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Rating the Seven Deadly Sins

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Abstract

Is one sin worse than another? Although hundreds of transgressions and vices are listed in religious works, the seven deadly sins (lust, greed, pride, envy, gluttony, sloth, and wrath) are considered the origin of all sin. In a psychological context, they involve basic emotions, attitudes, cognitions and behaviors related to central areas of psychology such as self-identity, interpersonal and intergroup relations, and psychological dysfunction and improvement. This article investigates how religious and nonreligious individuals in the United States distinguish the relative weight of different transgressions. A repeated measures analysis found a cultural “sin pattern” ranging from self-focused to other-focused and falling into four clusters that include biological desires and evolutionary adaptive mechanisms. A mixed factorial ANOVA analysis across different groups that were differentiated by gender, religion, age, marital status, and politics found moderating variables, including a “lust effect.” These variables also predicted severity ratings for six of the seven deadly sins, with a unique set of predictors for each type of sin. Although religious variables might be expected to be the driving force behind appraisals of sin, our research provides new insight into the complex nature of how sin is evaluated, including the possibility that a cultural understanding of the seven deadly sins has subsumed the religious meaning of certain deadly sins in U.S. culture.

Research into religious concepts has a long tradition in psychology and the other social sciences; many basic and applied subdisciplines have investigated the impact of spiritual and religious beliefs on human emotional, cognitive, and physical well-being (for a review, see Emmons and Paloutzian 2003). Furthermore, given that 88.54 percent of people in the world claim a religious denomination (CIA 2011) and 83 percent of Americans claim a religious denomination (Putnam and Campbell 2010), religion forms the basis for motivations, self-identity, and behaviors that are important in central areas of inquiry in psychology and sociology, such as perceptions of the self and interpersonal and intergroup dynamics. The concept of sin likewise touches on the central emotional, cognitive, and behavioral aspects of human experience that shape our perceptions of ourselves and others. In that context, understanding how people perceive sin has benefit not only for the religiously faithful, but also, in a broader cultural context, for learning more about how people perceive others and themselves in the social world. The purpose of the present research is to investigate from a cultural perspective how people distinguish the relative weights of different transgressions.

Although religious works list hundreds of transgressions and vices, the “seven deadly sins” (SDS) are seen as the origin of all sin (“Deadly Sin” 2011; Schimmel 1992). The concept of deadly sins originated in the 4th century and was based on classifications of sin in earlier Judeo-Christian texts. Since then, different versions of the list of deadly sins have been formulated on the basis of theological debate about the nature of sin (Capps and Haupt 2011; Schimmel 1992). The modern list of seven sins was established by 6th century Pope Gregory the Great, elaborated upon by St. Thomas Aquinas in the 13th century, and popularized in medieval culture in the 14th century by literature such as Dante’s *Inferno* and Chaucer’s *Canterbury Tales* (Capps 1989). The SDS continue to be popularized in Western culture through literary works, art, music, movies, television, comics, and video games¹ and have transcended religion to become part of contemporary culture and our collective consciousness. The extent of this can be illustrated by the multiple articles on CNN.com about new software and Web services that relate explicitly to each of the deadly sins, including “RageGage Connect, a USB gadget that hooks into your Facebook, allowing you to ‘punch’ your friends and coworkers in effigy” (Bartz and Ehrlich 2011) and “Meal Snap, an easier alternative to traditional calorie-counting apps [that] lets you snap photos of your meals, and will deliver an estimated calorie count and a list of ingredients” (Segal 2011).

In alphabetical order, the SDS are envy, gluttony, greed, lust, pride, sloth, and wrath (Schimmel 1992). They can be conceptualized as relating to basic human emotions and desires (lust and greed), attitudes and cognitions (pride and envy), and behaviors (gluttony, sloth, wrath) that everyone, whether religious or not, can

¹ For a long list, see “Seven Deadly Sins” (2011).

recognize or identify in their own lives and those around them. A quick scan of newspapers and magazines will show many examples of how these basic concepts permeate our daily lives and “are reflected in and shape social attitudes, values, and institutions” (Schimmel 1992: 245) such as the U.S. debt crisis, political turmoil, and conflict over social issues. The virtues corresponding to the SDS (kindness, temperance, charity, chastity, humility, diligence, and patience, respectively) are also readily apparent in our daily lives and are a hotly researched topic in the field of positive psychology (see Emmons 2003).

In addition to the view of the SDS in the religious tradition as the root of all transgressions, the SDS involve basic motivations and desires that are behind ongoing conflicts in our social world and our human nature (Schimmel 1992). In the burgeoning discipline of motivated cognition, the SDS can be conceptualized as pertaining to different goal-based processes, such as an inability to obtain a desired goal (envy, lust, greed), overindulgence in obtaining the goal (gluttony, sloth), and even evolutionary impulses (most SDS promote survival, competition, etc.). Each of these individual-level goals can underlie a host of personal issues such as “low self-esteem, aggression, racial animosity, economic anxiety, executive stress, obesity, sexual dysfunction, depression, and suicide” (Schimmel 1992: 10). Because the SDS are at the root of many basic religious, sociological, and psychological issues, it is important to ask a question that has not been addressed in the literature of the cultural perceptions of the SDS: Is one deadly sin worse another? Our research is the first to ask respondents to rate the relative severity of each SDS and to assess whether different factors such as age, gender, politics, and religion moderate the results.

We used a combination of groups and characteristics that entail aspects of self-identity, behaviors, viewpoints and opinions, and real-life experiences (e.g., marriage, divorce, church attendance). The results not only provide between-group moderating differentiation but also reveal patterns of responding for the different sociocultural groups and allow readers to compare themselves to the different groups in terms of how they would judge the severity of envy, gluttony, greed, lust, pride, sloth, and wrath. By surveying both religious and nonreligious individuals in the United States, we investigated the different U.S. cultural perceptions of sins. We then used multiple regression techniques to use the characteristics to predict evaluation of SDS in contemporary society.

METHOD

Participants

The participants were 505 Internet users (298 females and 207 males with a mean age of 34.02 years and a standard deviation of 12.67 years) who were recruited

via Amazon Mechanical Turk,² a website that offers a monetary reward for completion of tasks and that has been empirically tested for its demographically diverse population and reliability in data outcomes in comparison to traditional methods (Buhrmester, Kwang, and Gosling 2011). Most participants were Christian (54.1 percent), and most were either never married (43.6 percent) or married (32.7 percent). Amazon Mechanical Turk allows location restrictions on participation, so we restricted participation to the United States. A detailed breakdown of the number of participants in each demographic category is shown in Table 1.

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

| Variable | N | Mean (Standard Deviation) | | | | | | |
|--------------------------|-----|---------------------------|--------------------|---------------------|---------------------|--------------------|-------------------|---------------------|
| | | Pride | Sloth | Lust | Gluttony | Envy | Greed | Wrath |
| Overall | 505 | 44.50a (34.0) | 48.13b (31.0) | 48.86bc (34.14) | 50.62c (30.44) | 53.82d (31.29) | 70.22e (27.87) | 70.45e (27.75) |
| Gender: | | | | | | | | |
| Male | 207 | 44.02a (34.07) | 47.57ab (31.70) | 48.33b (32.60) | 50.60bc (30.20) | 53.02c (31.57) | 66.57d (28.19) | 67.80d (27.44) |
| Female | 298 | 44.84a (34.0) | 48.51b (30.55) | 49.22b (35.21) | 50.63b (30.66) | 54.37c (31.14) | 72.76d (27.42) | 72.30d (27.86) |
| Religious viewpoint: | | | | | | | | |
| Progressive | 172 | 40.94ab (31.83) | 45.48ac (28.55) | 40.37b (32.41) | 47.81cd (27.69) | 50.69d (29.52) | 72.44e (26.11) | 71.23e (26.97) |
| Mainstream | 187 | 46.51a (33.83) | 48.90ab (30.66) | 54.35cd (32.33) | 51.34bc (30.63) | 55.48d (31.26) | 66.50e (28.69) | 69.21e (25.98) |
| Fundamental | 77 | 60.17a (37.53) | 64.38ab (31.66) | 70.36bc (31.79) | 64.74acd (31.88) | 68.96bd (30.95) | 78.73e (24.37) | 78.60e (27.92) |
| Religious self-identity: | | | | | | | | |
| Not at all | 177 | 33.29a (29.19) | 38.18ab (28.65) | 28.67c (26.68) | 41.93b (27.47) | 41.92b (29.94) | 64.58d (31.05) | 65.93d (29.16) |
| Little religious | 131 | 42.73a (32.01) | 45.17a (27.28) | 50.47b (32.17) | 49.98b (28.39) | 53.54b (28.23) | 70.40c (24.71) | 71.50c (24.58) |
| Moderately | 139 | 51.68a (34.34) | 58.11b (30.16) | 63.42c (31.08) | 56.56ab (29.88) | 61.22bc (29.11) | 73.85d (25.56) | 75.06d (25.50) |
| Very religious | 56 | 67.5abc (36.82) | 62.70ad (36.11) | 73.48bce (31.83) | 66.36cdf (35.77) | 75.20eg (31.21) | 78.96e (26.81) | 72.18bfg (32.57) |

(continued)

² See www.mturk.com.

