ORIGINAL RESEARCH



Humble with God? How Education and Race Shape the Association Between God-Mediated Control and Humility in Later Life

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Abstract

Background In contrast to the vibrant interdisciplinary literature on other virtues, such as forgiveness and gratitude, the study of humility has developed more slowly. Over the 2 decades, there has been a proliferation of research on humility. In this study, we assess the interrelationship between a core feature of religious life, *God-mediated control*, and humility.

Purpose We assess the interrelationship between God-mediated control (the belief that God is a collaborative partner working together with humans) and humility. We also assess how the relationship between God-mediated control and humility may be conditional on two sociodemographic characteristics among middle-aged and older adults, education and race.

Methods Data for this study come from Wave 5 of the Religion, Aging, and Health Study (2013), a nationwide survey of Whites and African Americans (N=1152). We test our hypotheses with a series of OLS regression models.

Results We find that stronger perceptions of God-mediated control were associated with greater humility among older adults. Results from our moderation analyses also show that the relationship between God-mediated control and greater humility was stronger for low status groups, namely, the less educated and Black older adults.

Conclusion and Implications The cognitive belief that God can be trusted as an intimate collaborator in the chaos of human life appears to predict humility among older adults, perhaps by acknowledging one's dependence on a superior being and appreciating the limits of human finitude and acknowledging God's greatness outside one's self. Devoid of secular resources, the less educated and Black Americans might find greater meaning and significance in their association with God and may feel no need to establish their own worth through the attainment of worldly accomplishments or knowledge. Given the centrality of humility to religious/spiritual life, we suggest how future interdisciplinary research can build on the findings of our study.

Keywords Humility · God-mediated control · Race · Education

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Introduction

In contrast to the vibrant interdisciplinary literature on other virtues, such as forgiveness and gratitude, the study of humility has developed more slowly, likely caused by ambiguities in defining and measuring the construct (Davis et al., Worthington, and Hook 2010; Tangney 2000). As Tangney (2000) points out, several definitions of humility have been put forth. At its core, on the intrapersonal level, humility involves holding an accurate view of the self (Davis et al. 2011). On an interpersonal level, humility involves a position toward others that is other-oriented rather than self-focused, characterized by respect and an ability to restrain selfish motives (Davis et al. 2011). Peterson and Seligman (2004: 463) maintain that humility "...involves a nondefensive willingness to see the self accurately, including both strengths and limitations. Humble individuals will not willfully distort information in order to defend, repair, or verify their own image."

Despite its conceptual broadness, research on humility is gaining momentum. At the turn of the century, humility was largely neglected by the psychological and social sciences, with few studies examining this topic (Tangney 2000). Over the two decades, there has been a proliferation of research on humility (see AlSheddi 2020; Kelemen et al. 2022; Nielsen and Marrone 2018; McElroy-Heltzel et al. 2019; Worthington et al. 2017). The numerous empirical studies that have emerged had led several scholars to suggest that the study of humility has "turned a corner" (Chancellor and Lyubomirsky 2013: 819). One line of work posits humility as a character strength that is associate with positive outcomes. For example, humility has been found to be positively related to better physical and mental health (Krause 2010; Jankowski and Sandage 2014; Rowatt et al. 2006), academic performance (Owens 2009), job performance (Johnson et al. 2011; Lee, Berry, and Gonzalez-Mule 2019), more effective organizational leadership (Davis and Hook 2014; Keleman et al. 2022; Howard and Van Zandt 2020), and initiating and maintaining social relationships (Davis, Worthington, Hook, and Hill 2013; Van Tongeren, Davis, and Hook 2014).

Humility has also been considered as an outcome in its own right. One relationship which has intrigued scholars is that between religion/spirituality and humility (Davis et al. 2017). Most world religions promote humility as a virtue (Bollinger and Hill 2012; Paine et al. 2015; Wolfteich et al. 2016) and serve as a conduit for the transmission of the importance of humility. Christian scriptures, for instance, explicitly teach that humility is an essential part of God's character expressed through Jesus, and that Christians should relate to each other in a humble way. The Gospel of Matthew (20:25–27, New American Standard Bible) states that, "You know that the rules of the Gentiles lord it over them...Not so with you. Instead, whoever wants to become great among you must be your servant." The empirical evidence has generally catalogued a positive relationship between religion/spirituality and humility, as religious individuals both report (Davis et al. 2017; Van Tongeren et al. 2018) and are seen by others as more humble than non-religious individuals (Rowatt et al. 2014). In addition, priming humility in Christian participants was found to be associated with lower behavioral aggression in



response to criticism from a religious out-group member (Van Tongeren et al. 2016), suggesting that humility may be positively linked with emotional maturity and self-regulation (Jankowski and Sandage 2014; Jankowski et al. 2013).

In this study, we assess the interrelationship between a core feature of religious life, *God-mediated control*, and humility. God-mediated control is the perception that God is a collaborator with humans in solving their problems (Krause 2005), working with this trusted other to eradicate problems that arise. Integrating psychological and theological arguments, we outline why this particular religious cognition should bear close linkage with humility. As a second study objective, we also assess how the relationship between God-mediated control and humility may be conditional on two sociodemographic characteristics, education and race. A large body of research has sought to determine how social status characteristics shape an individual's propensity to rely on God, generally showing that lower status and marginalized people are more likely to relinquish control to God (Hayward and Krause 2013; Schieman 2010; Schieman et al. 2006). Therefore, we also assess whether this propensity on the part of lower status individuals to rely on part might be more strongly related to humility among less educated and Black older adults.

