

*Interdisciplinary Journal of Research on
Religion*

Volume 15

2019

Article 6

Virtues for Me or Virtues for You?:
Patterns of the Perceptions of the Religious
Virtues

Michael A. McCann

Fuller Theological Seminary
Pasadena, California

Douglas M. Stenstrom

California State University, Los Angeles
Los Angeles, California

Virtues for Me or Virtues for You?: Patterns of the Perceptions of the Religious Virtues

Michael A. McCann

Fuller Theological Seminary
Pasadena, California

Douglas M. Stenstrom

California State University, Los Angeles
Los Angeles, California

Abstract

Is one virtue perceived as better than another? Although the seven deadly sins (SDS: gluttony, envy, greed, lust, pride, sloth, wrath) have received some degree of investigation, the corresponding contrary virtues have been relatively unaddressed. Similar to past research on the SDS we investigated how religious and nonreligious individuals in the United States distinguish the relative weight of the corresponding seven virtues (temperance, kindness, charity, chastity, humility, diligence, patience). The method involved used a survey-format of 16 questions in which respondents ($N = 599$, 254 males, 343 females) were asked to rate the corresponding seven virtues as well as answer demographic grouping variables. A repeated measures analysis of the sample found a cultural “virtue pattern” ranging from self-focused to other-focused and falling into a threshold-based responding for some groups. A mixed-factorial ANOVA analysis across different groups that were differentiated by gender, religion, age, marital status, and politics found moderating variables, including a “Chastity Effect” that has bearing on past research of the SDS. The results not only provide between-group moderating differentiation but also reveal patterns of responding for how contemporary society perceives virtues within and across religious and non-religious groups in the United States, including revealing two factor analysis clusters of Giving v. Withholding virtues.

The world religions have attempted to define what the antidotes are for humanity's proclivity towards evil. In Western religious systems this evil has been conceptualized as sin. Through the literature and scholarship of the early Christian Church emerges an outline of the seven most deadly sins (lust, greed, pride, envy, gluttony, sloth and wrath) (Capps 1989; Schimmel 1997; Veselka, Giammarco, and Vernon 2014). This list of sins has penetrated popular culture and still resides in Western societies' zeitgeist (for a long list see Wikipedia article, "Seven Deadly Sins" 2011). To fend off these sins, virtues have been outlined as an antidote to the destructive nature of these seven sins (Capps 1989: 232). Virtues play a significant role in the formation of the individual and society, by providing opportunities for personal and interpersonal improvement through concentration on growth in one's virtues (Pennington and Hackney 2017: 429). They are also a community's recognition and commitment to moral values which informs the basis of its moral discourse (Etzioni 1992: 530) and informs how people perceive moral conduct, what matters most, and how to act well under a range of different circumstances (Hasselberger 2017: 776). Considering this reality, understanding how people perceive virtue has benefit not only for the religious but also the broader cultural context, for learning more about how people perceive others and themselves in the social world. In the social sciences there has been ample research done on the prevalence and influence of religious concepts, but little research extended into the specific seven deadly sins, and even less on their corresponding virtues. The purpose of the present research is to investigate from a cultural perspective how people distinguish the relative weights of different virtues.

Though the concept of sin is discussed throughout the Old and into the New Testaments, the seven deadly sins, as they are widely known, took time to come into their systematized form. In the Bible sin is discussed in general terms, unlike the specific classifications theologians often present (Powell 1989: 964). The traditional view of sin in the Bible sees it as a deviation from the norm or an act that misses the intended point of action (Grenz 1994: 183). As the Christian Church grew and theology developed along with it, a theology of sin emerged (Grenz 1994: 199; Powell 1989: 964). The conception of the Seven Deadly Sins did not exist before the 4th century BCE, where it emerged out of both the dogmatism of the Catholic Church and Medieval Literature (Capps 1989; Capps and Haupt 2011; Veselka, Giammarco, and Vernon 2014: 75). The Seven deadly sins are commonly understood as envy, gluttony, greed, lust, pride, sloth, and wrath (Stenstrom and Curtis 2012: 3). Though the concept of the seven sins was established in Western culture as early as the 4th century, their virtuous counterparts did not have the same representation.

In the religious tradition there is extensive discussion on the topic of virtues in both systematic theology and literature. One of the earliest conceptualizations of

virtues in Western culture can be traced back to Aristotle in 384 B.C.E to 322 B.C.E. (Kinghorn 2017: 440). Although Aristotle does not provide a formal list or weighing of the significant virtues, stemming from his perspective theologians have applied virtues against the sinful nature of humanity (Kinghorn 2017: 441; Titus 2017: 449). One of the first theologians to discuss the nature and significance of virtues, responding to the initial work of Aristotle, was Augustine of Hippo in the 4th and 5th century A.D. Augustine saw the significance of virtues in the proper functioning of society (Kinghorn 2017). He laid a foundation in theological virtue theory upon which other philosophers proceeded to elaborate. One of these thinkers was named Thomas Aquinas. Thomas Aquinas, an enduring leader in Christian virtue theory in the 13th century, discusses the significance of virtues in the theological abstract as well as their significance in praxis (Titus 2017: 447). Aquinas views virtues as important dispositions that provide foundations for concrete and predictable behavior (Titus 2017: 448). His perspective posits that virtues are dispositions inherited through faith in the Christian God, rather than the popular view that virtues are merely practiced behaviors that are antidotal to sins (Capps 1989: 232). He also saw, however, that these virtuous dispositions had to be cultivated through habitual practice. Aquinas's discussion of the nature of virtues focused on care, compassion, patience, perseverance, the management of fear, and the tempering of desires.

The antidotal approach to understanding virtue emerged as Christianity's response to humanity's sinful proclivity. Unlike the seven deadly sins, there is more variability in the list of religious virtues, including theological virtues, heavenly virtues, and cardinal virtues (Kinghorn 2017), some of which correspond to the approach advocated by Aquinas that virtues are dispositional. The ones specifically designated to oppose the SDS as antidotes, instead, are the contrary virtues: chastity, temperance, diligence, humility, charity, patience, and kindness (these correspond to the SDS: lust, gluttony, sloth, pride, greed, wrath, and envy). Much of the theological discussion around virtues views them as a disposition rather than a categorized list of behaviors (Charry and Kosits 2017; Kinghorn 2017; Titus 2017). This reality is artistically rendered in the Medieval Poem by Prudentius, *Psychomachia*, which blends the dispositional perspective with viewing virtues as ambiguous forces, represented in the poem as angelic-like warriors who battle the forces of sin, which have a clear symbolic representation of the seven deadly sins as demonic opposition. In his poem, Prudentius cultivates the perspective that virtues are the behaviors that counter-balance or respond to sins. Though this distinction is made poetically, the protagonists possess an amalgam of virtues rather than a singular characteristic like their sinful foes. Similarly, although virtues are not explicitly discussed in the Bible, there is an understanding that prescriptive action is required to negate the sinful nature of humanity. In the Bible, sin is generally understood to reside inside each person

(Powell 1989: 964). This understanding is placed in tension when theologians discuss how human agency aligns with the aims of God, with the good (Grenz 1994: 181). This notion of human agency emerges—namely, that with their free will people are able to take action against their own proclivity towards evil. Virtue, then, can be an antidote to the sinful nature of people. Conversely, vice can be seen as the absence of virtue (Bejczy 2011).

Positive psychology has a related, but more expansive, operationalized view of virtue theory. The VIA Classification developed by Peterson and Seligman (2002; 2004) is a taxonomy of 24 universal strengths and virtues that has found research-based links to important life outcomes such as life satisfaction and achievement (Niemiec 2013), and falls into different categories of virtue (wisdom, courage, humanity, justice, temperance and transcendence) (Kinghorn 2017: 436). Beyond individual character traits, there are also attempts to define virtue at a broader categorical level within the social-sciences along six dimensions: as integrated ethics and health, embodied character traits, sources of strength and resilience, embedded in cultural context, providing a sense of meaning and purpose, and grounded in the cognitive capacity for wisdom (Schnitker and Emmons 2003; Sandage and Hill 2001). Across all these conceptualizations and VIA taxonomy is the understanding that virtues are focused inwardly to help promote the flourishing of the virtuous person. Positive psychologists view the domain of virtues as being inside of the human individual, in which individuals will not necessarily manifest all strengths and virtues in the same way, but also form universal principles in which virtue is at the intersection of religion, psychology of religion, personality psychology, moral philosophy, and the psychology of emotion (Emmons 2003).

The positive psychology list of positive traits has bearing on the religious virtues within the religious tradition. For example, the categorized 24 character traits span the human condition, not just from a religious perspective specific to sin/virtue: a factor analysis of over a million participants found a three-factor structure of Caring, Control, and Inquisitiveness (McGrath, Greenberg, and Simmonds 2017) that does relate to the religious conceptualization of moral transgressions. In other words, although the Positive Psychology list of 24 traits includes many character strengths ostensibly not directly tied to religious sin/virtue, the overarching structure or theme of their three category approach suggests that utilizing the traits can deter from the negative aspects of life and help the person flourish, especially the constructs of Control (controlling the self in the sense of self-regulation) and Caring (caring in the sense of outward positive emotion or behavior). The virtues that correspond to the SDS within the religious tradition appear to stem from that same viewpoint of controlling the self and caring for others: chastity, temperance, diligence, humility, charity, patience, and kindness (that correspond to the SDS—lust, gluttony, sloth, pride, greed, wrath,

envy). Along those same lines, virtues are significant for the collective understanding of how a person ought to generally behave toward the self and others (Hasselberger 2017) and provide societal guidelines of normative ethical behavior. Given there is little to no empirical research on the perceptions of these contrary virtues within the context of the SDS, we sought to investigate this unaddressed area of the cultural perceptions of the virtues, including the moderating effect of variables such as age, gender, religion and politics. The current research then also uses multiple regression techniques to predict evaluation of the virtues and patterns of response for how contemporary society perceives virtues within and across religious and non-religious groups in the United States.

METHOD

Participants

Participants in this study were 599 Internet users (343 females, 254 males, 2 n/a; age, $M = 35.81$, $SD = 11.73$) recruited via Amazon's Mechanical Turk (MTurk), an Internet site that allows completion of tasks for monetary reward. Participants were compensated \$0.15 for their participation. Most participants were Christian (47.6%), and roughly equally split between married (39.9%) and never married (37.9%). A detailed break-down of the number of participants within each demographic category is displayed in the first column of Table 1. MTurk is a crowdsourcing website that connects respondents with various types of research, including psychology studies. Amazon's Mechanical Turk service allows location restrictions upon participation, such as in this case restricting to the United States. The advantages of the platform are subject anonymity, inexpensive and efficient collection at scale, ability to recruit rare populations, fast data collection, prescreening qualifications, and cross-cultural diversity (Paolacci, Chandler, and Ipeirotis 2010). The disadvantages of the platform are non-naiveté, dishonesty about inclusion criteria if the study requires inclusion criteria, and inattention, although some research suggests that participant attention is the same or better than undergraduate populations (Buhrmester, Talaifar, and Gosling 2018). Over the last few decades, MTurk has been used extensively in the social sciences by thousands of researchers across almost every social science discipline (Buhrmester, Talaifar, and Gosling 2018). In that time MTurk has been empirically tested for its demographically diverse population and reliability in data outcomes in comparison to traditional methods (see Keith, Tay, and Harms 2017; Mullinix et al., 2015). In terms of demographics, MTurk is more diverse than the traditional undergraduate subject pools (Buhrmester, Kwang, and Gosling 2011; Keith, Tay, and Harms 2017) and equivalent to the US population

on gender (Burnham, Le, and Piedmont 2018) but younger and more educated (Keith, Tay, and Harms 2017). In terms of politics the MTurk respondents are more frequently Liberal, but the characteristics of Liberals/Conservatives generally match that of the national population (Clifford, Jewell, and Waggoner 2015). In terms of religion the MTurk respondents are frequently more secular than the general population, but the respondents who are religious are generally representative of the national population (Lewis et al., 2015).

