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Benjamin M. Simonds
Bowdoin College

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A Moderated-Mediation Model of Emerging Adult and Parent Religiosity, Externalizing
Behavior, and Parenting Style

An Honors Paper for the Department of Psychology

By Benjamin M. Simonds

Bowdoin College, 2021

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Abstract

The present study investigated whether emerging adult religiosity mediated the relationship between high parental religiosity and low levels of offspring externalizing, and whether these pathways are moderated by aspects of authoritative parenting (i.e., acceptance, firm control, and psychological autonomy). Surveys were completed by 275 emerging adults aged 18-25, including scales assessing their religiosity, the religiosity of their parents, the style of parenting in which they were raised, and their own engagement in externalizing behaviors. Results indicated a correlation between high levels of parental and emerging adult religiosity, and a marginal relationship between high parental religiosity and reduced offspring externalizing. However, emerging adult religiosity was not related to externalizing, such that no mediation model could be tested. Psychological autonomy granting moderated the relationship between parental religiosity and emerging adult externalizing: low parental religiosity was associated with high levels of emerging adult externalizing only in parents who exhibited low levels of psychological autonomy granting, while high parental religiosity was related to low emerging adult externalizing regardless of psychological autonomy granting. The results indicate a complex relationship between parenting, externalizing, and religiosity.

A Moderated-Mediation Model of Emerging Adult and Parent Religiosity, Externalizing Behavior, and Parenting Style

The relationship between religion and externalizing behavior, including crime, drug use, and other illicit behaviors has been heavily studied in psychology, as well as in other disciplines including sociology and anthropology. From a psychological perspective, Baier and Wright's (2001) meta-analysis of the relationship between individual religiosity and criminal behavior found that, across over 60 studies, religiosity is a significant, moderate predictor of reduced criminal behavior. One explanation for this relationship is that religiosity acts as a form of social control through its moral condemnation of perceived immoral and deviant behaviors, as religious people have been found to experience higher levels of shame for deviant acts (Burkett & Ward, 1993; Grasmick et al., 1991). Religion can potentially reduce externalizing by diminishing the likelihood of engaging in unhealthy and risky behaviors.

This relationship holds true amongst young people, as research has shown that religiosity can help deter externalizing behaviors in adolescents and emerging adults (Adeseun, 1993; Johnson et al., 2000). However, this relationship is likely complicated by a number of variables. Some researchers have explored the role that parenting may play in the relationship between religiosity and externalizing. Parents who are religious themselves and involve their children in their faith and practices tend to have success in transferring their religiosity to their children (de Vaus, 1983). This relationship is also largely impacted by parenting style and the parent-child relationship. Positive parenting practices are often required for the transference of religiousness from parent to child through emerging adulthood (Myers, 1996). Although the existing research has shown religion to be negatively associated with antisocial behavior and that parenting plays a role in transferring religious practices, it is not yet understood what aspects of religiosity are

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responsible for the deterrence of externalizing or how parenting style may moderate these effects.

The aim of the present study is to investigate whether the relationship between parental religious involvement and emerging adult externalizing behavior is mediated by emerging adult religiosity through three dimensions (public practice, private belief, and commitment to religious plans), and to see if the relationships between these variables are moderated by aspects of authoritative parenting. Although several studies have investigated one or more of these relevant relationships in a piecemeal fashion, only a few have attempted to do so in the context of a complete model that incorporates parent and emerging adult religiosity and parenting factors. The few studies that have considered all these variables evaluated parenting style as a mediator, rather than considering the proposal that the relationships between parental and emerging adult religiosity and externalizing behavior are moderated by parenting style.

Religiosity and Emerging Adulthood

Religion is often an important facet of one's daily life and experience, as it can provide belief systems, help relieve stress, and provide moral and behavioral frameworks (Sweeny et al., 2021). Considered holistically, religiosity can be defined as a combination of how often one engages in religious practices and has adopted religious beliefs. Religious practice refers to behaviors that are consistent with practices that are specific to a particular religious sect or organization, and can be public (e.g., attending a religious service), or private (e.g., engaging in private prayer). Religious belief pertains to one's attitude towards the mythological, supernatural, or spiritual aspects of a particular religion (Wittgenstein, 2007). Religiosity, then, is the degree to which one demonstrates both religious practices and beliefs, and how significant a role religion plays in affecting one's value systems and behaviors (Litchfield et al., 1997).

The relationship between religiosity and behavioral outcomes specifically in emerging adulthood has been less frequently studied than this relationship in other age groups. Emerging adulthood encapsulates the ages of 18 to about 29, and it is a period of identity exploration, instability, self-focus, optimism, and a time of feeling “in between” the responsibilities of adulthood and the free-spirited nature of childhood (Arnett, 2000). Emerging adulthood is a sensitive time for spiritual development, along with changes in other areas of one’s life including the parent-child relationship, making this an important yet understudied stage of religious development (Gnaulati & Heine, 1997; Good & Willoughby, 2008). Furthermore, emerging adult religiosity is multi-faceted and must be measured as such; studies that measure multiple facets of religiosity tend to reveal more nuanced understandings of how emerging adult religiosity relates to various outcomes (Johnson et al., 2000). Specifically, Litchfield et al. (1997) distinguished three dimensions of young adult religiosity based on previous research (Roghaar, 1991): private religious belief, public religious practices, and religious future planning. Religious future planning refers to the degree to which young adults plan to continue with their religious faith and practices throughout adulthood. Litchfield et al. (1997) found that measuring all three of these aspects is essential in assessing the relevant dimensions of emerging adult religiosity, as measuring future planning captures the amount that religion is affecting one’s life choices and values.

Religiosity and Externalizing

There have been several studies that show a negative relationship between self-reported religiosity and varying forms of externalizing behavior in late adolescents and emerging adults. Studies have shown that internalized religious values, or religious social norms and moral codes that have been internally adopted, tend to decrease unhealthy behaviors in young adults

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(Adeseun, 1993; Benda, 1995; Johnson et al., 2000; Landor et al., 2011; Moitra & Mukherjee, 2010; Sloane & Potvin, 1986; Yonker et al., 2011). Additionally, late adolescents and early adults who engage in religious practices tend to demonstrate fewer externalizing behaviors such as substance use and delinquency (Bahr et al., 1998). Religious emerging adults tend to report greater general life satisfaction (Steger & Frazier, 2005) and better ability to cope with stressful life events (Kendler et al., 1997), suggesting that religion can act as a form of social support for young adults. Religiosity has even been found to be a protective factor against behavioral problems in adolescents who were already at-risk due to other social factors (Ahmed et al., 2011). This relationship has been found to hold true longitudinally (Mason & Windle, 2001; Peek et al., 1985) and independent of social learning theories (Johnson et al., 2001), indicating a robust connection between enhanced religiosity and reduced externalizing problems in emerging adults.

Parenting and Emerging Adult Religiosity

Additionally, emerging adult religiosity is strongly related to parenting. The parent-child relationship has been found to remain pertinent through emerging adulthood, as young adults still rely on their parents for support through their college years and beyond (McKinney & Milone, 2012). It has been found that parental religiosity is a strong predictor of adolescent and emerging adult religiosity (Guo, 2018; Yust et al., 2006). The religious beliefs and practices of emerging adults, while often complex and somewhat individualized, tend to reflect the religious beliefs and practices of their parents (Smith & Snell, 2009). However, this relationship may be dependent on parenting style. For example, positive parenting has been found to facilitate the instillation of parent religiosity into their children, holding true through young adulthood (Hardy et al., 2011). Parental religiosity has also been shown to be connected to both higher individual religiosity and

better mental health outcomes in emerging adulthood when individuals perceive their parents to have exhibited positive parenting practices (Power & McKinney, 2013). Adolescents tend to adopt the religious beliefs and practices of their parents, but are much more likely to do so if they perceive themselves to have been raised under positive parenting practices (Myers, 1996).