Religious affiliation:

| | | | | | | | | |
|-----------------|-----|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|
| Christian | 273 | 51.58a (34.75) | 54.26a (31.34) | 59.86b (32.51) | 55.42a (31.18) | 60.05b (30.32) | 73.19c (26.23) | 74.33c (25.62) |
| Other religions | 33 | 49.48a (34.43) | 47.70a (27.80) | 49.45ac (31.16) | 51.94ac (22.85) | 57.91ac (29.45) | 72.33b (26.06) | 61.58c (30.96) |
| Not religious | 161 | 33.02ab (28.49) | 38.07ad (28.61) | 30.12b (28.80) | 41.11cd (27.80) | 40.50cd (28.75) | 64.15e (29.77) | 65.90e (28.82) |

Political viewpoint:

| | | | | | | | | |
|--------------|-----|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|
| Liberal | 249 | 39.37ac (31.10) | 44.22bd (28.95) | 40.12cd (32.07) | 47.48e (28.25) | 48.82e (29.75) | 70.27f (27.05) | 69.91f (27.02) |
| Moderate | 102 | 47.44a (34.05) | 50.20a (31.99) | 52.94ab (33.52) | 51.87ab (31.50) | 57.25b (30.85) | 68.08c (29.00) | 70.18c (27.81) |
| Conservative | 129 | 53.64a (36.64) | 55.10a (32.63) | 62.73b (33.24) | 56.30ac (32.84) | 60.81bc (32.33) | 72.66d (27.45) | 71.84d (28.92) |

Political affiliation:

| | | | | | | | | |
|-------------|-----|-------------------|-------------------|--------------------|--------------------|-------------------|-------------------|-------------------|
| Democrat | 198 | 41.29a (30.68) | 45.51a (28.22) | 44.19a (32.70) | 48.90b (28.53) | 52.13b (30.10) | 72.46c (25.86) | 69.98c (27.05) |
| Republican | 81 | 56.38a (37.08) | 57.14a (33.45) | 63.52a (34.85) | 58.53a (32.99) | 60.07a (32.88) | 71.04b (28.10) | 74.14b (27.49) |
| Independent | 144 | 43.61a (34.49) | 44.84a (30.81) | 46.21ab (32.80) | 49.87bc (29.49) | 51.89c (29.96) | 68.54d (28.27) | 68.48d (28.95) |

Age cohort:

| | | | | | | | | |
|--------------|-----|-------------------|--------------------|-------------------|--------------------|--------------------|-------------------|-------------------|
| Generation Y | 265 | 40.0a (33.58) | 47.20bc (30.64) | 45.05b (33.26) | 48.68bc (29.42) | 49.64c (32.35) | 66.44d (28.63) | 68.14d (27.96) |
| Generation X | 141 | 52.28a (33.85) | 51.96a (31.05) | 52.99a (34.62) | 53.65a (32.30) | 62.35b (28.20) | 75.21c (26.42) | 74.72c (25.97) |
| Baby Boomers | 92 | 44.8ac (33.19) | 44.95bc (30.66) | 52.64d (34.92) | 51.33ad (29.56) | 52.08ed (30.53) | 73.06f (26.21) | 70.47f (29.44) |

Marital status:

| | | | | | | | | |
|-------------------|-----|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|
| Married | 165 | 44.49a (32.90) | 47.81ab (30.51) | 51.46b (33.67) | 48.99ab (29.37) | 51.58b (30.46) | 70.90c (26.99) | 69.92c (27.62) |
| Live with partner | 66 | 40.38a (34.56) | 48.52bc (32.02) | 42.62ab (33.86) | 50.61c (30.70) | 54.79c (29.68) | 71.67d (27.08) | 74.03d (25.19) |
| Divorced | 44 | 62.59ab (33.08) | 54.80b (30.03) | 56.34b (33.15) | 63.84ac (27.25) | 65.32ac (28.37) | 80.05d (22.04) | 75.98d (26.17) |
| Never married | 220 | 41.64a (33.92) | 45.85ab (31.12) | 46.26b (34.44) | 48.17b (31.15) | 51.99c (32.74) | 66.48d (29.55) | 68.14d (28.71) |

Note: The omnibus F -test across the seven sins was significant ($p_s < 0.001$) for each category row. The letters (a, b, c, d, e, f, g) indicate the follow-up test of significance. Sins that do not share a common letter are significantly different from each other within that category row. The marital status category “Live with partner” refers to living with a partner, and the category “Divorced” refers to divorced or separated. Sexual orientation was not assessed in the current survey, so it is not possible to identify the percentage of same-sex couples in the different categories of the “Marital status” question.

Materials and Procedures

The survey consisted of sixteen items. The first seven items concerned the deadly sins. Participants were first asked the question “Is one sin worse than another?” and then asked to “rank the ‘Seven Deadly’ sins by placing each on the line.” The line ranged from 0 percent to 100 percent, where 0 percent indicated that the item was not a sin; no label was given to the 100 percent endpoint. Presentation of the SDS was randomized for each participant.

The remaining nine questions assessed demographic grouping variables. Participants first indicated their age and then answered four questions about religion. The four religious questions were “Religion” (possible responses were “Christian,” “Jewish,” “Muslim,” “Buddhist,” “Hindu,” “Agnostic,” “Atheist,” “Secular,” and “Other”); “Do you think of yourself as a religious person?” (possible responses, on a four-point scale, were “Not at all religious,” “Little religious,” “Moderately religious,” and “Very religious”); “If you have a religion, do you think of yourself as progressive, mainstream, or fundamental?” (possible responses were “Progressive,” “Mainstream,” and “Fundamental”); and “How often do you attend religious services?” (possible responses were “More than once a week,” “Once a week,” “Once or twice a month,” “A few times a year,” “Once a year or less,” and “Never”). Each question was formulated to tap a different aspect of the religious experience. It is possible that different components of the religious experience influence a person’s perception of the deadly sins. Therefore, beyond religion affiliation, we wanted to assess degree of religious self-identity (“Do you think of yourself as religious person?”), religious viewpoint (possible responses were “Progressive,” “Mainstream,” and “Fundamental”), and behavioral aspects of religion (“How often do you attend church?”).

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

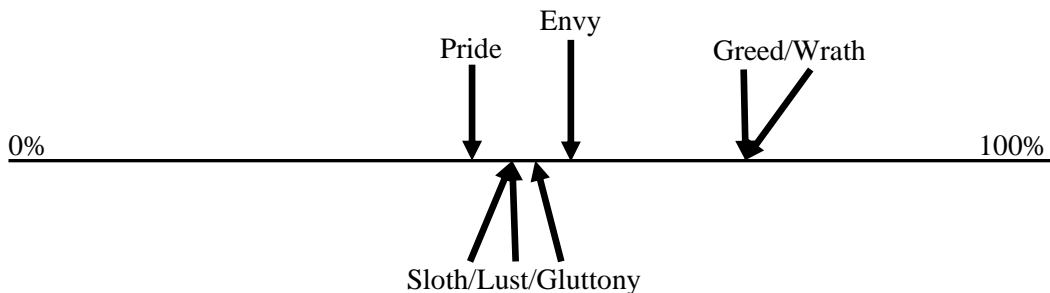
RESULTS AND DISCUSSION

A repeated measures analysis revealed a significant effect ($F(6, 499) = 95.21, p < 0.001$), with an extremely large effect size (multivariate $\eta^2 = 0.53$). Table 1 displays the means and standard deviations for the entire sample and for various

demographic categories. As the table shows, the ordering of severity is pride, sloth, lust, gluttony, envy, greed, and wrath. The same ordering exists for many of the demographic categories, including gender. In other words, a consistent pattern emerged in how people in the United States perceive the deadly sins.

