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The Effects of Provincial and Individual Religiosity on Deviance in China: A Multilevel Modeling Test of the Moral Community Thesis

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ABSTRACT

This paper examines the moral community thesis in the secular context of China. Using multilevel logistic regression, we test (1) whether both individual- (measured by affiliation with institutional religion) and aggregate-level religiosity (measured by the number of religious sites per 10,000 people in province) are inversely related to law and rule violations at the individual level and (2) whether the province-level religiosity enhances the inverse relationship between individual religiosity and the deviant behaviors. Results from analyzing data from the 2010 China General Social Survey and the Spatial Explorer of Religions show that both individual- and aggregate-level religiosity are inversely related to the odds of violating the law and various rules of government, transportation, workplace, and other organizations. However, the cross-level interactions are not significant across models, indicating that the contextual religiosity does not increase the effect of individual-level religiosity on deviance. Implications of findings for the moral community thesis are discussed.

Keywords: Religion, Law and rule violations, Moral community, China

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INTRODUCTION

The deterrent effect of religion on crime and deviance has been debated for more than thirty years since Hirschi and Stark (1969) failed to find empirical support for the "hellfire" hypothesis. While many studies report that religion is inversely associated with various types of criminal and deviant behaviors (e.g., Benda 2002; Cochran and Akers 1989; Johnson 1987; Johnson et al. 2000, 2000; Johnson and Jang 2011; Marsiglia et al. 2005; Olson 1990), others find religion to be unrelated to crime and deviance, like Hirschi and Stark (Groves, Newman, and Corrado 1987; Heaton 2006; Hirschi and Stark 1969). Some suggest that the relationship between religion and crime is spurious since both religiosity and criminal behaviors are fully attributable to the individual's neurological predisposition (Cochran, Wood, and Arneklev 1994; Ellis 1987, 220; Ellis and Peterson 1996).

Other scholars, however, propose explanations for the inconsistent findings. One key explanation is the moral community thesis proposed by Rodney Stark (Stark 1996; Stark, Kent, and Doyle 1982). According to the thesis, religion is more of a group than individual property. Thus, the effect of religious context on crime and deviance is conceptually distinct from that of individual religiosity. Moreover, the effect of individual religiosity on deviance and crime is expected to be contingent upon the religiousness of context, namely, the proportion of people who are actively religious in the context.

Not all studies, however, provide empirical support for the hypothesis that religiosity at contextual level affects individual deviance and crime (Adamczyk and Hayes 2012; Ellis and Peterson 1996; Finke and Adamczyk 2008; Stack and Kposowa 2011). Also, previous findings are not consistent about whether contextual-level religiosity enhances the effect of individual religiosity on crime and deviance (Adamczyk and Hayes 2012; Corcoran, Pettinicchio, and Robbins 2012; Regnerus 2003; Wallace et al. 2007). Besides, prior research focuses mostly on Western contexts, particularly the United States, which, due to their Judeo-Christian tradition, are more likely to have moral community than less religious non-Western contexts. To date, the moral community thesis has not been tested yet using data from non-Western societies.

To fill this gap in research, this study examines the moral community thesis in the context of contemporary China. Specifically, we apply multilevel logistic regression analysis to analyze two sets of nationally representative data to test (1) whether aggregate-level as well as individual-level religiosity is inversely related to behaviors in violation of the law and various conventional rules at the individual level and (2) whether the aggregate-level religiosity increases the prosocial effect of individual-level religiosity on the odds of violating the law and

conventional rules. We begin with an overview of the moral community thesis and religion in China, followed by a review of literature on religion and deviance in Chinese contexts, Taiwan as well as mainland China. Next, we describe our theoretical approach and hypotheses before turning to a description of data, measurement, and analytic strategy. Finally, we present results from multilevel logistic regression analysis and discuss implications of our study for the moral community thesis.

MORAL COMMUNITIES THESIS

The moral community thesis was originally proposed by Durkheim (1976) and then popularized by Rodney Stark (1996). When religiosity was found to have no association with delinquency in California and the Pacific Northwest (Burkett and White 1974; Hirschi and Stark 1969), unlike in Atlanta (Higgins and Albrecht 1977), Arizona (Jensen and Maynard 1979), Nashville (Rhodes and Reiss 1970), and among Mormons in Utah and Idaho (Albrecht, Chadwick, and Alcorn 1977), Stark (1996) proposed that the deterrent effect of individual religiosity on deviance and crime should be conditioned by the religiosity of broader social context, namely the proportion of people who are actively religious in a particular social context (Stark 1996; Stark, Kent, and Doyle 1982). For Stark (1996:164), religion is "a group property" rather than "an individual trait." Thus, religion is expected to produce social conformity among individuals only when religion is accepted by most of community members and provides a normative guideline for social interaction in the community. Accordingly, in a religious community where religious commitment is a social norm, individual religiosity is likely to be inversely associated with crime and deviance. In contrast, in a non-religious or secular community, religious individuals are as likely as their non-religious counterparts to be deviant as the religion is not accepted by their community as a social norm (Stark, Kent, and Doyle 1982).

Since its introduction, an increasing number of studies have been conducted to test the moral community thesis. To test the thesis, it is necessary first to examine whether context-level religiosity is inversely related to individual-level deviance and crime, though the relationship is not the key argument of thesis. Most studies find significant association between religious context and individual deviance.

For example, by applying multilevel analysis to cross-national data, studies find individuals living in more religious countries to have lower levels of premarital sex (Adamczyk and Hayes 2012), suicide acceptability (Stack and Kposowa 2011), and acceptance of white-collar crimes (Corcoran, Pettinicchio, and Robbins 2012) than those in less religious countries. Similarly, American adolescents attending religious schools are less likely to smoke

cigarettes than those in less religious schools (Bahr and Hoffmann 2008), and the risk of suicide attempts is found to be lower among youth living in neighborhoods that had higher proportion of religiously conservative residents in the United States (Maimon and Kuhl 2008).

Furthermore, Regnerus (2003) found religious homogeneity rather than community religiousness at school- and county-level to generate an effective social control against delinquency (Regnerus 2003; Trawick and Howsen 2006), while Adamczyk (2008, 657) found neither generic religiosity nor conservative Protestant religious context to make a difference in women's decisions regarding abortion. According to Finke and Adamczyk (2008), religiosity at national level was among the most consistent predictors of the individual sexual morality, although it had no effect on the morality sanctioned by the state such as cheating on taxes, accepting a bribe, buying stolen goods, providing the government with false information, and avoiding to pay a public transportation fare.

While the previous finding of inverse relationship between context-level religiosity and individual-level deviance is consistent with the moral community thesis, the central argument of thesis concerns whether context-level religiosity affects the individual-level relationship between religiosity and deviance. That is, Stark (1996:165) argues that individual religiosity restrains crime and deviance "only in communities where the majority of people are actively religious." In a secular context, he suggests the individual-level effect of religion on crimes and deviance would substantially decline and even disappear (Stark 1996; Stark, Kent, and Doyle 1982).

As the thesis would have predicted, Corcoran et al. (2012) found religious context, measured in terms of belief in a personal and moral God, to increase the inverse relationship between individual religious belief, specifically, a belief in personal and moral God and acceptability of white-collar crimes. Scheepers et al.'s cross-national study (2002) also showed that the effect of individual religiosity on moral attitudes (toward abortion, premarital and extramarital relationships, and homosexual relations) tended to be stronger in more religious countries than in less religious or more secularized countries. In addition, using a large representative sample of American public high schools, Wallace et al. (2007) found that adolescents attending highly religious schools were less likely to use alcohol, tobacco and marijuana than their equally religious peers attending less religious schools.