The present study defines positive parenting practices as having exhibited the authoritative parenting style. Classically, the authoritative parenting style is primarily denoted by scoring high in two measures: acceptance, which involves the degree to which parents provide emotional support and affection to their children; and behavioral control, which involves the degree to which parents impose healthy restrictions on their children's behaviors (Gray & Steinberg, 1999). These are historically the two major markers of authoritative parenting, which has been consistently found to be the parenting style most often associated with positive child outcomes (Steinberg, 2001). This includes the relationship between parental religious involvement and emerging adult religiosity. High acceptance and behavioral control have been associated with the transference of parental religious beliefs to their children amongst religious parents, and that this transference lasts into emerging adulthood (Heaven et al., 2010).

More recently, psychological autonomy granting has become an additional prominent and relevant factor in conceptualizations of the authoritative parenting style. Psychological autonomy in the context of parenting style involves using democratic processes with the child and fostering a sense of self-governance and internal control in one's offspring. It is an important factor in deterring unhealthy behavior and promoting positive outcomes, including high self-worth, in adolescence through emerging adulthood (Chirkov, 2011; Gray & Steinberg, 1999; Litchfield et al., 1997). Psychological autonomy granting has also been shown to be significant in the process of transferring religiosity from parent to child. Parents who foster a sense of psychological

autonomy in their children have been found to be more likely to pass their religious beliefs along to their children through emerging adulthood (Hardy et al., 2011). The transmission of religiosity from parent to child is also associated with both high levels of psychological autonomy granting and positive psychological adjustment in emerging adulthood (Power & McKinney, 2013).

Psychological autonomy granting is an important factor both in outcomes related to authoritative parenting, and in the process of transferring religious beliefs from parent to child, making it a relevant parenting factor worth investigating within the current model of authoritative parenting.

Parenting and Externalizing

Authoritative parenting tends to deter unhealthy and risky behaviors in emerging adults. Studies have shown that parents who exhibit the authoritative parenting style are more likely to observe decreased levels of at-risk behavior in their children from adolescence through young adulthood compared to parents who exhibit less effective parenting styles (Gray & Steinberg, 1999; Litchfield et al., 1997; Loeber & Stouthamer-Loeber, 1986; Simons et al., 2005; Wright & Cullen, 2001). For example, authoritative parenting that includes high levels of psychological autonomy has been found to predict lower levels of drop-out rates and higher levels of academic achievement in late adolescents and young adults (Blondal & Adalbjarnardottir, 2014). Although psychological autonomy granting has been found to deter delinquency in late adolescents partially through self-control learning (Adams, 2001), other studies have shown that psychological autonomy is directly related to reducing externalizing behaviors (Sher-Censor, Parke, & Coltrane, 2011). The authoritative parenting style, including psychological autonomy granting, has consistently been found to be related to decreased externalizing behavior and better outcomes in emerging adults. Studies have also shown that religious parents tend to have children that exhibit less adolescent delinquency, with this relationship partially mediated by the

authoritative parenting style and positive parent-child relationships (Foshee & Hollinger, 1996; Pearce & Haynie, 2004). However, it remains to be seen how offspring religiosity fits into this mediation model, and whether parenting style may play more of a moderating role rather than a mediating one.

Religiosity, Parenting, and Externalizing Behavior

Only a small number of studies have simultaneously examined the relationships between parent and child religiosity, parenting style, and offspring externalizing behavior. Litchfield et al. (1997) found in an all-Mormon sample that adolescent religiosity partially mediated the relationship between positive parenting (parental acceptance, behavioral control, and psychological autonomy) and low levels of adolescent at-risk behavior. Litchfield et al. (1997) measured adolescent religiosity using the same three facets as those assessed in the current study (practice, belief, and future religious plans), finding that having salient plans to continue with religious practice and beliefs was the strongest deterrent of at-risk behavior among the sample. Litchfield et al. (1997), however, did not consider parental religiosity, which is an important factor to consider in the model considering its strong connections to both emerging adult religiosity and externalizing behaviors. Additionally, the all-Mormon sample was not representative of the U.S. population, and there are likely key cultural differences between Mormon Americans and the general population that could account for some of their results. Also, the sample consisted of adolescent participants, whereas the present study is measuring these variables in emerging adulthood. This is important because emerging adulthood is a sensitive period for salient developments in both religiosity and parent-child relationships (Gnaulati & Heine, 1997; Good & Willoughby, 2008). Finally, Litchfield et al. (1997) did not consider

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parenting style as a moderator, and it remains to be seen whether the relationship between high parental religiosity and low offspring externalizing is moderated by authoritative parenting.

Guo (2018) investigated similar constructs, finding that parental religious involvement deters adolescent delinquency indirectly through parenting style (close monitoring, consistent discipline, and emotional support) and through adolescent religiosity, showing both to be independent mediators. Guo (2018) did not measure parenting through aspects of the authoritative parenting style, most notably neglecting to consider psychological autonomy granting as an important variable in the model. Additionally, Guo (2018) examined parenting practice as a mediator of parental religiosity and adolescent delinquency. In contrast, the current study considers parenting style as a potential moderator of this relationship. Lastly, Guo (2018)'s sample consists of adolescents, whereas the present study employs an emerging adult sample.

Only one previous study has examined similar variables in an emerging adult sample. Power and McKinney (2013) investigated emerging adult perceptions of parental religiosity and parenting practices and how they relate to psychological adjustment and self-reported religiosity. They found that the relationship between perceived parental religiosity and emerging adult psychological adjustment was mediated by emerging adult religiosity and parenting practices of high 'caring' and low 'overprotection.' Although many of the variables included in the current study were investigated by Power and McKinney (2003), there are several limitations that the current study plans to address. First, Power and McKinney's (2003) measures of parenting practices conflate behavioral control and psychological autonomy, claiming them to be opposite ends of the same spectrum. Yet, these parenting factors are conceptually distinct: the former refers to controlling child behavior when necessary and appropriate, while the latter involves fostering a sense of self-governance in children and forming a democratic relationship between

parent and child. It is possible for a parent to exhibit high levels of behavioral control while still fostering a sense of psychological autonomy. Thus, firm control and psychological autonomy granting must be measured separately. This is further evidenced by the fact that both factors are independently related to positive outcomes in childhood and through adulthood (Adams, 2001; Blondal, & Adalbjarnardottir, 2014; Wright & Cullen, 2001). Additionally, Power and McKinney (2003) did not measure future religious plans, which has been shown to be an important consideration in measuring emerging adult religiosity (Litchfield et al., 1997). Finally, Power and McKinney (2003) considered parenting practice as a mediator of the relationship between parental religiosity and psychological adjustment, rather than as a moderator. That is, they claim that the relationship between high parental religiosity and high psychological adjustment develops through positive parenting, without consideration of the possibility that the relationship is altered by aspects of positive parenting.

