emotional and cognitive



development of children. Ms. Washington-Nortey earned her Master of Arts Degree in Child Development form the University of Haifa in Israel and her Master of Science degree in Developmental Psychology from Virginia Commonwealth University.

Joana Salifu Yendork is a Lecturer of Psychology at the Department of Psychology, University of Ghana. Her research interests focus broadly on the wellbeing of vulnerable children and adolescents as well as the influence of religion on mental health. Dr. Yendork obtained her Ph.D. in Psychology from Stellenbosch University in South Africa.

**David W. Sosnowski** recently received his Ph.D. in Developmental Psychology from Virginia Commonwealth University and currently is a postdoctoral researcher at Johns Hopkins University. David's research centers on understanding biological mechanisms linking childhood adversity to health and behavior outcomes throughout life. He also has a strong interest of incorporating resilience into this work. David earned his B.S. in Psychology from The Pennsylvania State

University and his M.S. in Psychology from Virginia Commonwealth University.

**Anna W. Wright** is a graduate student in the Clinical Psychology doctoral program at Virginia Commonwealth University. Her research interests are on predictors of risk and resilience among youth who grow up under adverse circumstances. Specifically, she is interested in the positive adjustment of youth in institutional care settings. Ms. Wright earned her Master of Science in Clinical Psychology from Virginia Commonwealth University.

**Kristina McGuire** is a doctoral student in Psychology—developmental program concentration at Virginia Commonwealth University. Her research interests include risk and resilience of incarcerated youth. Kristina earned her B.S. in Psychology from the University of Utah and her M.S. in Psychology from Virginia Commonwealth University.

