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Thinkers and feelers: Emotion and giving

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ABSTRACT

Voluntary organizations, such as religious congregations, ask their members to contribute money as a part of membership and rely on these contributions for their survival. Yet often only a small cadre of members provides the majority of the contributions. Past research on congregational giving focuses on cognitive rational processes, generally neglecting the role of emotion. Extending Collins' (2004) interaction ritual theory, I predict that individuals who experience positive emotions during religious services will be more likely to give a higher proportion of their income to their congregational contexts characterized by high aggregate levels of positive emotion, strictness, dense congregational networks, and expressive rituals. Using data from the 2001 U.S. Congregational Life Survey and multilevel modeling, I find support for several of these hypotheses. The findings suggest that both cognitive *and* emotional processes underlie congregational giving.

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1. Introduction

Voluntary giving to religious organizations consistently represents the largest share of America's philanthropy (van Slyke and Brooks, 2005). Like other voluntary associations, religious congregations depend on the monetary contributions of their members to survive and be successful (Hodgkinson et al., 1988; Stark and Finke, 2000; Finke et al., 2006). Member contributions make up 91 percent of total church income for the average American congregation.¹ Yet, congregational giving is highly skewed with a large number of religious individuals giving no money and a minority contributing the majority of the donations (Iannaccone, 1997; Smith et al., 2008). Congregations, and voluntary associations generally, "must strive to convert affiliates with tepid commitments into constituents willing to sacrifice resources" (Scheitle and Finke, 2008: 815; see also McCarthy and Zald, 1977; Stark and Finke, 2000). Central to this goal is identifying why some individuals give more money than others. Yet as Finke et al. (2006) note, until recently congregational giving has received relatively scant attention in the literature, much of which is concerned with identifying correlates of giving, rather than providing a theoretical explanation of it.

Recent theoretical research focuses on economic or rational choice explanations emphasizing individuals as 'thinkers' making instrumental decisions on how much to contribute (e.g., Finke et al., 2006; Iannaccone, 1994; Scheitle and Finke, 2008, 2000; Whitehead, 2010). As such, this research has mostly neglected the role of emotions² as a motive for congrega-

¹ Data comes from a nationally representative survey of American congregations-the U.S. Congregational Life Survey (see Woolever and Bruce, 2002).

² While scholars use emotion to mean many different things, there is general agreement that all emotions "have 'valence'-they are either positive or negative" (Camerer et al., 2005) and "have an infrastructure that includes neural systems dedicated, at least in part, to emotion processes and that emotions motivate cognition and action and recruit response systems" (Izard, 2009). Anger, fear, sadness, and disgust are examples of negative emotions and happiness and joy are examples of positive emotions (Izard, 2009).

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tional giving and, in doing so, fails to consider how individuals may be both thinkers *and* feelers.³ Recent psychological and neuroscience research has stressed the interaction and integration of cognition and emotion in the brain (Phelps, 2006; Pessoa, 2008; Izard, 2009) and the importance of emotion for making decisions and facilitating cooperation, altruism, and giving behavior (Bechara et al., 1994, 1999; Damasio, 1994; McCabe et al., 2001; de Waal, 2008; Akin et al., 2012). This line of research questions cognitive-only approaches to congregational giving that fail to consider emotion.

Durkheim ([1912] 1965) identified emotion-inducing rituals as the foundation of religious life. More recent theoretical work suggests that positive social interactions spark emotions that are attributed to the group, thereby facilitating sacrificial behavior on its behalf (Lawler et al., 2000; Lawler, 2001; Collins, 2004). In particular, Collins' (2004) theory of interaction ritual chains highlights how successful rituals result in positive socially derived emotions, which drive individuals to value the group and its survival. Extending Collins' (2004) theory, I argue that experiencing positive emotions during religious services will increase congregational giving as individuals attribute the positive emotion they experience to the group. Congregational contexts in which it is easier to make this attribution (i.e., congregations in which there is a stronger sense of groupness) should facilitate this process and in doing so increase the effect of positive emotions on congregational giving. I argue that high levels of aggregate positive emotion, strictness, dense networks, and expressive rituals are four such congregational contexts.

This study offers an affective model of congregational giving that complements previous theoretical models emphasizing cognitive factors. First, I draw on recent work in the area of emotion and cooperation to propose hypotheses regarding the effect of individual- and congregational-level positive emotion on congregational giving and how the individual-level effect is moderated by certain congregational contexts. Second, I combine individual- and congregational-level data from the 2001 U.S. Congregational Life Survey to create a multilevel dataset of individuals within congregations that allows me to test the effect of positive emotion generated during religious services on congregational giving and how this effect varies by congregational context. Third, I test these predictions using hierarchical regression models and find support for several of them.

2. Correlates of religious and congregational giving

One of the main areas of research on religious or congregational giving is the identification of correlates (Hoffmann et al., 2010). Some of the most often cited demographic correlates of it include income, age, marriage, and education (Chaves and Miller, 1999; Finke et al., 2006; Hoge, 1994; Iannaccone, 1997; see Bekkers and Wiepking, 2011 for a review of this literature). A great deal of research also focuses on religious behavioral and belief correlates. Studies have consistently found religious service attendance to be a strong predictor of congregational giving (Hoge et al., 1996; Chaves and Miller, 1999; Smith et al., 2008; Bekkers and Wiepking, 2011). Conservative religious beliefs also tend to be positively related to giving (Luidens and Nemeth, 1994). Recent work in the area of religious beliefs focuses on the religious meaning ascribed to giving, typically that God asks for it (Peifer, 2010; Smith et al., 2008; Miller, 1999; Vaidyanathan and Snell, 2011). However, several studies find that the effect of religious beliefs is not as strong as attendance (Luidens and Nemeth, 1994). On the congregational level, theologically conservative denominations consistently have higher average levels of congregational giving (Hoge, 1994; Zaleski and Zech, 1994; Hoge et al., 1996; Finke et al., 2006).

While these correlates are important for identifying what types of people and denominations have higher levels of congregational giving, this area of research generally does not provide an overarching theoretical framework for predicting which individual or congregational characteristics should matter and why. The work that has been done in this area typically emphasizes the application of economic or rational choice approaches to religious giving.

3. Theoretical background

3.1. Rational choice explanations of congregational giving

There are several economic or rational choice approaches to congregational giving all sharing the assumption that levels of congregational giving are determined by weighing costs and benefits and choosing the level of congregational giving that maximizes utility (Iannaccone, 1992, 1997). An individual's monetary contribution to a congregation therefore depends on the value of the goods and services it provides. However, instrumentally rational individuals will always prefer to consume goods without contributing to their production when possible, that is, to free-ride off the contributions of others (Iannaccone, 1992). Since the value of religious commodities depends not only on one's own contribution to them but also on the contributions of others, free-riders can undermine the quality of the goods congregations produce and in doing so also reduce levels of congregational giving (Iannaccone, 1992, 1997; Stark and Finke, 2000). In this way, the two core dilemmas rational choice approaches attempt to address are (1) how congregations can provide quality goods that outweigh the costs of participation, including monetary contributions, and (2) curb free-riding with the latter contributing to the former.

One factor hypothesized to reduce free-riders and increase the quality of congregational goods is congregational strictness. The strict church model, proposed by Jannaccone (1992, 1994), suggests that behavioral prohibitions act as screening

³ Notable exceptions include recent studies investigating negative emotion, specifically guilt, and religious giving (Smith et al., 2008; Vaidyanathan and Snell, 2011).

devices, such that only those who really want the congregational goods and are willing to pay for them remain, whereas those not willing to comply with the strict rules leave. This curbs free-riders and thereby raises the overall quality of the congregational goods produced. As such, strict congregations are expected to garner more monetary contributions. Findings in support of Iannaccone's (1994) strict church model have been mixed. Using direct measures of behavioral strictures, one study failed to find a significant relationship between strictness and religious giving (Peifer, 2010), whereas others found a positive relationship (Finke et al., 2006; Scheitle and Finke, 2008; Whitehead, 2010).

While lannaccone's (1994) theory emphasized *behavioral* distinction as a means of increasing the quality of goods and curbing free-riders, Stark and Finke (2000) offer their own rational choice argument focusing on how theologically distinct beliefs increase the quality of congregational goods and thereby increase member commitment, including congregational giving (see Wellman and Corcoran, 2013 for further discussion of these arguments). In particular, theologically distinctive beliefs are more *extensive* (i.e., make demands on many spheres of an individual's life), *expensive* (i.e., impose material, social, and/or psychic costs), and *exclusive* (i.e., require commitment to one religious organization and/or deity). Stark and Finke (2000) propose that more theologically distinctive religious groups offer their members more advantageous religious explanations including explanations regarding dependable and trustworthy gods who provide otherworldly rewards (*i.e.*, benefits received in an afterlife) to individuals in exchange for their commitment. Moreover, by holding to deviant beliefs that effectively separate members from the outside world, these groups also offer their members this-worldly religious social capital in the form of tight-knit communities. Several studies find support for the positive effect of theological exclusivity on congregational giving (Finke et al., 2006; Scheitle and Finke, 2008; Whitehead, 2010; Corcoran, 2013).