Authoritative Parenting as a Moderator

Studies that explore the relationships between parental religiosity, parenting style, offspring religiosity, and externalizing behavior tend to examine authoritative parenting as a mediator. No research known to the author has examined authoritative parenting as a moderator within this model. However, a number of previous studies have investigated authoritative parenting as a moderator between parenting variables and child, adolescent, or emerging adult outcomes. For example, the relationship between high academic self-concept and high academic achievement is enhanced in adolescents whose parents exhibit the authoritative parenting style (Ishak et al., 2012). The relationship between homeschooling and academic readiness is also moderated by authoritative parenting in Chinese families with children entering kindergarten (Xia et al., 2020). Authoritative parenting can also enhance the relationship between parental

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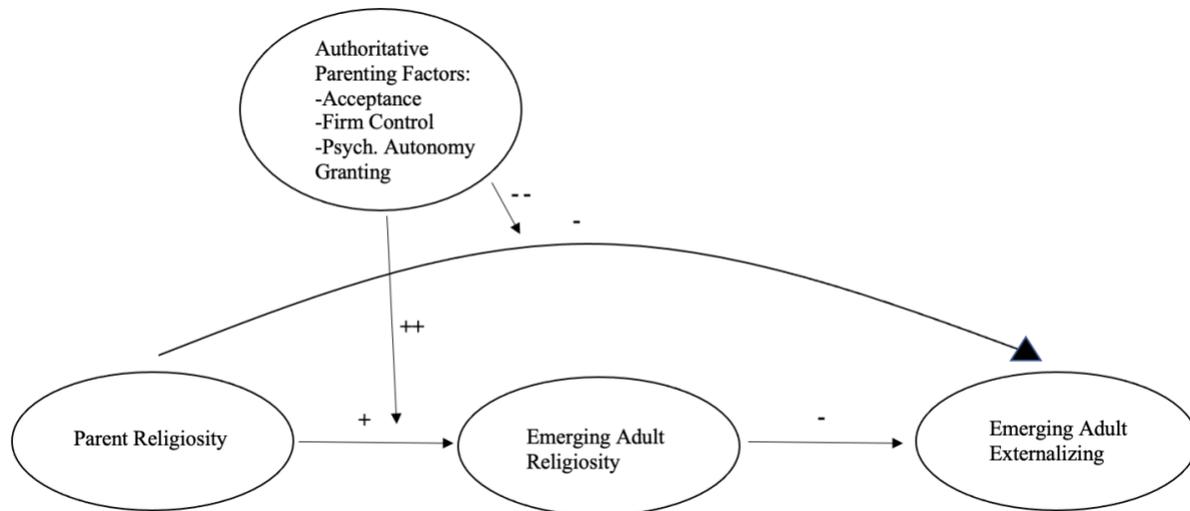
attitudes and their adoption of social norms, and the health-promoting aspects of adolescent eating behaviors (Lenne et al., 2019). As mentioned previously, authoritative parenting has even been found to increase the likelihood of religious transference from parent to child (Hardy et al., 2011). Additionally, authoritativeness has been found to buffer negative relationships between contextual factors and undesirable outcomes. Zhang et al. (2015) found that low authoritativeness moderated the effect of child temperament on maladaptive cognitions, while high authoritativeness buffered this effect. It has also been shown that the authoritative parenting style can buffer the relationship between punitive parenting practices and child externalizing problems (Fletcher et al., 2008). In summary, authoritative parenting as a moderator has been shown to both enhance relationships between contextual variables and positive child outcomes, and buffer relationships between predictive factors and negative child outcomes. This includes relationships involving child religiosity (Hardy et al., 2011), and externalizing problems (Fletcher et al., 2008).

Because the authoritative parenting style has been shown to have a moderating effect on several relationships involving parental context and child outcomes, it is plausible to expect that it will similarly moderate associations among religiosity and externalizing. The relationships between parental religiosity and both emerging adult religiosity and externalizing problems are examples of contextual variables predicting child outcomes. As authoritative parenting has been shown to moderate these types of relationships, it is valuable to consider authoritative parenting as a moderator in this model, especially considering it is related to a number of relevant variables in the present study and it has never been examined as a moderator in similar models.

The Present Study

The current study examines whether the relationship between parental religiosity and emerging adult externalizing behavior is mediated by emerging adult religiosity, which is made up of three dimensions (public practice, private belief, and future religious plans), and whether the relationships between these variables are moderated by the parenting factors associated with the authoritative parenting style (acceptance, behavioral control, and psychological autonomy granting). The present study explores a number of previously found relationships in an original, holistic model, testing these associations in a sample of emerging adults, an understudied population.

The hypotheses are as follows: 1) high parental religiosity will be related to high emerging adult religiosity; 2) high parent religiosity will be related to low levels of emerging adult externalizing; 3) high emerging adult religiosity will be correlated with low levels of externalizing; 4) the relationship between parental religiosity and emerging adult externalizing will be mediated by emerging adult religiosity; 5) the positive relationship between parental religious involvement and emerging adult religiosity will be enhanced by high parental acceptance, high firm control, and high psychological autonomy granting; and 6) the negative relationship between parental religious involvement and emerging adult externalizing behavior will be significantly stronger for parents who exhibit aspects of the authoritative parenting style.

Figure 1.*Visualization of Conceptual Model*

Note. “+” indicates expected positive relationship. “-“ indicates expected negative relationship.

All three authoritative parenting factors are expected to moderate the relationship between parent religiosity and emerging adult religiosity, as indicated by the “++” next to the designated arrow; and the relationship between parent religiosity and emerging adult externalizing behavior is expected to be moderated the authoritative parenting factors, as indicated by the “--“ next to the designated arrow.

Method

Participants

The sample consisted of volunteers who participate in Amazon Mechanical Turk (MTurk), a crowdsourcing website designed to allow remote workers to perform on-demand computer tasks for small amounts of money. The sample originally consisted of 300 participants. 10 participants did not report being within the present age range of 18-25 and were removed

from the sample. 15 participants incorrectly responded to more than one of the included ‘attention checkpoints’ (described below) and were removed from the sample. This data cleaning reduced the sample to a total of 275 participants.

In terms of demographics, female participants represent 52.6% of the MTurk participants aged 18-25 (Moss et al., 2020). MTurk has a particularly high representation of emerging adults (30% of the MTurk population but only 15% of the U.S. population) and tracks closely to racial distributions in the United States, although African American populations are slightly underrepresented in the participants, while Asian Americans are slightly overrepresented (Moss et al., 2020). Nonetheless, MTurk provides opportunities for samples that are often more diverse than typical empirical studies in psychology. Finally, MTurk matches income distributions in the U.S. well, with the most underrepresented group being those in households that make over \$150,000 per year (Moss et al., 2020).

One relevant area in which the MTurk population is relatively unrepresentative of the U.S. population is in religiousness and religious identity. According to the Pew Research Center, as of 2019, 65% of Americans identify as Christians (including Protestants, Catholics, and Mormons), while those who identify as religiously unaffiliated (agnostic, atheist, or ‘nothing in particular’) represent roughly 26% of the population. Two percent of the population identifies with Judaism, while Hinduism, Islam, and Buddhism each represent about one percent respectively, and other non-Christian religions account for another two percent (Pew Research Center, 2019). Comparatively, the MTurk population has been found to be consistently less religious than the general population. Burnham et al. (2018) found that, on average, samples in three psychological studies conducted on MTurk were about 38% religiously unaffiliated, while 51% of participants were Christian, two percent were Buddhist, slightly less than two percent

were Jewish, one percent were Muslim, 0.6% were Hindu, and 5.6% identified with another non-Christian religion. Although Burnham et al. (2018) cautions against using measures of religion in MTurk samples due to the lack of representation, present-day religious demographics are more comparable to the MTurk population than Burnham et al. (2018) suggests, as their study compared MTurk demographics to Pew Research Center data on U.S. religious demographics from 2014.