Materials and Procedures

The survey consisted of 16 items. The first seven items concerned the seven virtues. Participants were asked to rate the seven virtues by first reading the following instructions: “Everyone has heard of the Seven Deadly Sins, but there are also corresponding virtues that are the opposite of the sins. Is one virtue better than another? Please rank the ‘Seven Virtues’ by placing each on the line.” To help the participants understand how to use the 100-point sliding scale for each question, a statement read, “The line ranges from 0% to 100%, with 0% indicating it not a virtue. Given the way the software is set up, to keep the slider at 0, click on it once.” That last sentence was necessary because the Qualtrics survey item defaults at 0 but does not record a response unless the participants clicks on the scale. The scale visually had a “0” on the left-hand side of the slider, and a “100” on the right-hand side of the scale range. Presentation of the seven questions was randomized by the Qualtrics system for each participant. Each question followed the same format. For example, for humility the question read, “The virtue that actively counters or deters ‘pride’ is called humility. To what degree is that a virtue?” The other questions followed the same format, interchanging the SDS and its corresponding virtue: humility, diligence, chastity, temperance, kindness, charity, and patience. As mentioned earlier, the virtues that oppose the SDS are chastity, temperance, charity, diligence, patience, kindness, and humility, but chastity has sometimes been labelled as “abstinence” and temperance has sometimes been labelled as “liberality.” Given that the modern participants may not know the word “liberality” and may construe “abstinence” in a predefined way because of the controversial “Abstinence Only” sexual education program, we opted for the more neutral and understandable terminology of chastity and temperance used by others (Veselka, Giammarco, and Vernon 2014) to describe the contrary seven virtues.

The remaining nine questions assessed demographic grouping variables. First, participants indicated their age, and then answered four questions about religion. The four religious questions were, “Religion” (Christian, Jewish, Muslim, Buddhist, Hindu, Agnostic, Atheist, Secular, Other); “Do you think of yourself as a religious person?” (4-point scale: “Not at all religious,” “Little religious,”

“Moderately religious,” “Very religious”); “If you have a religion, do you think of yourself as progressive, mainstream, or fundamental?” (“Progressive (liberal),” “Mainstream (moderate),” “Fundamental (conservative)”); “How often do you attend religious services?” (“More than once a week,” “Once a week,” “Once or twice a month,” “A few times a year,” “Once a year or less,” “Never”). The purpose of each question was to tap into a different aspect of the religious experience. Beyond the religion affiliation, we wanted to assess degree of self-identity (Do you think of yourself as religious person?), religious ideology (Progressive, Mainstream, Fundamental), and behavioral aspects of religion (How often do you attend religious services?). It is possible that different components of the religious experience may influence the perception of the virtues.

Next participants reported gender, and then answered two political orientation questions: “Do you generally vote or identify with a political party?” (“Democrat,” “Republican,” “Independent,” “None,” “Other”) and “When it comes to politics, do you usually think of yourself as liberal, moderate, or conservative?” (“Very Liberal,” “Liberal,” “Slightly Liberal,” “Moderate,” “Slightly Conservative,” “Conservative,” “Very Conservative,” and “Don’t Know/None”). The final question was marital status with five response options (“Married,” “Living with Partner,” “Divorced/Separated,” “Widowed,” “Never Married”).

RESULTS AND DISCUSSION

Is one virtue better than another? A repeated measures analysis revealed a significant effect ($F(6, 593) = 78.45, p < 0.001$), with a sizable effect size (multivariate partial $\eta^2 = 0.44$, and a within-subjects partial $\eta^2 = 0.21$). Table 1 displays the means and standard deviations for the entire sample and various demographic categories. As seen from Table 1, the ordering of severity is Chastity, Temperance, Diligence, Humility, Charity, Patience, and Kindness. The same general ordering exists for many of the demographic categories, including gender. In other words, a consistent pattern emerged of how the American culture perceives the virtues. Moreover, the ordering suggests a pattern from self-focused (chastity, temperance, diligence, humility) to other-focused (charity, patience, kindness).

The data analytic strategy involved first analyzing the full sample, including looking at the pattern of responding across each virtue as reported in this section. Subsequent analysis analyzes moderation across each demographic group using mixed-factorial ANOVA, then the structure within the items using factor analysis, and finally the degree to which the virtues’ ratings can be predicted using multiple regression. In terms of the initial investigation of the pattern of responding, Table 1 provides the descriptive statistics and Figure 1 (for all Figures see Appendix A

beginning on page 29) provides a visual depiction of the sequence of virtues. To help explain the pattern of results, post-hoc pairwise analysis within the repeated measure analysis revealed that all pairwise comparisons were significant ($ps < 0.001$) except for charity and patience ($t(598) = -0.93, p = 0.35$), so the difference between each virtue in Table 1 (Overall) and Figure 1 indicates a significant difference incrementally to a higher virtue level from Chastity up to Kindness, except for the grouping of Charity/Patience. Given the high sample size for a repeated measures analysis and the extremely high power for the analysis (power was 1.0 for repeated measures analysis), it is informative that the non-significant effect emerged between Charity/Patience in the face of the high sample size and power, in part because the mean levels are almost identical to each other with the mean level for Charity (75.33) and the mean level for Patience (76.36)—so close, for example, that they are only separated by 1.03, which is substantial given that it is a 100-point scale. The effect size between Charity and Patience was extremely small ($\eta^2 = 0.001$), thus suggesting those two virtues are closely clustered together. The effect sizes between the virtues in pairwise fashion from the bottom to top was 0.15, 0.05, 0.03, 0.01, 0.001, 0.01, thus indicating that although there were inferential differences amongst the virtues, the strength of the differences varied.

In fact, the largest effect size difference was between Chastity at the bottom and the next nearest virtue. As you can see from Table 1, Chastity hovers around the mid-point of the scale. A one-sample t -test using the midpoint of the scale (50%) as the reference point found that Chastity was not significantly different from the middle of the scale ($t(598) = -1.88, p = 0.06$), with the rest of the virtues significantly above the midpoint ($ps < 0.001$). In other words, although Chastity descriptively is in the bottom half of the scale ($M = 47.43, SD = 33.41$), it is inferentially not different than the middle of the scale. That said, the marginal nature of the significance combined with the value ($M = 47.43$) close to the true midpoint (50%) suggests that the best interpretation of the participants' perceptions of the virtues is that Chastity is the only virtue that falls in the midpoint of the scale, with all other virtues virtuous enough to be fully in the high end of the scale.

Table 1: Means and Standard Deviations of Virtue Ratings for All Groupings

Variable	N		Chastity	Temperance	Diligence	Humility	Charity	Patience	Kindness	F-value	p-value
Overall	599	mean (SD)	47.43a (33.41)	60.82b (28.23)	66.68c (27.35)	72.17d (26.51)	75.33e (26.70)	76.36e (26.38)	78.85f (26.51)	78.45	<0.001
Gender											
Male	254	mean (SD)	44.54a (31.63)	59.26b (28.00)	65.66c (26.90)	72.16de (24.36)	71.96d (26.82)	71.53d (27.44)	75.20e (26.51)	33.67	<0.001
Female	343	mean (SD)	49.48a (34.58)	62.18b (28.26)	67.49c (27.75)	72.11d (28.06)	77.94e (26.35)	79.83ef (25.06)	81.62f (26.28)	47.24	<0.001
Religious Ideology											
Progressive	255	mean (SD)	39.54a (32.23)	58.51b (26.95)	67.13c (25.50)	71.70d (25.42)	78.49e (24.12)	77.29e (24.96)	81.38f (24.99)	61.63	<0.001
Mainstream	184	mean (SD)	54.25a (31.82)	62.36b (29.48)	64.98b (28.89)	70.78c (28.11)	71.50c (28.94)	72.41c (29.45)	75.76d (28.61)	12.07	<0.001
Fundamental	93	mean (SD)	66.27a (30.13)	63.59a (29.46)	67.28a (28.79)	78.33b (25.26)	74.01b (28.15)	79.30b (25.50)	76.03b (26.45)	6.37	<0.001
Religious Self-Identity											
Not at all religious	242	mean (SD)	32.54a (31.73)	56.95b (27.61)	65.33c (27.04)	68.14c (26.99)	74.46d (27.28)	65.30de (25.56)	78.10e (27.49)	59.82	<0.001
Little religious	147	mean (SD)	49.24a (30.46)	55.73b (28.81)	63.90c (26.79)	68.52d (26.93)	72.59de (25.98)	72.41de (29.37)	75.48e (28.22)	14.68	<0.001
Moderately	138	mean (SD)	58.43a (29.46)	67.58b (26.54)	68.84b (28.59)	78.04cd (23.29)	76.00c (26.95)	79.59cd (25.08)	81.70d (23.94)	17.95	<0.001
Very religious	70	mean (SD)	73.47a (27.43)	72.09a (27.40)	73.33a (26.44)	83.61b (23.71)	83.00b (24.96)	82.29b (23.90)	83.44b (23.55)	4.04	<0.01
Religious Affiliation											
Christian	285	mean (SD)	59.69a (30.58)	65.31b (28.04)	68.63c (27.35)	76.45de (24.99)	77.06d (26.21)	78.30de (26.16)	79.68e (25.35)	26.84	<0.001
Other Religions	39	mean	41.26a	54.44b	68.69c	74.67cd	78.08d	80.41d	81.97d	11.21	<0.001

		(SD)	(32.36)	(29.08)	(29.84)	(23.91)	(24.72)	(23.27)	(24.00)		
Not Religion	249	mean	33.06a	55.51b	63.84c	66.95c	72.82d	74.03d	77.30e	55.31	<0.001
		(SD)	(31.01)	(27.61)	(27.29)	(27.49)	(27.95)	(26.56)	(28.07)		
Political Ideology											
Liberal	326	mean	38.63a	58.48b	66.46c	70.42d	77.54e	77.18e	81.23f	75.58	<0.001
		(SD)	(31.90)	(27.34)	(26.09)	(26.54)	(25.31)	(25.35)	(24.96)		
Moderate	104	mean	53.55a	60.69b	63.89b	70.68c	72.09c	72.48c	73.70c	6.54	<0.001
		(SD)	(32.26)	(30.16)	(28.45)	(27.38)	(27.02)	(28.22)	(29.87)		
Conservative	157	mean	61.17a	66.57b	69.86bc	76.97de	73.64cd	77.86e	77.76e	9.69	<0.001
		(SD)	(31.69)	(27.59)	(27.84)	(25.59)	(28.57)	(26.46)	(26.73)		
Political Affiliation											
Democrat	266	mean	39.92a	57.93b	66.58c	71.12d	76.70e	77.52e	81.29f	58.60	<0.001
		(SD)	(31.87)	(27.58)	(25.74)	(26.71)	(26.16)	(24.96)	(25.22)		
Republican	123	mean	62.50a	66.07a	68.33a	74.13b	74.25b	77.19b	78.50b	6.99	<0.001
		(SD)	(30.82)	(27.04)	(27.10)	(25.33)	(25.49)	(25.07)	(24.52)		
Independent	161	mean	48.37a	61.22b	66.56c	73.19d	74.27d	73.57d	75.64d	19.58	<0.001
		(SD)	(33.63)	(29.09)	(28.75)	(26.61)	(27.06)	(27.93)	(28.75)		
Age Cohorts											
Generation Y	382	mean	43.79a	56.68b	63.48c	70.29d	72.49d	73.34de	75.21e	52.76	<0.001
		(SD)	(32.61)	(29.00)	(28.36)	(27.64)	(27.27)	(28.11)	(28.19)		
Generation X	145	mean	48.88a	66.00b	69.88c	72.80c	78.97d	81.51d	84.74e	26.07	<0.001
		(SD)	(34.60)	(25.01)	(24.62)	(25.12)	(25.71)	(21.64)	(22.50)		
Baby Boomers	70	mean	64.57a	72.60b	77.40bc	80.84cde	84.29de	82.30cd	86.63e	5.50	<0.001
		(SD)	(30.25)	(25.62)	(24.07)	(21.23)	(22.35)	(23.26)	(20.94)		
Marital Status											
Married	239	mean	49.26a	59.26b	64.51c	73.99d	75.34d	76.30de	78.96e	31.88	<0.001
		(SD)	(33.33)	(28.53)	(27.54)	(25.74)	(26.16)	(25.94)	(25.77)		
Living with partner	86	mean	39.66a	54.78b	61.83c	65.26cd	72.58e	70.01de	74.57e	13.13	<0.001
		(SD)	(30.79)	(27.04)	(27.68)	(20.05)	(29.01)	(29.97)	(29.67)		
Divorced/Separated	38	mean	61.71a	72.89bc	72.87ab	73.66bc	77.29bc	81.95c	78.68bc	2.13	0.08
		(SD)	(34.04)	(24.73)	(25.42)	(27.56)	(26.51)	(25.08)	(27.30)		