Furthermore, there was a significant effect for every grouping variable as displayed in Table 1. For every type of distinction, sins were perceived as worse than one another. To help explain the pattern of results, we used a one-sample *t*-test using the bottom, middle, and top of the scale as reference points to identify the relative sequence of sins. When we analyzed the entire sample, each of the deadly sins was significantly different from the bottom (0 percent) and the top of the scale (100 percent) ($p_s < 0.001$); which indicates that all of the sins were judged as true sins, since the survey instructions had indicated that 0 percent was “not a sin,” yet all were judged as less than 100 percent sins. In other words, all seven of the deadly sins were considered to be sins yet not fully sinful. Are the SDS in the middle range? Yes and no. The one-sample *t*-test using the midpoint of the scale (50 percent) as the reference point found that sloth, lust, and gluttony were not significantly different from the middle of the scale ($t(504) = -1.36, p = 0.18$; $t(504) = -0.75, p = 0.45$; and $t(504) = 0.46, p = 0.65$, respectively). In other words, although sloth and lust are descriptively in the bottom half of the scale, they are inferentially not different from the middle of the scale. This also means that pride is the only sin in the bottom half of the scale range. Pride is the only sin whose sinfulness is considered low enough to put it on the lower end of the scale. Gluttony, although in the top half of the scale, is also nonsignificantly different from the midpoint, which means that only envy, greed, and wrath are considered sinful enough to be on the high end of the scale. Figure 1 provides a visual depiction of the sequence.

Figure 1: Participants' Perceptions of the Deadly Sins



Interestingly, the pattern of sins also included groupings. Post hoc pairwise analysis (as represented by the letters in Table 1) revealed that the SDS fall into four groupings. The analysis shows that sloth and lust were nonsignificantly different from each other, as were lust and gluttony. At the high end of the scale,

greed and wrath were also nonsignificantly indistinguishable. They are judged to be so equivalent that they could, in effect, be switched with each other in Figure 1. Figure 1 displays the SDS in groupings for that reason. Given the large sample size for a repeated measures analysis, as well as the extremely high power for the analysis (the power was 1.0 for repeated measures analysis), it is very informative that nonsignificant differences exist. Although it is a tenet of statistics that given a high enough sample size, every relationship becomes statistically significant, the fact that a few nonsignificant effects emerged, given the high sample size and power, is informative, especially since the mean levels are almost identical to each other for the nonsignificant relationships. The mean level for greed (70.22) and the mean level for wrath (70.45) are so close, for example, that they are separated by only 0.23, which is a very close margin given that it is a 100-point scale. An equally informative piece of information beyond statistical significance is the strength of effect, which provides arguably more valuable information about how much each sin differs from the others. For example, the effect size between greed and wrath was indistinguishably small ($\eta^2 = 0.00007$). The effect sizes for the other nonsignificant differences were also extremely small ($\eta^2 < 0.003$ for effect sizes among sloth, lust, and gluttony). Even with substantially increased sample sizes that would make the differences statistically significant, the distinction between those SDS would remain weak and clustered together. The remaining effect sizes were small ($\eta^2 = 0.01$ between pride and sloth and between gluttony and envy), with an extremely large effect size between envy and greed ($\eta^2 = 0.29$).

Our research determined that there are four SDS groupings: pride, sloth/lust/gluttony, envy, and greed/wrath. Theologically speaking, pride is considered the root of all other sins (Capps and Haupt 2011; Lyman 1989), yet our respondents saw it as the least offensive. It is possible that in today's self-centered Western society, pride is no longer seen as serious and may have taken on a more positive connotation. The next grouping is sloth/lust/gluttony, which we term the Biological Desires grouping. Unlike the other groupings, these sins relate to animalistic needs that are universal to most species. Indeed, one line of reasoning is that the other groupings of the SDS are more uniquely human. The fact that they are grouped together and are located at the midpoint of the scale suggests that basic animalistic needs are considered neither extremely sinful nor entirely sinless in comparison to the other SDS. The third grouping consists of the single emotion envy. Greed and wrath compose the last grouping. In Figure 1, the biggest distinction between groupings is that between greed/wrath and the other SDS. Why are greed and wrath the worst transgressions, and why are they paired? Together, they form evolutionary adaptive mechanisms for survival while also being the sins that are most directly related to harming others. In fact, the ordering of sins (pride, sloth/lust/gluttony, envy, greed/wrath) can be placed on a continuum from self-focused (pride, sloth, gluttony) to other-focused (envy, greed, wrath).

Moderating Variables

Although there is a general pattern across the sins, there is considerable variation within each sin rating, as can be seen from the standard deviations in Table 1. Participants used the full range of the scale (0 to 100) for each sin. Thirty-three participants, for example, gave a rating of 100 to all seven sins. In other words, there is much variability among the respondents in how they answered the question about whether one sin is worse than another. The purpose of our subsequent analysis is to identify explanations for the variation using moderating variables.

Gender. Do males and females perceive the sins differently? A mixed factorial ANOVA using gender as a between-subjects moderator found no interaction ($F(6, 498) = 1.27, p = 0.27$, multivariate $\eta^2 = 0.02$) and no main effect of gender ($F(1, 503) = 0.96, p = 0.33$). An independent samples t -test of the effects of gender for each sin found a significant difference for greed ($t(1, 503) = 2.47, p = 0.01$) and a marginal difference for wrath ($t(1, 503) = 1.80, p = 0.07$), with no other significant differences ($p_s > 0.63$). As can be seen from the descriptive means in Table 1, females judge every sin as worse than males do, but the t -test analysis shows that the harsher ratings are significant only for greed and are marginal for wrath.

Figure 2: Sin Ratings by Gender

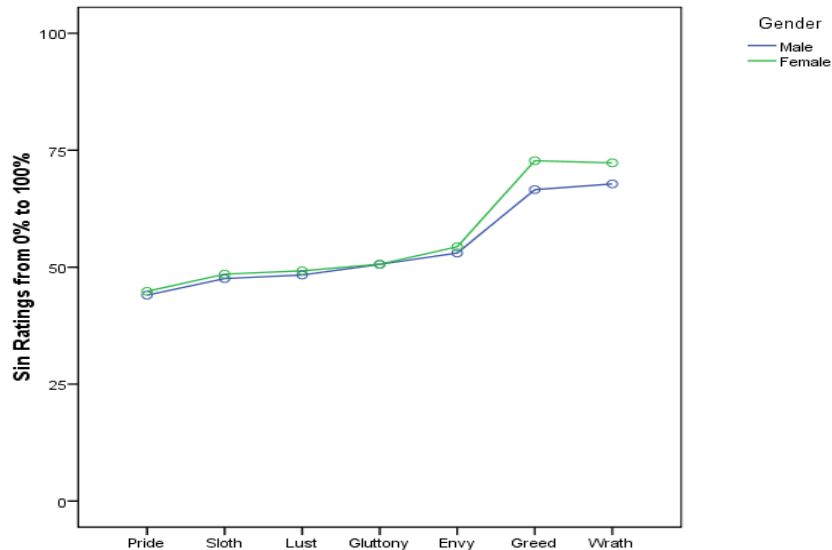
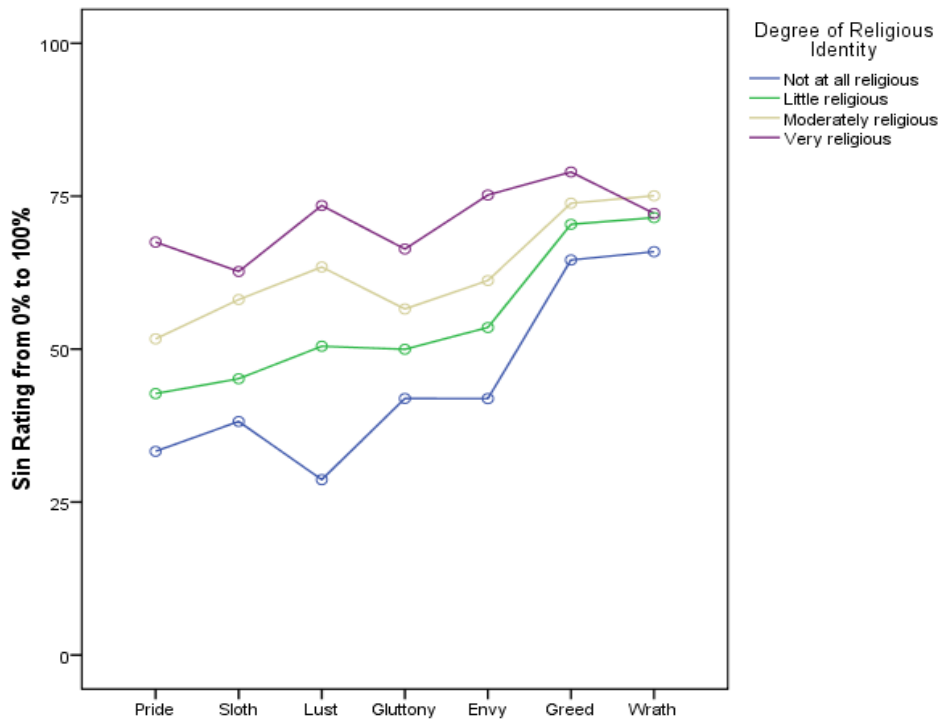


Figure 2 provides a better depiction of this finding; the lines are virtually identical except for greed and wrath. From Table 1, it may be difficult to discern the trends across the seven sins, given that the various demographic variables contained multiple levels, so the figures are presented as line graphs rather than bar

graphs to visually show trends across the sin ratings. In this case, a gender difference exists for only two of the SDS. Why just greed and wrath? In the previous analysis, we identified greed and wrath as the more harmful other-focused transgressions, which appear to be uniquely affected by gender.