MTurk presents several strengths that allow its use as a source for gathering participants despite the potential limitations. First, MTurk is nearly representative of the U.S. general population in most other demographic categories, which is an improvement from a number of other possible methods of obtaining participants, such as using college students from a single university. Second, MTurk is efficient and effective in obtaining participants within the age range of interest. Offering small amounts of money as reward for completion of surveys allows for the collection of results from a sufficient number of participants in a very short amount of time. Efficiency and convenience were particularly valuable at the moment of data collection, which took place during the COVID-19 pandemic (data collected in March 2021). Given the otherwise representational demographics of the MTurk population, and the benefits of effectiveness and efficiency from its use, the employment of a possibly unrepresentative population in terms of religious demographics is an acceptable limitation. Though there is a discrepancy in the representation of the U.S. religious population on MTurk, particularly with the Christian population, the gap is sufficiently narrow that the sample is relatively representative of U.S. emerging adults, and also demonstrates adequate variability in religiosity for effective measurement.

Procedure

Participants agreed to partake in the study after reading a description of the task outlining what to expect from the survey, understanding that they can refuse to answer any questions or withdraw from the study at any time. Participants were made aware of the exact amount of money they would be awarded upon completion of the survey, which was \$0.75. All participants received the same level of compensation. Participants were restricted to ages 18-25, such that those not within that age range according to their MTurk profile were not able to access the survey. Acceptance of the task navigated the participant to the survey, which was created with Qualtrics software (Qualtrics, Provo, UT) and approved by the Bowdoin College Institutional Review Board. All participants gave informed consent before continuing with the survey. On average, the survey took about 15 minutes to complete. Upon completion of the survey, participants were assigned unique codes to input into MTurk in order to receive compensation.

About half of the items were negatively worded and reverse scored. There were four items throughout the survey that acted as attention checks to ensure that the participants were paying attention and not just clicking through the survey, helping to ensure the validity of the responses. No identifying data was collected, and all responses were secured and kept confidential.

Materials

Parental Religiosity

Parental Religiosity was measured through a two-item questionnaire developed by Leonard et al. (2013) that was designed to assess emerging adults' perceptions of parental religiosity. This scale was presented twice: once for their primary caregiver, and one for their secondary caregiver. For most participants, this referred to their mother and father. However, to be more inclusive of non-traditional parental households, the scales did not explicitly state

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‘Mother’ and ‘Father.’ Participants were asked to indicate the gender of the parent/guardian and the nature of their relationship to the parent/guardian to whom they were referring to in each questionnaire in order to capture relational/gender differences. Finally, participants were asked to indicate whether they lived with each caregiver at least 50% of the time to capture differences in divorced versus non-divorced households.

Participants responded on a four-point Likert scale. Items included “How often does your parent attend religious services?” (“1 = *Never*, 4 = *Once a week or more*”), and “How important is religion to your parent?” (“1 = *Very important*, 4 = *Not important at all*). A question was included to indicate with which specific religious faith the participant’s parent identified (*Protestant, Catholic, Mormon, Jewish, Muslim, Hindu, Buddhist, Atheist, Agnostic, Other*).

Leonard et al. (2013) found adequate internal consistency between the practice items and belief items ($\alpha = .82$). In the current sample, $\alpha = .70$ for primary caregivers and $.82$ for secondary caregivers.

Emerging Adult Religiosity

Two aspects of emerging adult religiosity, practice and belief, were measured using a modified version of the Adolescent Religiosity Questionnaire (Ball et al., 2003), which measures religious practice and belief through adolescent self-report. This scale contains eight items, with four items designated to religious practice (e.g., “*How often do you go to church, or other religious service?*”) and four to religious belief (e.g., “*Do you believe in God?*”). All items included five-point Likert scales that varied based on the item: for practice, responses ranged from “*Never*” (1) to “*Nearly Every Day*” (5); for belief, responses ranged from “*Definitely not*” (1) to “*Definitely*” (5). Ball et al. (2003) found adequate internal consistency for both the practice items ($\alpha = .76$) and the belief items ($\alpha = .80$). Also, participants were asked to indicate which

specific religious faith they identify with (*Protestant, Catholic, Mormon, Jewish, Muslim, Hindu, Buddhist, Atheist, Agnostic, Other*).

Some items were modified to adapt to the emerging adult sample (e.g., “*How important do you think it is for teens to attend religious services?*” was changed to “*How important do you think it is for young adults to attend religious services?*”). Additionally, some items were modified to be less Christianity-centric and more inclusive of all religious faiths and practices (e.g., “*How often do you go to church services?*” was replaced with “*How often do you attend religious services?*”).

The Adolescent Religiosity Questionnaire does not include items for future religious planning, and there is no standardized questionnaire for future religious plans known to the author. The measure used by Litchfield et al. (1997) is specific to Mormonism (e.g., “*Will you go on a mission?*”). Thus, a new scale to measure the participants’ religious plans was developed. An eight-item scale was developed, with four items dedicated to plans of maintaining religious beliefs (e.g., “*My religious beliefs will continue to be important to me for years to come.*”), and four items related to the degree to which participants plan to continue with their religious practices (e.g., “*I plan to continue attending religious services as often as I do now.*”). Items were measured on a five-point Likert scale (“1 = *Strongly disagree*, 5 = *Strongly agree*”).

Exploratory factor analyses (principal axis) were conducted to analyze whether the three facets of religiosity (Practice, Belief, and Future Plans) made up a single factor of religiosity or should be considered separate factors. Examination of the scree plot strongly indicated a single factor. Therefore, Self-Religiosity scale scores were calculated as the average of all items related to Practice, Belief, and Future Plans. Alpha for this broad scale was high ($\alpha = .89$).

Parenting Style

Parental acceptance, firm control, and psychological autonomy granting were each measured using the Child Report of Parent Behavior Inventory – Revised (CRPBI-30) by Schludermann and Schludermann (1988). This measure has been found to be effective for all age groups in measuring participant perceptions of their parents' practices. The CRPBI-30 consists of two 30-item questionnaires measuring the parenting practices of the participant's mother and father, respectively. Each 30-item questionnaire is identical for each parent aside from designations of parent gender. Each questionnaire contains 10 items designated to acceptance, psychological control, and firm control, respectively. Items are measured on a three-point Likert scale ("1 = *Not like my parent*, 2 = *Somewhat like my parent*, 3 = *A lot like my parent*).

This scale was modified to not restrict measurements of both CRPBI-30 scales to mothers and fathers to be more inclusive of participants who were not raised under a traditional mother-father household (e.g., same-sex parents, single parents, non-parental guardians). This survey stated that participants should complete the first assessment of parenting style for their primary caregiver and were told they will have the opportunity to complete the same scale for a secondary caregiver after completing the first. It also stated that participants who were raised by only a single parent or guardian have the option to skip the second parenting assessment. Participants were given the opportunity to state the gender of and indicate their relationship to the caregiver for whom they were reporting to account for relational and gender differences. In the current sample, adequate internal consistency was demonstrated for acceptance ($\alpha = .89$), psychological autonomy granting ($\alpha = .86$), and firm control ($\alpha = .76$) amongst primary caregivers; and acceptance ($\alpha = .93$), psychological autonomy granting ($\alpha = .89$), and firm control ($\alpha = .81$) amongst secondary caregivers.

Externalizing Behavior

Externalizing behaviors were measured using the Subtypes of Antisocial Behavior questionnaire (Burt & Donnellan, 2009). This 32-item scale is designed to measure the frequency that the participant engages in behaviors that signify externalizing problems. It is designed for young adults (ages 18-30) through self-report. Higher scores on this scale indicated greater frequency of externalizing behaviors. Items were measured on a five-point Likert scale (1 = “never”, 5 = “nearly all the time”). In the current sample, internal consistency of these items was very high, $\alpha = .98$.

