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Religious Adherence and Military Enlistment
Before and After the 9/11 Attacks

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Abstract

Recent analyses indicate that young people from rural areas of the United States and the South have been more likely than others to enlist in the U.S. armed forces. The current study attempts to determine whether variation in the level of church adherence among the states has had an independent influence on the considerable differences in state enlistment rates for non-prior service active duty enlisted military personnel. The results indicate that church adherence was negatively related to enlistment both before and after 9/11. While the relationships of other factors to enlistment appeared to weaken after 9/11, the relationship of church adherence became stronger. Two other measures of social organization, percent divorced and percent of average annual net state domestic migration during 1990–2000, displayed patterns of relationship to enlistment that were similar to the pattern of church adherence. Further analyses indicated that the negative effect of church adherence on enlistment rates was connected largely to the divorce rate. Additional findings indicated that a dimension of local culture (religious belief system) might partially condition the apparent social organizational effect of church adherence on enlistment, since in multivariate analyses, the results for evangelical Protestant adherence differed from those obtained for total church adherence.

U.S. states differ widely in the tendency of their residents to enlist in the armed forces. For FY2000 (fiscal year 2000: October 1999 through September 2000), the ratios of non-prior service active duty enlistees in Montana, Wyoming, and Alaska to their shares of the country's 18- to 24-year-olds were 1.91, 1.65, and 1.57, respectively. This means that Montana contributed 91 percent more enlistees than its share of the nation's 18- to 24-year-olds, while Wyoming exceeded its share by 65 percent and Alaska by 57 percent. In comparison, the ratio for Massachusetts was 0.53, Utah's ratio was 0.55, and Minnesota's was 0.61. In other words, Massachusetts' number of enlistees in FY2000 was 47 percent below its share of the country's 18- to 24-year olds, while Utah's number of enlistees was 45 percent below its share, and that of Minnesota was 39 percent below. Similar contrasts in enlistment ratios existed in earlier and later years. For example, in FY2003, a year after the 9/11 attacks, Montana's enlistment ratio was 1.62, Alaska's was 1.43, and Florida's was 1.39, while the ratios for Rhode Island, Utah, and Massachusetts were 0.60, 0.62, and 0.62, respectively.

Despite the large interstate differences in enlistment, only limited sociological research appears to have addressed this topic. Previous research seems to have linked only a few social or cultural factors to geographical variation in enlistment. Recent analyses indicate that young people from rural areas of the United States, from the South, and/or living in areas that have a high proportion of people employed in the military are more likely to enlist than are other young people. The current study attempts to determine whether variation in the level of church adherence among the states has an independent influence on military enlistment.

BACKGROUND

Much of the existing research on non-prior service active duty military enlistment reflects social psychological or economic approaches. For example, Winkler's (1993: 398-399) survey of studies on military recruits indicated that the decision to enlist was often affected by concerns about economic and/or educational opportunities. Current employment status and perception of job security through military employment influenced enlistment, as did the anticipation that service in the military would result in getting financial aid for continuing education. Some studies showed that social support for enlisting also contributed to the decision to join the armed forces.

Bachman, Segal, Freedman-Doan, and O'Malley (2000: 1-30) analyzed data from a sample of more than 100,000 high school seniors for the years 1984-1991 and found that those who had favorable attitudes toward the military or felt that the military should have more influence and should receive more funding were more likely to enlist. They also found that young people from the South were more inclined to enlist than were those from other regions.

The Rand Corporation (2001) reported that the higher the local unemployment rate, the more likely high school seniors were to join the military, and that enlistment was also more likely among high school graduates who had parents serving in the armed forces. In her analyses of more than 2,000 male seniors enrolled in ninety-eight randomly selected Texas high schools, Kleykamp (2006) found that the percentage of the county workforce employed in the armed forces was positively related to students' tendency to enlist. Using Department of Defense data on new military recruits for FY1999, about 87 percent of whom were aged 18–24 years, Kane (2005) reported geographic analyses of enlistees suggesting that recruits were more likely to come from Southern and rural areas. O'Hare and Bishop (2006) provided an analysis of U.S. military fatalities in Iraq and Afghanistan that indicated an overrepresentation of soldiers from rural areas.