While Regnerus (2003) reported that religiosity at school- and county-level interacted with individual religiosity (religious affiliation) in reducing delinquency, he also suggested that religious homogeneity at a contextual level rather than religiosity interacts with individual religiosity reducing theft. Similarly, Ovadia and Moor (2010) found the percentage of evangelical Protestants in a county to be positively associated with the teen

birth rate, whereas the percentage of Catholics was negatively associated, although the percentage of the religious adherents in a county was not related to the birth rate.

Despite these positive findings, researchers have also failed to find evidence of the moral community thesis. For example, using data on suicide in Netherlands from 1936 to 1973, Van Tubergen et al. (2005) found that community-level religiosity can protect not only religious members of all denominations but also "religious nones" from suicide. Cochran and Akers (1989, 92) only found "minor" support for Stark's moral community thesis. That is, they didn't find significant interactions between aggregate religiosity and the effect of individual religiosity on alcohol and marijuana use, although they found personal asceticism to affect alcohol use only in highly religious contexts and disappears in contexts with low levels of religiosity.

In response to the negative findings, some researchers have argued that the significant relationship between religion and delinquency at the individual level "may not have as much to do with where (or in what social context) we measure it as with how we attempt to measure it" (Junger and Polder 1993; Sloane and Potvin 1986, 103). In a meta-analysis of 60 studies, Baier and Wright (2001) found religious beliefs and behaviors to have a moderate deterrent effect on individuals' criminal behaviors, but the effect was not contingent upon contextual religiousness (Baier and Wright 2001). Benda and Corwyn (2001) even rejected Stark's thesis based on their finding that an inverse relationship between religion and crime exists in the irreligious East coast as well as in the South of the United States. These findings suggest that the effect of individual religiosity on deviance and crime is not conditioned by the religiousness of the context.

Welch, Tittle and Petee (1991) also found no significant interaction between both individual and parish-level religiosity on adult deviance, while they were inversely related.[2] Similarly, Bahr and Hoffmann (2008, 743) found that "the associations between individual religiosity and the four types of drug use were not affected by the level of school religiosity." Applying hierarchical modeling to cross-national data, Adamczyk and Hayes (2012) also

[2] Furthermore, Title and Welch (1983) even found the opposite of what Stark's moral community thesis posits, although they relied on a proxy measure of aggregate religiosity constructed using individual-level survey data. That is, they reported that the inverse relationship between individual religiosity and self-estimated probability of future deviance was more likely to be significant when the proxy of aggregative religiosity was relatively low rather than high. To explain this unexpected finding, they speculated that religion might have been likely to "distinctly affect conformity only where the larger environment lacks the mechanisms that normally curtail deviance." (Tittle and Welch 1983, 674) Yet this finding needs to be interpreted with caution given the limited measurement of two key variables: contextual religiosity and deviance. That is, their measure of context-level religiosity based on the aggregation of individual religiosity may not be necessarily representative of the context, and the behavioral intention of future deviance may not be a good indicator of actual deviance.

found no significant cross-level interaction, while individual religious affiliation and the percent of Muslim residents at a country level both decreased the odds of premarital sex. Examining several deviant outcomes, Sturgis and Baller (2012) also failed to find significant interactions between contextual religiousness and the effect of individual religiosity on anti-asceticism. In sum, these studies indicate that individual and contextual religiosity tend to affect deviance independently.

Besides their mixed results, most previous studies have examined the effect of moral community on deviance and crime in the Western and particularly U.S. context, where the Judeo-Christian tradition exists (Regnerus 2003; Stark 1996; Stark, Kent, and Doyle 1982; Tittle and Welch 1983; Wallace et al. 2007). Few studies have examined the moral community thesis in a non-western context, especially a society where religion is marginalized and regulated by the state. Previous researchers have suggested that the prosocial effect of religion on deviance and crimes should substantially diminish and even disappear in a secular social context because moral community is unlikely to exist to strengthen individual religiosity (Corcoran, Pettinicchio, and Robbins 2012; Stark 1996; Stark 2001; Stark, Kent, and Doyle 1982). Some have even argued that when certain religions are persecuted by the government, these religious groups would increase their grievance against the state and the broader society who did not support their agenda (Grim and Finke 2007; Hafez 2004).

To address this understudied issue, we intend to examine the moral community thesis in the context of China, where religion is regulated and even repressed in a secular society (Grim and Finke 2006; Grim and Finke 2007; Potter 2003; F. Yang 2011). Thus, a brief description of the history and current state of religion in China is in order.

RELIGION IN CHINA

While different religions compete in a free market in the United States (Finke and Stark 2005), religion in China is marginalized and even persecuted by the government (Grim and Finke 2006; Grim and Finke 2007; Potter 2003; F. Yang 2011). Historically, agnostic Confucianism is the cultural bedrock of secular orthodoxy (Creel 1932; Sun 2013; Weber and Gerth 1953; C. K. Yang 1961). After the Communist Party of China took power in 1949, Marxism-based atheism has remained the official ideology of China (Cao 2012; F. Yang 2004) and continues to monitor and restrict religious activities.

Since the Economic Reform in 1978, however, the communist government has decreased its restrictions on religion, which initiated an intense growth of religion along with social and economic transitions (Potter 2003; Stark

and Wang 2015; F. Yang 2005; F. Yang 2011). Despite such growth, a large majority of the general population in China holds an atheistic or agnostic view with only a small percentage of Chinese population professing a religion. For example, while the 2007 Spiritual Life Study of Chinese Residents found 23 percent of participants to report their religious affiliation, the 2010 China General Social Survey (CGSS) revealed that only 13 percent of the population reported that they have certain religious affiliations. Similarly, according to the World Value Survey conducted in 2012, only 14.7 percent of respondents claimed affiliation to a religion. According to the 2010 CGSS, 5.5 percent of the survey respondents identified Buddhism as their religion, 2.2 percent Christianity, 2.4 percent Islam, .2 percent Taoism, and 2.3 percent folk religion.

Given its marginal social position in a secular society, many scholars have speculated that religion has no positive effect on morality or general trust in Chinese society (Hu 2013; Stark 2001). Even fewer studies have examined whether religion in China affects crime and deviance and promotes social conformity. At micro level, the religion-deviance link in China is quite understudied, while most studies to date suggest no relationship or even positive association between religion and deviance. For example, religion is found to be positively associated with suicide attempts among both college students and rural women in China (Zhang and Jin 1996; Zhang and Xu 2007; Zhao et al. 2012).

Cross-national studies usually consider China a generally secular nation where religion barely has any social influence. For example, by comparing data from China, Taiwan, and the U.S., Zhang and Thomas (1994) found that religion in both China and Taiwan doesn't increase social conformity among college students, perhaps because social conformity is primarily promoted by the Confucian tradition. Meanwhile, Stark (2001, 620) asserts that "the moral behaviors of individuals would be influenced by their religious commitments only in societies where the dominant religious organizations give clear and consistent expression to divine moral imperatives." In China, Confucianism and the dominant religions—Daoism, Buddhism, and folk religion—are somewhat amalgamated. In other words, gods of these religions are borrowed from each other, sometimes sharing the same teachings with one another (Shahar and Weller 1996). Consequently, religious beliefs and practices in China are likely to have little effect on moral judgments as those gods are "of very limited power and scope and usually lack moral concern and even dignity" (Stark 2001).