Background

Religion and Humility: Integrating God-Mediated Control

Over the centuries, religious/spiritual leaders have emphasized the virtue of being humble. St. Augustine, widely regarded as one of the greatest theologians in the Christian faith tradition, wrote instructions on how to live a religious life: "the first part is humility; the second is humility; the third humility; and this I would continue to repeat as often as you might ask direction...unless humility precede...every good action we perform...any good work is...wholly wrested from our hand by pride" (as quoted in Sparrow-Simpson 1919: 53–54). Christ is often held as the example of Christian humility to emulate. According to Jonathan Edwards, humility for Christians means emulating Christ, "No angers nor men ever equaled him in humility..." (as cited in Cochran 2007: 77). This definition of humility is helpful when cast within the context of the current study; it explicitly grounds humility within an interpersonal context and involves the way the individual views themselves and their relationship with God.

To delve more deeply into this character strength, we propose that God-mediated control, a collaborative relationship with God characterized by the belief that one is working together with God to solve problems that may arise (Krause, 2005), might promote a deeper sense of humility. To accomplish this pursuit, it is important to carefully consider both cognitive and emotional aspects that this type of relationship might entail. A sincere sense of humility is more likely to arise if a person comes into contact with a vastly superior other (God) and acknowledges the need to rely on Him for help in navigating daily life.

When people believe that they have a collaborative relationship with God, they may begin to comprehend the vastness of Him. According to Cottingham (2006),



when this process occurs, a sense of awe may develop, "...a complete submission of the whole mind, intellectual, sensory, and moral, to something vastly greater and more perfect than itself, something to which we react with humility and get with joy, something whose glory is fearful precisely and wholly good" (144). Viewed from this perspective, people may feel more humble when they enter into a personal relationship with God, realize His superiority and influence in their lives, and experience the sense of awe that emerges as a result. A sense of awe may be a precursor to humility because it emphasizes perceptions of greatness outside the self and diminishes other feelings that may be self-focused or self-enhancing (Shiota et al. 2007).

Believers with higher God-mediated control may also disclose more of their fears and personal shortcomings to God. In other words, they may realize the parts of their lives where they need God more deeply. Cast in the context of the current study, this involves a higher degree of trust in God, which facilitates the humble disclosure of personal limitations. As we noted earlier, humility is defined, in part, by the ability to acknowledge one's mistakes, imperfections, and limitations (Tangney 2000). It follows from this that looking at oneself with knowledge of the need for God in daily life can create an important psychological context for the development of humility. When a person feels reliant on or awed by God, this opens a vast gap between their perceived and ideal self and brings to bear a recognition of how far they need to go.

Another characteristic of a humble person that might have close linkages with God-mediated control is attention to one's accomplishments and abilities. A humble person realizes that they are not entirely responsible for their own good fortune, which helps to abate inflated self-assessments. People with stronger beliefs in God-mediated control believe that the good things in their life have been given from God (Schueler 1997) and that God is involved in solving problems and adversities that one confronts. Placing more of the credit for positive events in one's life, inspired by God-mediated control, might also foster humility. A more well-developed relationship with God might also "prepare a person to transcend the ego" (Mikulincer and Shaver 2007: 467), allowing for a healthy acceptance of human limitation and control in life while at the same time being open to growth and spiritual trust.

Aging and Humility

Though it is not possible to study age differences in humility with this cross-sectional data, humility may be an important virtue to assess in middle and later life. In his widely cited theory of human development, Erik Erikson (1959) divides the life course into eight stages, characterized by challenge or crisis. In the eighth stage of integrity versus despair, typically encountered in later life, people review the significant experiences of their lives to weave the story of their lives into a coherent whole. Part of this task encompasses resolving the gap that arises when one thinks about what they set out to do and what they were actually able to accomplish. According to Krause (2018), an older adult will be unlikely to successfully resolve this crisis without a sense of humility, that is, without, "...a nondefensive willingness to see the self accurately, including both strengths and limitations" (Peterson and Seligman 2004: 403). In his theory of gerotranscendence, Tornstam (2005: 62) also argues



that when the stage of late life is reached, people "...come to see certain egotistical features in themselves and replace them with a higher degree of altruism." For these reasons, our sample of older adults provides an opportunity to assess humility among a group at a life stage where this virtue may be especially important.

Hypothesis 1 Stronger perceptions of God-Mediated control will be associated with greater humility for older adults.

Variation in the God-Mediated Control and Humility Link by Education and Race

Though we would expect an overall positive association between God-mediated control and humility, we present the case that this relationship might be stronger for older adults without a college education and Black older adults.

Though not the main focus of our study, we note that few empirical studies have assessed how socioeconomic characteristics (e.g., race/ethnicity, education) on their own are related to humility. There is some empirical work which suggests that racial minorities have higher levels of humility (Krause 2015; Webster et al. 2018). Some scholars have theorized that racial differences in humility could be indicative of a response to the experience of perceived unfair treatment. Racial and ethnic differences in humility may stem from socioeconomic patterns in the United States. For instance, African Americans are more likely to live in poverty compared to Whites (Assari 2018; LaVeist 2005). White Americans, by this logic, may have more opportunity to attribute their higher likelihood of success to their individual effort, given fewer structural barriers to overcome. Altogether, this might lead to more humility on the part of African Americans and less humility on the part of White older adults. In addition, since resilience has been linked to greater humility (Dwiwardani et al. 2014), racial groups that have experienced more discrimination and hardship compared to other groups may show greater humility.