Although no sociological perspective relating to religion appears to have been applied directly to the topic of military enlistment, it is possible to adapt sociology of religion perspectives previously applied to illegal violence in order to study state-legitimated violence in the form of military service. The two major relevant approaches used here are the role of religion as an institutional force for social organization binding an individual to a moral community and the concept that the content of the belief system of a moral community might relate to military service.

Lee (2006) described several conceptual approaches regarding the potential macro-level association between religion and crime. He noted that the "religious institutional base" is thought to limit crime because churches both constitute and foster social networks. Citing Wilson (1996), Lee suggests that churches reduce the percentage of young people who are characterized by relative social isolation, which makes them more available for recruitment to criminal activities than is the case for young people who are less socially isolated.

A derivative of this hypothesis is that the incidence of social isolation among young people should correlate positively with local cultural acceptance of military enlistment as a way of reducing social isolation by entering the military community. This perspective suggests that states with lower percentages of the population who are church adherents might be expected to have higher enlistment rates. Lee also suggests that a second way in which churches as social institutions might limit crime is through their social networks providing young people with a structure of social options. It is likely that church-related institutional networks provide a wider range of legitimate options than young people would otherwise encounter. The fewer such options there are, the more culturally supported military enlistment is likely to be. Thus the institutional perspective on the impact of church adherence leads to the hypothesis that there should generally be an inverse relationship between church adherence and military enlistment.

However, two other perspectives that Lee described, the moral community approach and the conservative Protestant thesis, suggest that it is not just the

church as an institution, but also the content of church beliefs that affect local culture and the cultural attractiveness of military enlistment. The moral community concept hypothesizes that “crime rates will be lower where higher proportions of the population are actively religious” (Lee 2006: 310). However, this hypothesis is based on the reasonable assumption that religious belief is uniformly opposed to crime. Obviously, there is no validity for making such an assumption when it comes to military enlistment. Some religions might be generally opposed to military service, although this is relatively rare in the United States. It is more likely that the content of a religious belief system or the public positions taken by a religion’s clerical leaders will specify a greater or lesser acceptance of state-supported violence such as the death penalty or conflicts in which new enlistees might be expected to participate. The conservative Protestant thesis (Borg 1997; Ellison 1991; Ellison, Burr, and McCall 2003) specifically identifies certain aspects of conservative Protestant beliefs that are more supportive of state-supported violence—for example, capital punishment—than is the case for other religious belief systems. Ellison, Burr, and McCall (2003), in line with this concept, suggest that conservative Protestant culture supports a higher tolerance of violence than do other religious belief systems in certain circumstances, such as in defense of honor or family. Their work implies that the relationship of church adherence to military enlistment might in fact be partially dependent on the level of a religious belief system’s tolerance of violence in specific contexts.

In the current study, we hypothesize that if there is a difference among major U.S. religions in the relationship of church adherence to military enlistment, it would most likely be seen for evangelical Protestant church adherence.

DATA AND METHODS

The dependent variable in this study is the ratio of the percentage of first-time (non-prior service) active duty military enlistees for a particular state in a given year to the percentage of U.S. 18- to 24-year-olds designated as resident in that state (Kane 2005). For example, in FY2000 (October 1999 to September 2000), about 11.04 percent of all non-prior service active duty recruits to the armed forces came from California, where approximately 12.43 percent of all 18- to 24-year-olds in the U.S. resided. Therefore California’s enlistment ratio for FY2000 was $11.04/12.43 = 0.89$. For the same year, Ohio’s enlistment ratio was 1.00, and Florida’s was 1.35. So for FY2000, California’s number of recruits was 11 percent lower than would be expected on the basis of the percentage of the country’s 18- to 24-year-olds living in California, whereas Ohio contributed recruits in direct proportion to its share of the country’s 18-to 24-year-olds. Florida, in comparison, provided about 35 percent more recruits than its statistical

proportion of the country's 18-to 24-year-olds. State enlistment ratios were calculated for the years FY1998–FY2005 (U.S. Department of Defense, 1998–2005), during which 86–88 percent of recruits were aged 18–24 years.