Religion. Does being religious affect how a person rates the sins? It depends on the type of sin and the type of relationship under investigation. The degree of religious identity was a significant moderator in the mixed factorial ANOVA ($F(18, 1488) = 6.01, p < 0.001$, multivariate $\eta^2 = 0.07$) and a significant main effect ($F(3, 499) = 28.10, p < 0.001$, multivariate $\eta^2 = 0.15$).

Figure 3: Sin Ratings by Degree of Religious Identity



In Figure 3, the same general pattern emerges as occurs with the overall model and with gender differences: generally higher sin ratings from pride to wrath. What is interesting is the new finding for lust. The stronger the religious identity, the greater is the discrepancy in judging lust. A follow-up analysis showed that there is a main effect of self-identity, all four levels being significantly different from each other ($p_s < 0.02$). The more religious the respondent feels, the higher are the sin ratings for each sin (the “not at all religious” line is below all the

others, the “very religious” line is above all the others, etc.), which make sense given that more religiosity can be expected to intensify a person’s attitudes toward sin. But that pattern of results diverges for lust. What is it about lust that causes an extreme reaction that is not occurring for the other sins?

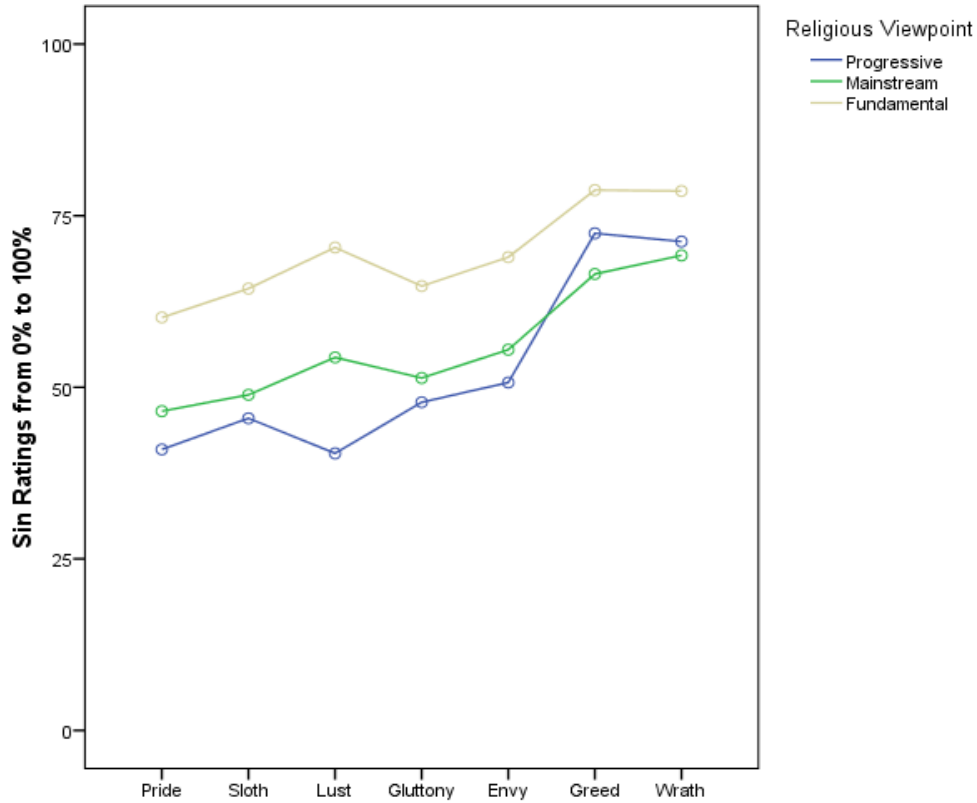
The same extreme reaction for lust occurs for religious viewpoint as a moderator and religious services as a moderator.³ As Figure 4 illustrates, lust is causing the diverging judgments across religious viewpoint from progressive to mainstream to fundamental viewpoints. A one-way ANOVA for lust across religious viewpoints found significant differences among all three levels ($p_s < 0.001$). The most telling illustration of what we term the “lust effect” is Figure 5, which shows the line graphs for attending religious services. There appears to be a perfectly linear association between attending religious services and the discrepancy across the pattern of feelings toward lust. In other words, with each incrementally higher degree of church attendance, the discrepancy for lust goes from the lowest dip to the highest peak. In fact, a test of linearity found the relationship between the lust effect and sin ratings to be linear (the linear term is significant but the deviation from linearity is nonsignificant, $p_s < 0.001$ and $p_s < 0.34$, respectively). A correlational analysis between the religious variables and each sin rating revealed that the strongest correlation always occurred for lust ($r_s > 0.32$, $p_s < 0.001$).⁴ How-

³ Similar to the results for degree of religious identity, the mixed factorial ANOVA showed a significant interaction and main effect for both the religious viewpoint variable and the religious attendance variable. For religious viewpoint, the interaction was significant ($F(12, 858) = 4.04$, $p < 0.001$, multivariate $\eta^2 = 0.05$), and the main effect was significant ($F(2, 433) = 14.80$, $p < 0.001$, multivariate $\eta^2 = 0.07$). The pairwise comparison of the main effect of religious viewpoint found significant differences among the three levels ($p_s < 0.001$) except for the comparison between progressive and moderate ($p = 0.17$). Fundamentalists are distinct from the other two levels. That said, given a large enough sample size, the distinction between progressive and moderate would become significant. What is more informative are the means and the corresponding effect sizes. The effect size between fundamentalists and the other two viewpoints is larger ($\eta^2 = 0.06$ for comparison to moderate, $\eta^2 = 0.11$ for comparison to progressive) than the effect size between progressive and moderate ($\eta^2 = 0.006$). In other words, not only are fundamentalists distinct, but the effect sizes provide the strength of the distinction. For religious attendance, the interaction was significant ($F(30, 2490) = 2.71$, $p < 0.001$, multivariate $\eta^2 = 0.03$), and the main effect was significant ($F(5, 499) = 11.14$, $p < 0.001$, multivariate $\eta^2 = 0.10$). The pairwise comparison of the main effect showed significant differences for each level ($p_s < 0.05$) except between “once or twice a month” and “once a week,” “a few times a year,” and “once a year or less” and between “once a year or less” and “never” ($p_s = \text{n.s.}$).

⁴ As would be expected, given the reported relationship between the religious variables and the sin ratings as presented in Figures 3, 4, and 5, there was a significant correlation between every sin rating and every religious variable. As the respondents became more religious (more self-identity, more likely to be fundamentalist, more likely to attend church), the sin rating increased. Given that every pairwise relationship was significant, for brevity sake the entire correlation matrix is not reproduced for each of the religious variables, since those correlation matrices would not offer any unique information other than the fact that the correlations were strongest for lust.

ever, the same effect is not generally occurring for the other deadly sins. Lust appears to be the sin whose ratings are uniquely affected by the religious nature of the respondent. Why are religious individuals more reactive to lust than to the other sins. Or are nonreligious people more permissive of lust?

Figure 4: Sin Ratings by Type of Religious Viewpoint



Are Christians harsher in their judgment of sin? Given the Judeo-Christian lineage of the SDS, does being Christian influence the respondents' judgments? As can be seen from Table 1, the means and standard deviations for Christians are consistently higher than those for the overall sample. Given the small sample size of the non-Christian religious groups,⁵ the sample was categorized into Christian ($N = 273$), other religious affiliations ($N = 33$), and not religious ($N = 161$) in order to perform a mixed factorial ANOVA on religious affiliation. The inter-

⁵ The frequencies for religious affiliation were 273 for Christian (54.2 percent), 16 for Jewish (3.2 percent), 6 for Muslim (1.2 percent), 5 for Buddhist (1.0 percent), 6 for Hindu (1.2 percent), 80 for agnostic (15.9 percent), 71 for atheist (14.1 percent), 10 for secular (2.0 percent), and 37 for other (7.3 percent).

action was significant ($F(12, 920) = 4.95, p < 0.001$, multivariate $\eta^2 = 0.06$) with a significant main effect ($F(2, 464) = 27.80, p < 0.001$, multivariate $\eta^2 = 0.11$).