These studies, however, have three major limitations. First, they fail to differentiate institutional religions from folk religions despite their potential differences in affecting deviance. On one hand, folk religions have very

diverse and even inconsistent beliefs and practices (Dean 2003; Tamney 1998; F. Yang 2010), whereas organized religions, also called "institutional" religions by Yang (1961), have developed systems of religious orthodoxy, moral norms, ritual practice, and professional clergies or religious institutions distinct from secular social life. On the other hand, in institutional religions, especially Christianity and Islam, there are "all-powerful, all-seeing gods ruling the entire universe as the ultimate deterrent" (Stark 2001, 621). Therefore, individuals can develop higher morality and moral behaviors with a conception of powerful and moral God in mind (Corcoran, Pettinicchio, and Robbins 2012).

In contrast, innumerable gods and deities exist in folk religions, many of which are shared by or borrowed from each other (Dean 2003; Shahar and Weller 1996). Having folk religion seldom implies "a long-standing, deeply-felt relationship with a god but merely involves requests for favors from various divinities of small scope" (Stark 2001, 634). Consequently, folk religions have limited power and scope in influencing individuals' morality. Instead, they function as a placebo for the self-centered and self-serving individuals (Stark 2001). Thus, folk religions in China are less likely to prohibit crimes and deviance than institutional religions. Even if some folk religions do have prosocial teachings, it is hard to find a significant association between folk religion and crimes and deviance behaviors in statistics considering so diverse religious doctrines and practices in folk religion (F. Yang and Hu 2012).

Second, those studies failed to consider that the levels of religious regulation may vary not only across religions but also among regions. Under state regulation, a triple religious market exists in contemporary China: (1) a "red market" approved by the government, (2) a "black market" banned by the government, and (3) a "grey market" ambiguously treated by the government (F. Yang 2006). The organized religions of Christianity (both Protestantism and Catholicism), Islam, Buddhism, and Daoism are in the red market recognized by the government, whereas Falun Gong, Eastern Lightening and other new religions are in the black market forbidden by the government (Chan 2004). On the other hand, various types of folk religions (i.e., sectarian, communal, and individual folk religions) have been thriving in grey market due to their ambiguous legal status (Dean 2003; Wenger 2004; F. Yang and Hu 2012).[3]

Although the central government of China regulates and even persecutes religion in general across the country, the development of religion is highly dependent on the daily interactions and negotiations between religious

[3] This argument may not be that true after 2013 since the government begins to have higher restrictions on Christianity and Islam. However, before 2013, folk religions are given less space to develop compared with institutional religions.

organizations and local government (Koesel 2014). For example, Cao's (2010) ethnographic study of Wenzhou Christians demonstrates how Christian leaders cooperate with local authorities, and Wang and Ya's (2015) study describes in detail how the Three-Self Church succeeded in expanding their influence by establishing a stable relationship with the local officials. In addition, some local governments would decrease religious regulation and even provide opportunities for the growth of religion when they try to help local economies thrive by using local religious resources (Feuchtwang 2010; Koesel 2014; Palmer, Shive and Wickeri 2011). Thus, a variation in the level of religious regulation is likely to exist across provinces, though no empirical research has examined this phenomenon yet.

Third, previous researchers failed to incorporate the fact that different religions tend to concentrate in different parts of China into their studies. As described by Wickeri (2011, 3), "Buddhists visit a popular temple in east China to burn incense or to ask the monks to conduce special service for their families. Villagers gather at festival time to usher in the lunar New Year and perform a communal sacrifice to the local gods [in Southeastern China]. Muslims in far Western China proceed to their neighborhood mosque five times a day for prayers…. Tibetan Monks demonstrate for religious freedom in a small city outside Lhasa." Protestant Christians are highly concentrated in Henan, Anhui, Zhejiang, Jiangsu, Fujian, and Yunan province (Stark and Wang 2015; Ying 2009), forming three major "Bible Belts" in China (Yu 2008): the Huai River Basin Bible Belt (Henan, Anhui and Northern Jiangsu); the Minzhe coastal Bible Belt (Fujian and Zhejiang); and the Shaanxi-Yunnan Bible Belt (Shaanxi and Yunnan). Due to its long history of missionary work, Catholicism in China is highly concentrated in North China, especially in Hebei and Tianjin (Madsen 1998). Muslims are highly concentrated in Northwestern China, including Xinjiang, Ningxia, Gansu, and Qinghai Province (Davis 2008; Gladney 1996), while Tibetan Buddhists are the majority of the population in Tibet. On the other hand, Southeast China, such as Fujian, Guangdong, and Jiangxi Provinces are famous for their various folk religions (Dean 2003; Palmer, Shive and Wickeri 2011).

The concentration of a particular religion, especially homogeneous institutional religions, in a certain region may: (1) generate and influence shared social norms among individuals in that region through social interactions, rites, and rituals (E. Durkheim 1926; Stark 1996; Stark, Kent, and Doyle 1982); (2) internalize individuals with the conception of powerful, morally conscious god(s) (Corcoran, Pettinicchio, and Robbins 2012; Stark 2001); and (3) provide dense networks and social capital that enhance civic engagement, social trust, and social and psychological support and control for community members (Lee 2006; Lee and Bartkowski 2004;

Regnerus 2003; Tsai 2007). We intend to examine whether institutional religion at provincial level shapes a moral community that alters the effect of individual religiosity on law and rule violation.[4]

HYPOTHESES

Taken together, focusing on province as aggregate unit, we test the following hypotheses.

- Hypothesis 1: *Individual-level religiosity is inversely related to individual-level deviance.*
- Hypothesis 2: *Province-level religiosity is inversely related to individual-level deviance.*
- Hypothesis 3: *Province-level of religiosity enhances the inverse relationship between individual-level religiosity and deviance.*

METHODS

Data

Data we analyzed come from multiple sources: the 2010 Wave of China General Social Survey (henceforth, CGSS 2010) and the Spatial Explorer of Religions, collected between 2002 and 2004. First, the CGSS 2010 resembles the General Social Survey of the United States and includes a series of questions about deviant behaviors, such as violation of the law and government, workplace, organization, and transportation rules. A multistage sampling design was used to obtain a nationally representative sample of individuals from each of 22 provinces and four Municipalities (Beijing, Shanghai, Tianjin, and Chongqing). The first 100 counties (or districts) were selected randomly across China, while five major cities (Beijing, Shanghai, Tianjin, Guangzhou, and Shenzhen) were treated as the primary sampling unit. Second, from each county, four communities or villages were randomly drawn. Then 25 households were randomly selected from each community, and, finally, one individual, age 18 or older, was randomly chosen from each household. From the five major cities, a total of 80 communities were randomly selected. In the end, 480 communities of administrative units and villages were selected, and the total sample size of individual respondents was 11,770. Second, province-level religiosity is measured based on data from the Spatial Explorer of Religions, made available by the China Data Center at Michigan University.[5] The

[4] However, we will not examine folk religion for two reasons. First and foremost, there is no data available to measure the presence of folk religion at provincial level. Second, based on our previous argument, folk religions are less likely than institutional religions to shape a moral community in secular China for three reasons: (1) folk religions are unlikely to generate a common moral order for individuals because of their numerous gods and deities (Corcoran, Pettinicchio, and Robbins 2012; Stark 2001); (2) folk religions lack a systematic orthodoxy and structures to constrain individual behaviors (C. K. Yang 1961); and (3) folk religions serve primarily as a utilitarian tool for self-centered and self-serving individuals (Chen 1995; Stark 2001; Wang and Jang forthcoming).

[5] The link to the website: http://chinadataonline.org/religionexplorer/religion40/#; accessed on 2016-05-20.