Church size is also thought to be related to the number of free-riders in a congregation. Stark and Finke (2000) propose that larger churches, due to having less dense social networks and ineffective monitoring and sanctioning capacities, will have more free-riders and lower average levels of giving as a result. Several studies find an inverse relationship between congregational size and giving (Hoge, 1994; Zaleski and Zech, 1994; Hoge and Augustyn, 1997; Wuthnow, 1997; Finke et al., 2006). Some work has begun to investigate dense social ties as the key means by which congregational rules are monitored and sanctioned (Finke et al., 2006; Scheitle and Finke, 2008; Bekkers and Schuyt, 2008).

3.2. Non-instrumental motives of congregational giving

Rational choice explanations have focused on congregational giving as an economic, instrumental decision based on maximizing benefits in pursuit of a given end. There has been relatively little theoretical research exploring non-instrumental explanations of religious giving. Notably, Peifer (2010) highlights the social contexts in which giving occurs and argues that congregational social cohesion increases giving by generating a sense of community. Hill and Vaidyanathan (2011) also stress congregational contexts, specifically that they can socialize individuals into particular habits⁴ of giving that influence not only religious giving but secular giving as well.

Emotion has received relatively little attention in research on religious or congregational giving. Notably, Smith et al. (2008) and Vaidyanathan and Snell (2011) suggest guilt as a motivator of religious giving; however, both studies find that guilt is not a primary motive for giving for the majority of people. This seems to be a result of what Smith et al. (2008:110) call "comfortable guilt" in which some religious individuals live "...with an awareness and feeling of culpability for not giving money more generously," but do not experience enough discomfort for it to motivate them to increase their giving (see also Vaidyanathan and Snell, 2011). The role of positive emotion as a predictor of religious giving is mostly absent from the literature and is not mentioned in reviews of charitable and religious giving studies (Bekkers and Wiepking, 2011). Outside of religious giving research, some scholars have argued that giving makes individuals feel good about themselves and causes them to experience a "warm glow" that acts as an emotional catalyst for future giving (Andreoni, 1990; Batson and Shaw, 1991; Akin et al., 2012). However, these studies emphasize a psychological approach to emotion and do not consider how positive emotions can be socially derived, which may also serve as motivation for giving.

In *Elementary Forms of Religious Life*, Durkheim ([1912] 1965) theorizes that commitment to religious groups is achieved and maintained through collective religious rituals, which produce "collective effervescence"—a strong, shared emotional experience that connects participants to the collective. Extending Durkheim, Collins' (2004) theory of interaction rituals assumes that individuals seek to experience Emotional Energy (EE) and that interaction rituals (i.e., interactions between two or more people) are a primary means by which individuals do so. EE is a socially derived emotion that results from the collective effervescence generated by interaction rituals. It can be thought of as a continuum ranging from the low end as sadness, lacking ambition, and other negative emotions to the high end as joy, enthusiasm, and other positive emotions.

The extent to which rituals are able to produce high levels of EE, depends on meeting four important conditions: the bodily assembly of participants, barriers excluding outsiders, a mutual focus of attention, and a shared mood (Collins, 2004). The bodily assembly of people is necessary to create a situation in which ritual participants can be affected by the presence and emotional experiences of others. Emotions are often contagious; like viruses they can spread, such that the emotions' of individuals around each other tend to converge (Hatfield et al., 1994; Barsade, 2002; Hendriks and Vingerhoets, 2006; Hennig-Thurau et al., 2006; Hareli and Rafaeli, 2008). When an individual observes the emotional states of others, this

⁴ Vaidyanathan and Snell (2011) also investigated ingrained habit as a motive for religious giving, referring to it as "socialized giving". However, they found that both low and high givers expressed socialized giving and some high givers were not socialized to give. Based on this, they concluded that socialized giving may be a necessary but insufficient motivator for some people and completely unnecessary for others.

can automatically and unconsciously activate them in the observer (de Waal, 2008). This process is facilitated by similarity and social closeness, which makes it easier for the observer to identify with the object thereby enhancing the "subject's matching motor and autonomic responses" (de Waal, 2008: 286). Barriers excluding outsiders increase the similarity of the ritual participants and help create a mutual focus of attention for all involved, which in turn facilitates emotional contagion and a shared emotional mood. These ingredients combined generate collective effervescence—"a feeling of being brought out of oneself into something larger and more powerful" (Collins, 2004: 39; see also Durkheim, [1912] 1965), which inflates individuals with EE. However, EE is not permanent; while it stays with individuals after they have left successful rituals, it wanes the longer they go without participating in a subsequent ritual. In this way, regular ritual participation is essential for sustaining and recharging EE over time.

Based on the assumption that individuals desire EE and want to continue experiencing it, they will seek to determine the source of it (see Lawler and Yoon, 1996). Because EE is a result of a collective emotional experience (i.e., collective effervescence) and is first experienced during the interaction ritual, it should be at least partly attributed to the group, that is, "the emotions experienced individually are interpreted by actors as coming from something they share" (Lawler and Yoon, 1996: 95), which is their interaction ritual experience. Since they value EE, they should also come to intrinsically value the group and be more willing to support its survival. For congregations, a primary means of doing so is through monetary contributions. In this way, the model predicts that EE should increase financial contributions to the congregation.

Religious services typically entail all four ritual ingredients and can yield strong emotional experiences. While religious rituals vary in their ability to produce these experiences (Baker, 2010; Wollschleger, 2012; Wellman et al., 2014), they are "the defining moments for religion, the ritual encounters with the holy to which other rituals look back if only in pale imitation" (Collins, 2010: 5). Religious rituals typically differ from secular ones in the holy, divine, or transcendent symbols that they entail and evoke, which allow individuals to feel as though they are channeling and experiencing the divine (Collins, 2010). This line of thought leads to the following hypothesis:

Hypothesis 1. Individuals who experience positive emotions during religious services at a congregation should have higher levels of congregational giving.

Congregations vary in their ability to produce interaction rituals that will generate high levels of collective effervescence. Congregations with higher levels of collective effervescence should have higher rates of congregational giving:

Hypothesis 2. Congregations with higher aggregate levels of positive emotion should have higher average levels of congregational giving.

The underlying proposed mechanism connecting EE to congregational giving is attributing it to the group and coming to value the group as a result. This attribution should be easier in ritual contexts where there is already some perception of groupness, which enhances the intersubjective emotional experience. As such, these types of contexts should amplify the positive effect of EE on congregational giving by facilitating the attribution of EE to the congregation. In particular, I propose that congregational contexts in which there are high aggregate levels of positive emotion, barriers excluding outsiders, dense networks, and institutionalized expressive rituals should increase the effect of EE on congregational giving.

Attributing the positive emotion one experiences during interaction rituals to the group should be facilitated in ritual contexts where the other participants are also experiencing positive emotions. When individuals experience emotional contagion and collective effervescence, their ritual experience becomes more intersubjective; they feel what others are feeling and others' feel what they are feeling, which makes it easier to attribute their emotional experience to the group. Thus, I argue that the positive effect of experiencing EE during religious services, as specified in Hypothesis 1, will be stronger in contexts where the positive emotion is shared with the other participants. In this way, I propose an interaction effect between individual positive emotion.

Hypothesis 3. Experiencing positive emotions during religious services should have a greater positive effect on congregational giving in congregations with high aggregate levels of positive emotion.

The positive effect of experiencing EE on congregational giving should also be moderated by barriers excluding outsiders. Barriers excluding outsiders from participating in rituals raise levels of homogeneity, which facilitates a common mood and focus of attention and thus, a stronger *collective* experience (Collins, 2004; Kanter, 1972). As such, barriers excluding outsiders should facilitate the attribution of EE to the group. Behavioral strictures are a primary means of preventing outsiders from participating in rituals and thus, they are a core type of barrier to outsiders. Congregational strictness may therefore affect giving not only by curbing free-riders (lannaccone, 1994), but also by amplifying the effect of EE on congregational giving. This leads to the following hypothesis:

Hypothesis 4. Experiencing positive emotions during religious services should have a greater positive effect on congregational giving in strict congregations (i.e., congregations with barriers that exclude outsiders).