A similar case might be made for less-educated respondents. Any group that has experienced relative hardships compared to another (e.g., those with less education compared to those who are college educated) might also have reason to show more humility. According to the cumulative advantage/disadvantage theory in the life course, stressful experiences are more likely to occur for those of a lower socioeconomic status (Dannefer 2003; Elman and O'Rand 2004). Therefore, humility may have a greater opportunity to develop in older adults who have faced greater hardship over their lives.

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An alternative perspective suggests is that higher rates of humility among the less educated and persons of color might be a sign of effective oppression strategies used by those in power to maintain social inequalities. Bloomfield (2020) goes so far as to argue that humility should not be considered a virtue, and that humility always serves conservative ends. Bloomfield (2020:2) argues that "humility...can also be an instrument of subjugation, a means of social control to maintain an unjust status quo."

While broad differences in humility by sociodemographic indicators are no doubt important, we are primarily interested in this study how educational attainment and race might condition the association between God-mediated control and humility. Starting first with education, people with less education tend to rely more heavily on religion in their day-to-day lives (Schieman 2011; Upenieks and Schieman 2021). Scholars have proposed the deprivation compensation hypothesis to explain this phenomenon. According to this view, the less educated "substitute" religion to compensate for their lack of secular resources (e.g., education) (Mirowsky and Ross 2003). As Ellison, Schieman, and Bradshaw (2014) note, the less educated tend to benefit more from religious beliefs and involvement, because those with a higher education already possess important resources, including earnings and wealth accumulation, financial and existential security, opportunities for novel experiences and personal growth, and social capital and efficacious social networks, among others. Devoid of these resources, Krause (1995) outlines that people with less education might place greater stock on religiosity—especially their relationship with God—in the absence of other resources. Writing about divine relations, Pollner (1989:94) implies that people with less education "may profit especially from the sense of order and meaning generated in and through divine interaction."

The deprivation compensation perspective holds that the less educated will be more likely to subscribe to notions of God-mediated control (see Krause 2005, 2007). However, we propose here that a collaborative relationship with God will bear a stronger positive association with humility for the less educated. In their discussion of beliefs in God's engagement in daily life and role in human affairs, Froese and Bader (2007: 472) contend that "perhaps education leads one to dismiss the idea that God continually intervenes in the world or perhaps material riches lead one to dispel the idea that God's intervention is a necessary component to success. The belief in God-mediated control may seem antithetical to those with higher education: human action is important to these individuals, yet at the same time could be undermined by the belief in God's control over worldly affairs and events in their lives. As Rogers and Konieczny (2018) note, religious beliefs can serve a social control function limiting the potential for social change for low-status groups. According to recent work by Evans (2022), education has a secularizing effect on supernatural beliefs in fields of study that involve inquiry as opposed to those that deploy extant knowledge.



Though the world may already be a humbling place for those with lower education, these individuals may recognize their need for God's intervention to compensate for their plight and deal with the immutable adversities in everyday life. Because the less educated may find personal significance in their relationship with God, they feel no need to establish their own worth through the attainment of worldly accomplishments or knowledge (Dumsday 2014). In this way, a low concern for one's status tied to one's dependence on God (i.e., humility) may be amplified for the less educated (Hill, Dunnington, and Hall 2018). According to St. Augustine, owning up to one's limitations is a natural response for someone who has acknowledged the need to work in collaboration with God. Therefore, based on the literature presented above, we arrive at our second study hypothesis:

Hypothesis 2 The positive association between God-mediated control and humility will be stronger for older adults with less education.

Race is an additional status dimension that we seek to consider as a moderator of the proposed relationship between God-mediated control and humility. African Americans are more likely to believe in a personal God and tend to view God as the ultimate ally, brother, father, and friend (Ellison et al. 2008). Eddie Glaude (2018), a prominent religious scholar, argued that the belief in God and his active role in human affairs is a crucial feature of African American religious life. A vast body of research has found that religion and spirituality occupy a more central place in the cultural lives of Black individuals in the United States (Chatters et al. 2009; Taylor et al. 2007). Black individuals are also more likely to believe that God is an engaged, loving presence in their lives (Froese and Bader 2010), and are less likely to experience divine struggles than White Americans (Upenieks et al. 2022). Related to the current study, Black older adults tend to have higher levels of God-mediated control compared to their White counterparts (Hayward and Krause 2013). God may be an important source of hope in the lives of African Americans because of the heightened struggles they have faced over their lifetimes (Upenieks 2021).

How might African Americans' higher propensity to believe in God-mediated control foster more humility? As a result of longstanding political, social, and economic inequalities that have characterized American society, Black older adults tend to find themselves in lower status positions, and frequent targets of institutional and interpersonal discrimination (see Bonilla-Silva 2019). The strength and humility, ultimately granted by God, may be more easily accepted for Black older adults who believe in God-mediated control. For Black older adults, God, as a trusted divine partner, is present with them in their struggles.