Spatial Explorer of Religion provides the number of religious sites of Buddhism, Daoism, Christianity, and Islam that existed in 31 provinces during the period of 2002-2004 (Bao, Wang, and Shui 2014). Third, income inequality at provincial level is measured using the Theil Index, published by Lu and Xu (2004), while the index is not available for four municipalities: Beijing, Tianjin, Shanghai, and Chongqing. Fourth, total population in each province comes from 2010 China Census data.[6] Fifth, the percentages for the communist party members in each province is clustered by the self-reported communist party member in China GSS 2010. Finally, other provincial characteristics such as illiteracy rate, urbanization rate, GDP per capita, and ethnic composition were obtained from the 2010 China Census data.

As explained, we focus only on institutional religion, so followers of folk religion are excluded from our analysis. In addition, Tibet is dropped because the unit contain less than 30 valid cases at individual level. As a result, the final sample consists of 9,528 valid cases from 25 provinces.

Measurement

Dependent Variables

We use five items to measure the violation of conventional authority: the law, transportation rules, the government rules, workplace rules, and other organizational rules: "How often do you obey the law/transportation rule/government rule/workplace rule/organizational rule?" (1 = not at all, 2 = rarely, 3 = sometimes, 4 = very often, 5 = always). The response categories are reversed-coded so a higher score represents more frequent violation. As anticipated for a general population, the items' distributions are highly skewed. For example, 69.2 percent of respondents reported that they never violated the law, whereas the remaining 30.8 percent said they did rarely (29.0%), sometimes (1.3%), very often (.3%), or always (.2%). To address this skewness, the item is dichotomized: 0 = no violation and 1 = violation. For the same reason, four items of rule violation are also dichotomized.[7]

Individual-level Independent Variables

[6] Administrative Divisions of People's Republic of China, from Chinese government website: http://www.gov.cn/test/2005-06/15/content_18253.htm, accessed on May 24th, 2016.

[7] Likewise, 63.3 percent respondents reported that they had never violated the government rule, whereas 36.7 percent said that they did rarely (33.2%), sometimes (2.8%), very often (.4) or always (.3). Almost 60 percent (58.2%) respondents reported that they had never violated the transportation rule, whereas 41.8 percent said that they did rarely (36.3%), sometimes (3.8%), very often (.1.3) or always (.4). About the same majority (60.4%) reported that they had never violated the workplace rule at all, while 35.2, 3.2, .7 and .5 percent reported they did very rarely, sometimes, very often and always, respectively. Similarly, 65.5, 31.6, 2.2, .3,.3 percent reported that they had never violated organization rules, very rarely, sometimes, very often or always, respectively.

Religiosity. Religious affiliation is used to measure an individual's religiosity. Specifically, respondents who identified themselves as Buddhist, Daoist, Christian, or Muslim are all coded as 1 with those who identified as "religious none" coded as 0.

Sociodemographic Characteristics. To control for various sources of spuriousness, we construct sociodemographic variables: age, gender (0 = male, 1 = female), ethnicity (0 = Han majority, 1 = non-Han minority), education (0 = no education, 1 = elementary school, 2 = middle school, 3 = high school, 4 = Junior college; 5 = college and above), annual personal income (logged), employment status (0 = employed, 1 = unemployed), marital status (0 = single, divorced, separated, or widowed, 1 = married), place of residence (0 = rural 1 = urban), and Community Party membership (0 = no, 1 = yes).

Province-level Independent Variables

Religiosity. To measure aggregate-level religiosity, the number of religious sites (including Buddhist temples, Daoist temples, churches, and mosques) per 10,000 residents of each province is calculated. We use the rate of religious sites for two reasons: one is the lack of data available to measure the percentage of people affiliated with institutional religion in each province, and the other is the expectation that a higher percent of residents with religious affiliation in a province would lead to a higher number of religious sites in the province, which makes the rate of religious sites a reasonable measure of province-level religiosity.

Sociodemographic Characteristics. GDP per capita of 2010 is used to measure the level of economic development of each province, and illiteracy rate is employed as a measure of province's educational level. Another measure of province-level socioeconomic status, the Theil Index (similar with Gini Index) is included in analysis to control for income inequality within province. The urbanization rate is operationalized by the percentage of urban population in each province in 2010, whereas the total population of province is measured in units of 10,000 people. Finally, we measure ethnic heterogeneity in terms of the percentage of ethnic minority (i.e., non-Han) residents in province and construct a variable of percent Community Party members in province given its significance in China.

Analytic Strategy

To simultaneously account for the interdependence of individuals within the same social context and model both provincial-level and individual-level variance on deviance, we conduct multilevel mixed-effects logistic regression analysis (Raudenbush et al. 2004). Thus, in our model individual deviance is explained by both individual and provincial characteristics.

In the first model—the individual-level model—we examine the relationship between individual religiosity and the odds of violating the law or rule, controlling for individual-level characteristics, while considering the variance at the individual and provincial level. In the second model—the context-level model—we estimate the relationship between province-level religiosity and individual-level deviance, controlling for province-level sociodemographic characteristics, while also accounting for the variance at the individual and the province levels. The third model—the multi-level model—investigate whether community-level and the individual-level religiosity are related to individual-level violation of conventional authority controlling for both provincial and individual characteristics. The fourth model—the cross-level interactive model—examine whether the strength of the relationship between individual-level religiosity and deviance increases along with the provincial religiosity by testing whether the random slope for the cross-level interactions is significant. In the first three models, we fix the random slopes because we are interested in the extent to which the mean level of deviance varies across provinces. In this final model, we intend to see if there is statistically significant cross-level interaction between individual and community religiosity (i.e., whether the effect of individual religiosity on the odds of violating the law and rules is strengthened by the religious context), for which the random slope for the individual religiosity is added.[8]

RESULTS

Descriptive statistics of variables include in analysis are summarized in Appendix A. About 11 percent (10.9%) of the final sample are affiliated with institutional religion, and less than half of them answer affirmatively the questions about violating the law and rules, ranging from 31.8 percent (law violation) to 43.1 percent (transportation rule violation). Survey respondents are, on average, about 49 years old, and the sample is 51.9 percent female, 9.0 percent ethnic minority (i.e., non-Han), 81.0 percent married, 43.1 percent urban residents, 6.0 percent unemployed, and 11.4 percent Community Party members.

The average number of religious sites in China is less than one per 10, 000 people, confirming that China is a highly secular country. The aggregate-level religiosity, however, varied across provinces, ranging from .036 (Guangxi) to 11.039 (Xinjiang), which suggests that these religious minorities are highly concentrated geographically (See Figure 1). The average GDP per capita is 25,638.77 RMB (≈$3,845.82) with the minimum and

[8] Since we were interested primarily in estimating the dichotomous slope model (affiliation of instituted religion), we did not center the variables that are not dichotomous around a group or grand mean (Kreft, Kreft, and Leeuw 1998; Regnerus 2003).

maximum being 10,301.95 RMB (≈$1,586.92) and 44,604.92 RMB (≈$6,862.30), and economic inequality, measured by the Theil index, also varies across provinces, from .063 (Zhejiang) to .489 (Guangdong). The average proportion of urban population in province is about 47 percent with the minimum and maximum being 29.9 percent (Guizhou) and 63.4 percent (Guangdong), respectively. While the illiteracy rate is, on average, 7.2 percent, the rate range from 3.2 percent (Liaoning) to 15.9 percent (Gansu), whereas the percentage of ethnic minorities in province varies widely across provinces, from .3 percent (Jiangxi) to 59.4 percent (Xinjiang). Finally, the percentage of Communist Party members in province is, on average, 11.4 percent, ranging from 7.0 percent (Hebei) to 25.3 percent (Qinghai).