Dense congregational social networks also provide a context that should heighten the effect of EE. Research on congregational giving and congregational networks tends to focus on their greater monitoring and sanctioning capacities (Finke et al., 2006; Scheitle and Finke, 2008; Bekkers and Schuyt, 2008). Providing an alternative explanation, Peifer (2010) highlights how congregational social cohesion establishes a sense of community, which increases giving. Positive emotions experienced during religious services in tight-knit congregational communities should make it easier for individuals to attribute those emotions to the congregation as the congregational community should already be a salient social unit in their mind. As such, I propose that dense congregational friendship ties should amplify the positive effect of EE on congregational giving.

Hypothesis 5. Experiencing positive emotions during religious services should have a greater positive effect on congregational giving in congregations with dense social networks.

Lastly, I predict that congregations in which the bodily expression of emotion is institutionalized and encouraged should strengthen the positive effect of EE. Emotional contagion is facilitated by individuals observing the bodily expression of emotion in other ritual participants. Collins (2004) notes how collective laughter, applause, dancing, and other bodily expressions serve to generate rhythmic entrainment, which makes the experience more intersubjective and thus more easily attributable to the group. Chaves (2004: 143–144) makes a similar argument when he describes how "enthusiastic" worship, including "raising one's hands, jumping or shouting, applauding, calling out 'amen', speaking in tongues, and giving lay testimony", encourages "participants to focus on other participants rather than on their own individuality, a leader, a script, or a performance." Thus, I propose that congregations that have institutionalized these types of expressive bodily movements should heighten the positive effect of EE on congregational giving.

Hypothesis 6. Experiencing positive emotions during religious services should have a greater positive effect on congregational giving in congregations that have institutionalized expressive rituals.

There are two particular religious traditions that are known for having institutionalized such bodily expression into their rituals—Pentecostal and historically Black Protestant congregations. Pentecostal congregations typically provide opportunities for conversion experiences, speaking in tongues, prophecy, lay testimony, dancing, and divine healing during their church services (Poloma, 1982, 1989; Woodberry and Smith, 1999; Chaves, 2004). Expressive worship is also central to Black Protestant congregations. In their qualitative interviews with Black Protestant clergy, Shelton and Emerson (2012) found that these clergymen and women identified expressive worship as a key difference between black and white Protestant churches. One deacon stated:

"African American Christians tend to be expressive in their worship styles, so-called 'ecstatic' in their worship style. Where white Christians tend not to be that way, tend to be less expressive, less ecstatic, more inner-focused. Where we [blacks] tend to be more outer-communal-focused".

[Shelton and Emerson, 2012: 61]

Lincoln and Mamiya (1990: 347) also identify the expressive outer-communal-focused nature of Black Protestant congregations; they note how worship in these churches is a "reaffirmation of a common bond" and "common experience." It is not surprising then, that Chaves (2004) found Pentecostal and Black Protestant churches to have some of the highest levels of enthusiastic worship (e.g., applauding, shouting, raising hands, and saying 'amen'). Thus, in order to test Hypothesis 6, I operationalize 'congregations that have institutionalized expressive rituals' as Pentecostal and Black Protestant congregations.

4. Data and methodology

To test these hypotheses, I use data from the 2001 U.S. Congregational Life Survey (USCLS) (Woolever and Bruce, 2002). Hyper-network sampling (McPherson, 1982) was used to draw a random sample of American congregations. These congregations were identified by using responses from participants in the 2000 General Social Survey (GSS) who stated that they had attended at least one religious service in the last year. These individuals were asked to name the congregation they attended. This resulted in a sample of 1,214 unique congregations that were invited to participate with 434 congregations completing the study (i.e., a 34 percent response rate). The congregations in the USCLS are demographically similar to congregations in the 1998 National Congregations Study,⁵ which is a nationally representative sample of American congregations with a higher response rate (80 percent) (Hill and Olson, 2009). The USCLS includes a congregational profile completed by a congregational leader and an attendee survey (i.e., all individuals age 15 and older who attended worship services on a weekend in April 2001 were asked to complete a survey).⁶ I combined these data sources to create a multilevel dataset—attendees within congregations. Following previous research using the USCLS and predicting congregational giving (Scheitle and Finke, 2008;

⁵ The National Congregations Study does not collect individual-level data and thus cannot be used in this study.

⁶ The average number of respondents per congregation was roughly 288. The USCLS did not record how may eligible survey participants were in attendance, thus individual weights cannot be implemented. Regarding the USCLS and response rates, Thomas and Olson (2010) note that "there are many reasons to think that" response rates "have less of an impact on one's ability to correctly determine the direction of relationships between variables in a population, than they do on one's ability to make accurate estimates of mean values for that population" (625). Like Thomas and Olson (2010) and others (Scheitle and Finke, 2008; Whitehead, 2010), this study does not seek to make point estimates of mean values for the congregational population, but instead seeks to identify the direction of relationships between variables. Moreover, despite the limitations of the USCLS, given that it is a nationally representative congregational survey and is one of the only multilevel datasets of individuals within congregations, it is considered an "invaluable resource for congregational research" (Doughtery and Whitehead, 2011: 97; see also Scheitle and Adamczyk, 2009; Scheitle and Finke, 2008; Schwadel, 2009; Smith, 2010; Whitehead, 2010).

Whitehead, 2010), I restrict the sample to individuals 18 years of age or older and handle missing data with list-wise deletion. This results in a final sample of 344 congregations and 46,571 attendees.⁷

For the sake of comparability with past USCLS congregational giving studies (Scheitle and Finke, 2008; Whitehead, 2010) and because the data is multilevel, I use hierarchical linear modeling (HLM).⁸ HLM accurately estimates standard errors of clustered cases within larger units (i.e., attendees within congregations), and permits the estimation of higher-level factors (Raudenbush and Bryk, 2002). It allows for the estimation of level-1 effects (i.e., individual-level variables predicting individual giving), level-2 effects (i.e., congregational variables predicting average rates of giving), and cross-level interaction effects (i.e., congregational variables predicting individual-level slopes). In particular, the cross-level interaction terms make it possible to examine whether the effect of EE varies across congregations and congregational characteristics. I use HLM 6.0 to estimate the models. All predictors are grand mean centered except for dichotomous variables, which aids in the interpretation of the results but does not substantively alter them. I report unstandardized and standardized⁹ beta coefficients.

4.1. Dependent variable

To measure religious giving, I use the USCLS attendee question: "About how much do you give financially to this congregation?" Respondents choose between five different responses, which were coded as follows: 0 = "I do not contribute financially here," 1 = "I give a small amount whenever I am here," 2 = "I give less than 5 percent of net income regularly," 3 = "I give about 5–9 percent of net income regularly," and 4 = "I give 10 percent or more of net income regularly." Maintaining these values is consistent with previous research using the same variable (Scheitle and Finke, 2008; Whitehead, 2010).

4.2. Independent variables

USCLS attendees were asked a series of seven questions regarding how often they experienced the following during worship services at their congregation: (1) A sense of God's presence; (2) Inspiration; (3) Boredom; (4) Awe or mystery; (5) Joy; (6) Frustration; and (7) Spontaneity. For each of these questions, respondents were provided with the responses "rarely," "sometimes," "usually," and "always." For positive emotional experiences (i.e., a sense of God's presence, inspiration, awe or mystery, joy, and spontaneity), these responses were coded from 1 = "rarely" up to 4 = "always." Negative emotional experiences (i.e., frustration and boredom) were reverse coded as 1 = "always" up to 4 = "rarely". The responses to these seven questions were summed to create an additive EE index (Cronbach's alpha = .757).

To create the congregational-level measure of positive emotion, I computed the mean level of EE for each congregation, that is, I aggregated the EE index by averaging the index values for attendees within a congregation. Following previous research (Scheitle and Finke, 2008; Whitehead, 2010), I measured congregational strictness using an additive index of *congregational* responses (0 = "no" and 1 = "yes") to six questions regarding whether the congregation has any rules or prohibitions regarding: (1) smoking, (2) drinking alcohol, (3) dancing, (4) dress/hairstyles/jewelry/makeup, (5) gambling, and (6) how much money congregational networks, I used the mean level of friendships within each congregation (see Scheitle and Finke, 2008; and Whitehead, 2010).¹⁰ Religious tradition is measured by dichotomous variables representing whether a congregation falls within a particular religious tradition scheme. Diverging from Steensland et al. (2000), I separate Pentecostal evangelical Protestant congregations. Drawing on Melton (2003), I code congregations affiliated with the Assemblies of God, Foursquare Church, Full Gospel, or Church of God in Christ as Pentecostal. Non-Pentecostal evangelical Protestant serves as the referent category.

4.3. Control variables

I include the following individual-level control variables in all models: sex (0 = male, 1 = female), education, income (logged family income in thousands of dollars), age (in years), marital status (0 = not married, 1 = married), and religious service attendance (1 = "This is my first time" up to 7 = "I attend more than once a week"). Education is measured as two binary

⁷ The number of congregations in this study is similar to that of previous studies using the same data (see Whitehead, 2010).