Figure 5: Sin Ratings by Degree of Attending Religious Services

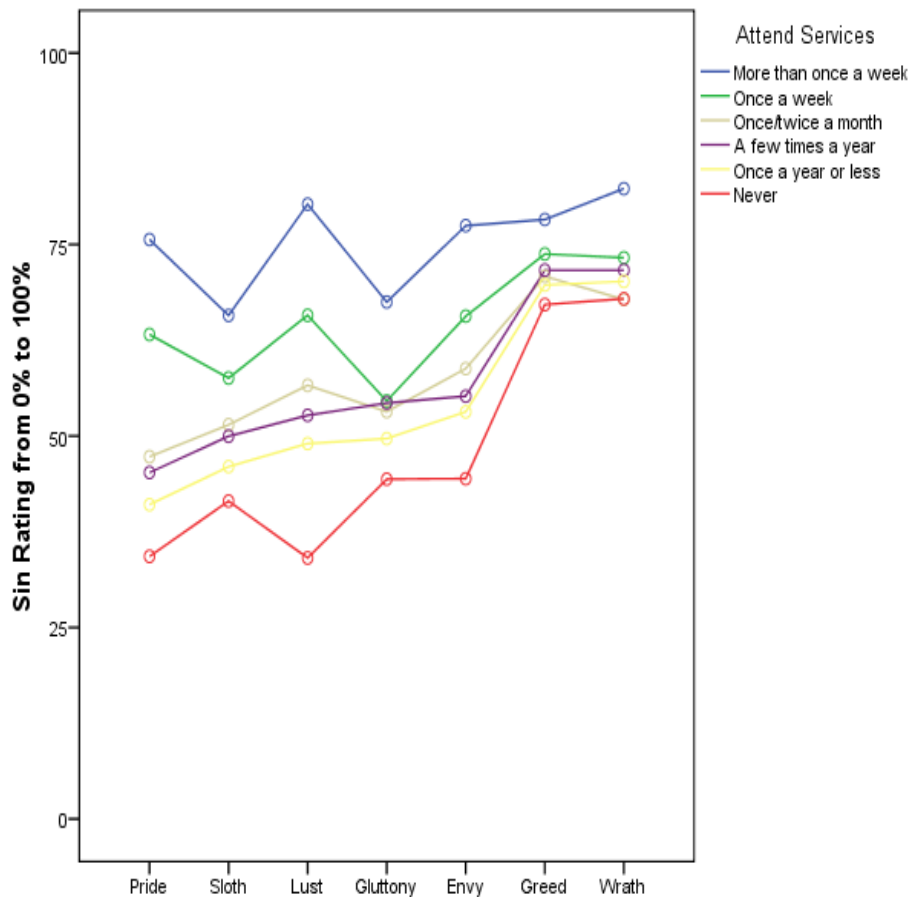
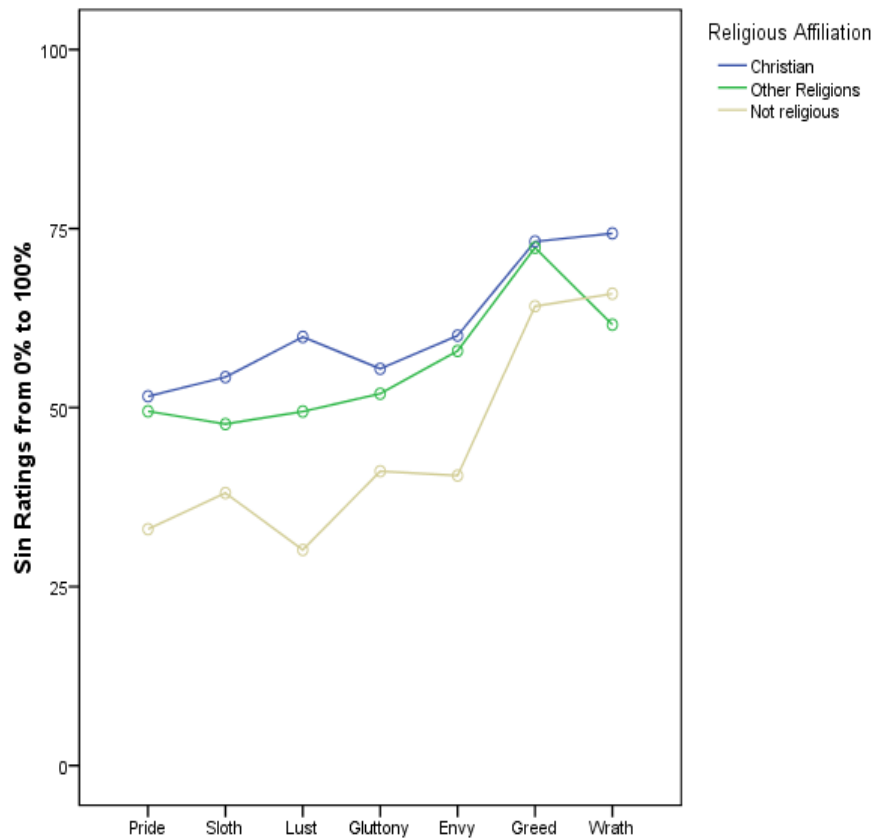


Figure 6 shows that Christians do judge each sin more harshly than do adherents of the other religions, but the follow-up analysis of the main effect revealed no significant pairwise difference for Christians and other religious groups ($p = 0.18$). To say it in reverse, the not religious group had significantly lower ratings than did both the religious groups ($p < 0.001$ for comparison to Christians, $p = 0.01$ for comparison to “other religious” groups). That said, given a large enough sample size, all differences become significant. What is informative is the mean levels and the corresponding effect sizes. The effect size between Christians and the other religious groups is smaller ($\eta^2 = 0.005$) than the effect between the other religious groups and the not religious group ($\eta^2 = 0.04$),

the largest difference being between Christians and the not religious group ($\eta^2 = 0.11$). In other words, not only are the religious affiliation groups distinct, but the effect sizes provides the strength of the distinction.

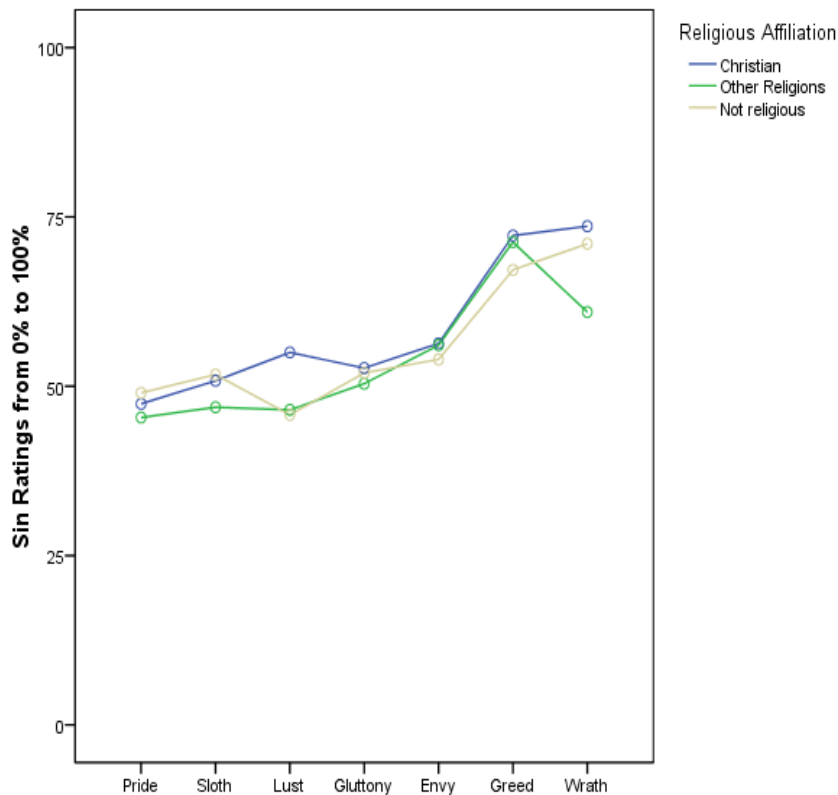
Figure 6: Sin Ratings by Religious Affiliation



An $\eta^2 = 0.04$ between other religious groups and the not religious group is a modest effect size (with 0.01, 0.06, and 0.14 corresponding to benchmarks of small, medium, and large, respectively, for interpreting partial η^2), so even non-Christian religious groups are distinctively higher in their ratings of the deadly sins. Interestingly, Figure 6 shows the same discrepancy ratings for lust, with a spike in the lust rating for Christians. The reactive responses for lust occur in the Christian religion and not in the Jewish, Muslim, and Buddhist faiths. That said, the effect is weak. A one-way ANOVA on lust ratings for all three groupings found a significant main effect ($F(2, 464) = 46.05, p < 0.001$) and a marginal difference between the Christian group and other religious groups ($p = 0.07$).