(Insert Figure 1 about here)

Table 1 presents results from estimating logistic regression models that include only the individual-level independent variables. Being consistent with Hypothesis 1, respondents affiliated with institutional religions report significantly lower odds of violating the law (−.276), workplace rule (−.233), government rule (−.226), organizational rule (−.229) and transportation rule (−.306) compared with their religious-none counterparts. That is, an individual's religiosity, whether affiliated with Christianity, Islam, Buddhism or Daoism, is inversely related to the individual's odds of violating the law and rules. Contrary to some of previous findings that religion has no protective effect on deviance in China (Stark 2001; Zhang and Thomas 1994; Zhang and Xu 2007), we find institutional religion to have the hypothesized effect of social conformity, a virtue that is also emphasized by the Confucian ethic.

(Insert Table 1 about here)

Besides this key finding, sociodemographic variables are generally found to have significant relationships with the law and rule violations in the expected directions. For example, ethnic minority respondents report higher odds of violating the law and rules compared to their peers of Han ethnicity, which might have been due in part to their lack of assimilation into the Han-centric norms of China (Shahar and Weller 1996). Also, respondents of older age and higher education and income are less likely to violate the law and various rules than those of younger age and lower education and income, one exception being the education-government rule relationship (−.020, $p > .05$). In addition, females are less likely to violate the law and organizational rule than males, although they are not different in the odds of violating rules of workplace, government, and transportation. The anticipated protective effect of marriage is found only for the violation of transportation rules. On the other hand, contrary to our

expectation, urban residents are less likely to commit law and rule violations than their non-urban counterparts, and unemployment is inversely related to law violation. Finally, respondents affiliated with the Communist Party is less likely to report deviance of all measures than those who were not Community Party member.

Table 2 shows models of contextual variables only, estimated as the baseline model of moral community thesis. Being consistent with Hypothesis 2, aggregate-level religiosity, that is, the number of religious sites per 10,000 people in province is inversely related to the individual-level violation of the law (−.160), workplace rule (−.112), government rule (−.137), organizational rule (−.126), and transportation rule (−.092), controlling for provincial characteristics. Besides, economic development (GDP per capita) is inversely related to the law and rule violation with one exception (i.e., transportation rule violation). Population size, percent of communist party members, economic inequality, illiteracy rate, and percent of ethnic minorities, however, are not associated with any of the measures of deviance, while province's urbanization rate is positively related to the odds of violating government rules, as anticipated.

(Insert Table 2 about here)

Table 3 reports results from estimating multi-level models that contain both individual-level and province-level independent variables, including individual and provincial religiosity hypothesized to explain the deviance of law and rule violations, without cross-level interactions of religiosity. Controlling for both individual and provincial sociodemographic characteristics, we find both individual-level and province-level religiosity to remain inversely related to the violation of law (−.234 and −.167), workplace rules (−.200 and −.103), government rules (−.184 and −.153), organizational rules (−.193and −.132), and transportation rules (−.287 and −.084), while the odds become somewhat smaller as the sociodemographic variables explain partly the deviant behaviors (see Tables 1 and 2).

(Insert Table 3 about here)

Statistical significance of relationships between other independent variables and deviance also remain the same with three exceptions where non-significant relationships become significant. Two of them involve percent Community Party members in province, which are positively associated with government and transportation rule violation (3.805 and 3.342, respectively). The positive association is an interesting finding given the negative relationship between individual-level Community Party membership and deviance. The other exception was urbanization rate, which is found to be positively associated with violation of the law (.043) as well as government rule (.038), although it is significantly related only to the latter in the contextual model (see Table 2).

Finally, Table 4 shows results from estimating multilevel models that includes cross-level interactions between individual and provincial religiosity, where we find none of the interaction terms are significant. Thus we fail to find support for Hypothesis 3 that the provincial religiosity should increase the effect of individual religiosity on law and rule violations. According to our findings, the effect of an individual's affiliation with institutional religion on law- and rule-violating behaviors does not vary across provinces with different numbers of religious sites. Positively stated, individual religiosity is found to be a protective factor for deviance regardless of the religiousness of province in China.

(Insert Table 4 about here)

Supplemental Analyses

Although we fail to find the religiousness of provincial context benefits individuals affiliated with institutional religion by enhancing the deterrent effect of their religiosity on deviance (i.e., not significant cross-level interactions), our results showed that an individual's odds of violating the law and rules is inversely related not only with individual but also contextual religiosity in the total sample (see Table 2). So, we conduct a supplemental analysis to see whether provincial religiosity had a deterrent effect on deviance among non-religious residents in province, estimating the multilevel models of Table 3 for the subsample of religious nones.

Table 5 presents the supplemental results that show inverse relationships between provincial religiosity and the odds of violating the law (−.267), workplace rule (−.200), government rule (−.264), and organizational rules (−.211). However, it is not significantly related to transportation rule violation (−.093, $p > .05$), perhaps because in China violating transportation rules is less likely to be considered as deviant or immoral than other violations and thus less likely to be affected by the provincial religiousness. Specifically, controlling for other individual-level and province-level variables, we find an increase of one religious site per 10,000 people in a province decreases the odds of violating the law, workplace rules, government rules, and organizational rules by 23.5, 18.1, 23.2, and 19.0 percent, respectively. This finding indicates that a province's religious context tends to deter individuals living in the province from engaging in law- and rule-violating behaviors even if they are not affiliated with institutional religion. In other words, the protective effect of religion is likely to spill over into the broader society beyond the religious community by influencing the normative atmosphere of province.

(Insert Table 5 about here)

DISCUSSION AND CONCLUSION

This study examines the effect of religiosity, measured at both individual and contextual level, on an individual's deviant behaviors in China, where religion is regulated and marginalized (Grim and Finke 2006; Grim and Finke 2007; F. Yang 2006; F. Yang 2011). By doing so, we test the moral community thesis in a non-Western context, which has rarely been done since it was proposed by Stark (Adamczyk 2008; Regnerus 2003; Stark 1996; Wallace et al. 2007; Welch, Tittle, and Petee 1991). Previous tests conducted in the U.S. context t show inconsistent results regarding whether contextual religiosity is inversely related to individual deviance and enhances the inverse relationship between individual religiosity and deviance.

The present study provides partial support for the moral community thesis as we find that contextual religiosity is inversely associated with an individual's violation of the law and various rules, regardless of individual's religious affiliation. Thus our results support Stark's argument that religiosity is a group or communal property that influences an individual's behaviors (Stark 1996; Stark, Kent, and Doyle 1982).

We, however, fail to find significant cross-level interactions: that is, provincial religiosity does not increase the strength of inverse relationship between individual religiosity and deviance, unlike our null hypothesize. Thus, our study provides no supportive evidence of Stark's proposition that the effect of individual religiosity on deviance should be larger or more likely to be observed in a more religious than less or non-religious context (Stark 1996; Stark, Kent, and Doyle 1982). In China, both individual religiosity and contextual religiosity tend to keep individuals from engaging in law and rules violation.

This finding highlights an important role of religion in China in two ways. It suggests that institutional religions in China tend to protect individuals from violating the law and other conventional rules. Scholars have speculated that religion has no significant association with deviance or social conformity because Confucianism emphasizes social conformity as much as religion does (Zhang and Thomas 1994) and religion in China doesn't have an all-powerful God sanctioning the moral behaviors of individuals (Shahar and Weller 1996; Stark 2001). In this study, we separate institutional religion from folk religion because the former, unlike the latter, is expected to have deterrent effect on deviant behaviors because it has a systematic orthodoxy and a/many powerful god(s) that proscribe immoral behaviors including crime and deviance. As we anticipate, people who are affiliated with institutional religion are likely to report lower odds of violating the law and other rules than those who are not. In sum, we find institutional religions in China to have a protective effect on deviance, similar to Christianity in Western contexts (Baier and Wright 2001; B. R. Johnson et al. 2001; B. Johnson and Jang 2011).