Never married	227	mean	45.68a	62.41b	69.36c	72.68cd	75.60de	77.70ef	80.12f	36.76	<0.001
		(SD)	(33.56)	(28.30)	(26.72)	(25.76)	(26.53)	(25.43)	(26.07)		

Note: Virtues that do not share a common letter (subscript) are significantly different from each other within that category row.

But how virtuous are they? When we used a one-sample *t*-test in which the bottom and top served as reference points to identify the relative nature of virtue, we found that each of the virtues was significantly different from the bottom (0%) and top of the scale (100%) ($ps < 0.001$), which indicates that all were judged as true virtue, but yet not fully virtuous. For example, given that the survey instructions indicated that the 0% was “not a virtue,” and that the results indicate all seven virtues are significantly different than the bottom of the scale range, the respondents are indicating that all seven virtues are in fact truly classified as virtuous. However, all seven are still not reaching the top of the scale range from a descriptive (mean levels) or inferential (*p*-values) standpoint. In other words, all seven aspirations are considered positive, and yet not completely virtuous.

Moderating Variables: There was a significant effect for every grouping variable as displayed in Table 1 in terms of repeated measures analysis within each level of each grouping variable. The purpose of the moderation analysis is to analyze the variability among the respondents across each level of the moderating variables. In terms of gender, for example, do males and females perceive the virtue differently? A mixed factorial ANOVA using gender as a between-subjects moderator found an interaction ($F(6, 590) = 2.98, p = 0.01$), and a main effect of gender ($F(1, 595) = 7.36, p = 0.01$). There was also a main effect of virtue, which makes sense given the analysis from the previous section about the pattern of responding. The nature of the virtue main effect is not discussed for the grouping variables in this section since it was already explained previously. Instead, this moderation section is devoted to understanding the effect and nature of the grouping variables, such as in the case in which gender plays a unique role in producing equivalent responses for most of the virtues, except for Charity, Patience, and Kindness at the top part of the virtue pattern, as seen in Figure 2. For example, an independent-samples *t*-test of the effects of gender for each virtue found a significant difference for Charity ($t(1, 595) = 2.72, p = 0.01$), Patience ($t(1, 595) = 3.85, p < 0.001$), and Kindness ($t(1, 595) = 2.94, p < 0.01$), but non-significant for all virtues below Charity. As mentioned previously, the virtue pattern extends from self-focused (chastity, temperance, diligence, humility) to other-focused (charity, patience, kindness), so the implication is that female participants are equivalent to the male participants for the self-focused, but rate the other-focused virtues differentially higher.

In terms of religion, does being religious affect how one rates the virtues? Yes and no, depending on the type of virtue and the type of relationship under investigation. Religion was assessed according to four categories: self-identity, religious ideology, behavioral component of attending services, and religious affiliation. The degree of self-identity was a significant moderator in the mixed factorial ANOVA ($F(18, 1770) = 4.97, p < 0.001$) and a significant main effect ($F(3, 593) = 14.48, p < 0.001$). From looking at Figure 3, one can see that the

same general pattern emerges as with the overall model and as with gender differences—namely, generally higher virtue ratings from the lowest rated virtue up to Kindness. What is interesting, here, is the new finding for Chastity. The stronger the religious identity at each level ($ps < 0.01$), the greater the discrepancy in judging Chastity. The same finding occurred for religious ideology and attending services, namely significant moderators and main effects,¹ plus a general pattern of responding from the lowest virtue up to kindness (see Figures 4 and 5) and the same amplified reaction for Chastity. As an example of this Chastity Effect, notice in Figure 4 the step-wise increase in Chastity perceptions as religious ideology increases. Why are religious individuals more reactive to Chastity compared to the other virtues? Or, are the non-religious more permissive of Chastity?

We decided to start the analysis of religious variables with the individual-level constructs (identity, ideology, attending services) because it provides information across the religious affiliations about the degree to which the participants view themselves as religious. Looking now at religious affiliation as a moderator, given the Judeo-Christian lineage of the religious virtues, does being Christian influence the respondents' judgments? As can be seen from Table 1, the means and standard deviations for Christians are consistently higher compared to the overall sample. What about in terms of other religions or the non-religious? The sample was categorized into Christian ($n = 285$), other religious affiliations ($n = 39$, such as Jewish, Muslim, Buddhist, Hindu), and not religious ($n = 249$, such as Agnostic, Atheist, Secular) in order to perform a mixed factorial ANOVA on religious affiliation. The interaction was significant ($F(12, 1132) = 5.80, p < 0.001$) with a significant main effect ($F(2, 570) = 14.07, p < 0.001$), and there was a pairwise difference in the follow-up analysis only between Christian and Not-Religious (p

¹ Similar to degree of religious identity, the mixed factorial ANOVA showed a significant interaction and main effect for both the religious ideology variable ($F(12, 1050) = 6.66, p < 0.001$ for interaction; $F(6, 524) = 45.95, p < 0.001$ main effect) and the religious attendance ($F(30, 2955) = 2.57, p < 0.001$ for interaction; $F(6, 587) = 36.42, p < 0.001$ main effect). Figures 4 & 5 show the corresponding results, including the Chastity Effect for each one, such as for religious ideology there is a step-wise increase in Chastity ratings at each level ($ps < 0.01$) from Progressive to Mainstream to Fundamental. For attending services there is an step-wise decrease in Chastity ratings the more one attends religious services, with levels such that the first two (more than once a week and once a week) are the same but higher than the second level (once or twice a month, a few times a year, once a year or less) which is higher than the last level (never) with each level significantly different ($ps < 0.03$). From looking at Table 1 it may be difficult to discern the trends across the seven virtues given that the various demographic variables contained multiple levels, so the Figures are presented as line graphs rather than as bar graphs to visually show trends across the ratings. Along those lines, across all the Figures there appears to be a plateau in the higher end of the virtue pattern, as if once the type of virtue reaches a certain threshold, they are no longer seen as more virtuous.

< 0.001). In other words, Christians definitely rated the virtues higher than the Not-Religious in general as a main effect, but the Other-Religious were in the middle and non-significantly different from the other categories. Also, there was a Chastity Effect. As you can see from Figure 6, the reactive responses for Chastity are occurring within the Christian religion, not Jewish, Muslim or Buddhist faiths. For example, a one-way ANOVA on Chastity ratings for all three groupings found a significant overall model ($F(2, 572) = 50.09, p < 0.001$), and the difference between the Christian group and the other two groups was significant ($ps < 0.001$). However, the other two groups were not different from each other ($p = 0.12$), indicating that the Chastity Effect is occurring just for the Christians, not other religious groups.

But are Christians just as positive toward Chastity and the other virtues after controlling for degree of religiosity? The mixed factorial ANOVA on religion affiliation was repeated with the other religious variables as covariates (self-identity, ideology, attending services), revealing a non-significant interaction ($F(12, 994) = 0.92, p = 0.53$) with a non-significant main effect ($F(2, 501) = 0.59, p = 0.55$). There were also no longer any pairwise main effects between the groups ($ps > 0.30$), as can be seen visually from the tight clustering in Figure 7 as compared to Figure 6, which is interesting given the distinct origin of the contrary virtues within Judeo-Christianity. There was also no Chastity Effect (with non-significant difference between Christian and Other-Religious, $p = 0.06$, between Christian and Not-Religious, $p = 0.13$, or between Other and Not-Religious, $p = 0.48$). At a larger level, the diminished differences across category groups show that religious affiliation has a lesser impact on how the participants perceive virtue than individual-level personal religious traits such as self-identity, ideology, and religious services.

In terms of the political variables, the results parallel the preceding analysis. Do Republicans and Democrats praise the virtues equally? Analyzing political affiliation (Republican, Democrat, Independent) by itself in the mixed factorial ANOVA revealed a significant interaction and main effect that then disappeared when repeating the analysis by controlling for the religious personal-level variables (self-identity, religious ideology, religious attendance) ($F(12, 964) = 0.91, p = 0.54$; $F(2, 486) = 1.19, p = 0.31$), similar to the results for religious affiliation. A similar result occurred for the political ideology variable assessing whether the respondents were politically liberal, moderate or conservative. Analyzing political ideology by itself shows a significant effect, but after controlling for religious personal variables (self-identity, religious ideology, religious attendance), the effect disappears, with a non-significant interaction ($F(12, 1024) = 1.00, p = 0.44$) and a non-significant main effect ($F(2, 516) = 1.44,$

$p = 0.24$).² Although one might expect Republicans and political conservatives to rate the virtues more generously, this was not the case after controlling for religious personal constructs. Conservatives are no different than liberals in how they judge virtuous actions after controlling for these constructs.

In terms of age, as you can see from Figure 8, there is a general trend toward perceptions of higher virtue ratings as age increases, with a main effect of age group within the mixed factorial ANOVA ($F(4, 582) = 8.52, p < 0.001$), but no interaction between repeated measures of virtue ratings and age group ($F(24, 2320) = 0.59, p = 0.94$). We decided to initially split age into ten-year ranges in order to have sufficient sample size within each group while replicating the same analyses, as in the other sections in this paper, to allow easy comparison to the other repeated measures analysis and comparison to other figures.³ That said, treating age as continuous within a correlational analysis showed that as individuals grow older, they perceive more generous ratings for each virtue ($r_s = 17, 0.21, 0.19, 0.14, 0.18, 0.15, 0.19$, respectively, $p_s < 0.001$). Together, the two analyses show that as individuals grow older they judge virtues more intensely.

Beyond the incremental age ranges, how do culturally defined cohorts of individuals evaluate the virtues? When splitting the respondents into Generation Y (born 1980 to 2000), Generation X (born 1965 to 1979) and Baby Boomers (1946 to 1964) (e.g., Barford and Hester 2011) to assess if the different historical and cultural experiences of the cohorts influence virtue patterns, we found a main effect ($F(2, 594) = 18.07, p < 0.001$) and no interaction in the repeated measures ($F(12, 1180) = 1.39, p = 0.16$), with the follow-up pairwise comparisons across all three groups showing significant effects ($p_s < 0.02$). As you can see from Figure 9, the youngest cohort was the least positive in their ratings (Generation Y) and the oldest cohort (Boomers) the most positive. More interestingly, the age cohorts also displayed the Chastity Effect, but only for Baby Boomers ($p < 0.001$, with Baby Boomer significantly different from other cohorts) with Generation X and Y non-significantly equivalent ($p = 0.11$). Perhaps Generation Y and X have not

² The question about political liberalism/conservatism was categorized into three levels (Liberal, Moderate, Conservative) to make the analysis more interpretable with larger sample sizes and fewer groups than the original 8-point measurement scale. For political affiliation, there were only a few respondents in the option for none ($n = 36$) and other ($n = 12$) so they were not included in the analysis when analyzing by groups for political affiliation (Republican, Independent, Democrat).