Results

Preliminary Analysis

Inter-caregiver correlations were conducted prior to the hypothesis-driven analyses to assess whether primary and secondary caregivers should be considered separately or combined into one ‘Caregiver’ score for each of their variables. Scores from primary and secondary caregivers were closely related for religiosity ($r(263) = .63, p < .001$), acceptance ($r(267) = .51, p < .001$), firm control ($r(263) = .48, p < .001$), and psychological autonomy granting ($r(267) = .60, p < .001$). Because of these strong correlations for each caregiver-related dimension, scale scores obtained separately from primary and secondary caregivers were averaged into single scores for each dimension (e.g., ‘Caregiver Religiosity’).

Descriptive Statistics

Frequencies for categorical variables were calculated (Table 1), as were descriptive statistics for all substantive quantitative variables (Table 2). Over half of the respondents were over 23 years old, with a much lower distribution in the 18-20 range. Additionally, about 61% of the respondents were male, while 39% were female (no respondents identified as non-binary or third gender). The overwhelming majority of participants grew up in two-caregiver households

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(about 86%), and even more indicated they grew up with more than one caregiver (about 96%).

Finally, slightly less than half of the respondents identified as Christian, while about 20% stated they were overtly non-religious (Atheist or Agnostic/non-religious), and the rest identifying with a different religious denomination.

Table 1

Frequencies for Categorical Variables

| | | n | Percent (%) |
|-------------------|---------------------------------------|------------|-------------|
| Age (n=270) | 18 | 3 | 1.1 |
| | 19 | 7 | 2.5 |
| | 20 | 7 | 2.5 |
| | 21 | 20 | 7.3 |
| | 22 | 26 | 9.5 |
| | 23 | 37 | 13.5 |
| | 24 | 68 | 24.7 |
| | 25 | 102 | 37.1 |
| Gender (n=273) | Male | 165 | 60.6 |
| | Female | 107 | 39.4 |
| Ethnicity (n=274) | Hispanic | 103 | 37.6 |
| | Non-Hispanic | 154 | 56.0 |
| | Prefer not to say | 17 | 6.2 |
| Race (n=275) | American Indian | 18 | 6.5 |
| | Asian American | 55 | 20.0 |
| | Native Hawaiian / Pacific Islander | 4 | 1.5 |
| | Black / African American | 16 | 5.8 |
| | White | 150 | 54.5 |
| | Other | 24 | 8.7 |
| | Prefer not to say | 8 | 2.9 |
| | Denomination (n=275) | Protestant | 19 |
| Catholic | | 107 | 38.9 |
| Mormon | | 1 | .4 |
| Jewish | | 2 | .7 |
| Muslim | | 11 | 4.0 |

| | | | |
|--|-----------------------|-----|------|
| | Hindu | 53 | 19.3 |
| | Buddhist | 6 | 2.2 |
| | Atheist | 22 | 8.0 |
| | Agnostic | 32 | 11.6 |
| | Other | 17 | 6.2 |
| | Prefer not to say | 5 | 1.8 |
| <hr/> | | | |
| Primary caregiver relationship (n=275) | Mother | 218 | 79.3 |
| | Father | 44 | 16.0 |
| | Sibling | 4 | 1.5 |
| | Grandparent | 7 | 2.5 |
| | Other relative | 0 | 0 |
| | Non-parental guardian | 0 | 0 |
| | Other | 2 | .7 |
| <hr/> | | | |
| Primary caregiver gender (n=272) | Male | 55 | 20.2 |
| | Female | 217 | 79.8 |
| <hr/> | | | |
| Primary caregiver denomination (n=275) | Protestant | 31 | 11.3 |
| | Catholic | 136 | 49.5 |
| | Mormon | 0 | 0 |
| | Jewish | 2 | .7 |
| | Muslim | 14 | 5.1 |
| | Hindu | 54 | 19.6 |
| | Buddhist | 6 | 2.2 |
| | Atheist | 5 | 1.8 |
| | Agnostic | 16 | 5.8 |
| | Other | 8 | 2.9 |
| Prefer not to say | 3 | 1.1 | |
| <hr/> | | | |
| Live w/ Primary Caregiver 50% of time? (n=274) | Yes | 271 | 98.8 |
| | No | 3 | 1.2 |
| <hr/> | | | |
| Secondary caregiver relationship (n=275) | Mother | 45 | 16.4 |
| | Father | 179 | 65.1 |
| | Sibling | 12 | 4.4 |
| | Grandparent | 23 | 8.4 |
| | Other relative | 4 | 1.5 |
| | Non-parental guardian | 1 | .4 |
| | Other | 1 | .4 |

24 MODERATED-MEDIATION OF RELIGION, EXTERNALIZING, AND PARENTING

| | | | |
|--|----------------------|-----|------|
| | None (single parent) | 10 | 3.6 |
| Secondary caregiver gender (n=274) | Male | 198 | 72.1 |
| | Female | 65 | 23.7 |
| | N/A (single parent) | 11 | 4.2 |
| Secondary caregiver denomination (n=275) | Protestant | 26 | 9.5 |
| | Catholic | 123 | 44.7 |
| | Mormon | 1 | .4 |
| | Jewish | 2 | .7 |
| | Muslim | 13 | 4.7 |
| | Hindu | 53 | 19.3 |
| | Buddhist | 4 | 1.5 |
| | Atheist | 7 | 2.5 |
| | Agnostic | 24 | 8.7 |
| | Other | 8 | 2.7 |
| | Prefer not to say | 2 | .7 |
| | N/A (single parent) | 12 | 4.4 |
| Live w/ Secondary Caregiver 50% of time? (n=273) | Yes | 234 | 85.5 |
| | No | 27 | 10.0 |
| | N/A (single parent) | 12 | 4.5 |

Table 2

Descriptive statistics for quantitative variables

| | N | Mean | Std Dev | Skewness | Skewness Std Error |
|------------------------------|-----|------|---------|----------|--------------------|
| Self-religiosity | 275 | 2.94 | 1.08 | -.36 | .15 |
| Primary parent religiosity | 275 | 2.84 | .90 | -.34 | .15 |
| Secondary parent religiosity | 265 | 2.71 | 1.02 | -.28 | .15 |
| Primary parent acceptance | 275 | 2.32 | .50 | -.73 | .15 |

| | | | | | |
|---------------------------------|-----|------|-----|------|-----|
| Primary parent firm control | 275 | 1.87 | .42 | .59 | .15 |
| Primary parent psych. autonomy | 275 | 2.01 | .51 | .33 | .15 |
| Secondary parent acceptance | 269 | 2.17 | .58 | -.62 | .15 |
| Secondary parent firm control | 269 | 1.89 | .45 | .24 | .15 |
| Secondary parent psych autonomy | 269 | 2.05 | .55 | .25 | .15 |
| Self-externalizing | 275 | 2.11 | .96 | .87 | .15 |

Correlations

Pearson correlations were conducted to investigate relationships between all substantive variables (Table 3). Importantly, a primary hypothesis was not supported, as self-reported religiosity was not significantly correlated with externalizing behaviors. High levels of parent religiosity were marginally associated with low externalizing. High parent religiosity was significantly correlated with elevated religiosity in emerging adults.

Table 3

Pearson Correlations Between Substantive Variables

| | Self-religiosity | Caregiver religiosity | Caregiver accept | Caregiver control | Caregiver psych | Externalize |
|-----------------------|------------------|-----------------------|------------------|-------------------|-----------------|-------------|
| Self-religiosity | -- | .57** | .28** | -.07 | -.23** | -.02 |
| Caregiver religiosity | | -- | .17** | .08 | -.20** | -.12# |
| Caregiver acceptance | | | -- | -.49** | .05 | -.09 |

| | | | |
|--------------------------|----|--------|--------|
| Caregiver control | -- | -.33** | .13* |
| Caregiver psych granting | | -- | -.28** |

Note. N = 275. ** $p < .01$. * $p < .05$. # $p < .10$.