In addition, in China institutional religion seems to have a spillover effect in that it is found to protect non-religious as well as religious people from committing deviance. The variation in religiosity observed across provinces is inconsistent with a view that China is a homogeneously secular country (Grim and Finke 2007; Stark 2001). According to our supplemental analysis, religious nones living in more religious provinces are less likely to commit deviance than those in less religious provinces. Perhaps in a vibrant religious environment, conventional religious orthodoxy would build into the local social network and norms to regulate both religious and non-religious individuals from law and rule violations.

The present findings also suggest new research questions for future research. First, while we could not examine the effect of religious concentration or religious diversity in this study, previous researchers have argued that it is homogeneous religion rather than overall religiosity that protects individuals from deviance (Ellison, Burr, and McCall 1997; Regnerus 2003; Trawick and Howsen 2006). Because we treat institutional religions of similar institutions and orthodoxies as belonging to a same group, this study could not examine whether the domination of a homogenous religion or the diversity of religions at provincial level was associated with individual deviance. Future research should examine whether the concentration of a religion in a local setting has an effect on individual deviance.

Second, we could not examine the individual and contextual effect of folk religions because no information about religious sites for folk religion was available in our data, while a previous study shows that folk religions can provide public goods and shaping local democracy for local community (Tsai 2007). Further research needs to measure the regional, provincial, and communal level of folk religiosity to examine the effect of context-level folk religiosity by taking two approaches to data collection. Specifically, the percentage of people who identify themselves with folk religion can be calculated for each province based on survey data. It should be kept in mind, however, that the percentage may be underestimated since many followers of folk religions do not necessarily report that they are affiliated with particular folk religions despite practicing them (Palmer, Shive and Wickeri 2011). Alternatively, religious sites of folk religions, such as ancestor halls and temples of various deities, can be used as an indicator of the context-level folk religiosity.

Third, further studies are needed to incorporate the thriving underground churches into the study of aggregate-level religiosity. Because the Spatial Explorer of Religion data includes only officially registered religious sites, the number of total religious sites is surely an underestimate given that unregistered house churches and small

scale congregations are thriving both in urban and rural China (Bao, Wang, and Shui 2014; Wenger 2004; F. Yang 2005; F. Yang 2010; Yu 2010). Cults with strong organization, such as the Eastern Lightening and Falungong, that are forbidden by the government should also be taken into account (Chan 2004; Dunn 2008).

Additionally, future research on religion in China should examine the religion-deviance relationship using other common but culture-appropriate measures of both constructs. That is, researchers should test the moral community thesis using ascetic (e.g., substance use) as well as anti-ascetic deviance (e.g., law violation). They should also consider types of deviance particularly recognized by the Chinese society (e.g., extramarital sexuality and lack of filial piety). Common measures of religiosity, such as religious salience and practices, should be examined as well. However, church attendance may not be a very good indicator of religiosity because Eastern religions (e.g., Zen Buddhism and Taoism) encourage private rather than public practices of religion, unlike Abrahamic religions that emphasize frequent attendance of communal religious activities. In addition, religious attendance is suppressed as government regulation increases the risk and cost for public attendance (Hu 2013; F. Yang 2006).

Finally, further research is also needed to examine the effect of religiosity at the level of smaller context than province, such as community, county, and village. While we found province-level religiosity to affect individual deviant behaviors, within-province variations in religiosity are worth studying given that not only religiosity but also economic development and historical characteristics related to religion would vary across counties and villages of province (Cai, Wang, and Du 2002; Palmer, Shive and Wickeri 2011; Tsai 2007).

In conclusion, despite limitations acknowledged above, our study partially supports the moral community thesis by finding that contextual as well as individual religiosity is inversely related to individual deviance. Although we fail to find that contextual religiosity increased the inverse relationship between individual religiosity and deviance, the protective effect of contextual religiosity is found to benefit Chinese society beyond religious community, protecting both religious and non-religious people from violating the law and conventional rules.

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Table 1. Religious affiliation as Individual Control: The Individual Influence Hypothesis (Individual N=8,224; province N=25)

	(1) Violating the law	(2) Violating workplace rule	(3) Violating government rule	(4) Violating organizational rule	(5) Violating transportation rule
Institutional religion	-.276**	-.233**	-.226**	-.229**	-.306**
	(.092)	(.086)	(.086)	(.088)	(.083)
Ethnic minority	.357**	.322**	.309**	.295**	.323**
	(.100)	(.098)	(.097)	(.100)	(.095)
Urban resident	-.222**	-.229**	-.158**	-.228**	-.165**
	(.062)	(.059)	(.059)	(.061)	(.058)
Age	-.008**	-.008**	-.010**	-.008**	-.007**
	(.002)	(.002)	(.002)	(.002)	(.002)
Female	-.098*	-.051	-.073	-.124**	-.075
	(.053)	(.050)	(.050)	(.053)	(.049)
Education	-.067**	-.082**	-.020	-.047*	-.076**
	(.027)	(.026)	(.026)	(.026)	(.025)
Married	-.032	-.093	-.095	-.073	-.106*
	(.066)	(.063)	(.063)	(.064)	(.061)
Unemployment	-.194*	.071	.109	-.019	.044
	(.109)	(.102)	(.101)	(.104)	(.100)
Income (logged)	-.031**	-.044**	-.034**	-.028**	-.032**
	(.008)	(.008)	(.008)	(.008)	(.008)
Communist party	-.240**	-.287**	-.365**	-.393**	-.223**
	(.089)	(.083)	(.084)	(.087)	(.080)
Intercept	.013	.677**	.366**	.177	.635**
	(.189)	(.169)	(.172)	(.185)	(.165)
Province Intercept	.295**	.167**	.199**	.286**	.160**
	(.095)	(.053)	(.064)	(.091)	(.050)
ICC	8.23%	4.84%	5.69%	7.99%	4.63%

Note. Unstandardized coefficients are reported; * $p < .05$(one-tailed test), ** $p < .05$(two-tailed test).

Table 2. Religiosity as Contextual Control: The Moral Communities Hypothesis (Individual N=8,224; province N=25)

	(1) Violating the law	(2) Violating workplace rule	(3) Violating government rule	(4) Violating organizational rule	(5) Violating transportation rule
Religious sites	-.160**	-.112**	-.137**	-.126**	-.092**
per 10,000 people	(.051)	(.043)	(.044)	(.051)	(.043)
Total population	.109	-1.193	1.502	1.65	-4.044
	(6.505)	(5.536)	(5.703)	(6.68)	(5.685)
Percent of	.325	1.929	1.677	.445	1.728
communist	(2.257)	(1.894)	(1.954)	(2.320)	(1.942)
GDP per capita	-.400*	-.340*	-.368**	-.404*	-.150
(10,000 RMB)	(.208)	(.178)	(.183)	(.214)	(.183)
Urbanization rate	.041	.025	.038*	.033	-.001
	(.026)	(.022)	(.023)	(.026)	(.022)
Theil Index	-.818	-.119	-.091	-.501	.817
	(.960)	(.813)	(.837)	(.988)	(.837)
Illiteracy rate	-.034	-.023	-.018	-.045	-.035
	(.029)	(.024)	(.025)	(.029)	(.025)
Percent of ethnic	.008	.003	.009	.004	.004
minority	(.008)	(.007)	(.007)	(.008)	(.007)
Intercept	-1.370	-.629	-1.476*	-.809	.201
	(.986)	(.833)	(.858)	(1.010)	(.852)
Province intercept	.133**	.094**	.100**	.143**	.102**
	(.045)	(.031)	(.034)	(.048)	(.032)
ICC	3.90%	2.77%	2.95%	4.17%	3.00%

Note. Unstandardized coefficients are reported; * $p < .05$(one-tailed test), ** $p < .05$(two-tailed test).