Past research has accumulated evidence to support this line of argument. For example, African Americans diagnosed with HIV derived their major source of support through their relationship with God (Poindexter et al. 1999). A religious consciousness and perspective of God as an all-powerful, protector against evil, and capable of ending suffering are important sources of strength and hope for African American believers (Hamilton et al. 2013a, b). Among African



Americans with cancer, the use of religious songs and Bible reading reminded the user of the possibility that God would be with them during their vulnerable time and take them from a place of suffering to one of peace and serenity (Hamilton et al. 2013a, b). For African American theologian Howard Thurman (1972: 1), the spiritual encounter always occurs as a co-operative affair between God and the individual: "Religious experience in its profoundest dimension is the finding of man by God and the finding of God by man." Seeking out the help of God may foster more humility among Black older adults, especially in a society which has historically excluded them as outsiders. On the basis of these argument, then, we put forth our final study hypothesis:

Hypothesis 3 The positive association between God-mediated control and humility will be stronger for Black older adults compared to White older adults.

Data and Methods

Sample

The data for this study comes from the *Religion, Aging, and Health Survey*, which is a nationwide survey of Whites and African Americans. To date, five waves of interviews have been conducted. The study population for the baseline survey was defined as all household residents who self-identify as black or white are non-institutionalized, English-speaking, and at least 66 years of age residing in the coterminous United States. This study was designed to investigate the role of religion in the lives of older adults and its specific link to health. Since it is challenging to devise a comprehensive set of religion measures for a large-scale study of religious life that are appropriate for persons of all faiths, the designers of the *Religion, Aging, and Health Survey* decided to restrict the study population to currently practicing Christians, individuals who were Christian in the past but no longer practice any religion, and people who were not affiliated with any faith at any point in their lifetime. The sampling frame consisted of all eligible persons contained in the beneficiary list maintained by the Centers for Medicare and Medicaid Services (CMS).

The baseline survey took place in 2001. The data collection for all waves of interviews was conducted by Harris Interactive (New York). A total of 1500 interviews were completed, face-to-face, in the homes of the study participants. African Americans were oversampled so that sufficient statistical power would be available to assess racial cultural differences in religion. The overall response rate for the baseline survey was 62%. The baseline survey was followed up by a Wave 2 survey in 2003 (N=1024; reinterview rate=80%), Wave 3 in 2007 (N=969; re-interview rate=75%), and Wave 4 in 2008 (N=718; re-interview rate=88%).

A fifth wave of interviews was completed in June of 2013. However, the sampling strategy for this round of interviews was complex. By the time Wave 5 interviews were conducted, 229 study participants were re-interviewed successfully. Many experienced significant illness that was associated with their advanced age (M=83.2 years) and a number had died (N=611). To retain sufficient statistical



power to conduct meaningful analyses, the following two-part sampling strategy was employed. First, the research team interviewed as many of the original study participants as possible (N = 229). The re-interview rate for people who had participated in the study previously was 63%. Second, this group was supplemented with a new sample of individuals who had not participated in the survey previously (N=1306). The same study population definition that was used at Wave 1 was used again at Wave 5. There was, however, one exception, in that age for eligibility from 66 to 50. The following strategy was used to sample individuals who has not participated previously in the study. Based on the data in the 2010 census, 50 geographic areas (i.e., Census tracts) were selected to proportionately represent the population aged 50 and older and White or African American. All households within each Census tract were enumerated. One eligible person within each household was selected at random to participate in the study. The response rate for the individuals who had not participated in the study previously was 45%. Altogether, a total of 1535 individuals participated in the Wave 5 interviews. The analysis presented here are based on Wave 5 survey, so it employs a cross-sectional design.

Dependent Variable

Humility: Six items were used to measure humility, which were developed by Peterson and Seligman (2004). These items were: (1) "I always admit when I am wrong, (2) "I am always humble about the good things that happen to me," (3) "I do not act as if I am a special person," (4) "I am honest with myself when I assess my own faults and limitations," (5) "I am honest with myself when I assess my own abilities and accomplishments, and (6) "Other people have talents, abilities, and accomplishments that are just as important as mine." Responses were scored on the following scale: (1) "strongly disagree," (2) "disagree," (3) "agree," and (4) "strongly agree." Answers to these six questions were summed, where higher scores represent greater humility (α =0.78).

Focal Independent Variables

God-Mediated Control: God-mediated control was measured by three items. These items were: (1) "I rely on God to help me control my life," (2) "I can succeed with God's help," and (3) "All things are possible when I work together with God" (see Krause 2005). For each item, responses were scored according to the following scheme: 1 = "Strongly Disagree," 2 = "Disagree," 3 = "Agree," and 4 = "Strongly Agree." Scores were summed to create a summary measure of beliefs in God-mediated control ($\alpha = 0.93$).

Education: Education is coded continuously in years.

Race: A binary variable contrasts White older adults (0) with Black older adults (1).



Control Measures

Several additional covariates were included in all analyses. We control for the age, gender (male=1) and marital status (married=1; 0=otherwise) of the respondent.