⁸ Following previous studies (Scheitle and Finke, 2008; Whitehead, 2010), the dependent variable is treated as continuous. Models in which the outcome variable is treated as ordinal produce results that are substantively the same as those presented in this paper (results not shown).

⁹ Gelman (2008) identifies standardizing variables prior to estimating regression models as one method to produce standardized beta coefficients in multilevel regression. Since binary predictors are already on an interpretable scale they do not need to be transformed. Because "the coefficients for the binary predictors correspond to a comparison of x = 0 to x = 1, or two standard deviations", in order for other predictors to be directly comparable to them, Gelman (2008: 2867) suggests that all other predictors be scaled by subtracting their means and then dividing by two standard deviations. I follow his suggestion, which allows for the direct comparison of the effects of all predictors.

¹⁰ This variable is computed from the individual-level control variable intra-congregational close friendships. Whereas the intra-congregational close friendships variable measures the amount of friends an individual has in his/her congregation, congregational network density takes the average of all these individual values and thus represents the level of social connectedness of the congregation as a whole (see Scheitle and Finke, 2008). Since Hypothesis 5 predicts that the positive effect of EE will be amplified in tight-knit congregations (i.e., a characteristic of the congregation not the individual), the latter measure is used to test this hypothesis.

Table 1	
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Descriptive statistics.

Variables	Ν	Mean	SD	Min	Max
Individual-level outcome					
Congregational giving	46,571	2.38	1.09	0	4
Congregational-level variables					
Congregational positive emotion	344	20.57	1.23	16.33	24.30
Congregation Size (LN)	344	5.66	1.21	2.40	8.59
Strictness	344	0.85	1.49	0.00	6.00
Network density	344	2.75	0.27	1.75	3.60
Non-Pente. Evangelical (reference)	344	0.20	-	0	1
Mainline	344	0.41	-	0	1
Catholic	344	0.25	-	0	1
Black Protestant	344	0.02	-	0	1
Pentecostal	344	0.05	-	0	1
Other	344	0.07	-	0	1
Individual-level predictors					
Emotional Energy	46,571	20.66	3.43	7	28
Individual-level controls					
Age	46,571	48.54	15.20	18	100
Sex	46,571	0.60	-	0	1
Marriage	46,571	0.60	-	0	1
Less than high school (reference)	46,571	0.03	-	0	1
High school	46,571	0.48	-	0	1
College	46,571	0.49	-	0	1
Income (LN)	46,571	10.76	0.75	8.52	11.51
Attendance	46,571	5.75	1.07	1	7
Devotional practices	46,571	3.64	1.53	0	5
Exclusive theology	46,571	2.83	1.27	1	5
Close friends	46,571	2.62	0.90	1	4

variables with "less than a high school degree" as the referent category: (1) Has a high school degree (1 = has a high school degree, 0 = otherwise) and (2) Has a college degree (1 = has a college degree, 0 = otherwise). Respondents were provided with categorical responses for family income and the mid-point of each category was used with 100,000 dollars being used for the highest category. The result was then logarithmically transformed. To control for the influence of theological distinctiveness and religious beliefs, following prior research (Finke et al., 2006; Scheitle and Finke, 2008; Whitehead, 2010; Peifer, 2010) I include a measure of the exclusivity of beliefs, measured by respondents' agreement with the statement "all the different religions are equally good ways of helping a person find ultimate truth" (1 = "Strongly agree" up to 5 = "Strongly disagree"). Since Peifer (2010) emphasizes social cohesion as a predictor of religious giving, I control for intra-congregational close friendships (1 = "I have little contact with others from this congregation outside of activities here up to 4 = "Most of my closest friends are part of this congregation") (see also Corcoran, 2013). Moreover, following Scheitle and Finke (2008), I also control for frequency of personal devotion activities (e.g., prayer, meditation, and reading the Bible in private) (0 = "Never" up to 5 = "Every day"). On the congregational-level, I control for congregation size (average attendance logged). Table 1 provides descriptive statistics.

5. Results

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I start by estimating a null random-intercepts-only model. Table 2 presents the variance components from this model and shows that congregational giving significantly varies across congregations (variance 0.184). This results in an intraclass correlation of 0.153 (0.184/0.184 + 1.021), that is, 15.3 percent of the variance in congregational giving is between congregations.

Table 3 provides the models testing the direct effects of the predictors. Model 1 presents the base model with only individual-level control variables. In terms of demographic variables, females and older, married, more highly educated

Table 2				
Variance	components	of	congregational	giving.

	Standard deviation	Variance component	df	Chi-square	P-value
Between congregations Within congregations Total	0.429 1.011	0.184 1.021 1.205	343	9801.120	0.000

Table 3

HLM models predicting congregational giving: unstandardized coefficients and standardized betas displayed.

	Model 1			Model 2			Model 3			Model 4		
	Unstand. Coef.	SE	Stand. Beta	Unstand. Coef.	SE	Stand. Beta	Unstand. Coef.	SE	Stand. Beta	Unstand. Coef.	SE	Stand. Beta
Intercept	2.312***	0.030	-	2.321	0.030	-	2.484***	0.036	-	2.444***	0.036	-
Level 1 (Individual) Age Sex Marriage Less than high school (reference) High School College Income (LN) Attendance Devotional practices Exclusive theology Close friends	0.013 0.040 0.120 - 0.138 0.103 0.170 0.307 0.307 0.064 0.052 0.150	0.000 0.009 - 0.023 0.024 0.006 0.004 0.003 0.004 0.005	0.181 0.018 0.055 - 0.063 0.047 0.117 0.300 0.090 0.060 0.124	0.013 0.028 0.121 - 0.135 0.110 0.174 0.302 0.056 0.054 0.054	0.000 0.009 - 0.023 0.024 0.006 0.004 0.003 0.004 0.005	0.179 0.013 0.055 - 0.062 0.050 0.120 0.295 0.078 0.063 0.119	0.013 0.029 0.121 - 0.137 0.137 0.175 0.301 0.055 0.055 0.052 0.142	0.000 0.009 - 0.023 0.024 0.006 0.004 0.003 0.004 0.005	0.179 0.013 0.056 - 0.063 0.052 0.121 0.295 0.078 0.061 0.117	0.013 0.028 0.122 - 0.137 0.137 0.174 0.301 0.055 0.052 0.141	0.000 0.009 - 0.023 0.024 0.006 0.004 0.003 0.004 0.005	0.179 0.013 0.056 - 0.052 0.120 0.294 0.078 0.061 0.117
EE Level 2 (Congregational) Congregational Positive Emotion Congregation Size (LN) Strictness Network density Non-Pente. Evangelical (reference) Mainline Catholic Black Protestant Pentecostal Other				0.020	0.001	0.062	0.019 0.041 -0.036 0.074 0.207 - -0.129 -0.257 0.332 0.159 -0.127	0.001 0.011 0.012 0.009 0.050 - 0.032 0.041 0.090 0.062 0.056	0.061 0.046 -0.041 0.101 0.052 - -0.060 -0.118 0.152 0.073 -0.058	0.019 0.041 -0.037 0.074 - -0.128 -0.128 0.333 0.161 -0.133	0.002 0.011 0.012 0.009 0.050 - 0.031 0.032 0.090 0.061 0.056	0.061 0.046 -0.041 0.101 0.052 - -0.059 -0.119 0.153 0.074 -0.061
Variance components Between Congregations Within Congregations EE	0.095 ^{***} 0.763			0.093 ^{***} 0.759			0.027*** 0.759			0.026 ^{***} 0.758 0.001 ^{****}		

Level-2 N = 344; Level-1 N = 46,571; Two-tailed significance tests:

**** ^r p < .001.

individuals with larger incomes are more likely to have higher levels of congregational giving. Consistent with past research, the religion control variables all have statistically significant positive effects on congregational giving—frequency of religious service attendance, frequency of devotional practices, proportion of close friends in one's congregation, and exclusive theology. In terms of the standardized beta coefficients for the religion control variables, religious service attendance by far has the strongest effect followed by close friends, devotional practices, and exclusive theology. Outside of certain socio-demographic variables, religious behavioral predictors typically have the strongest effects on congregational giving with conservative religious beliefs having moderate, but consistent, positive effects (Luidens and Nemeth, 1994; Hoge et al., 1996; Chaves and Miller, 1999; Smith et al., 2008; Bekkers and Wiepking, 2011). Thus, these findings follow previous research. Model 2 adds the key individual-level predictor—EE experienced during worship services—to the model, which has a significant positive effect on congregational giving and significantly improves model fit ($\chi^2 = 234.441$, d.f. = 1; p < .001). Higher values of EE are associated with higher levels of congregational giving, supporting Hypothesis 1. Examining the standardized beta coefficients, the magnitude of the EE effect is on par with that of exclusive theology an often cited predictor of congregational giving (Stark and Finke, 2000; Finke et al., 2006; Scheitle and Finke, 2008; Whitehead, 2010).