Additionally, high levels of parental psychological autonomy granting and low levels of firm control were related to low levels of emerging adult externalizing, while caregiver acceptance was not significantly related to externalizing.

Although not a central focus of the present study, it is notable that high levels of both parent and self-reported religiosity were significantly associated with high levels of parent acceptance and low levels of psychological autonomy granting, but unrelated to firm control. Finally, parental firm control was negatively correlated with both caregiver acceptance and psychological autonomy granting.

Regression

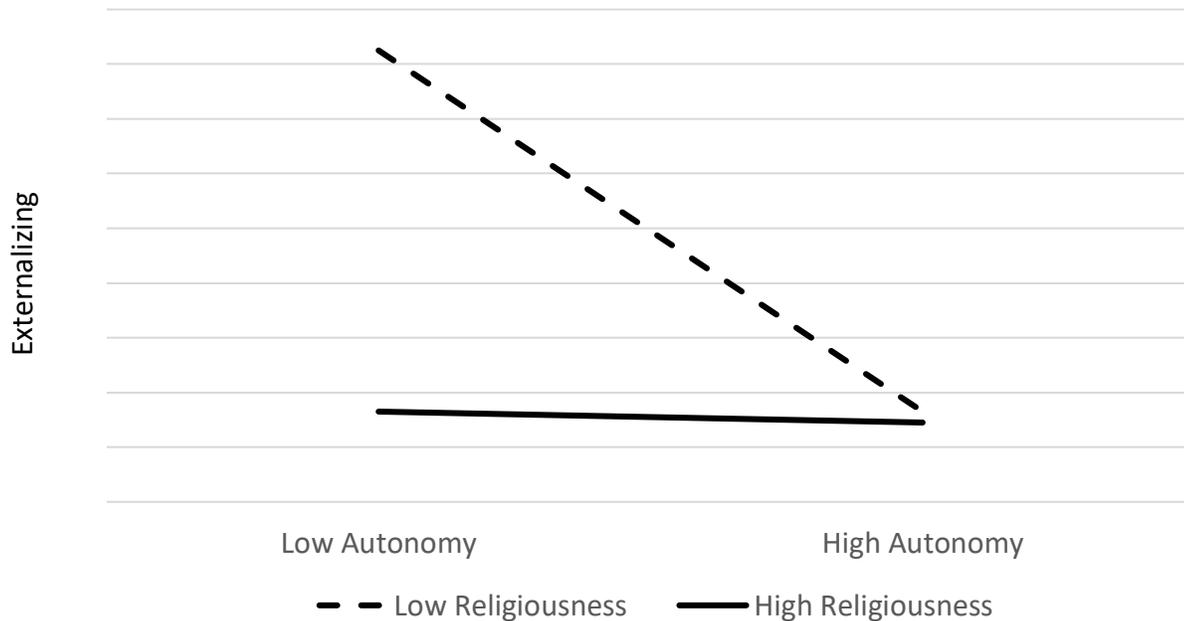
Linear regression was calculated to investigate the unique contributions of the different facets of parenting (acceptance, firm control, and psychological autonomy granting), caregiver religiosity, and the hypothesized moderation of parent religiosity by parenting, upon emerging adult religiosity. The full model containing the four parent-focused variables and three interaction terms accounted for significant variance in emerging adult religiosity, $F(7, 267) = 23.80, p < .001$, with an R^2 of .38. Significant positive predictors of emerging adult religiosity included parental religiosity, $\beta = .50, t = 9.88, p < .001$, and parent acceptance, $\beta = .19, t = 3.04, p < .001$. Psychological autonomy granting was found to be a significant, negative predictor of emerging adult religiosity, $\beta = -.14, t = -2.62, p < .001$. Parental firm control did not predict

emerging adult religiosity, $\beta = -.05$, $t = -.76$, $p > .10$). None of the interaction terms were significant.

Another multiple linear regression was calculated to predict emerging adult externalizing based on parental religiosity; the parenting factors of acceptance, firm control, and psychological autonomy granting; and interactions between parent religiosity and parenting factors. Parent religiosity, parenting factors, and the interaction terms were found to account for a significant amount of the variance in externalizing, $F(7, 267) = 5.38$, $p < .001$, with an R^2 of .15. Parental religiosity, $\beta = -.17$, $t = -2.87$, $p < .001$, and parental psychological autonomy granting, $\beta = -.36$, $t = -5.62$, $p < .001$, significantly predicted externalizing behavior. Notably, the marginal correlation between parent religiosity and offspring externalizing became significant in the context of other parenting variables. In addition, parental acceptance, $\beta = -.06$, $t = -.06$, $p > .10$, and firm control, $\beta = .029$, $t(274) = -.04$, $p > .10$, did not predict offspring externalizing in this context. Additionally, there was a significant interaction between parental religiosity and psychological autonomy granting, $\beta = .18$, $t = 2.67$, $p < .001$. To interpret the interaction, the regression coefficient for parent religiosity was inspected at 1 SD above and below the mean of autonomy granting, as recommended by Aiken and West (1991). High parent religiosity significantly predicted reduced externalizing in parents that exhibited low psychological autonomy granting, $\beta = -.33$, $t = -3.88$, $p < .001$, while low parent religiosity did not predict externalizing in parents who exhibited high psychological autonomy granting, $\beta = -.01$, $t = -.11$, $p > .10$. This interaction is plotted below (Figure 2).

Figure 2

Interaction of Parental Religiosity and Psychological Autonomy Granting on Externalizing



Note. Plot describing the Parent Religion X Psychological Autonomy Granting interaction on emerging adult externalizing. Non-religious parents only deterred externalizing in their offspring if they exhibited high levels of psychological autonomy granting, while highly religious parents deterred externalizing regardless of psychological autonomy granting.

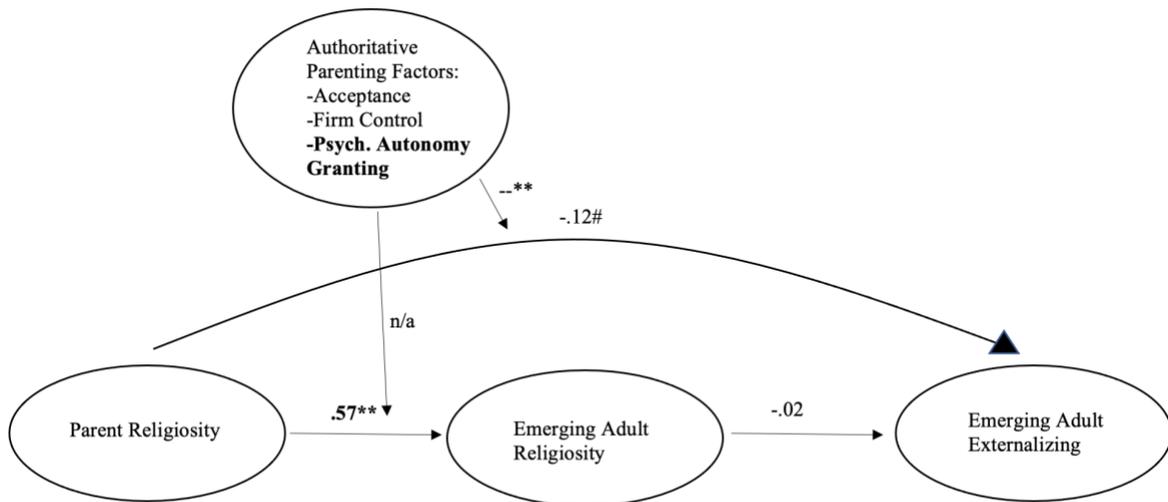
Discussion

Using a cross-sectional dataset collected from a sample of American emerging adults aged 18-25, the present study aimed to assess a model in which emerging adult religiosity mediates the relationship between parental religiosity and emerging adult externalizing; and in which the relations between parental religion, offspring religion, and externalizing would be moderated by three aspects of authoritative parenting. The results suggested that, while there is a close relationship between caregiver and emerging adult religiosity, and a marginal relationship

between high levels of caregiver religiosity and low levels of externalizing, emerging adult religiosity was unrelated to externalizing behavior. Therefore, emerging adult religiosity could not mediate a relationship between parental religiosity and offspring externalizing. Additionally, none of the present parenting factors moderated the relationship between parent and emerging adult religiosity. Analyses did suggest that caregiver psychological autonomy granting moderated the relationship between caregiver religiosity and emerging adult externalizing. Specifically, in the context of low autonomy granting, non-religious parents tended to have offspring who exhibited high levels of externalizing behaviors compared to religious parents; but at high levels of psychological autonomy, offspring externalizing was low regardless of caregiver religiosity.