But are Christians just as harsh toward lust and the other sins after we control for degree of religiosity? We assessed religion in four ways: self-identity, religious viewpoint, behavioral component, and affiliation. The mixed factorial ANOVA on religion affiliation was repeated with the other religious variables as covariates, revealing a nonsignificant interaction ($F(12, 744) = 1.43$, $p = 0.15$, multivariate $\eta^2 = 0.02$) with a nonsignificant main effect ($F(2, 391) = 0.77$, $p = 0.47$, multivariate $\eta^2 = 0.01$). As can be seen from Figure 7, the sin ratings from Christians generally parallel the sin ratings from people of other religions and the nonreligious. Unlike the other figures, Figure 7 shows that the sin ratings are tightly packed together. Christians do not generally perceive the deadly sins differently from the other groups, which is interesting given the origin of the SDS in Christianity. At a larger level, the lack of differences across groups shows that religion is not changing how people perceive sin. The perception of sin may have transcended religious origin and become part of modern secular culture.

Figure 7: Sin Ratings by Religious Affiliation After Controlling for Other Religious Variables



However, the discrepancy for lust still emerges. Figure 7 indicates that Christians judge lust more severely than do individuals in the other two groups; the ratings for “other religious” and “not religious” are virtually identical. It is specifically the Christian religious group, not other religious affiliations, that has an issue with lust. The other religious groups, in fact, see lust similarly to the way in which the nonreligious see it. It is possible that the Christian religion places a heavier emphasis on avoiding lustful desires, but it is equally possible that the lust effect is being driven by how adherents of the Christian faith specifically within U.S. culture perceive lust.

Politics. Do Republicans and Democrats condemn the deadly sins equally? Although it initially appears that Republicans are rating the sins consistently worse than other political groups do (see Table 1), the effect disappears after we control for religious variables (self-identity, religious viewpoint, religious attendance), with a nonsignificant interaction ($F(18, 1233) = 0.83$, $p = 0.66$, multivariate $\eta^2 = 0.01$) and a nonsignificant main effect ($F(3, 414) = 0.30$, $p = 0.83$, multivariate $\eta^2 = 0.002$).⁶ A similar result occurred for the variable that assesses whether the respondents are politically liberal, moderate, or conservative. Although conservatives initially appear to rate the sins more severely (see Table 1), the effect disappears after we control for religious variables (self-identity, religious viewpoint, religious attendance), with a nonsignificant interaction ($F(12, 804) = 0.45$, $p = 0.94$, multivariate $\eta^2 = 0.01$) and a nonsignificant main effect ($F(2, 406) = 0.16$, $p = 0.85$, multivariate $\eta^2 = 0.001$).⁷ Although one would expect Republicans and political conservatives to rate the sins more harshly, given their historical affiliation with the Christian faith, this is not the case. In fact, the effect sizes are extremely small for all comparisons ($\eta^2 \leq 0.004$ for all). The type of political affiliation and the degree of liberalism/conservatism have almost no effect on perceptions of deadly sins after we control for religion. Conservatives are no different from liberals in how they judge deadly sins.

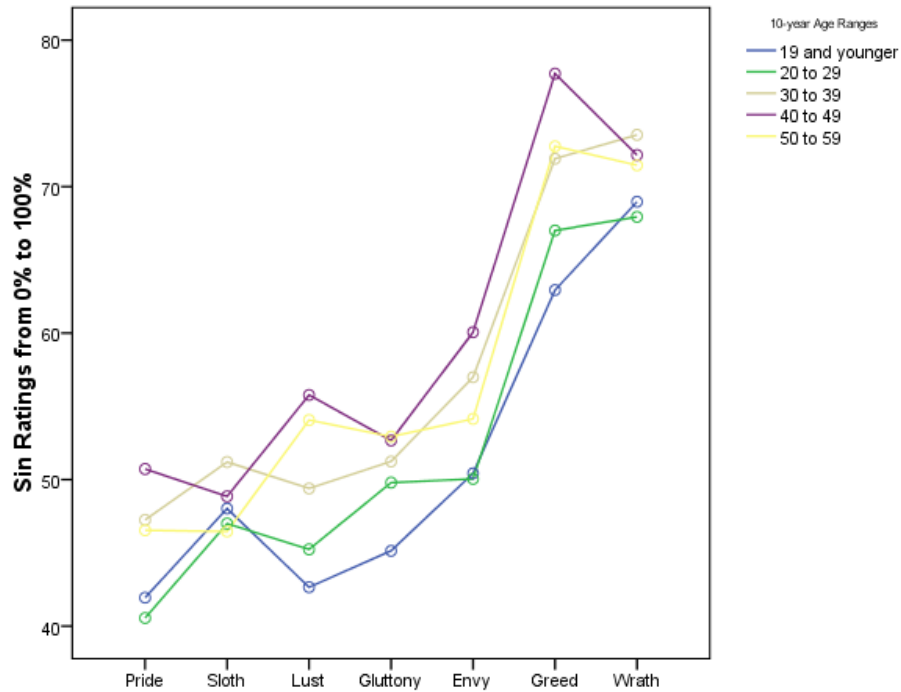
Age. Do people judge vices more severely as they grow older? Yes and no. As Figure 8 illustrates, there is a general trend toward higher sin ratings as age increases, but the main effect of age group in the mixed factorial ANOVA was marginal at best ($F(4, 483) = 1.90$, $p = 0.11$), and there was no interaction between repeated measures of sin ratings and age group ($F(24, 1924) = 0.90$, $p =$

⁶ Only a few respondents chose the options Tea Party ($N = 4$) and “other” ($N = 11$), so they were not included in the analysis by groups for political affiliation.

⁷ 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 was the case with the original eight-point measurement scale.

0.61, multivariate $\eta^2 = 0.01$). In other words, there is a general but weak trend toward individuals who are older rating the SDS as more sinful.

Figure 8: Sin Ratings by Age Group (Ten-Year Ranges)



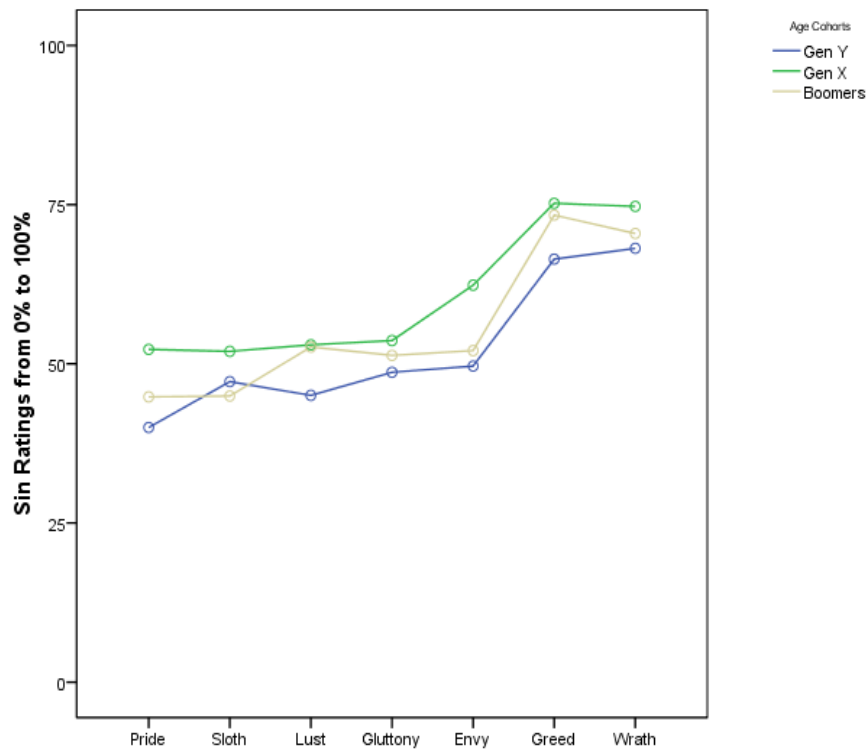
We initially decided to split age into ten-year ranges in order to have a sufficient sample size in each group while replicating the same analyses as in the other sections in this article to allow easy comparison.⁸ However, treating age as continuous in a correlational analysis showed that as people grow older, they give harsher ratings to pride, lust, envy, and greed ($r_s = 0.09, 0.11, 0.09, 0.13$, respectively; $p_s < 0.05$) but not to sloth, gluttony, and wrath ($r_s = -0.001, 0.05, 0.05$, respectively; $p_s > 0.26$). It is interesting to note that some sins are influenced by age while others are not. Together, the two analyses shows that age is associated with some general increases in perceptions of sinfulness for particular sins.