Model 3 adds the congregational-level variables to the model and presents the full model with all predictors. In this model, net of all the controls, EE maintains a significant positive effect of the same magnitude as that in Model 2. On the congregational-level, consistent with past research, congregational friendship density and strictness have significant positive effects on the average level of congregational giving, while congregational size has a significant negative effect. Non-Pentecostal evangelical congregations have higher average levels of congregational giving compared to Mainline, Catholic, and Other congregations; however, they have significantly lower average levels of congregational giving compared to Black Protestant and Pentecostal congregations. In other analyses (not shown), Black Protestant congregations also exhibited higher average levels of congregational giving compared to mainline Protestants. This is interesting in light of Keister's (2008) findings that Black Protestants have lower wealth compared to mainline and evangelical Protestants. Thus, while Black Protestants have lower average levels of resources to give, these results show that on average they give higher

[†] *p* < .10.

p < .05.

^{**} p < .01.

percentages of their income than mainline and non-Pentecostal evangelical Protestants. Turning to the standardized beta coefficients, the magnitude of the Black Protestant coefficient is larger than the coefficients for the other religious traditions in the model.

Congregational positive emotion also has a significant positive effect on congregational giving, that is, congregations with higher aggregate levels of positive emotion have higher average rates of giving, providing support for Hypothesis 2. Congregational positive emotion significantly improves model fit compared to a base model with all other variables (model not shown; $\chi^2 = 13.675$, d.f. = 1; p < .001). Examining the standardized beta coefficients, the magnitude of the congregational positive emotion effect is similar to that for congregational size and network density, which are two of the main predictors of congregational giving in rational choice explanations (Stark and Finke, 2000; Finke et al., 2006; Scheitle and Finke, 2008; Whitehead, 2010). The congregational-level variables account for roughly 71 percent of the variation in giving across congregations. In other words, I estimate a nested random-coefficient regression model where the fixed effect of the EE coefficient now represents the weighted average of its slopes across the 344 congregations. Model 4 shows that the coefficient for EE does significantly vary across congregations (i.e., EE's variance component of 0.0012 is statistically significant) and that the weighted average of slopes for it remains statistically significant.

In Table 4, I test whether EE varies with random slopes and with congregational positive emotion, strictness, congregational friendship density, and religious tradition, that is, I estimate cross-level interactions between individual-level EE and these congregational-level predictors and allow the slope for EE to vary across congregations. This produces an interceptsand-slopes-as-outcomes regression model. Models 1 through 4 add these interaction terms to the model separately. The interaction effect for EE and intra-congregational network density (Model 3) and the interaction effects between EE and religious traditions¹¹ (Model 4) are not statistically significant. However, the interaction effects for EE and congregational positive emotion and EE and strictness are significant and positive (Models 1 and 2). The positive effect of EE on congregational giving is higher in congregational contexts characterized by higher congregational positive emotion and strictness. Figs. 1 and 2 illustrate these significant interaction effects. The low and high values of the congregational variables represent the 25th and 75th percentiles of congregations respectively. Fig. 1 shows that the positive effect of EE on congregational giving becomes stronger in congregations with high levels of congregational positive emotion. Similarly, Fig. 2 illustrates that the positive effect of individual EE on congregational giving is amplified in congregations with high levels of strictness. In terms of the standardized betas, the magnitude of the strictness interaction effect is similar to the effect of congregational size and slightly stronger than the congregational positive emotion interaction effect. Model 5 estimates these two interaction terms in the same model; both remain statistically significant and together significantly improve model fit (χ^2 = 13.608, d.f. = 2; *p* < .01; compared to Model 4 in Table 3). These results support Hypotheses 3 and 4 but not Hypotheses 5 and 6.

6. Discussion

Congregations depend on funding from their members for their livelihood and yet giving is highly skewed with 20 percent of members providing over 80 percent of the donations (lannaccone, 1997; see also Smith et al., 2008). Because the majority of individuals give nothing or very little to their congregations, it is important to determine what factors affect monetary giving and why some individuals are willing to give more than others. Rational choice explanations typically emphasize the screening, monitoring, and sanctioning capacities of congregations as a means of inducing instrumentally rational actors to contribute. The significant effects of strictness, congregational size, congregational network density, and theological exclusivity are consistent with this perspective. While these results provide some support for rational choice explanations, the majority of American congregations are not strict or theologically exclusive and the majority of America congregation-goers attend large, not small, congregations (Stark and Finke, 2000; Thumma and Travis, 2007). Thus, these rational choice explanations fail to explain congregational giving within the average American congregation or for the average attender of American congregations. The positive effects of individual- and congregational-level emotion on giving net of strictness, congregational size, and theological exclusivity suggest that in the average American congregation emotioninducing rituals may be especially important for facilitating higher levels of congregational giving. Moreover, the magnitude of the individual-level EE effect is on par with that of theological exclusivity and the magnitude of the congregational-level positive emotion effect is roughly equivalent to that of congregational size. Thus, the effects of emotion are similar in strength to two of the main rational choice predictors of giving. Although strict congregations amplify the individual-level effects of EE, congregations of any size with any level of strictness or theological exclusivity can theoretically generate these types of rituals. This study suggests that congregations can increase the proportion of income their members donate by structuring their rituals to promote positive emotional experiences. Since many churches have control over the form and type of worship service they offer, future research should investigate what types or characteristics of rituals facilitate positive emotional experiences for participants.

¹¹ Ottoni-Wilhelm (2010) and Cornwall (2010) note the importance of fully interacting models, which requires interacting a variable with each religious tradition not just particular traditions specified by hypotheses. Hence, in Model 4, I interact EE with each religious tradition even though Hypothesis 5 is only in regards to comparing Black Protestants and Pentecostals to non-Pentecostal evangelicals.

Table 4

HLM models predicting congregational giving: unstandardized coefficients and standardized betas displayed.

	Model 1			Model 2	Model 2		Model 3		
	Unstand.	SF	Stand. Beta	Unstand.	SF	Stand. Beta	Unstand.	SF	Stand.
Intercent	2 /30***	0.036	Deta	2 444***	0.035	Deta	2 444***	0.040	beta
I and 1 (Individual)	2.433	0.050		2.444	0.055		2.444	0.040	
Age	0.013***	0.000	0179	0.013***	0.000	0179	0.013***	0.000	0 179
Sex	0.028**	0.009	0.013	0.028	0.000	0.013	0.028	0.009	0.013
Marriage	0.122***	0.009	0.056	0.122***	0.009	0.056	0.122***	0.009	0.056
Less than high school (reference)	-	-	-	-	-	-	-	-	-
High school	0.137	0.023	0.063	0.137	0.023	0.063	0.137	0.023	0.063
College	0.113	0.024	0.052	0.113	0.024	0.052	0.113	0.024	0.052
Attendance	0.174	0.008	0.120	0.174	0.008	0.120	0.174	0.008	0.120
Devotional practices	0.055***	0.003	0.078	0.056	0.003	0.078	0.055	0.003	0.078
Exclusive theology	0.052***	0.004	0.061	0.052***	0.004	0.061	0.052***	0.004	0.061
Close friends	0.141***	0.005	0.117	0.141***	0.005	0.117	0.141***	0.005	0.117
EE	0.019	0.002	0.061	0.021	0.002	0.066	0.020	0.002	0.063
Level 2 (Congregational)									
Congregational positive emotion	0.040***	0.011	0.045	0.039***	0.011	0.044	0.041	0.011	0.046
Congregation Size (LN)	-0.036	0.012	-0.040	-0.037	0.013	-0.041	-0.036	0.012	-0.041
Strictness	0.074	0.009	0.100	0.073	0.009	0.099	0.074	0.009	0.101
Network density	0.208	0.050	0.052	0.206	0.051	0.051	0.206	0.050	0.051
Mainline	- -0.126***	-	-0.058	- _0128***	-	-0.059	_ _0127***	-	-0.058
Catholic	-0.257	0.040	-0.118	-0.258	0.040	-0.118	-0.258	0.040	-0.119
Black Protestant	0.332	0.893	0.153	0.334	0.089	0.154	0.332	0.090	0.153
Pentecostal	0.159*	0.089	0.073	0.154	0.061	0.071	0.160*	0.061	0.074
Other	-0.139*	0.056	-0.064	-0.134**	0.056	-0.062	-0.132*	0.056	-0.061
Cross-level Interactions (Level 1 \times Level 2) EE \times Congregational positive emotion EE \times Strictness	0.004*	0.002	0.030	0.004**	0.001	0.040	0.005	0.000	0.000
$EE \times Network density$							0.005	0.006	0.008
Between Congregations	0.026***			0.026***			0.027***		
Within Congregations	0.758			0.758			0.758		
EE	0.0001**			0.0000**			0.0001***		
	Model 4			Model 5					
	Unstand.		Stand.	Unstand.		Stand.			
	Coef.	SE	Beta	Coef.	SE	Beta			
Intercept	2.444***	0.040	-	2.439***	0.036	-			
Level 1 (Individual)									
Age	0.013	0.000	0.179	0.013	0.000	0.179			
Sex	0.028	0.009	0.013	0.028	0.009	0.013			
Marriage Less than high school (reference)	0.122	0.009	0.056	0.122	0.009	0.056			
High school	0.137***	0.023	0.063	0.137***	0.023	0.063			
College	0.112	0.024	0.052	0.113***	0.024	0.052			
Income (LN)	0.174***	0.006	0.120	0.173***	0.006	0.120			
Attendance	0.301	0.004	0.294	0.301***	0.004	0.294			
Devotional practices	0.056	0.003	0.078	0.056	0.003	0.078			
Exclusive theology	0.052	0.004	0.061	0.052	0.004	0.061			
EF	0.141	0.005	0.117	0.141	0.005	0.116			
	0.021	0.004	0.000	0.021	0.002	0.005			
Congregational positive emotion	0.041***	0.011	0.046	0.038**	0.011	0.043			
Congregation Size (LN)	-0.036	0.011	-0.040	-0.036	0.012	-0.040			
Strictness	0.074	0.009	0.102	0.072	0.009	0.099			
Network density	0.206***	0.050	0.051	0.207***	0.050	0.052			
Non-Pente. Evangelical (reference)		-	-		-	-			
Mainline	-0.127	0.032	-0.058	-0.126	0.032	-0.058			
Catholic Black Protostant	-0.257	0.040	-0.118	-0.257	0.040	-0.118			
Diack Protestall Pentecostal	0.304	0.094	0.140	0.334	0.089	0.153			
Other	-0.136	0.056	-0.062	-0.139	0.056	-0.064			