Variables that were included in separate analyses to explain the variation in enlistment levels among states were the percentage of the total number of church adherents (all full recognized members of religious congregations, including their children, along with other congregation participants who were not officially members) among the residents in each state in 2000, the percentage of Catholic church adherents, the percentage who were adherents of mainline Protestant churches, and the percentage who were adherents of evangelical Protestant churches. These data were collected by the Glenmary Research Center (2002). The church adherence data are not age specific. However, we believe that it is reasonable to assume that percentage differences in church adherence among states relate to all age groups, including the 18–24 age range that is typical of first-time enlistees. Furthermore, as was noted above, we view church adherence as primarily a social organizational variable that affects the local cultural attractiveness of military enlistment. In other words, we theorize that an aspect of social structure affects *local culture*, which in turn influences the enlistment rate. Other explanatory variables that were included in multivariate analyses along with church adherence were the percentage of each state's population living in rural areas, the percentage of a state's population employed in the military, a dummy variable for region (South = 1, non-South = 0), and the unemployment rate. The unemployment variable was included in an attempt to control for the way in which limits on economic opportunity in each state might affect enlistment. Data regarding percentage living in rural areas and the unemployment rate were taken from the 2000 Census (U.S. Bureau of the Census, 2002). The percentage of a state's population employed in the military, like the enlistment data, came from the U.S. Department of Defense (2000). To evaluate the concept that church adherence represents a type of social organizational effect on enlistment, two social disorganization variables that were negatively correlated with church adherence, percent annual net domestic state migration in 1990–2000 at -0.383 and percent divorced at -0.598 , were substituted for church adherence in alternate multivariate analyses. Both the 1990–2000 state migration variable and the percent divorced variable were taken from the 2000 Census.

RESULTS

Table 1 displays the top ten and bottom ten states in terms of military enlistment ratios for FY2000. The average percentage of church adherence for the top ten enlistment states was 46.1 percent, and the average church adherence for the bottom ten enlistment states was 58.6 percent.

**Table 1: Top Ten and Bottom Ten State Enlistment Ratios
for FY 2000 and Corresponding Church Adherence Percentages**

State	2000 Enlistment Ratio	Religious Adherence Percentage
<i>Top Ten Enlistment States</i>		
Montana	1.91	44.7%
Wyoming	1.65	46.7%
Alaska	1.57	34.3%
New Mexico	1.48	58.2%
Alabama	1.40	54.8%
Maine	1.39	36.4%
Florida	1.35	41.1%
South Carolina	1.30	47.6%
West Virginia	1.30	35.9%
Oklahoma	1.29	60.8%
Means	1.46	46.1%
<i>Bottom Ten Enlistment States</i>		
Massachusetts	0.53	64.1%
Utah	0.55	74.7%
Minnesota	0.61	61.7%
Rhode Island	0.63	63.5%
Connecticut	0.66	57.9%
Wisconsin	0.75	60.4%
Iowa	0.79	58.5%
Indiana	0.81	42.9%
Michigan	0.81	41.8%
New York	0.82	60.4%
Means	0.70	58.6%

For all the enlistment years in the study, FY1998–FY2005, the percentage of the state population who were church adherents had a statistically significant negative correlation to non–prior service active duty enlistment rates, as is shown in Table 2. Furthermore, while the strength of the correlations between enlistment and percentage living in a rural area, percentage of state population in the military, Southern region, and percentage who were unemployed all weakened after 9/11, the strength of the negative correlation of church adherence to enlistment increased from a pre-9/11 average of -0.435 to a post-9/11 average of -0.537 . In other words, the percentage of total church adherents was associated with about 19 percent of the interstate variation in enlistment rates before 9/11, but it was associated with about 29 percent of the variation after 9/11. Note that we obtained similar results here and in the regression findings reported below when the predominantly Mormon state of Utah was not included in the analyses.

Table 2: Correlations of Church Adherence, Percent Rural, Percent of Population in the Military, Southern Region, and Percent Unemployed with Military Enlistment, FY1998–FY2005

Enlistment	Church Adherence	Percent Rural	Percent Military	South	Percent Unemployed
FY1998	-.437**	.377**	.275	.273	.377**
FY1999	-.416**	.361*	.318*	.283*	.418**
FY2000	-.448**	.313*	.358*	.240	.464***
FY2001	-.438**	.272	.315*	.265	.506***
FY2002	-.509***	.267	.267	.201	.431**
FY2003	-.549***	.244	.301*	.187	.344*
FY2004	-.587***	.207	.359*	.144	.363**
FY2005	-.502***	.263	.279*	.113	.271

$N = 50$.