We also adjust for several religious covariates. First, we included a measure of church attendance, gauged by the question, "How often do you attend religious services?" Responses were initially coded into nine categories, but we ultimately coded attendance into a four-category variable, with (1) Never attends, (2) Attends yearly, (3) Attends monthly, and (4) Attends weekly or more. We also adjust for how often a respondent engaged in frequent prayer. This was coded into a four-category variable where (1) Never prays, (2) Prays monthly, (3) Prays weekly, and (4) Prays daily or more. Finally, we include adjustment for religious denomination at Wave 5. This was coded as a series of dummy variables, with Protestant serving as the reference group compared to "Catholic" and "Other Christian" (e.g., Eastern Orthodox, Mormon/LDS/Church of the Latter-Day Saints). Additional analyses disaggregated the "Protestant category" to include separate categories for Conservative and Black Protestant (Steensland et al. 2000); results remain unchanged. Since denominational differences were not the focus of this study, we elected to retain our initial classification of denominations. We excluded older adults who were religiously unaffiliated respondents because it is important to control for religious denomination when assessing God-mediated control beliefs (see Krause and Hayward 2014), though results are substantively similar if the unaffiliated were included.

Plan of Analysis

A series of Ordinary Least Squares (OLS) regression models with robust standard errors were used to test our hypotheses. The decision to use robust standard errors was informed by a significant kurtosis test for normality on our dependent variable of humility (p=0.041), which leads us to reject the null hypothesis of this test that humility was normally distributed. Listwise deletion was used to handle missing data, yielding a final sample size of 1152. Results were also consistent if multiple imputation with chained equations was used to address missing data (Royston 2005).

Model 1 tests a baseline association between God-mediated control and humility, net of all other demographic and religious covariates. This serves as a test of Hypothesis 1. In Model 1, we also test whether there are main associations between race and education and humility. Model 2 tests an interaction term between God-mediated control and education, serving as a test of Hypothesis 3. Finally, Model 3 introduces an interaction term between God-mediated control and race, serving as a test of Hypothesis 2. To aid in the interpretation of interaction terms, we use the margins command in Stata 14 to derive average marginal effects at various levels of God-mediated control: at the mean (moderate God-mediated control), and at one standard deviation above (high God-mediated control) and below the mean of God-mediated control (low God-mediated control).



Results

Table 1 presents descriptive statistics for all study variables. To highlight a few notable ones, humility scores ranged from 9 to 24, with respondents in our sample averaging 18.88 (mean = 2.47, SD = 1.88). God-mediated control scores ranged from 3 to 12, yielding a fairly high mean of 10.53 (SD = 1.88).

The average age of our analytic sample was 63.28 (SD=11.65). Older adults in our sample had a mean of 13.08 years of education, which would correspond to a little more than high school (12 years), with a standard deviation of 2.24 years. Roughly 45% of the sample had more than 12 years of education, and 7% of the sample had 16 or more years of education, equivalent to a college degree. Moreover, 35% of our sample was Black.

Multivariable Regression Results

Table 2 shows results from our ordinary least squares regression models predicting humility. We present unstandardized regression coefficients in all statistical tables. Model 1 tests for an association between God-mediated control and humility, net of

Table 1 Descriptive statistics, 2013 *religion, aging, and health survey* (N = 1152)

	Mean/%	S.D	Minimum	Maximum
Dependent variable				
Humility	18.88	2.47	9	24
God-mediated control	10.53	1.88	3	12
Education (years)	13.08	2.24	3	20
Black	35.58			
Age	63.28	11.65	50	102
Male	39.35			
Married	41.55			
Religious attendance				
Never attends	11.69			
Attends yearly	25.61			
Attends monthly	13.20			
Attends weekly or more	49.51			
Private prayer				
Never prays	47.13			
Monthly prayer	39.14			
Weekly prayer	6.53			
Daily prayer	7.19			
Religious affiliation				
Protestant	40.79			
Catholic	16.58			
Other	42.64			

Standard deviations are omitted for categorical variables



Table 2 God-mediated control and humility: contingencies by race and education, 2013 religion, health, and aging survey (N=1152)

	Model 1	Model 2	Model 3
God-mediated control	0.39*** (0.06)	1.11** (0.33)	0.35*** (0.07)
God-mediated control*education		-0.06* (0.03)	
God-mediated control*black			0.20* (0.10)
Education (years)	0.03 (0.04)	0.63 (0.27)	0.04 (0.04)
Black	0.04 (0.21)	0.04 (0.21)	-2.22 (1.49)
Age	0.02 (0.01)	0.02 (0.01)	0.02 (0.01)
Male	-0.07 (0.19)	-0.05 (0.18)	-0.05 (0.19)
Married	0.22 (0.19)	0.21 (0.19)	0.22 (0.19)
Religious attendance ^b			
Attends yearly	-0.45 (0.42)	-0.50 (0.42)	-0.43 (0.42)
Attends monthly	-0.38 (0.45)	-0.39 (0.45)	-0.36 (0.45)
Attends weekly or more	-0.43 (0.41)	-0.45 (0.41)	-0.44 (0.41)
Private prayer			
Monthly prayer	-0.09 (0.20)	-0.07 (0.20)	-0.07 (0.20)
Weekly prayer	-0.72 (0.44)	-0.74 (0.44)	-0.72 (0.44)
Daily prayer	-0.85 (0.52)	-0.77 (0.53)	-0.91 (0.53)
Religious affiliation ^a			
Catholic	0.16 (0.26)	0.12 (0.26)	0.18 (0.26)
Other Christian	0.25 (0.21)	0.23 (0.21)	0.22 (0.21)

Unstandardized regression coefficients shown. *p<.05, **p<.01, ***p<.001. Robust standard errors shown in parentheses

demographic and religious covariates. As shown in Model 1, stronger perceptions of God-mediated control are significantly associated with greater humility (b=0.39, p<0.001). This suggests that a move from a 10 on the God-mediated control scale to 12, the strongest perceptions of God-mediated control that a respondent could report, is associated with a 0.78 increase in humility scores. This finding provides