(continued on next page)

Table 4 (continued)

	Model 4			Model 5		
	Unstand. Coef.	SE	Stand. Beta	Unstand. Coef.	SE	Stand. Beta
Cross-level interactions (Level $1 \times$ Level 2)						
EE × Mainline	0.002	0.005	0.005			
$EE \times Catholic$	-0.004	0.004	-0.013			
$EE \times Black Protestant$	0.022	0.023	0.070			
$EE \times Pentecostal$	0.015	0.010	0.046			
$EE \times Other$	-0.009	0.009	-0.029			
$EE \times Congregational positive emotion$				0.003	0.002	0.022
$EE \times Strictness$				0.004**	0.001	0.034
Variance components						
Between Congregations	0.026			0.026***		
Within Congregations	0.758			0.758		
EE	0.0001***			0.0000**		

Level-2 N = 344; Level-1 N = 46,571; Two-tailed significance tests:

† *p* < .10.

p < .05.

*** p < .01. **** p < .001.



Fig. 1. Relationship between individual emotional energy, congregational positive emotion, and individual giving (x-axis = ±2 SE's).



Fig. 2. Relationship between individual emotional energy, congregational strictness, and individual giving (x-axis = ±2 SE's).

Past studies, relying primarily on rational choice explanations, have focused on the cognitive processes by which individuals make giving decisions (see Peifer, 2010 and Hill and Vaidyanathan, 2011 for notable exceptions). In doing so, they fail to consider emotional processes. Individuals are viewed as 'thinkers' making decisions regarding how much to give, rather than as 'feelers.' Yet the findings of this study highlight how there is more to congregational giving than cognitive motivations. The amount of EE individuals experience during worship services has a consistent positive effect on congregational giving. This suggests that emotion, not just cognition, plays a role in financial decisions regarding how much to give to one's congregation. In fact, psychological and neuroscience research identifies emotion and cognition as being intertwined in the brain (Phelps, 2006; Pessoa, 2008; Izard, 2009). Some research argues that emotion precedes cognitive processing (Zajonc, 1980, 1984, 1998), showing that individuals are typically able to determine how they feel about something before they can even articulate what it is. Other studies have connected emotion to cooperative behavior. For example, McCabe et al. (2001) had participants play experimental cooperation games, where there was an incentive to not cooperate if one's partner cooperated but disincentives for mutual non-cooperation. They found that participants who cooperated more frequently showed higher levels of activation in the emotional limbic system of the brain, thereby suggesting the importance of emotion for facilitating cooperative behavior. The current study further supports this conclusion with survey data and pinpoints how emotionally charged group rituals may be catalysts for encouraging cooperation or contribution to the group.

Past research on religious giving has consistently found a positive effect of regular church attendance. While requests for donations during religious services may partly explain this relationship (Bekkers and Schuyt, 2008), the results of this study identify the emotional experiences of participants as also relevant. These experiences include general emotions, such as 'joy' and 'awe', and religion-specific ones, such as experiencing 'a sense of God's presence.' This study proposes that certain social contexts may moderate the effects of EE on congregational giving. In particular, the cross-level interaction effects identify how certain congregational contexts-those characterized by high levels of positive emotion and strictness-increase the individual-level positive effect of EE. I argued that this is due to these contexts amplifying the degree to which EE is attributed to the congregational ritual experience. Although the interaction effect between EE and strictness was of a similar magnitude to the effects of congregational size and network density, the interaction effect between EE and congregational positive emotion was smaller. Yet, even the smaller interaction effect between EE and congregational positive emotion has important potential financial implications for congregations. As Smith et al. (2008) show, even small increases in the amount individuals give can, in the aggregate, create immense financial windfalls for congregations. Although I predicted a moderating effect between EE and congregational network density, it was not supported. This may be because congregational network density operates in different ways across congregations; it may make individuals feel a part of a tight-knit community in some congregations (Peifer, 2010), and have the opposite effect in others, particularly when the dense ties are used for the purposes of monitoring and sanctioning (Scheitle and Finke, 2008).¹² Only in the case of the former, should EE become more easily attributable to the congregation. Of course, not all religious rituals are equally as successful at generating EE. Given that positive emotion experienced during worship services is positively associated with higher levels of congregational giving on both the individual- and congregational-levels, future research should investigate what factors affect the success of a religious ritual (see Baker, 2010; Draper, 2014; Wellman et al., 2014 for recent research in this area).

My hypothesis regarding a conditional relationship between EE and institutionalized expressive rituals—operationalized by Pentecostal and historically Black Protestant congregations—was also not supported. However, institutionalized expressive rituals on their own do seem to have an effect on average levels of congregational giving. Although most prior studies of giving have focused on religious traditions as operationalizations of strictness or conservative religious beliefs (Hoge, 1994; Zaleski and Zech, 1994; Hoge et al., 1996), the higher average levels of giving in Black Protestant and Pentecostal congregations compared to non-Pentecostal evangelical congregations suggest that the emotional expressiveness of rituals may also contribute to explaining variation in congregational giving across religious traditions. These findings emphasize the importance of differentiating Black Protestant and Pentecostal congregations from evangelical and mainline congregations. While some past studies have separated out individuals who attend Black Protestant congregations (see Keister, 2008 and Corcoran, 2013), this study is the first to do so at the congregational-level. Notably, I find that Black Protestant congregations, even though their attendees have fewer resources (Keister, 2008), have the highest average levels of congregational giving (as measured by the average percentage of attendees' net income given regularly) compared to the other religious traditions in the model. Moreover, it seems that Pentecostal congregations may be the driving force behind the higher average levels of giving among evangelical congregations reported in prior studies. This would suggest that their emotionally expressive rituals are primarily responsible for their giving rates, not their conservative theology. Due to the small number of Black Protestant and Pentecostal congregations in the sample, additional research using oversamples of these congregations is needed to further confirm these results. Future research would also benefit from directly measuring the extent to which emotionally expressive rituals are institutionalized to determine if this explains the higher average levels of congregational giving among Black Protestant and Pentecostal congregations.

The findings of this study could be generalizable to other types of voluntary organizations. Religious congregations are just one type of voluntary association (Harris, 1998); many organized membership-based groups, such as social movement

¹² See Kitts (2000) for a discussion of the different mechanisms by which social networks can affect group commitment.

organizations and clubs, also depend on funding from members. The hypotheses proposed in this study are not dependent on religious characteristics as EE may be generated from non-religious rituals (Collins, 2004) and shared collective emotion and strictness are not religion-specific factors. Thus, the relevance of emotion for giving may also operate in secular organizational contexts as well.