* $p < .05$, ** $p < .01$, *** $p < .001$.

The multivariate analyses in Table 3 for FY2000–FY2003 show that church adherence had significant independent negative relationships to military enlistment in all four years and that the effect of church adherence on enlistment in FY2002 and FY2003 became stronger than the effects of any of the four other variables.

Table 3: Multivariate Ordinary Least Squares Regression of Military Enlistment on Church Adherence and Other Variables, FY2000–FY2003

Variables	FY2000 Enlistment		FY2001 Enlistment		FY2002 Enlistment		FY2003 Enlistment	
	Beta	B	Beta	B	Beta	B	Beta	B
Church adherence	-.29*	-.0079 (.003)	-.28*	-.0076 (.003)	-.39**	-.0090 (.003)	-.46***	-.0098 (.003)
Percent rural	.29*	.0056 (.002)	.24*	.0046 (.002)	.24*	.0400 (.002)	.23	.0034 (.002)
Percent military	.22	.112 (.061)	.16	.083 (.062)	.11	.049 (.053)	.16	.064 (.050)
South	.09	.051 (.071)	.12	.076 (.072)	.07	.035 (.062)	.07	.032 (.058)
Percent unemployed	.30*	.0917 (.036)	.36**	.111 (.037)	.27*	.070 (.032)	.15	.036 (.030)
R^2	.460		.451		.424		.418	

$N = 50$.

* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed test, standard errors in parentheses).

Table 4 shows the correlations for two indicators of social disorganization, percent divorced and percent annual domestic net state migration during 1990–2000, along with the relationship of church adherence to military enlistment for the years FY1998–FY2005. The two social disorganization variables were consistently positively correlated to enlistment; and, as was the case for church adherence, the magnitude of their correlations to enlistment increased markedly after 9/11.

Table 4: Correlations of Church Adherence, Percent Annual Net Domestic Migration 1990–2000, and Percent Divorced with Military Enlistment, FY1998–FY2005

Enlistment	Church Adherence	Percent Net State Migration 1990–2000	
		Annual Average	Percent Divorced
FY1998	-.437**	.203	.519***
FY1999	-.416**	.192	.519***
FY2000	-.448**	.223	.528***
FY2001	-.438**	.302*	.588***
FY2002	-.509***	.409**	.659***
FY2003	-.549***	.381	.631***
FY2004	-.587***	.368**	.618***
FY2005	-.502***	.428**	.638***

N = 50.

p* < .05, *p* < .01, ****p* < .001.

Table 5 shows results of the regression analyses of enlistment for FY2000–FY2003 with percent annual domestic net state migration during 1990–2000 substituted for church adherence. Table 6 shows results after substitution of percent divorced for church adherence. Both of these indicators of social disorganization had significant impacts on enlistment for all four years, and, similar to church adherence, their standardized regression coefficients were notably larger than those for other variables in the regressions in FY2002 and FY2003.

Additional multivariate regression analyses indicated that the effect of church adherence on enlistment was largely indirect, conveyed through the intervening social disorganization variable percent divorced. That is, church adherence had a strong negative relationship to percent divorced, which in turn had a strong positive relationship to the enlistment rate.

Table 5: Multivariate Ordinary Least Squares Regression of Military Enlistment on Percent Annual Domestic Net Migration 1990–2000 and Other Variables, FY2000–FY2003 (Standardized Regression Coefficients Only)

Variables	FY2000 Enlistment Beta	FY2001 Enlistment Beta	FY2002 Enlistment Beta	FY2003 Enlistment Beta
Migration 1990–2000	.25*	.32**	.44***	.42***
Percent rural	.30*	.25*	.26*	.24
Percent military	.31*	.26*	.25*	.31*
South	.04	.06	-.02	-.02
Percent unemployed	.38**	.43***	.36**	.26*
R^2	.442	.476	.467	.397

$N = 50$.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 6: Multivariate Ordinary Least Squares Regression of Military Enlistment on Percent Divorced 2000 and Other Variables, FY2000–FY2003 (Standardized Regression Coefficients Only)

Variables	FY2000 Enlistment Beta	FY2001 Enlistment Beta	FY2002 Enlistment Beta	FY2003 Enlistment Beta
Percent divorced	.39***	.45***	.56***	.56***
Percent rural	.22*	.16	.15	.13
Percent military	.29*	.23*	.20	.26*
South	.08	.12	.06	.06
Percent unemployed	.26*	.29*	.19	.09
R^2	.514	.554	.556	.508

$N = 50$.