^aCompared to protestant

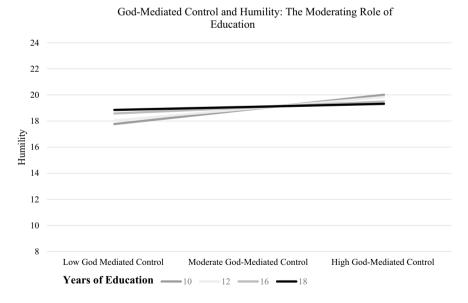
^bCompared to never attends

^cCompared to never prays

support for Hypothesis 1. Notably, we also see in Model 1 that neither education nor race had a significant main association with humility. However, Models 2 and 3 test whether this association between God-mediated control and humility differ as a function of these status characteristics, respectively.

Moving to Model 2, we see that God-mediated control retains its significant association with humility (b=1.11, p<0.01). We also see the emergence of a significant, negative interaction term between God-mediated control and humility (b=-0.06, p<0.05). This suggests that the overall association between God-mediated control and humility is weaker among those with more years of education, or said differently, stronger among those with less education.

Figure 1 helpfully visualizes the interaction term documented in Model 2. As shown in Fig. 1, we plot predicted humility scores at four different quantities of education: 10 years (less than high school), 12 years (high school or equivalent), 16 years (college degree) and 18 years (more than a college degree) across three levels of God-mediated control: low, moderate (men), and high. We would draw attention to the darkest grey line in Fig. 1 (representing those with 10 years of education) as well the black line (representing those with 18 years of education) and light grey line (representing those with 16 years of education). Moving from low God-mediated control to high God-mediated control, the steepest rise in humility is among those with 10 years of education, moving from average humility scores of 17.77 at low God-mediated control to 20.01 for low God-mediated control. The relationship between God-mediated control and humility was flat (and non-existent) among those with 18 years of education, and those with 16 years of education. Indeed, humility



Note. Estimates are derived from Model 2 of Table 2. All other covariates held at their respective means.

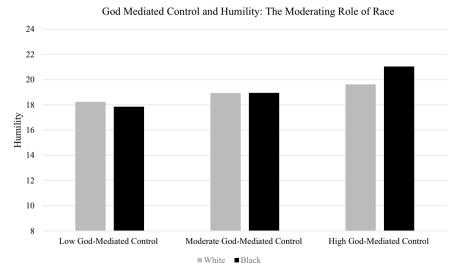
Fig. 1 God-mediated control and humility: The moderating role of education



scores increased only from 18.85 among those with 18 years of education and low God-mediated control to 19.32 for the highly educated group with high God-mediated control. Examining the instantaneous rates of change (using the *dydx* command in Stata), the slope of the line between God-mediated control and humility is 0.56 at 10 years of education, 0.45 at 12 years of education, 0.23 at 16 years of education, and 0.12 at 18 years of education. We therefore see support for Hypothesis 2: the relationship between God-mediated control and humility was stronger for older adults with less education.

Finally, Model 3 considers our second conditional relationship of interest, that between race and God-mediated control. Again, God-mediated control retains its significance in predicting higher humility (b=0.35, p<0.001). In Model 3, we also see the emergence of a significant interaction term between God-mediated control and race, this time in the positive direction (b=0.20, p<0.05). Using the *pwcom-pare* command in Stata, the pairwise difference in slopes in the God-mediated control and humility relationship between Whites (0.34) and Blacks (0.54) was found to be significant. The positive interaction coefficient means that the relationship between God-mediated control and humility is stronger among Black older adults.

Figure 2 displays a visualization of this interaction term, plotting predicted humility scores for Black versus White older adults at low, moderate (mean), and high levels of God-mediated control. As shown there, the relationship between God-mediated control and humility is weaker for older White adults (shown by the grey bars in Fig. 2). In contrast, the relationship between God-mediated control and humility is stronger once we move beyond moderate levels of God-mediated control scores for Blacks, indicated by the Black bars in Fig. 2. Indeed, the move from moderate God-mediated control scores to high God-mediated control for Blacks is



Note. Estimates are derived from Model 2 of Table 2. All other covariates held at their respective means.

Fig. 2 God mediated control and humility: The moderating role of race



associated in a rise in humility scores from 18.95 to 21.04, over a full unit. Moreover, Blacks with low God-mediated control scores report average humility scores of only 17.85. Black older adults with high God-mediated control scores also report greater humility than their White counterparts with high God-mediated control, on average 1.42 units higher on the utility scale. On the basis of the results observed in Model 3, then, we find support for Hypothesis 3: the association between God-mediated control and humility is stronger among Black older adults compared to White older adults.

Discussion

Humility lies at the heart of religion, as Christian scholars St. Augustine and St. Thomas Aquinas have advocated, and has also been linked to several favorable outcomes, including health (Krause 2010; Jankowski and Sandage 2014), better social relationships (Davis et al. 2013; Van Tongeren et al. 2014) and more effective job performance and organizational leadership (Johnson et al. 2011; Lee et al. 2019; Howard and Van Zandt 2020). Given both theological and social scientific interest in humility, we sought to expand on a growing base of empirical evidence linking religion/spirituality and humility (see Davis et al. 2014, 2017; Jankowski et al. 2021, 2022; Rowatt et al. 2014; Van Tongeren et al. 2016, 2018). In the current study, we considered how one aspect of religion/spirituality, perceptions of God-mediated control, may be an additional precursor to humility. We also examined whether the association between God-mediated control and humility was conditioned by socioeconomic status (education) and race, incorporating these important sociodemographic characteristics into the study that are also understudied with humility as the outcome.