The current study is not without limitations. First, because the data is cross-sectional, causal inference cannot be drawn. Currently, there is no available longitudinal multilevel data of religious attendees within congregations. As such, this study used one of the best available sources of multilevel data for congregations. Outside of religious giving studies, some past research has suggested that giving makes individuals feel good about themselves and causes them to experience a "warm glow," which in turn is predicted to facilitate future giving in order to repeat the feeling (Andreoni, 1990). This research predicts a reciprocal relationship between a certain type of emotion (i.e., a warm glow) and giving. In the current study, EE is measured by emotions individuals experience during worship services including spontaneity, awe, joy, and a feeling of God's presence. While giving may provide one with a "warm glow," why this would necessarily affect feelings of spontaneity, awe, and so on during religious services is less clear. The warm glow reverse causal logic also has a difficult time explaining the interaction effects, that is, why giving more would create a stronger "warm glow" in certain contexts versus others. Moreover, the positive effect of congregational positive emotion on congregational giving, net of one's own EE, suggests a direct effect of congregational emotion.¹³ Individuals with low EE give more in congregations with higher congregational positive emotion, which is inconsistent with the reverse causal effect predicted by warm glow explanations. Second, although the USCLS is currently the only dataset that has questions able to measure both congregational giving and EE, it does not provide information on when or how individuals give (i.e., spontaneously during the service or through planned giving). Since EE is not merely an instantaneous emotion, but lasts even after the interaction ritual ends (Collins, 2004), EE should have a positive effect on all types of giving. However, because EE wanes the longer one goes without repeating the ritual, it might affect spontaneous giving during worship services more than planned giving as EE should be higher for the former. Since Smith et al. (2008) provide evidence that individuals who plan their contributions give more, investigating whether EE increases giving among spontaneous givers, who typically give less, is a fruitful avenue for future research.

Finally, like much of past research, the current study is unable to directly control for the quality of religious goods offered by congregations. Due to this, a rational choice approach to congregational giving may reinterpret the EE findings as merely capturing an individual's perception of the quality of the religious goods offered and heightened satisfaction with them. This, however, is an insufficient explanation. According to rational choice approaches, in order for there to be high levels of congregational giving, not only must the quality of the religious goods exceed their cost, but the congregation must effectively curb free-riders through screening and/or monitoring and sanctioning. If the former condition is met without the latter, then instrumentally rational individuals are expected to consume the higher quality good without contributing to its production, that is, to free-ride. Since the positive effect of EE is net of the factors predicted to curb free-riding— congregational strictness, congregational size, and congregational network density—it cannot be reduced solely to a rational choice explanation. While the interaction effect between EE and strictness may be interpreted instrumentally—EE has a greater positive effect in congregations with fewer free-riders—this interpretation cannot explain the interaction effect between EE and congregational choice approaches are therefore unable to fully explain the EE findings. Still, more research is needed to further elucidate the influence of EE on congregational giving and the underlying cognitive and emotional mechanisms at work.

Although it has limitations, the results identify important relationships between positive emotion, congregational contexts, and congregational giving. While past giving research has focused on rational choice explanations, this study contributes to diversifying theoretical research on religious giving by extending Collins' (2004) interaction ritual theory to hypothesize non-cognitive predictors of congregational giving, specifically emotion. The results of this study provide support for the hypothesis that positive emotions produced by religious rituals are associated with higher levels of congregational giving, net of income and other relevant factors. Future research should further consider how both cognitive *and* emotional processes underlie congregational giving and giving more broadly.

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¹³ It is possible that a high level of giving may be a proxy for power and powerful individuals may more strongly influence the emotional context of a congregation. This study is unable to test this alternative explanation; however, the influence of any one individual on the emotional atmosphere of the group should be more likely to occur in small congregations (i.e., where it is easier for one individual to stand out). Thus, controlling for congregational size helps strengthen confidence in the causal specification of the models.

References

Akin, Lara B., Dunn, Elizabeth W., Norton, Michael I., 2012. Happiness runs in a circular motion: evidence for a positive feedback loop between prosocial spending and happiness. J. Happiness Stud. 13 (2), 347–355.

Andreoni, J., 1990. Impure altruism and donations to public goods: a theory of warm-glow giving. Econ. J. 100, 464-477.

- Baker, Joseph O., 2010. Social sources of the spirit: connecting rational choice and interactive ritual theories in the study of religion. Sociol. Relig. 71 (4), 432-456.
- Barsade, S.G., 2002. The ripple effect: emotional contagion and its influence on group behavior. Adm. Sci. Q. 47, 644-675.
- Batson, C.D., Shaw, L.L., 1991. Evidence for altruism: toward a pluralism of prosocial motives. Psychol. Ing. 2 (2), 107-122.
- Bechara, Antoine, Damasio, Antonio R., Damasio, Hanna, Anderson, Steven W., 1994. Insensitivity to future consequences following damage to human prefrontal cortex. Cognition 50 (1–3), 7–15.
- Bechara, Antoine, Damasio, Hanna, Damasio, Antonio R., Lee, G.P., 1999. Different contributions of the human amygdala and ventromedial prefrontal cortex to decision-making. J. Neurosci. 19 (13), 5473–5481.
- Bekkers, Rene, Schuyt, Theo, 2008. And who is your neighbor? explaining denominational differences in charitable giving and volunteering in the Netherlands. Rev. Relig. Res. 50 (1), 74–96.
- Bekkers, Rene, Wiepking, Pamala, 2011. Who gives? a literature review of predictors of charitable giving part one: religion, education, age and socialisation. Volunt. Sector Rev. 2 (3), 337–365.
- Camerer, Colin, Loewenstein, George, Prelec, Drazen, 2005. Neuroeconomics: how neuroscience can inform economics. J. Econ. Lit. 43 (1), 9-64.
- Chaves, Mark, 2004. Congregations in America. Harvard University Press, Cambridge.

Chaves, Mark, Miller, Sharon L., 1999. Financing American Religion. Alta Mira Press, Walnut Creek.

- Collins, Randall, 2004. Interaction Ritual Chains. Princeton University Press, New Jersey.
- Collins, Randall, 2010. The micro-sociology of religion: Religious practices, collective and individual. Association of Religion Data Archives, Guiding Paper. State College, PA: The Association of Religion Data Archives at The Pennsylvania State University. http://www.thearda.com/rrh/papers/guidingpapers.asp (retrieved 05.02.11).
- Corcoran, Katie E., 2013. Divine exchanges: applying social exchange theory to religious behavior. Ration. Soc. 25 (3), 335–369.
- Cornwall, Marie, 2010. From the editor: ten most likely ways an article submission fails to live up to publishing standards. J. Sci. Study Relig. 49 (4), i–v. Damasio, Antonio R., 1994. Descartes' Error: Emotion, Reason, and the Human Brain. G.P. Putnam, New York.
- De Waal, Frans B.M., 2008. Putting the altruism back into altruism: the evolution of empathy. Annu. Rev. Psychol. 59, 279–300.
- Doughtery, Kevin D., Whitehead, Andrew L., 2011. A place to belong: small group involvement in religious congregations. Sociol. Relig. 72 (1), 91-111.

Draper, Scott, 2014. Effervescence and solidarity in religious organizations. J. Sci. Study Relig. 53 (2), 229-248.

- Durkheim, Emile, [1912] 1965. The Elementary Forms of the Religious Life. Translated by Joseph Ward Swain. Free Press, New York.
- Finke, Roger, Bahr, Matt, Scheitle, Christopher P., 2006. Toward explaining congregational giving. Soc. Sci. Res. 35, 620-641.

Gelman, Andrew, 2008. Scaling regression inputs by dividing by two standard deviations. Stat. Med. 27, 2865–2873.

Hareli, Shlomo, Rafaeli, Anat, 2008. Emotion cycles: on the social influence of emotion in organizations. Res. Organiz. Behav. 28, 35–59.

Harris, Margaret, 1998. A special case of voluntary associations? towards a theory of congregational organization. Brit. J. Sociol. 49 (4), 602-618.

Hatfield, E., Cacioppo, J.T., Rapson, R.L., 1994. Emotional Contagion. Cambridge University Press, Cambridge.

Hendriks, M., Vingerhoets, A., 2006. Social messages of crying faces: their influence on anticipated person perception, emotions and behavioral responses. Cogn. Emot. 20, 878–886.