* $p < .05$, *** $p < .001$.

Although the results in Tables 4 through 6 are consistent with the notion that the impact of church adherence on enlistment is essentially a social organizational influence, it is possible that the effect could vary by religious belief system. To assess this possibility, additional regression analyses were conducted in which adherence to three broad religious groups—Catholics, mainline Protestants, and evangelical Protestants—was substituted for total church adherence. While the results for Catholic adherence and mainline Protestant adherence tended to conform to those obtained for total church adherence, the results for evangelical

Protestant adherence generally did not, especially after 9/11. Table 7 shows how the result for evangelical Protestant adherence for FY2003 differed from those for total church adherence, Catholic adherence, and mainline Protestant adherence. However, further analyses indicated that this difference might also essentially reflect a social disorganization effect. When percent divorced was regressed on Catholic adherence, mainline Protestant adherence, and evangelical Protestant adherence, Catholic adherence and mainline Protestant adherence both had negative relationships to percent divorced at $P < .001$. In comparison, evangelical Protestant adherence had no significant relationship to percent divorced.

Table 7: Multivariate Ordinary Least Squares Regression of Military Enlistment on Church Adherence, Catholic Adherence, Mainline Protestant Adherence, and Evangelical Protestant Adherence, FY2003 (Standardized Regression Coefficients Only)

Variables	All Churches Beta	Catholic Beta	Mainline Protestant Beta	Evangelical Protestant Beta
Church Adherence	-.46***	-.35**	-.31*	.07
Percent rural	.23	.12	.38**	.21
Percent military	.16	.17	.26*	.24*
South	.07	-.08	.04	.02
Percent unemployed	.15	.24*	.14	.27*
R^2	.418	.306	.296	.236

$N = 50$.

* $p < .10$, ** $p < .05$, *** $p < .01$.

DISCUSSION

Zero-order correlations showed that the percentage of state population that were church adherents was negatively related to the variation in state non-prior service military enlistment rates from FY1998 through FY2005. Multivariate analyses indicated that the relationship held after controlling for the effects of other variables. After 9/11, the negative influence of church adherence on enlistment appeared to strengthen, while the effects of several other variables seemed to weaken.

In an attempt to evaluate whether the relationship of church adherence to enlistment reflected a social organizational effect, the correlations of two measures of social disorganization to enlistment were examined. These two variables percent annual net domestic state migration 1990–2000 and percent

divorced were positively associated with enlistment, paralleling the negative relationship of church adherence to enlistment, and, as was the case for church adherence, their effects increased relative to those of other variables after 9/11. This pattern of findings seems to lend support to the hypothesized social organizational impact of church adherence on enlistment. Additional analyses indicated that the relationship of church adherence to enlistment was conveyed mainly through its effect on divorce. In other words, states with relatively low levels of church adherence tended to have high divorce rates and high non-prior service military enlistment rates.

The observation that evangelical Protestant adherence did not display a negative effect on enlistment after 9/11 suggests that religious belief system could at least partially condition the theorized social organizational influence of church adherence. However, the absence of an evangelical Protestant adherence effect on enlistment might instead reflect the fact that this factor, unlike Catholic adherence and mainline Protestant adherence, displayed no significant relationship to the divorce rate.

The jump in the church adherence correlations to enlistment after 9/11 was not anticipated and raises a new question for future research. In approaching this issue, it might be important to note that in the two years immediately following 9/11 (FY2002 and FY2003), enlistment in the military declined by about 3.4 percent, perhaps because some young people were discouraged from joining the armed forces by the increased likelihood of participating in combat, and that the decrease in enlistments seemed to average about 50 percent higher in the states that were above the median in church adherence than in the states that were below the median.

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