A more interesting analysis investigates whether different birth cohorts perceive sin differently. Beyond the incremental age ranges, how do culturally defined cohorts of individuals evaluate the SDS? Although there are differing def-

⁸ When we split the sample into ten-year age groups, there were few respondents in the 80s age group ($N = 1$), the 70s age group ($N = 1$), and the 60s age group ($N = 15$), so we did not include them in the analysis as a group.

initions of the birth cohorts, the following are commonly accepted (e.g., Barford and Hester 2011): Generation Y, born 1980–2000; Generation X, born 1965–1979; and Baby Boomers, born 1946–1964. As is to be expected, these cohorts differ in many ways for historical and cultural reasons. Does the age effect discussed above still hold when we analyze responses by cohort? No. In fact, the age group with the highest ratings of sinfulness was Generation X. The main effect of age group in the mixed factorial ANOVA was significant ($F(2, 495) = 5.82, p = 0.01$, multivariate $\eta^2 = 0.02$), and the interaction between repeated measures of sin ratings and age group was significant ($F(12, 982) = 1.94, p = 0.03$, multivariate $\eta^2 = 0.02$).⁹ As Figure 9 shows, the youngest cohort (Generation Y) was the least severe in its ratings, and the oldest cohort (Baby Boomers) was generally in the middle of the birth cohorts, although the only significant pairwise difference in the follow-up analysis was between Generation X and Generation Y ($p = 0.001$). Maybe the members of Generation X have reached the age threshold at which they are as strict in their judgment of sins as the Baby Boomers.

Figure 9: Sin Ratings by Age Cohort



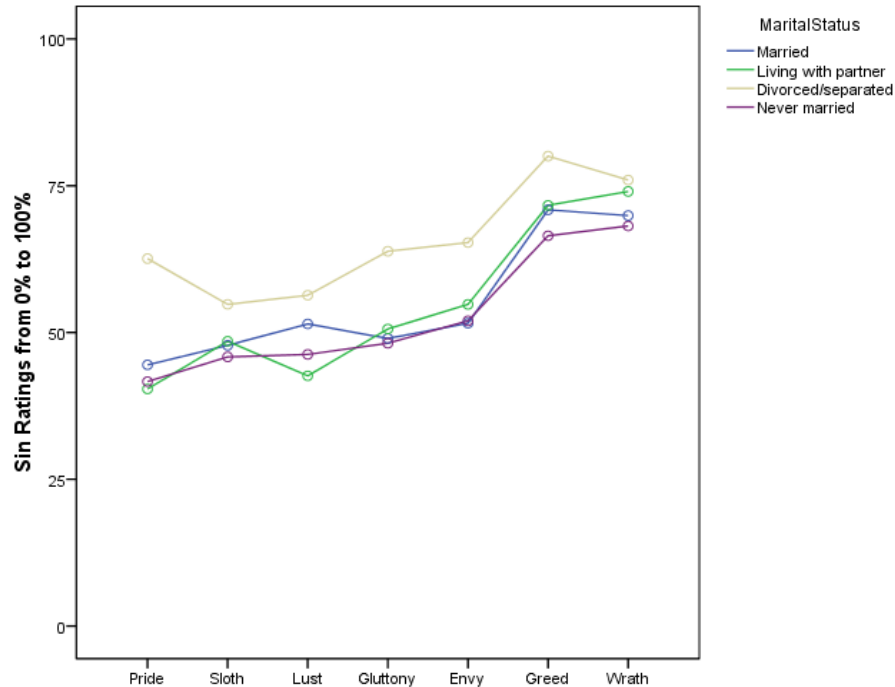
⁹ When we split the sample into age cohorts, there were only a few respondents in the age range that starts at age 65 ($N = 7$), so we did not include them in the analysis as a group.

The effect sizes among the three groups were small to moderate (0.01 between Generation X and Baby Boomers, 0.004 between Baby Boomers and Generation Y, and 0.03 between Generation X and Generation Y), which suggests that the relative harshness in judgment of deadly sins among Generation X is modest at best. That said, given the lust effect in our prior analysis, it is interesting to note in Figure 9 that only Generation Y has a lower rating for lust (compared to the other sins). Generation X's assessment of lustfulness is equal to that of the Baby Boomers, and lust is the only deadly sin that Generation X rates equivalently to the Baby Boomers.

Marital Status. Single, divorced, living with partner, or married: Which groups of people see sins as more offensive? Are major life changes such as marriage or divorce associated with differences in evaluation of sin? The main effect of marital status in the mixed factorial ANOVA was significant ($F(3, 491) = 3.70, p = 0.01$, multivariate $\eta^2 = 0.02$), with a marginal interaction between repeated measures of sin ratings and age group ($F(18, 1464) = 1.56, p = 0.06$, multivariate $\eta^2 = 0.02$).¹⁰ The follow-up pairwise analysis revealed that the only significant differences were between people who were divorced or separated and the other three groups ($p_s < 0.02$). The people who are most disapproving of the deadly sins are those who are divorced or separated, as can be seen in Figure 10. It is possible that the process of divorce leads to a harsher view of sinning, but it is clear that the effect is not driven by age because controlling for age in the mixed factorial ANOVA produced the same results.¹¹ There was no effect for marriage. The effect size for married people compared to the effect sizes for the other groups was small ($\eta^2 = 0.001$ for living with partner, $\eta^2 = 0.03$ for divorced, $\eta^2 = 0.001$ for never married). Although single people might be expected to be most permissive when it comes to sins, Figure 10 shows that being married or being single does not change people's perception of the deadly sins, even when it comes to lust.

¹⁰ The sample size for "widowed" was small ($N = 8$), so they were not included in the analysis as a group.

¹¹ The main effect of marital status in the mixed factorial ANOVA was significant ($F(3, 490) = 2.63, p = 0.05$, multivariate $\eta^2 = 0.02$), with a marginal interaction between repeated measures of sin ratings and age group ($F(18, 1461) = 1.49, p = 0.086$, multivariate $\eta^2 = 0.02$).

Figure 10: Sin Ratings by Marital Status

Multiple Regression

The purposes of the preceding moderator analysis were to analyze how between-group differentiations can affect the perception of sin and to examine the different patterns of responding. A related question is the degree to which these individual characteristics predict evaluation of sin. Multiple regression analysis in Table 2 shows that the predictors significantly explain six of the seven SDS, the largest explanatory power being that for lust (adjusted $R^2 = 0.23$). Wrath is the only SDS that is not explained by the variables, presumably because it is the sin that deviates the most from the sin patterns reported in the figures.¹²

¹² As is seen in some of the between-group differences illustrated in the figures, wrath operates unlike many of the other SDS. For example, Figure 3 shows that when sins are rated by religious viewpoint, there is a steady progression for each level of the variable for each sin but wrath. In other words, multiple regression is based on an ordering of the levels that is missing for wrath for some of the continuous predictors. The categorical predictors have a similar issue for wrath in that categorical predictors require a baseline from which to create the dummy codes, and the baseline appears to be different for wrath in some of the categorical variables. Inspecting the figures can help in identifying the potential lack of explanatory power of each predictor in the regression analysis for wrath and the other variables in the analysis. For example, Figure 4 shows that greed as well as wrath deviates from the pattern of the other SDS.

The unique predictive power of the analysis is that the nine predictors entail a diverse set of features and characteristics: gender, religiosity (orientation, self-identity, services, affiliation), political (viewpoint, affiliation), age cohorts, and marital status. Thus they involve a combination of biological aspects, sociocultural viewpoints and opinions, self-identity, behaviors, and real-life experiences (e.g., marriage, divorce). Because of the large number of variables in Table 2, we discuss only the significant effects to help the reader parse the breadth of the data. As can be seen in Table 2, each sin is predicted by a unique set of these variables that vary in valence and magnitude.

Table 2: Multiple Regression for Sins

| Variable | Type | Pride | Sloth | Lust | Gluttony | Envy | Greed | Wrath |
|-------------------------|-------|----------|---------|--------------------|----------|---------|--------------------|--------|
| Gender | M/F | | | | | | | |
| Religious: | | | | | | | | |
| Viewpoint | (1–3) | | | | | | | |
| Identity | (1–4) | | 0.24** | 0.29*** | 0.19* | 0.24** | | |
| Services | (1–6) | -0.24** | | | | | | |
| Affiliation | C/O | | | | | | | -0.13* |
| | C/N | | | -0.17* | | | -0.12 [†] | |
| Political: | | | | | | | | |
| Viewpoint | (1–3) | | | | | | | |
| Affiliation | R/D | | | | | | | |
| | R/I | | -0.16* | | | | | |
| Age cohorts | Y/X | | | | | 0.14* | 0.11 [†] | |
| | YBB | | | | | | | |
| Marital status | Di/M | -0.33*** | -0.21* | -0.21* | -0.35*** | -0.28** | -0.19* | |
| | Di/P | -0.23** | | | -0.18* | | | |
| | Di/N | -0.37*** | -0.25* | -0.18 [†] | -0.36*** | -0.21* | | |
| Overall model | | | | | | | | |
| F-value | | 4.34*** | 2.78*** | 7.78*** | 2.70*** | 4.17*** | 1.80* | 1.02 |
| Adjusted R ² | | 0.13 | 0.07 | 0.23 | 0.07 | 0.12 | 0.03 | 0.001 |

[†] $p < 0.08$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Note: Categorical variables were dummy coded into $k - 1$ levels, and the dummy-coded levels are indicated in the “Type” column. The first category was coded as 0, and the second was coded as 1 (e.g., Christian versus other was coded Christian = 0, other = 1). Thus a positive β value indicates a higher sin rating for the second category (coded as 1), and a negative β value indicates a higher sin rating for the first level (coded as 0). The labels in the “Type” column refer to male (M), female (F), Christian (C), other religion (O), not religious (N), Republican (R), Democrat (D), independent (I), Generation Y (Y), Generation X (X), Baby Boomers (BB), divorced (Di), married (M), living with partner (P), and never married (N).