³ When splitting the sample into ten-year age groups, there were only a few respondents in the 70 and above range ($n = 3$) and in the 19 and below range ($n = 8$) so they were not included in the analysis as a group. When splitting the sample into age cohorts, there were only a few respondents in the age range that starts at age 65 ($n = 13$) so they were not included in the analysis as a group, leaving just Generation Y, Generation X, and Baby Boomers.

reached the age threshold at which they are as positive in their judgment of Chastity as the Boomers, or perhaps there is a distinct socio-cultural or historical confound for which Boomers perceive the most permissible opinions of Chastity as a virtue.

Finally, in terms of marital status, are major life changes like marriage or divorce associated with differences in evaluation of virtue? The main effect of marital status within the mixed factorial ANOVA was significant ($F(3, 586) = 3.71, p = 0.01$) with a non-significant interaction ($F(18, 1749) = 1.37, p = 0.14$).⁴ The follow-up pairwise analysis revealed the only significant differences were Living with Partner from the other three groups ($ps < 0.02$), with the other groups equivalent to each other, and the least positive was the Living with Partner group, as seen in Figure 10. For the Chastity Effect, one can see that the group most approving of Chastity as a virtue was Divorced/Separated. The One-Way ANOVA showed that the Divorced/Separated group was significantly higher on the scale than the other three groups ($ps < 0.03$), with some of the other groups different from each other (Married and Never Married non-significantly equivalent in the middle, and Living With Partner significantly different from Married ($p = 0.02$)). Perhaps the experience of getting divorced or separated has colored the participants' perception of the benefits of Chastity.

Factor Analysis: To provide more analysis of the categorization amongst the seven virtues, factor analysis was conducted to investigate structure within the data. The seven virtue items were factor analyzed using principle component analysis with Varimax rotation and yielded two factors explaining 64.01% variance for the set of items. The factor explaining the largest percent of variance at 50.12% included Kindness, Patience, Charity and Diligence. The full list of items in each factor is displayed in Figure 2 along with the variance explained, Cronbach's alpha of the composite, means, and standard deviations. The second factor explaining 14.88% of the variance included Chastity, Temperance, and Humility, and showed an overall higher mean value of the composite compared to the first factor, indicating that this second factor was rated as more virtuous, which was confirmed by a paired-sample t-test ($t(598) = 16.74, p < 0.001$). Given the nature of the virtues within each composite, they are conceptually split into a type of Giving v. Withholding distinction, with the latter more virtuous factor ($t(598) = 16.74, p < 0.001$) being the ones that actively withhold from the self in some way, such as Chastity (withholding or refraining from sexual desires), Temperance (abstinence from excessive appetite or gluttony), and Humility (opposite of corresponding sin of Pride in withholding ego or hubris to remain

⁴ The sample size for "widowed" was small ($n = 8$) so they were not included in the analysis as a group.

humble). The Giving virtues, on the other hand, involve actively conferring positive aspects to others (Kindness, Patience, Charity) or to the self (Diligence).

Although the virtues are falling into these conceptually grouped clusters, it is also important to provide a counterargument approach, such that there could be ambiguity in that Diligence (contrary to sin of Sloth) could be seen as a type of controlling the self and thus more akin to the “Withholding” virtues, rather than conceiving of Diligence as actively providing to the self the persistence, effort, and hard work characterized by Diligence. Similarly, Humility could be seen as giving modesty to the self, rather than the current cluster of withholding or preventing hubris within the self. As one can see in Table 2, Humility has a factor loading close to both factors, and when conducting Oblimin factor analysis it loads slightly more closely on the other factor. When conducting Maximum Likelihood analysis, Humility has a factor loading on both factors when using Varimax, and factor loading more closely on the first factor when using Oblimin. We want to be forthright about the conceivable ambiguity, although we believe the stronger conceptual distinction aligns with the current statistical result, confirmed with the original Factor Analysis, that to be Diligent is to actively provide hard work and persistence in line with Giving, and to be Humble is to show restraint and modesty in line with Withholding. Moreover, the other virtues are clearly falling into the Withholding v. Giving distinction, as some virtues involve controlling excess such as Chastity and Temperance, or freely giving and bestowing gifts, such as Kindness, Patience, and Charity.

Table 2: Factor Analysis Results Using Principle Components Varimax Rotation

Item	Factor Loadings	
	Giving	Withholding
Kindness	0.850	0.105
Patience	0.792	0.179
Charity	0.765	0.161
Diligence	0.613	0.480
Chastity	-0.038	0.897
Temperance	0.458	0.701
Humility	0.443	0.486
Eigenvalue	3.51	1.04
% of Total Variance	50.12	14.88
Cronbach’s Alpha	0.81	0.66
Mean (composite)	60.14	74.30
SD (composite)	22.74	21.40

Note: Items were sorted by size for ease of viewing, rather than how the items were sorted in other Tables.

In addition to revealing structure within the virtues along the Giving v. Withholding distinction, the factor analysis also allows further elaboration of the moderation analysis. Using the distinction (Giving, Withholding) as a repeated measures in the mixed factorial ANOVAs with the grouping variables showed a significant interaction with the religious and political variables,⁵ but not gender, age, or marital status. For example, all the personal-level religious constructs (self-identity, ideology, attending services) showed an interaction such that the Progressive (religious ideology), not at all religious (self-identity) and those attending less services had a reactive response with only the Giving virtues. Figure 11 shows the results for religious ideology to provide better visual explanation of the interaction. As you can see, there is a main effect of Giving, in that everyone sees the Giving virtues as greater than Withholding virtues, but there is polarization for the Progressives such that the Giving virtues are now seen as that much more virtuous. The same effect is not occurring for the Moderates or Conservatives. The nature of the interaction with the other variables is the same, namely that the interaction is driven by anyone not Christian Conservative (such as Other/None for religious affiliation, Liberal for political ideology, Democrat/Independent for political affiliation), so the Progressive Liberal Democrats/Independents are increasing their views toward Giving virtues in a way that is not happening for the other groups.

Multiple Regression: The purpose of the moderator analysis was to analyze how between-group differentiations can impact the perception of virtue and the different patterns of responding. A related question is the degree to which these individual characteristics *predict* evaluation of virtue. Multiple regression analysis in Table 3 shows that the predictors are significant for all seven virtues, with the largest explanatory power for Chastity (Adjusted $R^2 = 0.26$). The unique predictive power of the analysis is that the nine predictors entail a diverse set of features and characteristics—gender, religious (self-identity, ideology, services, affiliation), political (ideology, affiliation), age cohorts, and marital status. Thus, they entail a combination of biological aspects, sociocultural viewpoints and opinions, self-identity, behaviors, and real-life experiences (e.g., marriage, divorce, etc). Given the large number of variables in Table 3, only the significant effects are provided to help the reader parse the breadth of the data. As seen in Table 3, each virtue is predicted by a unique set of these variables that vary in valence and magnitude.

⁵ The interactions in the repeated measures mixed ANOVA using Giving v. Withholding was significant for religious identity ($F(3, 593) = 18.83, p < 0.001$), ideology ($F(2, 529) = 26.29, p < 0.001$), attending services ($F(5, 592) = 8.78, p < .001$), religious affiliation ($F(2, 570) = 23.84, p < 0.001$), political affiliation ($F(2, 547) = 18.11, p < 0.001$), and political ideology ($F(2, 584) = 28.15, p < 0.001$).

Table 3: Multiple Regression for Virtues

Variable	Type	Chastity	Temperance	Diligence	Humility	Charity	Patience	Kindness
Gender	Male vs Female						0.12*	0.09 ^t
Religious Self-Identity	(1-4; Not-at-all to Very)	0.20**	0.20**		0.19*			
Ideology	Fundamental vs. Progressive	-0.14 ^t				0.20*		0.21*
	Fundamental vs. Mainstream						-0.13 ^t	
Services	(1-6; Once-Week+ to Never)	-0.20***				-0.14*		
Affiliation	Christian vs Other Religions			0.09 ^t			0.10*	0.12*
	Christian vs Not Religious							
Political Ideology	Conservative vs. Liberal				-0.018 ^t			
	Conservative vs. Moderate	0.11 ^t						
Affiliation	Republican vs Democrat	-0.015 ^t						
	Republican vs. Independent							
Age Cohorts	Boomers v. Gen Y	-0.17*	-0.26***	-0.25***	-0.15*	-0.25***	-0.15*	-0.22**
	Boomers v. Gen X	-0.16*	-0.13 ^t		-0.14*			
Marital Status	Married vs Living with Partner							
	Married vs Divorced/separated							
	Married vs Never Married		0.13**	0.15**			0.09 ^t	
Overall Model								
F-value		10.95***	4.34***	2.85***	3.09***	2.79***	3.29***	3.12***
Adjusted R ²		0.26	0.10	0.06	0.07	0.06	0.07	0.07

Note: ^t $p < 0.09$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Categorical variables were dummy coded into k-1 levels, and the dummy coded levels are indicated in the “Type” column. The first category was the reference point (e.g., for Religious Affiliation, Christian was coded as 0 as the reference point). Thus, a positive beta-value indicates a higher virtue rating for the second category and a negative beta-value indicates a higher virtue rating for the reference level.

In terms of Chastity, for example, one of the most prominent results from the preceding moderator analysis was the Chastity Effect that emerged for some variables, so the current multiple regression analysis provides the relative strength of each of those variables. In this case, the strongest predictors are religious identity and services, which both account for the Chastity virtue ratings while controlling for each other and the other variables in the analysis. Other factors that uniquely explain Chastity ratings are age cohort, and marginally for fundamental religious ideology and moderate Republican political affiliation. The fact that religious affiliation was not a predictor in the model suggests that the other variables such as religious personal-level variables like identity, ideology, and services are the driving force behind the increased perceptions of Chastity as a virtue. In fact, Christian affiliation was not a significant predictor for any of the virtues. In two cases the Other-Religious, compared to Christian affiliation, was a positive predictor (Patience and Kindness). Those same two virtues were also the only virtues predicted by gender. The most consistent predictor among all the variables was age-cohorts, namely the Baby Boomers explaining the largest percentage of variance for over half of the virtues.

In terms of the Giving and Withholding composites, the regression model was significant for both, with larger predictive power for Withholding virtues (Giving: $F(16, 443) = 4.19, p < 0.001$ with adjusted R-squared of 10; Withholding: $F(16, 443) = 906, p < 0.001$ with adjusted R-squared of 0.22). The two types were predicted to some degree by different variables, with Withholding predicted by religious self-identity ($beta = 0.25, p < 0.001$) and attending services ($beta = -0.16, p = 0.01$), and Giving predicted by being Other-Religious (compared to Christian categorical dummy code, $beta = 0.11, p = 0.02$) and marginally by Progressive religious ideology (compared to Fundamental categorical dummy code, $beta = 0.18, p = 0.07$). Both types of virtues were then predicted by being Baby Boomers (compared to Generation Y for Giving, $beta = -0.27, p < 0.001$; compared to Generation Y for Withholding $beta = -0.25, p < 0.001$; compared to Generation X for Withholding, $beta = -0.18, p = 0.01$) and predicted by being Married (compared to Never Married for Giving ($beta = 0.12, p = 0.02$) and Withholding ($beta = 0.09, p = 0.05$)). In terms of what they have in common, the two types of virtues were predicted by the older age group, the Baby Boomers, which suggest a socio-cultural or historical component to how Western Culture views the religious Seven Contrary Virtues. Note that the regression was controlling for other variables in the analysis, so the age-related predictor was above and beyond the variance explained by the religious variables. Also, what both types of virtues have in common is that never being married predicts over being married. Perhaps there is some aspect of being married that presents less giving and less withholding, or maybe never being married means more giving and more withholding. Either way, the effect was above and beyond any age-related effects,

so it is not as if younger, and presumably less married, individuals are driving the effects. However, the most interesting aspect of the analysis was what separates the two types of virtues, as Giving was associated with Progressive non-Christians (Other-Religious), and Withholding was associated with strong religious identity who more regularly attend services, irrespective of religious affiliation.