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Table 3. Religion as Individual and Contextual Control (Individual N=8,224; province N=25)

	(1) Violating the law	(2) Violating workplace rule	(3) Violating government rule	(4) Violating organizational rule	(5) Violating transportation rule
Individual Level					
Institutional religion	-.234**	-.200**	-.184**	-.193**	-.287**
	(.092)	(.086)	(.086)	(.088)	(.084)
Ethnic minority	.405**	.364**	.361**	.342**	.341**
	(.101)	(.100)	(.099)	(.101)	(.097)
Urban resident	-.214**	-.223**	-.151**	-.222**	-.163**
	(.062)	(.059)	(.059)	(.061)	(.058)
Age	-.008**	-.008**	-.0100**	-.008**	-.007**
	(.002)	(.002)	(.0019)	(.002)	(.002)
Female	-.100*	-.053	-.0748	-.126**	-.076
	(.053)	(.050)	(.0502)	(.052)	(.049)
Education	-.070**	-.085**	-.0239	-.050*	-.078**
	(.027)	(.026)	(.0257)	(.026)	(.025)
Married	-.034	-.094	-.0958	-.074	-.107*
	(.066)	(.063)	(.0626)	(.064)	(.061)
Unemployment	-.197*	.069	.107	-.021	.042
	(.109)	(.102)	(.101)	(.104)	(.100)
Income (logged)	-.030**	-.043**	-.034**	-.027**	-.031**
	(.008)	(.008)	(.008)	(.008)	(.008)
Communist party	-.235**	-.284**	-.361**	-.389**	-.222**
	(.089)	(.083)	(.084)	(.087)	(.080)
Contextual Level					
Religious sites	-.167**	-.103**	-.153**	-.132**	-.084*
per 10,000 people	(.052)	(.044)	(.045)	(.052)	(.045)
Total population	-1.875	-2.511	-.978	-.399	-4.824
	(6.300)	(5.427)	(5.469)	(6.474)	(5.875)
Percent of	3.189	4.190**	3.805**	3.178	3.342*
communist	(2.202)	(1.874)	(1.893)	(2.266)	(2.024)
GDP per capita	-.400**	-.337*	-.346**	-.406*	-.160
(10,000 RMB)	(.202)	(.175)	(.176)	(.208)	(.189)
Urbanization rate	.043*	.028	.038*	.034	.003
	(.025)	(.022)	(.022)	(.026)	(.023)
Theil Index	-.720	.067	-.003	-.370	.919
	(.929)	(.796)	(.801)	(.955)	(.867)
Illiteracy rate	-.033	-.017	-.010	-.041	-.029
	(.028)	(.024)	(.024)	(.029)	(.026)
Percent of ethnic	.000	-.002	.002	-.004	-.001
minority	(.008)	(.007)	(.007)	(.008)	(.008)
Intercept	-.738	.078	-.758	-.172	.801
	(.968)	(.827)	(.836)	(.990)	(.892)
Province intercept	.120**	.086**	.087**	.129**	.107**
	(.041)	(.029)	(.030)	(.044)	(.035)
ICC	3.51%	2.56%	2.59%	3.78%	3.15%

Note. Unstandardized coefficients are reported; * $p < .05$(one-tailed test), ** $p < .05$(two-tailed test).

Table 4. Individual and Contextual Interaction Model (Individual N=8,224; province N=25)

	(1) Violating the law	(2) Violating workplace rule	(3) Violating government rule	(4) Violating organizational rule	(5) Violating transportation rule
Individual Level					
Institutional religion (A)	-.293**	-.273**	-.267**	-.244**	-.302**
	(.106)	(.097)	(.100)	(.101)	(.091)
Ethnic minority	.401**	.352**	.352**	.338**	.337**
	(.101)	(.100)	(.099)	(.101)	(.098)
Urban resident	-.215**	-.224**	-.152**	-.222**	-.163**
	(.062)	(.059)	(.059)	(.061)	(.058)
Age	-.008**	-.008**	-.010**	-.008**	-.007**
	(.002)	(.002)	(.002)	(.002)	(.002)
Female	-.099*	-.051	-.074	-.125**	-.075
	(.053)	(.050)	(.050)	(.052)	(.049)
Education	-.070**	-.084**	-.024	-.050*	-.078**
	(.027)	(.026)	(.026)	(.026)	(.025)
Married	-.034	-.094	-.096	-.074	-.107*
	(.066)	(.063)	(.063)	(.064)	(.061)
Unemployment	-.197*	.068	.106	-.022	.041
	(.109)	(.102)	(.101)	(.104)	(.100)
Income (logged)	-.030**	-.043**	-.034**	-.027**	-.031**
	(.008)	(.008)	(.008)	(.008)	(.008)
Communist party	-.234**	-.282**	-.359**	-.387**	-.221**
	(.089)	(.083)	(.084)	(.087)	(.080)
Contextual Level					
Religious sites	-.253**	-.196**	-.269**	-.206**	-.101*
per 10,000 people (B)	(.097)	(.075)	(.086)	(.088)	(.060)
Total population	-3.033	-3.754	-2.525	-1.402	-5.047
	(6.272)	(5.408)	(5.446)	(6.395)	(5.883)
Percent of	3.957*	5.009**	4.818**	3.854*	3.489*
communist	(2.276)	(1.921)	(1.961)	(2.308)	(2.049)
GDP per capita	-.395**	-.331*	-.340**	-.401**	-.158
(10,000 RMB)	(.199)	(.172)	(.173)	(.203)	(.188)
Urbanization rate	.044*	.029	.041*	.035	.003
	(.023)	(.021)	(.021)	(.025)	(.023)
Theil Index	-.806	-.018	-.118	-.440	.906
	(.915)	(.787)	(.788)	(.935)	(.865)
Illiteracy rate	-.022	-.006	.004	-.032	-.027
	(.030)	(.025)	(.026)	(.029)	(.026)
Percent of ethnic	-.001	-.004	.001	-.005	-.001
	(.008)	(.007)	(.007)	(.008)	(.008)
A × B	.108	.120	.145	.093	.022
	(.099)	(.076)	(.089)	(.088)	(.053)
Intercept	-.897	-.086	-.973	-.306	.774
	(.964)	(.824)	(.833)	(.977)	(.892)
Province Intercept	.114**	.083**	.083**	.122**	.106**
	(.039)	(.028)	(.028)	(.042)	(.035)
ICC	3.35%	2.47%	2.46%	3.58%	3.13%

Note. Unstandardized coefficients are reported; * $p < .05$(one-tailed test), ** $p < .05$(two-tailed test).