Several important findings emerged from our analysis. First, as expected, stronger perceptions of God-mediated control were associated with greater humility. The belief that one is working together with God to solve problems (Krause 2005) appears to promote a greater sense of humility. This finding fits squarely within theological discourses on humility. As St. Thomas Aquinas argued, "humility properly regards the subjection of man to God" (Aquinas 1920: 61). For a human to be humble, according to Aquinas, they must recognize themselves as an inherently valuable child of God. To be humble, for Aquinas, was to also realize that one's value as a person is ultimately given to them by God, just as one's existence is granted by God.

There are several theoretical mechanisms that may underlie this finding. First, a sense of humility may arise from acknowledging one's dependence on a superior being, appreciating the limits of human finitude and acknowledging God's greatness outside of one's self. This sense of awe of God, created in and through a personal relationship with Him, might be an important precursor to humility (Shiota et al. 2007; . As one theologian, Wolfhart Pannenberg (1994: 24) affirmed, the Christian faith gives a paradigmatic example of what it means to humbly relate to God through the life of Jesus Christ: "Jesus...accepted his finitude, and with it the finitude of the human creature and of all creaturely existence in relation to God by honoring God as his own Father and Creator, and as the Father and Creator of all creatures."



Altogether, if people see themselves in a collaborative relationship with God, the seeds of humility may be sown in this relationship. The cognitive belief that God can be trusted as an intimate collaborator in the chaos of human life could foster humility among older adults. An honest acknowledgment of the need for God on the part of older adults can create a ripe context for the development of humility, especially since this is a stage of the life course when personal control fades and God is relied on to a heavier extent (Hayward and Krause 2013). A well-developed relationship with God could also allow one to transcend their own ego, and heed religious calls to, as St. Paul suggests, "...in humility value others above yourselves, not looking to your own interests but each of you to the interests of the other" (Philippians 2:4, NIV).

Two other key findings were observed in this study. The relationship between God-mediated control and greater humility was stronger for low status groups, namely, the less educated and Black older adults. Before discussing these results, however, we note that we saw no main association between race or education with humility in our first statistical model. This is inconsistent with a previous study on this topic, which have found that the less educated and Black adults to be more humble (Webster et al. 2018). Since so little work has been done on sociodemographic predictors of humility, we would surmise that the inconsistency in our findings with respect to previous research is a function of the sample used. While Webster and colleagues (2018) looked only at a sample of adults from the Detroit Area Study, we relied here on a nationally representative sample of older adults who were practicing Christians or former Christians. Future work is needed to further explore how humility may differ in important ways across groups of various social statuses in variegated samples.

Even though no main effect was observed for sociodemographic differences in humility, we did find that the conditional associations worked in the expected direction, with education and race moderating the association between God-mediated control and humility. Beginning first with education, we found that the less educated (less than high school) were more humble at higher levels of God-mediated control. According to the resource substitution perspective, the less educated may be more prone to rely on aspects of their religious/spiritual life as a compensatory mechanism for their lack of status and power in the secular work (Mirowsky and Ross 2003). As it relates to humility, it appears that a personal, collaborative relationship with God is an important factor in promoting humility among the less educated. Recall that, in the absence of higher levels of God-mediated control, the less educated did not have humility scores that differed significantly from their higher educated counterparts. We suspect that not only does a lower education prompt greater acceptance of God's role in human life (Krause 2005, 2007; Schieman 2011; Upenieks and Schieman 2021), but it may also spur greater recognition that God's intervention is needed as the hardships of daily life are confronted. Humility should be a natural by-product of acknowledging the need to work in collaboration with God. Devoid of secular resources, the less educated might find greater meaning and significance in their association with God and may as a result of their status feel no need to establish their own worth through the attainment of worldly accomplishments or knowledge (Dumsday 2014; Hill, Dunnington, and Hall 2018).



We also saw a similar interaction pattern observed for race, where the positive association between God-mediated control and humility was strengthened for Black older adults. As with the less educated, scholars have found that Black Americans tend to believe in the importance of cultivating a relationship with a personal God (Glaude 2018; Hayward and Krause 2013). Racial differences in humility have been thought to reflect differences in the experience of perceived unfair treatment and discrimination (Webster et al. 2018). Resilience has also been linked to greater humility (Dwiwardani et al. 2014), and according to some accounts, racial groups that have experienced more discrimination may be more humble because of their position in a society that affords them few breaks. Black older adults may be, as St. Thomas Aquinas says, more likely to "subjugate" themselves to God, recognizing through Him their inherent value as a person. If God is a trusted partner, present to them in the struggles of this life, they may have more humility from their dependence on God. As with education, Black older adults in our sample did not report greater humility than their White counterparts in the absence of stronger perceptions of God-mediated control. Our findings suggest that perhaps some of the greater humility reported by Black people in the United States could be attributed to stronger reliance on God's intervening role in human affairs.