SUMMARY

Is one virtue better than another? There was a consistent pattern of responding for both Religious and Non-Religious individuals, which supports the idea that the religious virtues have a cultural basis within contemporary U.S. society. From a descriptive perspective of American culture, the current study also identified how different groups within contemporary culture perceive the relative virtuosity of the constructs. The virtue rating means were descriptively highest (Table 1) for females (versus males), Christian (versus Other-Religious groups and Non-Religious), Baby Boomers (compared to Generation Y and X), and those who were Divorced (compared to Married, Widowed, Single). From looking across the Figures, one can not only see the general virtue pattern emerging with a plateau near the top, but also the definite Chastity Effect for particular groups (such as the religiosity variables) in addition to a unique pattern of self-focused to other-focused in terms of how the participants viewed virtue.

However, it is important to highlight that the participants were rating the virtues without context other than the reference to the corresponding seven sins. As described in the Method section, there was no definition provided for each virtue. We opted for that approach to avoid biasing the respondents or narrowing their pre-existing beliefs about the virtues, and thus allowing their naturally occurring perceptions of the virtues to determine the rating. That said, it is possible that respondents were not overly familiar with some of the terms, and thus were rating the virtues in an abstract manner. Part of the reason we couched each virtue in terms of its corresponding sin was to provide reference within the religious context of the terms, but it is possible that the respondents were rating the virtues in a strictly cultural way without reference to religion. Similarly, we asked respondents if one virtue was better than another, and to place their rating on a 0—100% line, so it is possible they answered each question by its individual importance on a 100% scale, and/or by comparing the different importance of the virtues in comparison to each other. Given the nature of the results, especially the fact that the virtues were in the top half of the scale range except for Charity, suggests that respondents were rating the individual importance of each virtue, but future research should more clearly delineate the different methodological approaches, as well as parsing apart the larger contextual issues of the cultural versus religion nature of the virtues in contemporary society.

To highlight a few interesting findings amongst the voluminous amount of data, the current research found an ordering along the scale range (Chastity, Temperance, Diligence, Humility, Charity, Patience, Kindness) with all significantly different than the bottom and top of the scale, thus suggesting they are all considered virtues but not fully virtuous. Chastity was the only virtue descriptively in the bottom-half of the scale and inferentially not different from the midpoint, with all others virtuous enough to be in the top half of the scale range. Moreover, looking at Table 1, one can see that particular groups had a “threshold” based response (as indicated by the nature of the subscripts) which indicated significant differences if the mean levels have different subscripts. As you can see for the Fundamental (religious ideology), Very Religious (religious self-identity), and Republican (political affiliation), there is a threshold at which the bottom section of the virtue pattern is one grouping (sharing subscripts) and then significantly different from the top section (which shares subscripts). That distinction conforms to the self-other nature of the virtues. For those particular groups (fundamental religious ideology, very religious self-identity, and Republican), the virtues align into the self-other distinction, with the other-related virtues being rated as higher or more virtuous than the self-related virtues. Conversely, for another set of respondents, such as the Progressive (religious ideology), Democrat (political affiliation) and Liberal (political ideology), there is a very different pattern of responding that is incrementally increasing for each virtue (see the different subscripts for each virtue with a grouping for Charity/Patience, as mentioned at the beginning of the Results section). In other words, the religiously fundamental Republicans perceive virtue as a type of dichotomous distinction, in which there is one big group of self-virtues, which are significantly different than another group of other-virtues. For the progressive Democrat, there is a more nuanced approach to virtues significantly higher than the next.

The moderation results revealed a significant effect for every grouping variable based upon the nature of the variable, such as how males and females were equivalent for the self-focused virtues but females perceived the other-focused virtues (Charity, Patience, Kindness) as higher than males. Religious and political variables initially showed effects when analyzed separately, but after controlling for the personal-level religious variables (self-identity, attending services, religious ideology) there were no longer effects, which means being Christian (versus Other Religions or Not Religious) or Republican (versus Democrat or Independent) or politically Conservative (versus Moderate or Liberal) has no impact on how you perceive the virtues. Instead, the driving force was the personal level variables—such as “do you think of yourself as a religious person,” “how often do you attend religious services,” and “do you think of yourself as progressive, mainstream, or fundamental.”

The Chastity Effect for Christians also went away when controlling for the personal level religious variables. The Chastity Effect that emerged for many of the variables showed a reactive response for Chastity as a virtue that was not seen with the other virtues. Moreover, when using multiple regression to control for every single variable in the analysis (see Table 3), Chastity was predicted most by Self-Identity and Attending Services, then to a lesser degree being a Baby Boomer, and finally to an even lesser degree it was marginal for being Republican, Conservative politically, and Fundamental ideology. For the analysis controlling for other variables, such as in the mixed factorial ANOVA and multiple regression, an important limitation to highlight is that strong correlations among predictor variables can lead to less interpretable results, and that the different religious and political variables can have obvious intercorrelations. That said, the religious connection to Chastity was similarly seen in the Giving v. Withholding factors in which Withholding virtues were associated with Strong Religious Identity and Regularly Attend Services, whereas Giving was associated with progressive non-Christians (Other-Religious). A similar effect occurred in the moderation analysis, with an interaction effect for every religious and political variable in which the Progressive Liberal/Moderates had an increased reactive response for Giving virtues that was not occurring for other groups. Future research could focus on the virtue of chastity and cross-cultural variables that form understandings of the virtues. Given that the term “chastity” carries cultural baggage and has value in the changing cultural landscape, potential future interdisciplinary research on chastity would be advantageous for pursuing a deeper understanding of how culture impacts perceptions of chastity. Moreover, analyzing the relationship between the virtues and key outcome variables—like life satisfaction or meaning—could be advantageous, such as investigating whether the respondents’ self-reported frequency of exhibiting these virtues in their lives has a relationship to their overall well-being or psychological health.

Virtues are significant for the collective understanding of how a person ought to generally behave (Hasselberger 2017); however, as our research shows, there is variability among the grouping variables, which makes sense in a pluralistic society like the U.S. (Etzioni 1992). This provides an emerging issue in the shared expectations of ethical normative behavior. In their original conception, virtues were not explained or understood in a hierarchy, they were presented as practical skills for an ethical life (Hasselberger 2017). Virtues are guidelines provided by the institutions of a society that encourage people to live ethical and moral lives (Krause and Hayward 2015). This view is also promoted by the inclusion of a postmodern narrative of power dynamics in society (Etzioni 1992). The protection of individual autonomy is important, but the implementation of virtues cannot be separated from the community that they emerge from (Schnitker et al., 2017). Though the questioning of established institutions has its place, it is also

important to remember that the values expressed in institutions manifest through negotiation between individuals (Dewey 1944). A focused and honest conversation on what virtues are and how they should be enacted could potentially establish a greater value and understanding of the utility and practice of virtues in a democratic society.

It is also important to note that there has been limited study of the philosophical/religious virtues due to issues in conceptualizing and measuring their significance (Krause and Hayward 2015). However, the study of the psychological virtues has been a staple of the positive psychology discipline since its conception (Davis et al., 2017). With positive psychology becoming increasingly more prevalent over the last decade (King and Whitney 2015), the incorporation of studies that utilize philosophy and theology could benefit the field (Schnitker et al., 2017), especially in terms of virtues. This is especially true considering that researchers in religion and positive psychology have not found a shared understanding of virtues (Schnitker and Emmons 2017), so interdisciplinary research can shed light on this important area of inquiry.

REFERENCES

- Barford, Ian N. and Patrick T. Hester. 2011. "Analysis of Generation Y Workforce Motivation Using Multiattribute Utility Theory." *Defense AR Journal* 18: 63–81.
- Bejczy, I.P. 2011. "Virtue and Vice." In *Encyclopedia of Medieval Philosophy*, 1365–1369. Netherlands: Springer.
- Buhrmester, Michael, Tracy Kwang, and Samuel D. Gosling. 2011. "Amazon's Mechanical Turk: A New Source of Inexpensive, Yet High-Quality, Data?." *Perspectives on Psychological Science* 6: 3–5.
- Buhrmester, Michael, Sanaz Talaifar, and Samuel D. Gosling. 2018. "An Evaluation of Amazon's Mechanical Turk, Its Rapid Rise, and Its Effective Use." *Perspectives on Psychological Science* 13: 149–154.
- Burnham, Martin J., Yen K. Le, and Ralph L. Piedmont. 2018. "Who is MTurk? Personal characteristics and sample consistency of these online workers." *Mental Health Religion and Culture*, DOI: 10.1080/13674676.2018.1486394.
- Capps, Donald. 1989. "The Deadly Sins and Saving Virtues: How They Are Viewed by Laity." *Pastoral Psychology* 37(4): 229–253.
- Capps, Donald and Melissa Haupt. 2011. "The Deadly Sins: How They Are Viewed and Experienced Today." *Pastoral Psychology* 60: 791–807.
- Charry, Ellen T. and Russell D. Kosits. 2017. "Christian theology and positive psychology: An exchange of gifts." *The Journal of Positive Psychology* 12(5): 468–479.
- Clifford, Scott, Ryan M. Jewell, and Philip D. Waggoner. 2015. "Are samples drawn from Mechanical Turk valid for research on political ideology?" *Research and Politics* 1–9.