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Table 5. Religion as Individual and Contextual Control for Religious Nones (Individual N=7, 364, Province N=25)

Variables	(1) Violating the law	(2) Violating workplace rule	(3) Violating government rule	(4) Violating organizational rule	(5) Violating transportation rule
Individual-level					
Ethnic minority	.499**	.498**	.454**	.494**	.444**
	(.111)	(.112)	(.110)	(.113)	(.110)
Urban resident	-.207**	-.222**	-.145**	-.226**	-.176**
	(.0654)	(.0625)	(.0626)	(.0640)	(.0612)
Age	-.00815**	-.00896**	-.0107**	-.00809**	-.00806**
	(.00207)	(.00199)	(.00198)	(.00202)	(.00193)
Female	-.0870	-.0168	-.0532	-.124**	-.0757
	(.0553)	(.0529)	(.0529)	(.0542)	(.0517)
Education	-.0806**	-.0957**	-.0342	-.0601**	-.0876**
	(.0284)	(.0271)	(.0270)	(.0278)	(.0263)
Married	.0107	-.0563	-.0479	-.0201	-.0598
	(.0700)	(.0669)	(.0667)	(.0685)	(.0653)
Unemployment	-.234**	.00998	.0889	-.0461	-.00484
	(.116)	(.108)	(.107)	(.110)	(.106)
Income (logged)	-.0279**	-.0406**	-.0329**	-.0262**	-.0316**
	(.00870)	(.00852)	(.00838)	(.00858)	(.00827)
Communist party	-.255**	-.282**	-.360**	-.420**	-.252**
	(.0918)	(.0861)	(.0872)	(.0902)	(.0831)
Contextual Level					
Religious sites	-.267**	-.200**	-.264**	-.211**	-.0931
per 10,000 people	(.113)	(.0801)	(.0930)	(.0994)	(.0624)
Total population	-4.824	-4.692	-3.520	-2.374	-5.547
	(6.470)	(5.416)	(5.595)	(6.691)	(6.156)
Percent of	4.156*	5.047**	4.970**	3.946	3.802*
communist	(2.416)	(1.963)	(2.052)	(2.464)	(2.167)
GDP per capita	-.371*	-.330*	-.314*	-.379*	-.161
(10,000 RMB)	(.207)	(.175)	(.180)	(.215)	(.200)
Urbanization rate	.0424	.0311	.0371	.0347	.00385
	(.0266)	(.0221)	(.0229)	(.0275)	(.0253)
Theil Index	-.770	.0202	.143	-.392	1.013
	(.962)	(.800)	(.826)	(.995)	(.916)
Illiteracy rate	-.0184	-.000729	.000906	-.0285	-.0291
	(.0340)	(.0268)	(.0287)	(.0334)	(.0284)
Percent of ethnic	-.00186	-.00402	.000998	-.00590	-.00178
minority	(.00821)	(.00687)	(.00708)	(.00849)	(.00783)
Intercept	-.908	-.229	-.889	-.377	.764
	(1.050)	(.862)	(.899)	(1.072)	(.966)
Province intercept	.118**	.0802**	.0854**	.131**	.115**
	(.0422)	(.0285)	(.0301)	(.0464)	(.0383)
ICC	3.45%	2.38%	2.53%	3.38%	3.37%

Note. Unstandardized coefficients are reported; * $p < .05$(one-tailed test), ** $p < .05$(two-tailed test).

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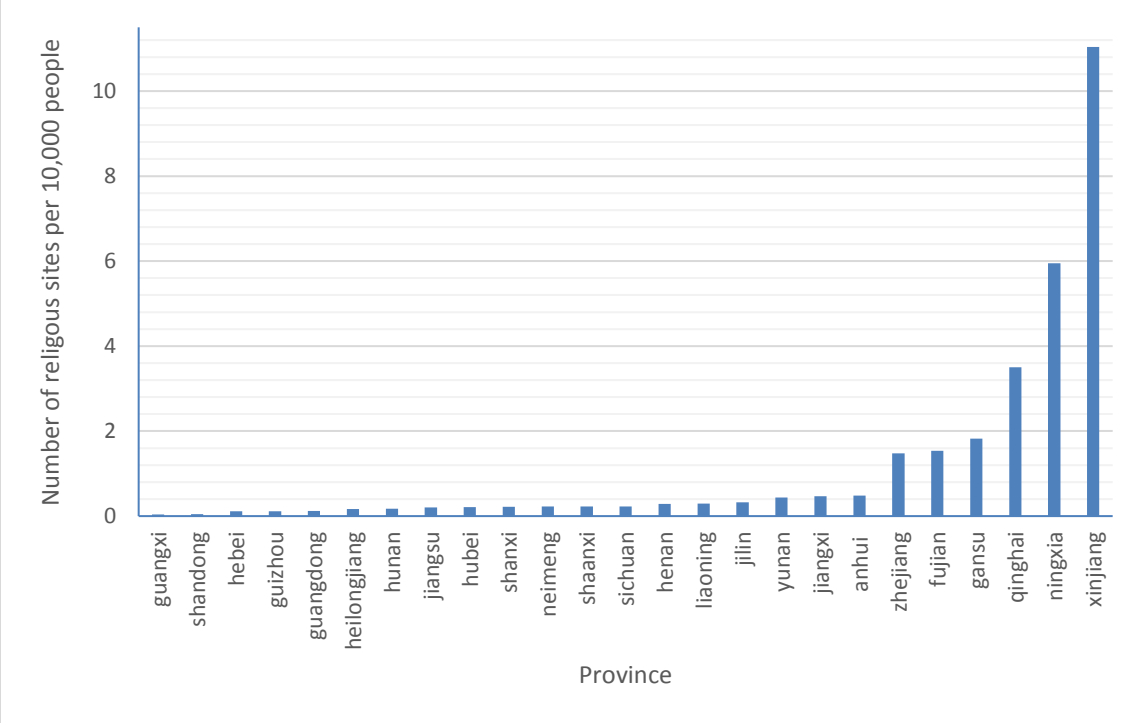

Figure 1. Number of religious sites per 10,000 people in 25 provinces in China

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Appendix A. Descriptive Statistics (individual variables N=8224 provincial variables N=25)

Variable	Mean	S.D.	Range
Individual Level			
Law violation "Have you ever violated the law?" (1=yes;0=no)	.318	.466	0 – 1
Government rule violation "Have you ever violated government rules?" (1=yes;0=no)	.377	.485	0 – 1
Working rule violation "Have you ever violated working rules?" (1=yes;0=no)	.411	.492	0 – 1
Organization rule violation "Have you ever violated organization rules?" (1=yes;0=no)	.357	.479	0 – 1
Transportation rule violation "Have you ever violated transportation rules?" (1=yes;0=no)	.431	.495	0 – 1
Affiliating with institutional religion (1=affiliating with Buddhism, Taoism, Christianity or Islam; 0=no religious affiliation)	.109	.312	0 – 1
Ethnicity (1=non-Han ethnicity; 0=Han ethnicity)	.090	.286	0 – 1
Residence (1=urban residence;0=rural residence)	.431	.495	0 – 1
Age (at the year of survey)	48.838	15.497	19 – 98
Female (1=female;0=male)	.519	.500	0 – 1
Education (0=no education; 1=elementary school; 2=middle school; 3=high school; 4=adult high education; 5=college education and above)	1.971	1.338	0 – 5
Married (1=yes; 0=no)	.810	.393	0 – 1
Unemployment (1=yes; 0=no)	.060	.238	0 – 1
Annual personal income (logged)	8.037	3.184	0 – 14.845
Communist party member (1=yes; 0=no)	.114	.318	0 – 1
Contextual Level			
Number of religious institutions per 10,000 people	.575	1.321	.036 – 11.039
Total Population (10,000 people)	.032	.020	.001 – 075
Percent of communist party members	.114	.034	.070 – .253
GDP per capita (10,000 RMB ≈ U$1,500)	2.564	1.015	1.030 – 4.460
Urbanization rate	46.873	8.687	29.890 – 63.400
Theil index	.156	.098	.063 – .489
Illiteracy rate	7.201	3.276	3.200 – 15.940
Percent of minor ethnicity	8.672	12.858	.310 – 59.430

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