- Hennig-Thurau, T., Groth, M., Paul, M., Gremler, D.D., 2006. Are all smiles created equal? how emotional contagion and emotional labor affect service relationships. J. Mark. 70 (3), 58-73.
- Hill, Jonathan P., Olson, Daniel V.A., 2009. Market share and religious competition: do small market share congregations and their leaders try harder? J. Sci. Study Relig. 48 (4), 629–649.
- Hill, Jonathan P., Vaidyanathan, Brandon, 2011. Substitution or symbiosis? Assessing the relationship between religious and secular giving. Soc. Forces 90 (1), 157–180.
- Hodgkinson, Virginia A., Weitzman, Murray S., Kirsch, Arthur D., 1988. From Belief to Commitment: The Activities and Finances of Religious Congregations in the United States. Independent Sector, Washington, DC.
- Hoffmann, John P., Lott, Bruce R., Jeppsen, Catherine, 2010. Religious giving and the boundedness of rationality. Sociol. Relig. 71, 323-348.
- Hoge, Dean R., 1994. Introduction: the problem of understanding church giving. Rev. Relig. Res. 36 (2), 101-110.

Hoge, Dean R., Augustyn, Boguslaw, 1997. Financial contributions to Catholic parishes: a nationwide study of determinants. Rev. Relig. Res. 39 (1), 46–60. Hoge, Dean, Zech, Charles, McNamara, Patrick, Donahue, Michael J., 1996. Money Matters: Personal Giving in American Churches. Westminster John Knox Press, Louisville, KY.

Iannaccone, Laurence, 1992. Sacrifice and stigma: reducing free-riding in cults, communes, and other collectives. J. Political Econ. 100 (2), 271–291.

- Iannaccone, Laurence, 1994. Why strict churches are strong. Am. J. Sociol. 99, 1180–1211.
- lannaccone, Laurence, 1997. Skewness explained: a rational choice model of religious giving. J. Sci. Study Relig. 36 (2), 141-157.
- Izard, Carroll E., 2009. Emotion theory and research: highlights, unanswered questions, and emerging issues. Annu. Rev. Psychol. 60, 1–25.
- Kanter, Rosabeth Moss., 1972. Commitment and Community. Harvard University Press, Cambridge, MA.
- Keister, Lisa A., 2008. Conservative protestants and wealth: how religion perpetuates asset poverty. Am. J. Sociol. 113 (5), 1237–1271.
- Kitts, James A., 2000. Mobilizing in black boxes: social networks and participation in social movement organizations. Mobilization 5 (2), 241–257.
- Lawler, Edward J., 2001. An affect theory of social exchange. Am. J. Sociol. 107 (2), 321–352.
- Lawler, Edward J., Yoon, Jeongkoon, 1996. Commitment in exchange relations: test of a theory of relational cohesion. Am. Sociol. Rev. 61 (1), 89–108.
- Lawler, Edward J., Thye, Shane R., Yoon, Jeongkoon, 2000. Emotion and group cohesion in productive exchanges. Am. J. Sociol. 106 (3), 616-657.
- Lincoln, C.Eric, Mamiya, Lawrence H., 1990. The Black Church in the African American experience. Duke University Press, Durham.
- Luidens, Donald, Nemeth, Roger, 1994. Social sources of family contributions: giving patterns in the Reformed Church in America. Rev. Relig. Res. 36 (2), 207–217.
- McCabe, Kevin, Houser, Daniel, Ryan, Lee, Smith, Vernon L., Trouard, Theodore, 2001. A functional imaging study of cooperation in two-person reciprocal exchange. Proc. Natl. Acad. Sci. USA 98 (20), 11832–11835.
- McCarthy, John.D., Zald, Mayer.N., 1977. Resource mobilization and social movements: a partial theory. Am. J. Sociol. 82, 1212–1241.
- McPherson, J.Miller., 1982. Hypernet sampling: duality and differentiation among voluntary organizations. Soc. Networks 3 (4), 225-249.
- Melton, J.Gordon, 2003. The Encyclopedia of American Religions, seventh ed. Gale Group, Farmington Hills, MI.
- Miller, Sharon L., 1999. The meaning of religious giving. In: Chaves, Mark, Miller, Sharon L. (Eds.), Financing American Religion. AltaMira Press, California, pp. 37-46.
- Ottoni-Wilhelm, Mark, 2010. Giving to organizations that help people in need: differences across denominational identities. J. Sci. Study Relig. 49 (3), 389–412.
- Peifer, Jared.L., 2010. The economics and sociology of religious giving: instrumental rationality or communal bonding? Soc. Forces 88 (4), 1569–1594. Pessoa, L., 2008. On the relationship between emotion and cognition. Natl. Rev. Neurosci. 9, 148–158.
- Phelps, E.A., 2006. Emotion and cognition: insights from studies of the human amygdale. Annu. Rev. Psychol. 52, 27-53.
- Poloma, Margaret, 1982. The Charismatic Movement: Is There a New Pentecost? Twayne, Massachusetts.
- Poloma, Margaret, 1989. The Assemblies of God at the Crossroads: Charisma and Institutional Dilemmas. The University of Tennessee Press, Knoxville, Tennessee.

Raudenbush, Stephen W., Bryk, Anthony S., 2002. In: DeLeeuw, J., Berk, R. (Eds.), Hierarchical Linear Models: Applications and Data Analysis, vol. 1. Sage, Thousand Oaks, CA.

Scheitle, Christopher P., Adamczyk, Amy, 2009. It takes two: the interplay of individual and group theology on social embeddedness. J. Sci. Study Relig. 48 (1), 16-29.

Scheitle, Christopher P., Finke, Roger, 2008. Maximizing congregational resources: selection versus production. Soc. Sci. Res. 37, 815-827.

Schwadel, Phillip, 2009, Neighbors in the pews: social status diversity in religious congregations. Int. J. Relig. Res. 5: Article 2. <www.religiournal.com> (retrieved 10.07.13).

Shelton, Jason E., Emerson, Michael O., 2012. Blacks and Whites in Christian America. New York University Press, New York.

Smith, Buster G., 2010. Acceptance of other religions in the United States: an HLM analysis of variability across congregations. Social Compass 57 (1), 127-142.

Smith, Christian, Emerson, Michael O., Snell, Patricia, 2008, Passing the Plate: Why American Christians Don't Give Away More Money, Oxford University Press

Stark, Rodney, Finke, Roger, 2000. Acts of Faith: Explaining the Human Side of Religion. University of California Press, Berkeley.

Steensland, Brian, Park, Jerry Z., Regnerus, Mark D., Robinson, Lynn D., Wilcox, W.Bradford, Woodberry, Robert D., 2000. The measure of American religion: toward improving the state of the art. Soc. Forces 79 (1), 291–318.

Thomas, Jeremy N., Olson, Daniel V.A., 2010. Testing the strictness thesis and competing theories of congregational growth. J. Sci. Study Relig. 49 (4), 619-629

Thumma, Scott, Travis, Dave, 2007. Beyond the Megachurch Myths. Jossey-Bass, San Francisco, CA.

Vaidyanathan, Brandon, Snell, Patricia, 2011. Motivations for and obstacles to religious financial giving. Sociol. Relig. 72 (2), 189-214.

Van Slyke, David M., Brooks, A.C., 2005. Why do people give? new evidence and strategies for nonprofit managers. Am. Rev. Pub. Administr. 35 (3), 199-222. Wellman, James K., Corcoran, Katie E., 2013. Religion and regional culture: embedding religious commitment within place. Sociol. Relig. 74 (4), 496–520. Wellman, James K., Corcoran, Katie E., Stockly-Meyerdirk, Kate, 2014. 'God is like a drug...': explaining interaction ritual chains in American megachurches. Sociol. Forum 29 (3), 650-672.

Whitehead, Andrew L, 2010. Financial commitment within federations of small groups: the effect of cell-based congregational structure on individual giving. J. Sci. Study Relig. 49 (4), 640-656.

Wollschleger, Jason, 2012. Interaction ritual chains and religious participation. Sociol. Forum 27 (4), 896-912.

Woodberry, Robert D., Smith, Christian S., 1999. Fundamentalism et al.: conservative protestants in America. Annu. Rev. Sociol. 24, 23-56.

Woolever, Cynthia, Bruce, Deborah, 2002. A Field Guide to U.S. Congregations: Who's Going Where and Why. Westminster John Knox Press, Louisville, KY. Wuthnow, Robert., 1997. The Crisis in the Churches: Spiritual Malaise, Fiscal Woe. Oxford University Press, New York.

Zajonc, Robert B., 1980. Feeling and thinking: preferences need no inferences. Am. Psychol. 35 (2), 151–175.

Zajonc, Robert B., 1984. On the primacy of affect. Am. Psychol. 39 (2), 117-123.

Zajonc, Robert B., 1998. Emotions. In: Gilbert, Daniel T., Fiske, Susan T., Lindzey, Garder (Eds.), Handbook of Social Psychology. Oxford University Press, New York, pp. 591-632.

Zaleski, Peter A., Zech, Charles E., 1994. Economic and attitudinal factors in Catholic and Protestant religious giving, Rev. Relig, Res. 36 (2), 158-167.