- Davis, Don E., Joshua N. Hook, Ryan McAnnally-Linz, Elise Choe, and Vanessa Placeres. 2017. "Humility, Religion, and Spirituality: A Review of the Literature." *Psychology of Religion and Spirituality* 9(3): 242–253.
- Dewey, John. 1944. *Democracy and Education: An Introduction to the Philosophy of Education*. The Free Press: New York, NY.
- Emmons, Robert. A., Raymond F. Paloutzian. 2003. "The Psychology of Religion." *Annual Review of Psychology*, 54: 377–402.
- Etzioni, Amitai. 1992. "On the Place of Virtues in a Pluralistic Democracy." *The American Behavioral Scientist* 35(4/5): 530–540.
- Grenz, Stanley J. 1994. *Theology for the Community of God*. Grand Rapids, MI: Broadman and Holman Publishers.
- Hasselberger, William. 2017. "Knowing More than We Can Tell: Virtue, Perception, and Practical Skill." *Social Theory and Practice* 43(4): 775–803.
- Keith, Melissa G., Louis Tay, and Peter D. Harms. 2017. "Systems Perspective on Amazon Mechanical Turk for Organizational Research: Review and Recommendations." *Frontiers in Psychology* 8: 1–19.
- King, Pamela E., William B. Whitney. 2015. "What's the 'Positive' in Positive Psychology? Teleological Considerations Based on Creation and *Imago* Doctrines." *Journal of Psychology & Theology* 43(1): 47–59.
- Kinghorn, Warren. 2017. "The politics of virtue: An Aristotelian-Thomistic engagement with the VIA classification of character strengths." *The Journal of Positive Psychology* 12(5): 436–446.
- Krause, Neal and R. David Hayward. 2015. "Virtues, Practical Wisdom and Psychological Well-Being: A Christian Perspective." *Social Indicators Research* 122: 735–755.
- Lewis, Andrew R., Stephen T. Mockabee, Paul A. Djupe, and Joshua Su-Ya Wu. 2015. "The (Non) Religion of Mechanical Turk Workers." *Journal for the Scientific Study of Religion* 54: 419–428.
- McGrath, Robert E., Michael J. Greenberg, and Ashley Hall-Simmonds. 2017. "Scarecrow, Tin Woodsman, and Cowardly Lion: The three-factor model of virtue." *The Journal of Positive Psychology* 16(47): 1–20.
- Mullinix, Kevin J., Thomas J. Leeper, James N. Druckman, and Jeremy Freese. 2015. "The Generalizability of Survey Experiments." *Journal of Experimental Political Science* 2: 109–138.
- Niemiec, R.M. 2013. "VIA Character Strengths: Research and Practice (The First 10 Years)." In *Well-Being and Cultures: Perspectives from Positive Psychology*, vol. 3., edited by Antonella Delle Fave and Hans Henrik Knoop. Springer: Dordrecht.
- Paolacci, Gabriele, Jesse Chandler, Panagiotis G. Ipeirotis. 2010. "Running experiments on Amazon Mechanical Turk." *Judgment and Decision Making* 5: 411–419.
- Pennington, Jonathan T. and Charles H. Hackney. 2017. "Resourcing a Christian positive psychology from the Sermon on the Mount." *The Journal of Positive Psychology* 12(5): 427–435.
- Peterson, Christopher and Martin E.P. Seligman. 2002. *The VIA Taxonomy of Human Strengths and Virtues*. Washington, DC: American Psychological Association.

- Peterson, Christopher and Martin E.P. Seligman. 2004. *Character Strengths and Virtues: A Handbook and Classification*. New York, NY: Oxford University Press.
- Powell, Mark A. 1989. *Bible Dictionary*. New York, NY: HarperCollins Publishers.
- Sandage, Steven J. and Peter C. Hill. 2001. "The virtues of positive psychology: the rapprochement and challenges of an affirmative postmodern perspective." *Journal for the Theory of Social Behaviour* 31: 241–60.
- Schimmel, Solomon. 1997. *The Seven Deadly Sins: Jewish, Christian, and Classical Reflections on Human Nature*. New York: The Free Press.
- Schnitker, Sarah A., Robert A. Emmons. 2017. "The Psychology of Virtue: Integrating Positive Psychology and Psychology of Religion." *Psychology of Religion and Spirituality* 9(3): 239–241.
- Schnitker, Sarah A., Benjamin J. Houlberg, William Dyrness, and Nanyamka Redmond. 2017. "The Virtue of Patience, Spirituality, and Suffering: Integrating Lessons from Positive Psychology, Psychology of Religion and Christian Theology." *Psychology of Religion and Spirituality* 9(3): 264–275.
- "Seven Deadly Sins." 2011. In *Wikipedia: The Free Encyclopedia*. Retrieved from http://en.wikipedia.org/w/index.php?title=Seven_deadly_sins&oldid=443894955.
- Stenstrom, Douglas M. and Matthew Curtis. 2012. "Pride, Sloth/Lust/Gluttony, Envy, Greed/Wrath: Rating the Seven Deadly Sins." *Interdisciplinary Journal of Research on Religion* 8: 1–27.
- Titus, Craig S. 2017. "Aquinas, Seligman, and Positive Psychology: A Christian Approach to the Use of the Virtues in Psychology." *The Journal of Positive Psychology* 12(5): 447–458.
- Veselka, Livia, Erika A. Giammarco and Philip A. Vernon. 2014. "The Dark Triad and the Seven Deadly Sins." *Personality and Individual Differences* 67: 75–80.