In terms of lust, for example, one of the most prominent results from the moderator analysis was the lust effect that emerged for some variables, notably being Christian and the measures of religiosity (self-identity, viewpoint, church attendance). Which variables are causing the lust effect? The multiple regression analysis provides the relative strength of each possible cause, the strongest predictor being religious self-identity. The extreme lust ratings are driven primarily by stronger religious identity but not by the other variables such as going to church, being fundamentalist versus progressive, and political affiliation. Moreover, the fact that Christian affiliation versus identifying as “not religious” was significant indicates that Christian affiliation is predictive of the lust effect above and beyond the degree of religious self-identity.

The most consistent predictor among all the SDS is marital status. Divorced people have an increased perception of severity for six of the seven SDS. The strongest predictive values, in fact, were for divorced people compared to married or never married people. The experience of divorce appears to be associated with harsher sin ratings that trump gender, religious, political, and age-related characteristics for all SDS except lust. It is interesting that the strongest and most consistent predictor was the variable associated with life experiences rather than variables associated with viewpoints or opinions. Although one would have expected that religious variables would be the driving force behind appraisal of sin, our research provides new insight into the complex nature of how sin is evaluated. In fact, many of the religious variables have little or no relationship to the SDS when we control for the other predictors in the analysis. One interesting exception is that frequency of religious services is significant exclusively for pride. Given that theological teachings portray pride as the root of all other sins (Capps and Haupt 2011; Lyman 1989), it is possible this message becomes more strongly internalized with increased church attendance. However, frequency of church attendance is not associated with increased severity ratings for the other sins. Although one would have expected that more religious teachings would increase the perception of sinfulness, the religious variable with the most effect on sin ratings is the degree of religious identity of the individual, not any particular type of viewpoint (progressive, moderate, fundamental), frequency of religious services, or type of religious affiliation.

SUMMARY

We return to our initial question: Is one sin worse than another? The answer is yes, according to both religious and nonreligious individuals. There were meaningful differences in appraisals of sin both across the ordering of the seven sins and within the variability of each sin rating. Furthermore, nonreligious people also perceived some sins as being worse than others, even though the concept of

SDS originated in religious traditions. It is possible that the perception of SDS is both a religious phenomenon and a cultural one, partly owing to popularization of the SDS in modern culture as well as SDS being expressions of basic emotions and desires (such as lust and greed), attitudes and cognitions (such as pride and envy), and behaviors (such as gluttony, sloth, wrath) that are relevant to everyone's lives. For every grouping variable and moderator analysis, particular sins were judged as being worse than others. From a descriptive perspective of U.S. culture, our study also identified how different groups in contemporary culture perceive the relative severity of different transgressions. The sin rating means were highest for females (compared to males), Christians (compared to other religious groups and nonreligious people), Generation X (compared to Generation Y and Baby Boomers), and those who were divorced (compared to married, widowed, and single people).

Interestingly, the sin pattern across the groups was generally consistent. In all the figures, there is a definite pattern of sins across the results for each type of person. Pride was consistently rated the lowest, and wrath was rated the highest. Apparently, in U.S. culture, it is permissible to like yourself (pride) but not to hurt others (wrath). Although pride is rated the lowest, the Catholic Church deems it the worst sin; the order of SDS in the Catholic faith, from least to most sinful, is lust, gluttony, greed, sloth, wrath, envy, pride (Fairlie 1978). This order is clearly different from how Christians in our sample judged the same sins, including Christians who attended church every day and self-identified as very religious or fundamentalist. It is possible that the cultural understanding of the SDS has subsumed the religious meaning in U.S. culture. The sin pattern was consistent even between religious and nonreligious respondents. One implication is that the deadly sins that originated in the religious tradition have a core psychological component that persists. It is even possible that the original formation of those particular sins occurred because of their basic psychological functions in human nature that exist for both nonreligious and religious individuals. That might also help to explain the popularization of the SDS in culture: They form a fundamental component of what it means to be human. Future research could tease apart the reason behind the consistent pattern of results in order to identify the factors that appear to drive this universal perception of the SDS in U.S. culture and to explore why the particular groupings of pride, sloth/lust/gluttony, envy, and greed/wrath occurred.

Does the ordering found in our research predict what types of sins are committed? Apparently not. An informal survey by a Jesuit scholar of sex differences in Catholic confessions reported the frequency of sins that males confessed (order: greed, envy, pride, anger, sloth, gluttony, lust) and those that females confessed (order: sloth, greed, gluttony, lust, anger, envy, pride) (BBC News 2011). The frequency of sins that they committed (or, at least, those that they confessed)

does not reflect the order in which Christians in the United States judged the severity of those sins in our study (see Table 1). That said, given the sparse details about the methodology and sampling of the survey, it is difficult to draw firm comparisons to the current work. However, the experience of sin from the confessions may have depended on the degree of the sin and the situational context. In the present research, we purposefully did not define the SDS for the respondents because the meaning of the sin changes depending on the degree of the sin and the situational context. If we had provided a definition, the particular wording would have dictated the relative order of results. For example, prior research asked selective clergy and religious figures to hand out a survey about the SDS to the members of their congregations and seminary classes (Capps 1989; Capps and Cole 2000; Capps and Haupt 2011). Capps and Haupt (2011: 806) noted that the results were likely “influenced by their rhetorical features (i.e. the words and phrases employed).” Lust, for example, could be defined weakly (“ardent enthusiasm; zest; relish”), moderately (“a passionate or overmastering desire or craving”), or strongly (“uncontrolled or illicit sexual desire or appetite; lecherousness”). All three of those definitions are from the same dictionary (“Lust” n.d.). Word choice changes the severity of the definition and thus changes the results. In our research, we were interested in respondents’ perceptions of the SDS, so we did not want to impose a particular definition on them. As a result, we were able to assess the naturally occurring cultural and religious perceptions of the SDS.

We were also able to assess the strength of those perceptions. Effect sizes provide unique information about the strength of the differences along the interval scale. Prior research asked Christian congregations and seminary classes to rank order the SDS (numbered 1 to 7) and asked students to make paired comparisons between the SDS (twenty-one pairs of sins), so both studies produced ordinal data. For example, the rank order research (Capps 1989; Capps and Cole 2000; Capps and Haupt 2011) reported the percentage of respondents who indicated that each sin was the deadliest sin and the percentage who indicated that it was the second deadliest. For instance, Capps and Haupt (2011) found that 0 percent of their respondents indicated that envy was the deadliest sin. Although 0 percent of respondents thought that envy was the deadliest, only rank orders were used, so there is missing information about how envy would rate on a scale, whether it was considered a sin at all, how it compares to the other sins, the interval between envy and the other sins, and so on. Given the descriptive focus of the prior research, there were also no inferential statistics about significant differences or effect sizes across sins. In our research, envy had a mean of 53.82, for example, so although none of our respondents placed it as the deadliest in the prior ordinal research, our research allows more robust information and statistical analyses. The remaining paper that we found that reported a paired comparison between

deadly sins (Opum 1967) had the same descriptive and ordinal-based reporting issues as are found in the research by Capps and colleagues. Given these limitations, it is difficult to draw comparisons to the current research.

However, it is interesting to note that the sin that Capps and Haupt (2011) reported as having the most votes as the deadliest was lust and that the sample for the study was Christian congregations and seminary classes. In our research, a lust effect emerged for Christians and was related to the degree of religious self-identity. Would the same be true in other cultures? The lust effect in the Christian religion might be inherent in the religion itself or might be comingled with unique cultural characteristics of Christianity in U.S. culture. Future research could investigate the SDS in other cultures to identify the cross-cultural aspects of the lust effect and the cross-cultural aspects of all the SDS. Future research could also test the newly developed SDS. The Vatican recently updated the list after 1,500 years with seven new deadly sins for the modern age that are focused on social issues and globalization (unlike the more individualistic focus of the traditional deadly sins). The new SDS are genetic modifications, experimenting on humans, polluting the environment, becoming obscenely wealthy, taking drugs, causing social injustice, and causing poverty.

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