This consistent pattern of moderation results observed for the less educated and Black older adults invites further reflection on the possible role of humility in addressing other forms of inequality that exist, particularly surrounding health and well-being. For instance, given the salubrious associations of humility with physical and mental health (Krause 2010; Rowatt et al. 2006), the findings of our study suggest that a collaborative relationship with God for those of a lower status could possibly be a mechanism to reduce educational and racial differences in health. Further research is needed on religious/spiritual pathways that might connect humility to health, but to the extent that humility can be fostered in greater amounts among lower status groups through their faith, disparities in well-being could possibly be reduced.

We must also acknowledge the possibility that the positive association we observed between God-mediated control and humility, which was stronger for Black and less educated older adults, could also involve existential avoidance. Sandage and colleagues (2015), for instance, suggest that "like ascetic behavior and spiritual bypassing, high levels of idealisation hunger are easily misinterpreted as humility" (pg.210). Another possibility is that God-mediated control is positively associated with humility and reflects either a form of self-abasing (e.g., Weidman et al. 2018) or possessing too much humility that gives to much deference to another (Bloomfield, 2020). Viewed from this perspective, ceding all or some control to God might come at the cost of viewing *oneself* as capable of handling challenges in life (Schieman et al. 2018), and we would encourage future work to probe the complexities inherent in secondary forms of divine control and their positive and negative consequences for older adults.

Despite the novel contributions made in the current study, we acknowledge several shortcomings. First, as some researchers argue, self-reports of humility, like the ones used in the current study, may be influenced by social desirability bias (Powers et al. 2007). It is possible, for instance, that religious people rate



themselves as more humble because to do so aligns them more closely with the official teachings of the church. Rowatt and colleagues (2002) find that those who believe they are more adherent to biblical commandments than others (referred to as the 'holier-than-thou effect' tend to overvalue their sense of self relative to others (i.e., are less humble). Unfortunately, measures of social desirability were not available in the current study.

Second, we were limited by cross-sectional data in the current study. It is possible that more humble individuals are more likely to seek out God or other aspects of religiosity. A common theme among religiousness/spirituality and virtues, including humility, is the need for longitudinal designs that can sort out the temporal order among variables (Davis et al. 2017). It may be that there are bidirectional associations between virtues and religiousness over time (Hardy et al. 2019). It could also be that in the presence of other virtues (gratitude, forgiveness), humility might not have a significant longitudinal association with elements of religion/spirituality (e.g., Jankowski et al., 2022). In addition, the sample focused exclusively on individuals who are or were formerly Christian, potentially limiting the generalizability of our findings.

Third, we also focused on a narrow age range of Americans who were 50 years and over at the time of data collection. Future research should replicate our findings with younger samples to observe whether the relationship between God-mediated control and humility and the reported contingencies by race and education are robust in samples collected at earlier stages of the life course. Along similar lines, Wave 5 of the *Religion*, *Aging*, and *Health Survey* was conducted almost a decade ago. Several events have transpired since then in the United States, such as the COVID-19 pandemic, divisive politics and the rise of Christian Nationalism, and intense polarizations along identity dimensions. Such events may have altered the meaning, and the potential relevance, of a construct like God-mediated control, a period effect which could accentuate or decrease the importance of God-mediated control. We therefore encourage future research to replicate our findings with more recent waves of data collection.

Despite these limitations, this paper contributes to the broader literature that anchors the study of individuals' perceived relationships with God and personal spirituality within an understanding of the wider stratification system. A growing body of work has sought to determine how social status characteristics influence an individual's propensity to rely on God, generally showing that lower status and marginalized people are likely to rely more heavily on God (Hayward and Krause 2013; Schieman 2010; Schieman and Bierman 2011). We extend these important findings in this study by showing that such relationships with divine beings also tend to be associated with stronger perceptions of humility for marginalized groups. This type of analysis positions the study of religious cognitions and experiences—which may strike some scholars as idiosyncratic and intrapsychic—as amenable to sociological theorizing and analysis and with the potential to offer profound insights regarding the role of religion in larger systems of social inequality.



Conclusions and Implications

The once modest field of research on humility has been growing over the past several years. Researchers from various disciplines, including psychology and sociology, have contributed to defining humility and have examined its correlates and its utility in predicting a host of outcomes, including health and well-being. It is our hope that this study catalyzes the development of future research to advance this important virtue of social life. For instance, once we know more about the genesis of humility, we can turn to the important task of assessing whether people can be taught to be more humble, perhaps providing an important means by which physical and mental health can be improved (Krause 2012). Existing evidence suggests that targeted humility interventions, such as giving respondents workbooks to promote humility, can be effective among religious leaders (Cuthbert et al. 2018), undergraduate students (Lavelock et al. 2017) and for patients undergoing psychotherapy (Jankowski et al. 2021). We also see several open questions that can be stimulating areas for future research on humility. For instance, future work should continue to explore and consolidate the religious/spiritual characteristics that are core to humility, paying special attention to the effects carried by public versus personal religiosity. In addition, future work should seek to identify whether there is a "dark side" to humility. Indeed, character traits that we deem to be virtuous often hold drawbacks in certain contexts. A situation in which one is too humble, for instance, might allow one to take little pleasure in hard-won accomplishments or achievements. More work could also be done to link humility to other virtues, such as gratitude, forgiveness, and patience (e.g., Krumrei-Mancuso 2017). Given the centrality on humility to religious/spiritual life, there remains important work to be done on this topic that lies at the intersection of several disciplines.

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