Appendix A: Figures

Figure 1: Participants' Perceptions of the Virtues

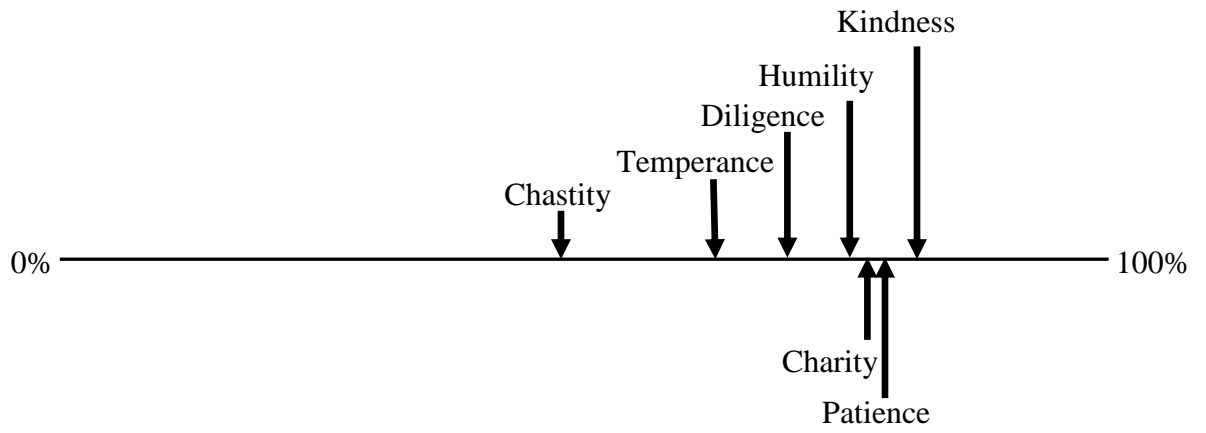


Figure 2: Virtue Ratings for Gender

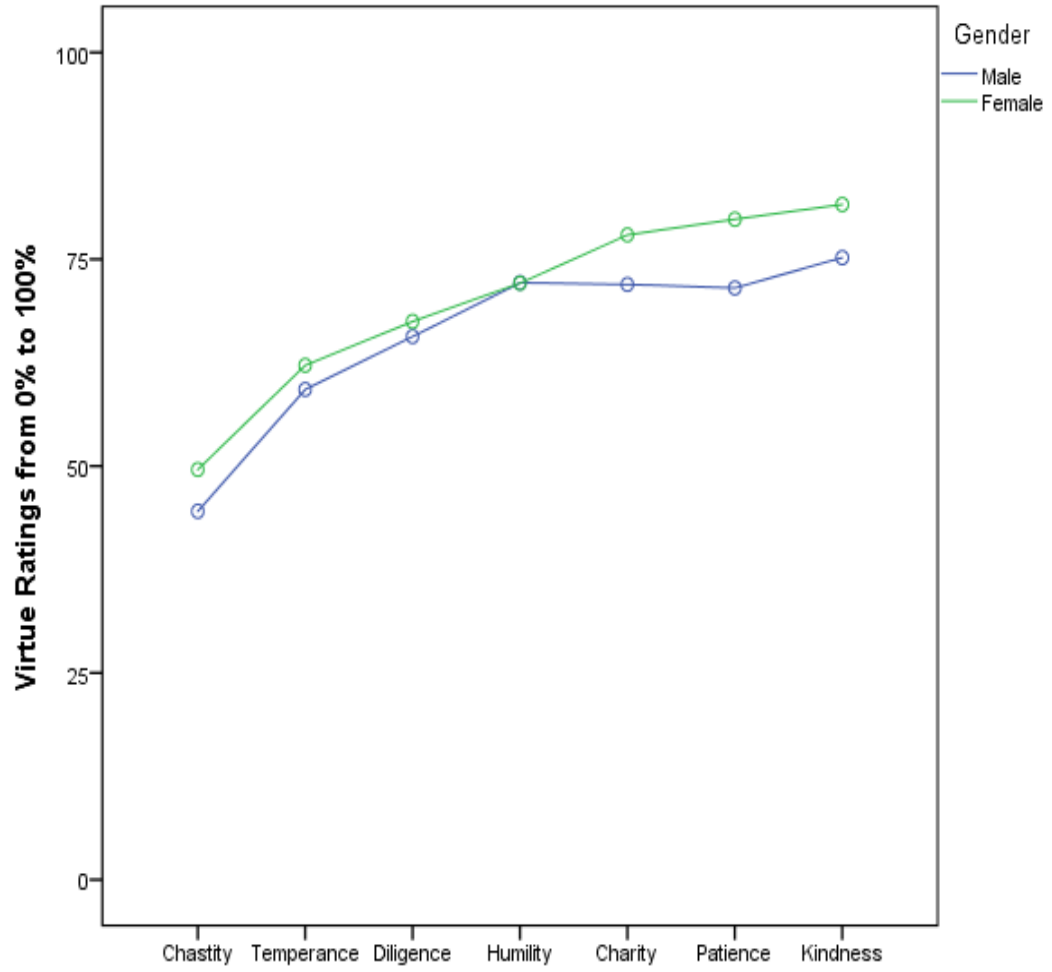


Figure 3: Virtue Ratings for Degree of Religious Identity

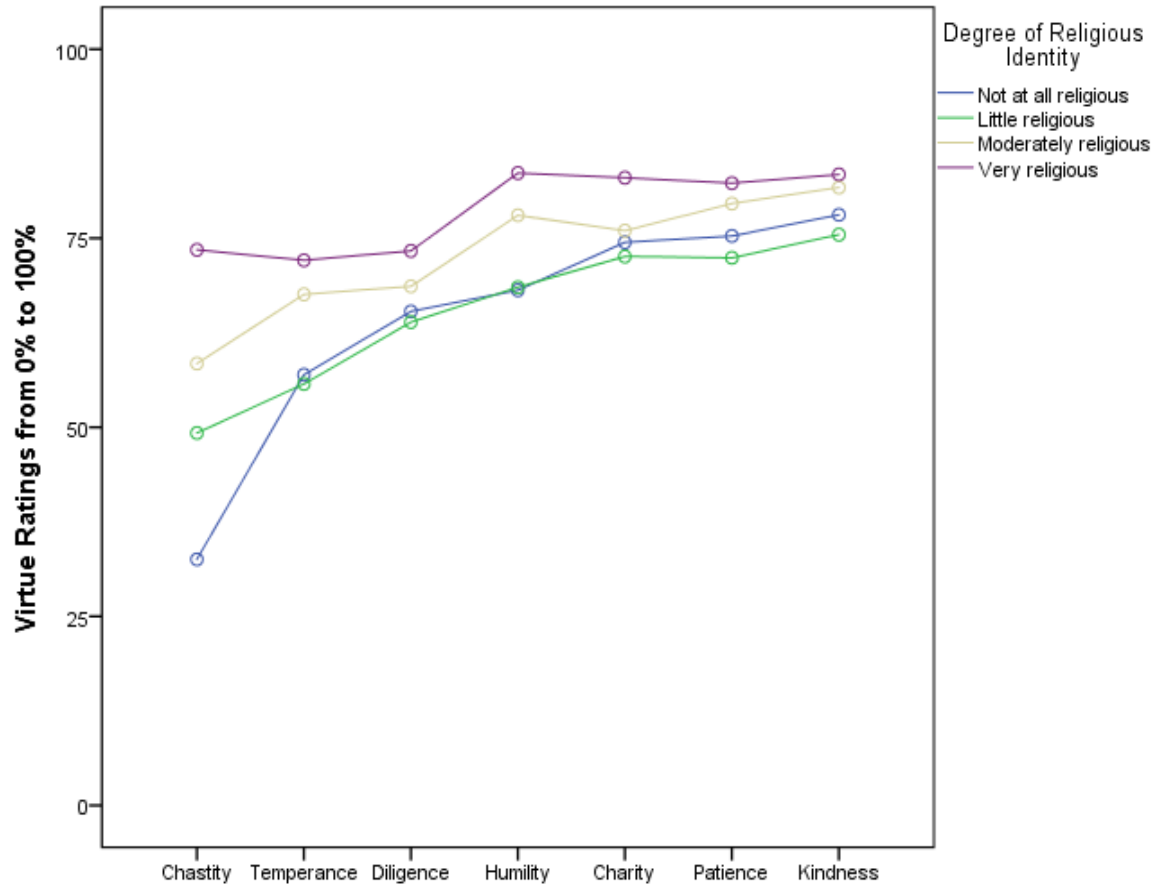


Figure 4: Virtue Ratings for Type of Religious Ideology

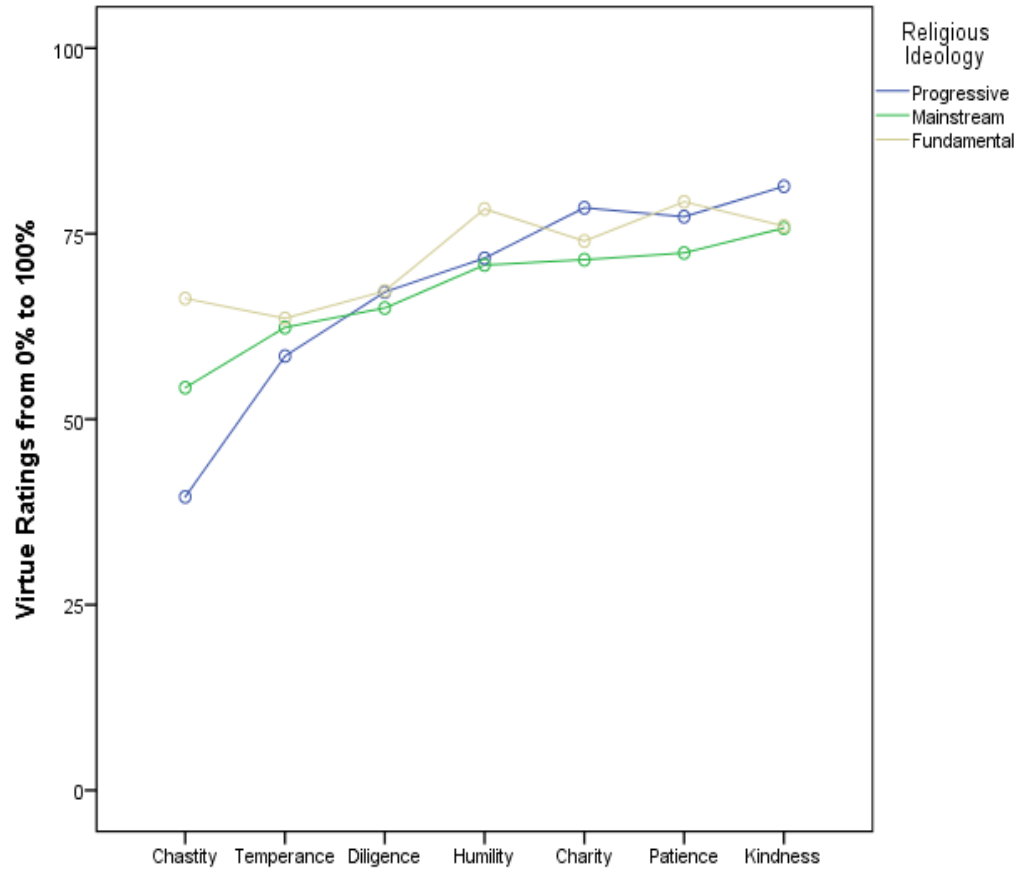


Figure 5: Virtue Ratings for Degree of Attending Religious Services

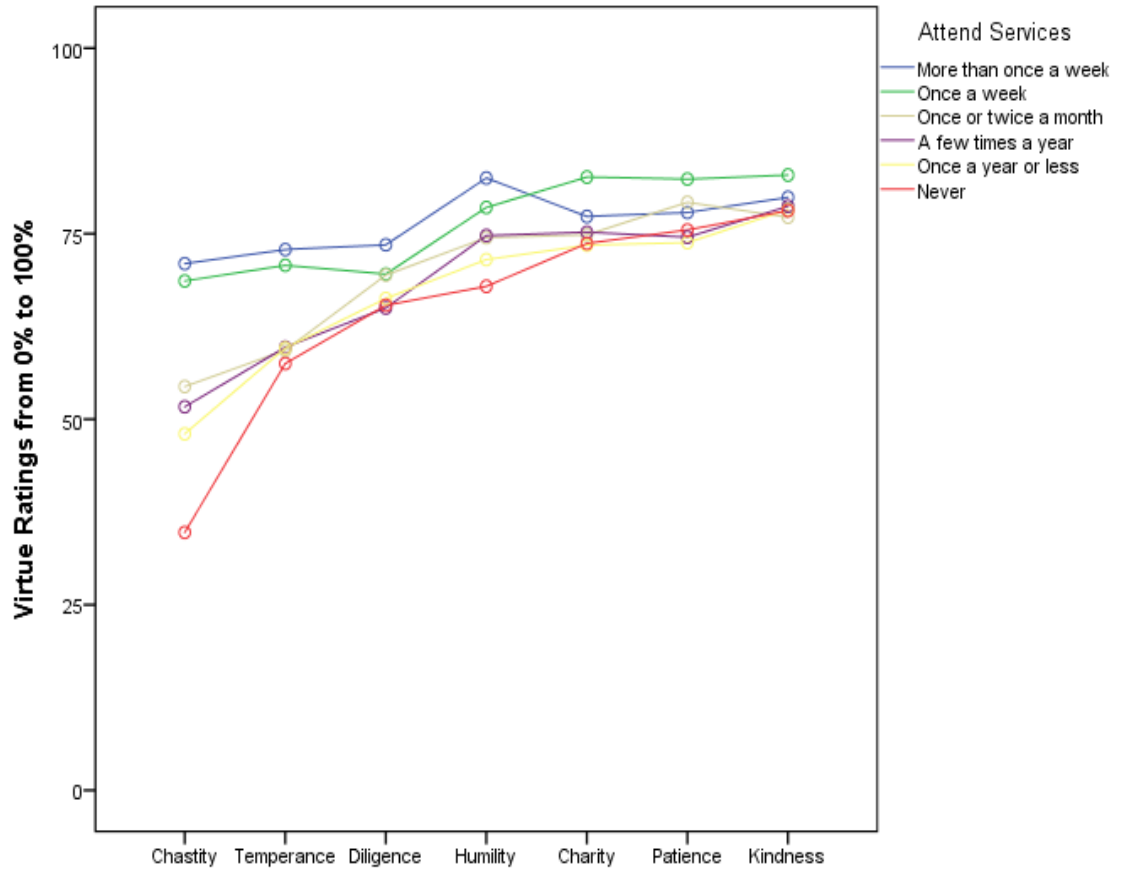


Figure 6: Virtue Ratings for Religious Affiliation

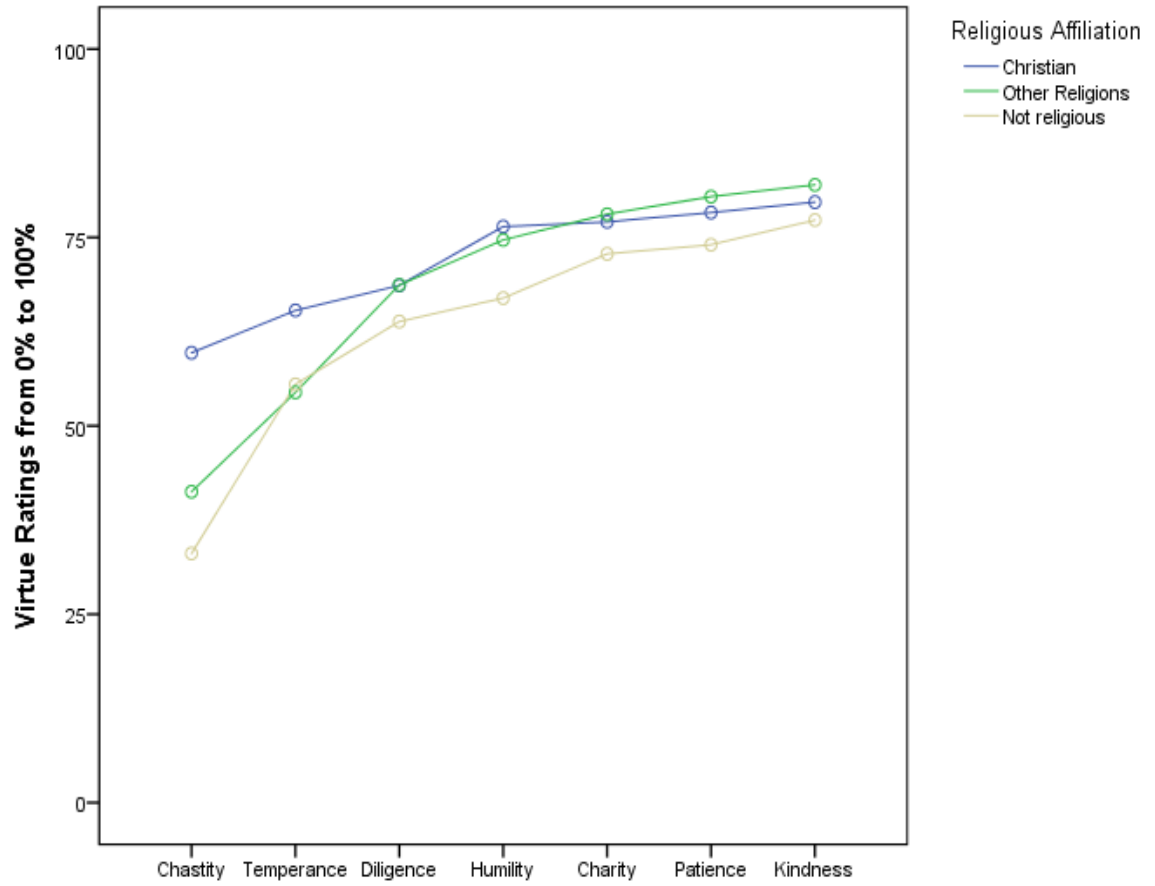


Figure 7: Virtue Ratings for Religious Affiliation After Controlling for Other Religious Variables