Figure 3

Visualization of Findings within Conceptual Model



Note. High psychological autonomy granting moderated the relationship between high parent religious and low emerging adult externalizing. "--" indicates a significant interaction.

^aN = 275. ** p < .01. * p < .05. # p < .10.

The strong relationship between high levels of parent and emerging adult religiosity seen in the present study is consistent with findings from previous literature. Emerging adults tend to rely on their caregivers through and beyond their college years, and as this reliance continues, so do the religious similarities between parent and offspring (Guo, 2018; McKinney & Milone, 2012). Due to generational differences in understandings of religion, the religious beliefs and practices of young adults may not exactly reflect those of their parents, but more often than not, religious parents tend to instill similar levels of religiosity into their offspring through young adulthood (Smith & Snell, 2009).

The (marginal) relationship between high levels of parent religiosity and low levels of emerging adult externalizing was also consistent with findings from previous research. Parents who are religious are more likely to apply the values and practices of their religious affiliation to their parenting, and this often involves the moral condemnation of perceived immoral or deviant behaviors (Grasmick et al., 1991; Guo 2018). Internalized religious values, typically imparted by caregivers, tend to deter externalizing behaviors in young adults (Moitra & Mukherjee, 2010; Sloane & Potvin, 1986). Parents who are religious themselves are often able to successfully instill perceived prosocial and moral values into their offspring, thus reducing their likelihood of engaging in externalizing behaviors later in life (Foshee & Hollinger, 1996; Pearce & Haynie, 2004). It is important to note, however, that the relationship between high parental religiosity and low offspring externalizing in the current investigation was not as strong as past research had suggested. This is likely because the relationship between parental religiosity and reduced offspring externalizing is weakened by the moderating effect of psychological autonomy

granting. The relationship between low levels of parental religiosity and high levels of offspring externalizing is only present in parents who also exhibit low levels of psychological autonomy granting. In addition, most related previous studies have employed highly religious samples, and because psychological autonomy granting is negatively related to parent religiosity, it is likely the case that measuring these factors in a generalized sample led to a moderation that weakened the association between high parental religiosity and low offspring externalizing.

The present study found no relationship between self-reported religiosity and externalizing in emerging adults. Previous research suggests a strong relationship between high religiosity and low externalizing in young adults, as this has been demonstrated several times over (Ahmed et al., 2011; Mason & Windle, 2001). For example, it has been shown that early adults who participate in religious practices seem to engage in fewer externalizing behaviors such as substance use (Bahr et al., 1998), and religious young adults are better equipped to handle stressful life events (Kendler et al., 1997). It is worth noting that most previous studies that have found this relationship employed samples of late adolescents or college-aged adults, while the current sample primarily consisted of adults ages 23-25. Additionally, Amazon Mechanical Turk (MTurk) samples tend to be highly educated, and education tends to be associated with lower amounts of externalizing in general (Schindler et al., 2015). The present study did find low levels of externalizing overall, so it is possible that a floor effect, in which most of the participants simply don't frequently engage in antisocial behaviors, limited the available variance to associate with religiosity.

It is also possible that the lack of relationship between emerging adult religiosity and externalizing, particularly in conjunction with the present relationship between high parent religiosity and low offspring externalizing, can be attributed to the generational difference in

perspectives on religion between present day emerging adults and their parents. While traditional religion, more commonly associated with older generations, tends to be value- and community-based, contemporary religion amongst young people often distances itself from the bounds of organized religion and focuses more on 'spirituality' (Pew Research Center, 2015). One study found that, as of 2008, 55 percent of people ages 18 to 25 said they were more spiritual now than ever, but nearly one-third said they don't trust organized religion (Roehlkepartain et al., 2008). This included participants who would identify with religious affiliations such as Christianity but engaged with their spirituality in a way that is detached from the Church and the values and systems it perpetuates. It is possible that, even when the religiosity of parents transfers to the child in affiliation, the two parties have differing perspectives on how they view their personal religiosity. Thus, rather than obtaining a shared understanding of religion, the transference of religiosity between caregiver and offspring may be more of a transference of the internalized values that the caregiver identifies with their religion, but the offspring does not (Adeseun, 1993; Johnson et al., 2000). While emerging adults may not see their religiosity as a system of values that would impact their behavioral outcomes, they may still be deterred from engaging in antisocial behaviors through the values instilled in them by their parents. It is possible that because previous studies have employed slightly different samples, have not considered the belief aspect of religiosity as broadly, and were largely conducted several years ago, they detected relationships between high emerging adult religiosity and low externalizing that the present study did not. Future research should consider generational differences in perspective, particularly on the distinction between organized religion and personal spirituality, to further explain nuance in the relationships between parent and offspring religion and behavioral outcomes.

Although the primary interest in aspects of authoritative parenting concerned their potential roles as moderators of religiosity, it is worth noting the simple relationships between parenting and religiosity in caregivers and emerging adults. As expected, high levels of caregiver acceptance were associated with both high caregiver religiosity and high emerging adult religiosity. This is consistent with previous literature, as it has been found that parents who are religious are more likely to model their parenting after religious authorities (such as God), who are perceived as warm, accepting figures, and that warm parents are able to instill religious beliefs in their children through this modelling (Heaven et al, 2010). However, high behavioral control was not related to either caregiver or emerging adult religiosity. Previous research would suggest that firm control in parenting is associated with religiosity in both the parent and the child, but this research almost always considers firm control as an aspect of authoritative parenting without assessing it on its own (Hardy et al., 2011). In fact, no study known to the author has assessed firm control independently in relation to factors of religiosity in parents or children. Therefore, it appears that, while firm control may be related to caregiver or emerging adult religiosity when considered as a part of authoritative parenting, it does not appear to be a predictive factor on its own.

Further, contrary to previous findings, the present study found that high levels of psychological autonomy granting in parents was associated with low levels of both parental and emerging adult religiosity. This was an unexpected finding, as psychological autonomy granting is generally related to increased religiosity in both parents and emerging adults (Hardy et al., 2011; Power & McKinney, 2013). The contrary finding of the present study could be explained by the fact that psychological autonomy granting was measured independent of other parenting factors. Previous studies have tended to assess psychological autonomy granting only as a facet

of authoritative parenting, which has consistently been found to be related to religiosity (Myers, 1996). Yet, in the present study, psychological autonomy granting was predictive of reduced religiosity in both parents and their young adult offspring. Psychological autonomy granting establishes environments that facilitate the development of a personal sense of identity, efficacy, and self-worth in offspring (Barber, 1996). When the child is given more psychological autonomy, they are more likely to begin to form their own plans and ideals for their future, as they have control over their own future rather than being controlled by external forces, particularly their parents. Therefore, religious parents who give their children more autonomy in their thinking and identity may have children who are less likely to follow in their religious footsteps, especially given the increasingly secularized nature of American society (Litchfield et al., 1997; McCrary & Wheatley, 2017).

The parenting factors were also assessed in relation to emerging adult externalizing. Parental acceptance was not found to be associated with externalizing. Past research has shown a consistently strong relationship between high parental acceptance and low levels of antisocial, undesirable behaviors in their offspring into adulthood (Gray & Steinberg, 1999; Simons et al., 2005). As such, it was surprising, and is unclear why this relationship was not present in this study. Most of the previous research on the subject have used younger populations of offspring, so it is possible that the older, more mature sample employed in the study were less impacted by differences in parental acceptance than children and adolescents, reducing these potential effects (Loeber & Stouthamer-Loeber, 1986; Wright & Cullen, 2001). Further research should continue to explore aspects of acceptance in adult perceptions of their parents, both alone and within the context of an overall parenting style (e.g., authoritative) to be a deterrent of externalizing.

A similar argument can be made about the relationship between firm control and externalizing revealed in the present study. It was found that high levels of firm control in caregivers were associated with high levels of offspring externalizing when assessed independent of other parenting variables, but this relationship became null when it was considered in the context of other parenting variables. Previous research would suggest that high firm control is predictive of decreased externalizing, but previous research usually measured younger populations (Heaven et al., 2010; Steinberg, 2001). It may be possible that adult offspring are differently affected by high parental firm control compared to younger populations, as adults are less likely to positively respond to behavioral control from their parents. It is also likely the case that high firm control is not an inherently positive trait in terms of affecting positive offspring behavioral outcomes, as firm control by itself can be restrictive to a point of being harmful and contributing to behavioral problems (Forehand et al., 2015). High firm control can be associated with harmful parenting styles like authoritarianism and ‘helicopter parenting,’ and its established association with positive outcomes is likely due to its role in the authoritative parenting style (Moilanen & Manuel, 2019). The fact that the positive association between firm control and emerging adult externalizing was no longer significant in the context of other parenting variables showcases the lack of strength in this relationship.

Enhanced psychological autonomy granting, on the other hand, was found to be a deterrent of emerging adult externalizing both independently and in the context of other parenting factors. This is in line with previous studies, as past research has shown that high psychological autonomy granting decreases the likelihood of undesirable behaviors in young adulthood, and that this may occur partially through self-control learning (Adams, 2001; Blondal & Adalbjarnardottir, 2014; Sher-Censor, Parke, & Coltrane, 2011).

None of the authoritative parenting factors moderated the relationship between parent religiosity and emerging adult religiosity. It's important to note that this is the first study known to the author that investigated whether parenting factors would alter the intergenerational transfer of religiosity, and our results suggest these individual factors do not. Previous research has found that the transference of religion from parent to offspring could occur through processes such as social learning (Johnson et al., 2001), and it may be the case that these processes are resistant to moderating effects of parenting. Further research into mechanisms behind the transference of religiosity from parent to child could provide more information as to why parenting doesn't seem to have a moderating effect despite the undeniable impact of parenting on offspring outcomes.

One aspect of authoritativeness, however, did moderate the relationship between parental religiosity and emerging adult externalizing: while religious parents deter their offspring from externalizing regardless of how psychologically controlling they are, non-religious parents only deterred their offspring from externalizing if they exhibited high levels of psychological autonomy. Stated another way, parents deter their offspring from externalizing if they are religious and/or exhibit high levels of psychological autonomy granting; parents who are low in both are significantly more likely to see high levels of externalizing behavior in their young adult offspring.

Psychological autonomy granting has consistently been associated with positive behavioral outcomes and reduced externalizing, even with religious parents (Chirkov, 2011; Gray & Steinberg, 1999; Litchfield et al., 1997). The present moderating effect of psychological autonomy granting on the relationship between caregiver religiosity and emerging adult externalizing, though, is contrary to expectations that the deterrent effects of religiosity would be enhanced among psychological-autonomy-fostering parents. This unexpected finding can

potentially be understood through more elaborate consideration of the implications of religious socialization. Religion acts as a form of social control through its moral condemnation of perceived immoral, and often illegal, behaviors (Burkett & Ward, 1993). Religious people have been found to experience higher levels of shame for deviant acts (Grasmick et al., 1991), and this shame could make religious parents more likely to restrict the likelihood of their offspring engaging in antisocial behaviors through increased psychological control. It is possible that parents who demand their children act and think a certain way, without the clear moral roadmap that religion can provide, could promote amoral behavior. Additionally, a lack of psychological autonomy granting can lead to resentment in the child (Loeb et al., 2021). If psychological control isn't backed by a larger system of moral expectations, this resentment could possibly be magnified as the parent's demands are viewed as illegitimate. Future research should further investigate the complex relationship between parental religiosity and psychological autonomy granting in affecting offspring externalizing behavior into young adulthood.

The present study has both strengths and limitations. A major limitation is that the data is not longitudinal nor experimental, so no causal claims can be made. Future research should consider these variables longitudinally, or utilize interventions or experiments of nature to generate greater inference regarding directionality and/or causality in relations among parenting, religiosity and externalizing. Knowledge in this area would also benefit from further investigation into the effects of generational differences in perspectives on organized religion and individual spirituality, and how they are or are not connected, in predicting and understanding the mechanisms relating religiosity to behavioral outcomes. Relatedly, analyses of the distinction between organized religion and personal spirituality could shed light on the nature of some of the unexpected findings in the present study. This study also relies on data from a

single source and would benefit from other measures and participants, including the involvement of the caregivers/parents themselves, in order to provide a more holistic understanding of the relationships explored in the study. Finally, the present sample from MTurk is not entirely representative of the population of emerging adults in the United States, as MTurk participants are typically more educated, and the sample largely consisted of 23–25-year-old individuals, with few participants aged 18–22. A more representative sample of young adults across the entire age distribution of interest would provide a more complete assessment of these relationships within this population.

This study also presents several strengths and generates important implications for future research in the area. First, it is the first known study to assess individual parenting factors as potential moderators of the relationships between parental religiosity and emerging adult religiosity, and parental religiosity and offspring externalizing. The present study also advances understanding of the impact of discrete parenting variables when standing alone and when considered in the context of each other. The overwhelming majority of research in this area has considered parenting factors as a part of larger parenting styles (e.g., authoritative, authoritarian), and future research should continue to compare the separate and combined effects of these roughly independent parenting factors. This study also included future religious plans as an aspect of emerging adult religiosity, showing that future religious plans need not be considered a distinct factor from religiosity as a whole. Additionally, this study employed a sample of emerging adults, an understudied population, yet one representing a critical period for both spiritual development and parent-child relationships (Good & Willoughby, 2008; Gnoulati & Heine, 1997).

Research has continuously indicated a strong association between religion and antisocial behavior, but this relationship is complicated by differing styles in parenting and differing perspectives on religiosity and the moral standards that organized religion aims to set. Future research examining the nature of the relationships between parent and offspring religiosity, parenting, and externalizing should aim to discover more about the mechanisms of religious transference from parent to child, the effects of more varied aspects of parenting (e.g., coercion, close monitoring, discipline style), and how traditional and contemporary perspectives on religion and spirituality impact these relationships. Finally, the complex and intertwined relationship between psychological autonomy granting and parental religiosity, and how they interact to affect offspring externalizing, should continue to be explored. Investigating the mechanism behind the deterring effect of parental religion on emerging adult externalizing in both low and high psychological autonomy granting contexts will evolve understanding of how these factors affect behavioral outcomes in young adult offspring. Further research will continue to reveal more about the complex relationship between religion and parenting, and how they combine to affect the moral and behavioral outcomes of offspring into young adulthood.

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