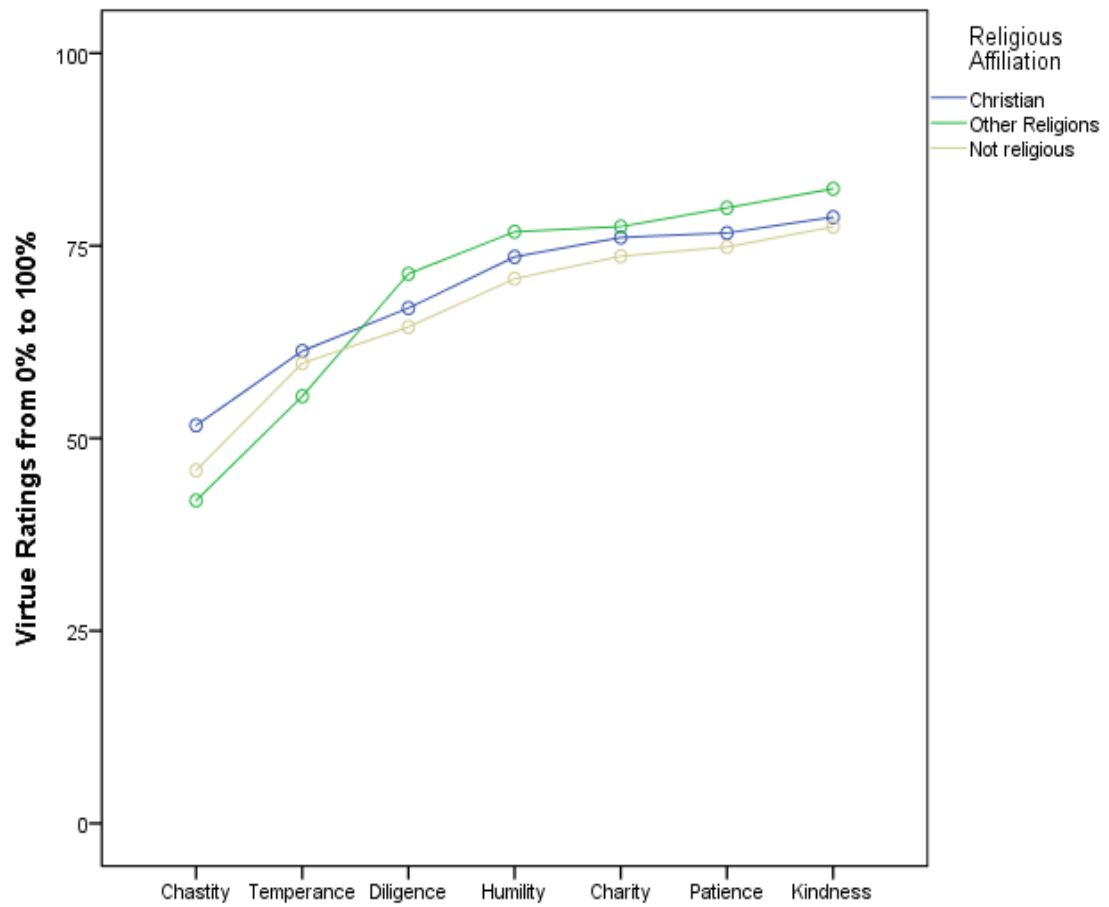


Figure 8: Virtue Ratings for Age Groups (10-year ranges)

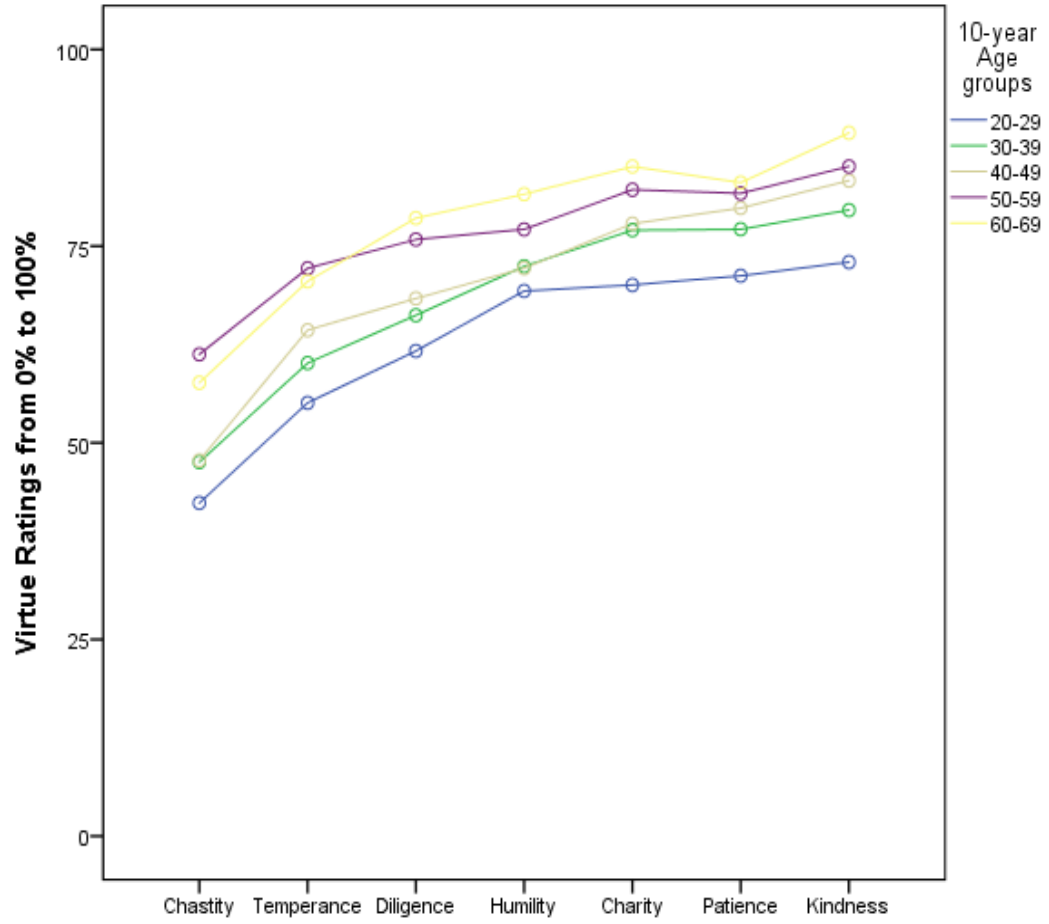


Figure 9: Virtue Ratings for Age Cohorts

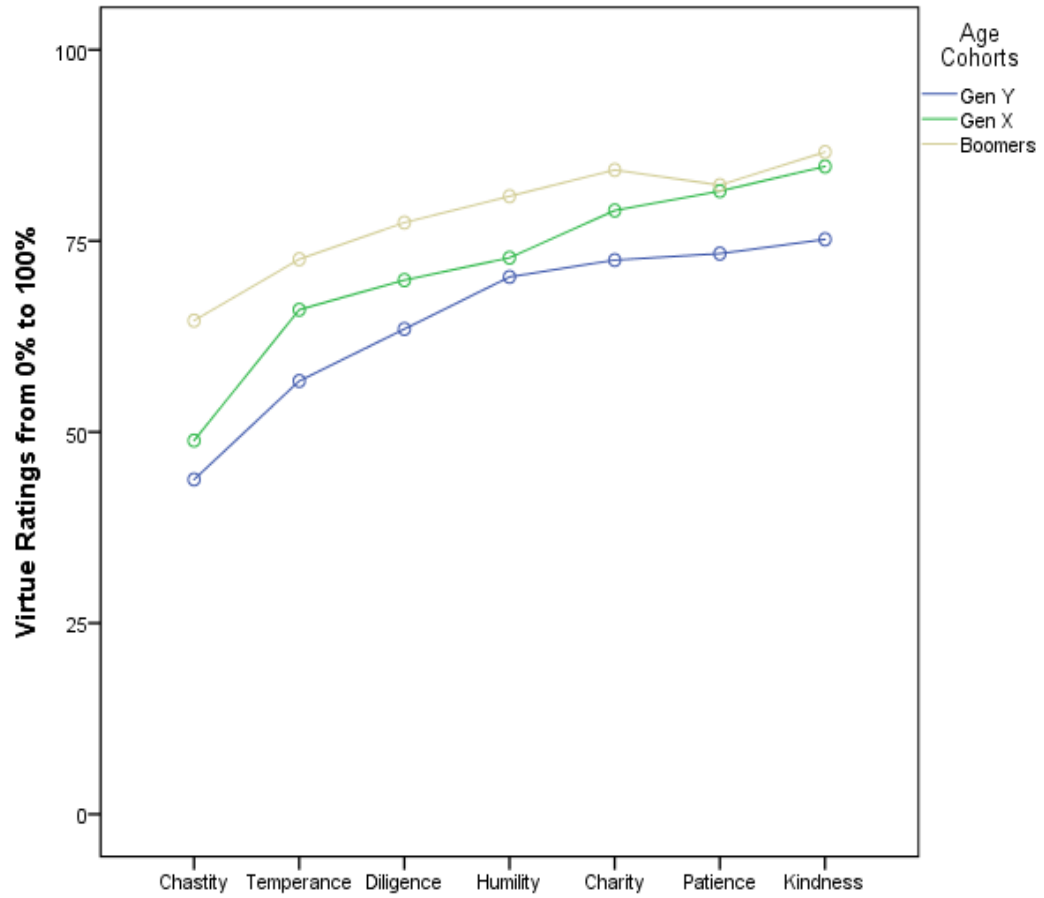


Figure 10: Virtue Ratings for Marital Status

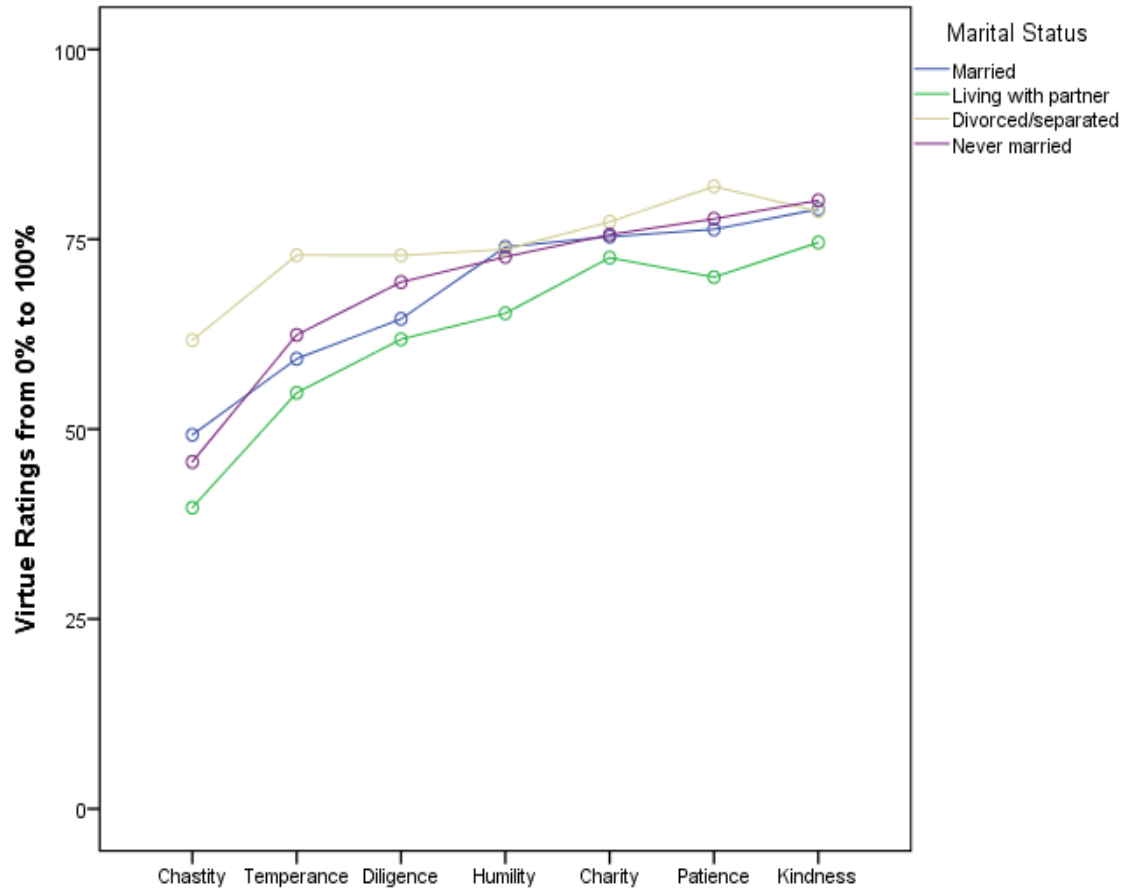


Figure 11: Interaction Between Giving/Withholding and Religious Ideology