

# Prayer in Disaster: Case Study of Christian Clergy

Jerry T. Mitchell<sup>1</sup>

---

**Abstract:** Prayer for divine intervention at the time of disaster is well-documented. With a general belief in some sectors of the population that God or some external force drives disaster, to appeal to the same for help or direction should not be unexpected. A number of studies around the world and across cultures have found this to be true. Using a sample of Christian clergy in South Carolina, prayer is investigated for its perceived use as a hazard adjustment. The results indicate that there is broad support for perseverance across denominations, that prayer as protection enjoys support under certain conditions, and that prayer as prevention garners little support except among some more fundamentalist conservative clergy. An important question remaining for hazards researchers is how to recognize and support the positive roles prayer can have in the recovery and relief process of disaster in addition to other protective measures.

**DOI:** 10.1061/(ASCE)1527-6988(2003)4:1(20)

**CE Database keywords:** Disaster relief; South Carolina; Human factors; Social factors.

---

## Introduction

[They] huddled with their three preschool children and 100 neighbors in a narrow basement hallway at First Baptist Church of DeKalb when a tornado bounced through the Northeast Texas town ... As the acoustic ceiling tiles above them popped and bowed ... [the] minister of music at First Baptist Church led some of the people nearest to him in prayer as the tornado passed over them, ripping half the roof off the church's sanctuary [and] destroying 90 percent of the downtown business district ... (Camp 1999).

The above scene is a familiar one: a tornado looms large—churning in the distance. As it approaches, it destroys everything in its path—schools, shopping centers, homes, and often the people within them. Invariably, the threat reaches a house of worship, and though the steeple or another symbolic feature is damaged, those souls harbored inside the structure manage to avoid death. Of the survivors reporting after the fact, many credit their narrow escape to the power of prayer.

A number of adjustments to environmental extremes have been identified and can be broadly classified as technological, regulatory, distributional (movement of humans and their use systems), and symbolic (Micklin 1973; Mileti 1980). The final classification refers to adjustments that stem from culture. Both historic and contemporary references tie the important cultural aspect of religion to disaster with event descriptors such as “acts of God” or “bolts from the blue” (Dynes and Yutzey 1965; Hewitt 1997). Religion is an important cultural identifier that is useful for understanding how humans occupy and interact with their environment both on a routine basis and when dealing with extremes. For many religions the use of prayer is the communication link between the believer and the deity(s) that they believe

is in control of the world around them. To witness the use of this facet of religion at the time of disaster is not surprising and is in fact well documented.

With a belief by some in the general population that God or some external force drives disaster, appealing to the same for help or direction should be expected. A number of studies around the world and across cultures have found this to be true (Jackson and Mukerjee 1974; Kirkby 1974; Murton and Shimabukuro 1974; Hoffman and Oliver-Smith 1999; Schmuck 2000). Distributive literature by groups such as the Jehovah's Witness (and others) often contain references to disaster as part of their eschatological viewpoint (Meredith 1985 and Watch Tower Society 1995). Schmuck (2000) and Alam (1990) demonstrate that this view of God as the source of disaster is not restricted to a particular Christian theology, but is also found in some Islamic communities as well. Even those who do not believe the event was divinely directed have been known to pray for intervention or protection nonetheless.

People often find themselves led toward the cosmological when trying to understand calamity. Within religion, they find explanation and assign meaning to the traumatic events (Lachman and Bonk 1960; Dynes and Yutzey 1965; Lifton and Olson 1976; Gibbs 1989; Davis and Wall 1992). However, some exceptions are known (Kroll-Smith and Couch 1987). Religious involvement post-event in disaster response is also quite pervasive (Smith 1978). The activities of churches often revolve around relief, and descriptions of the Mennonite Disaster Service (Wiebe 1976) and the Church of Jesus Christ of Latter-Day Saints (Mormons) relief activities are not uncommon (Fisher 1985; Bolin and Bolton 1986). A small body of research has also focused on the role of religion in coping and counseling (Chinnici 1985; Bradfield et al. 1989).

While the use of prayer has been identified as a seemingly common response to disaster, the application of prayer by individuals or various groups in terms of its perceived utility has been less studied. As a hazard adjustment, prayer is poorly understood by hazard researchers, and some remain hostile to the discussion. Regardless of the perceived efficacy of this particular adjustment—and prayer is a form of action—those involved in hazards mitigation/response must recognize that it will continue to take place. The question then is how can we support this ad-

---

<sup>1</sup>Assistant Professor of Geography, Dept. of Geography and Geosciences, Bloomsburg Univ. of Pennsylvania, Bloomsburg, PA 17815.

Note. Discussion open until July 1, 2003. Separate discussions must be submitted for individual papers. To extend the closing date by one month, a written request must be filed with the ASCE Managing Editor. The manuscript for this paper was submitted for review and possible publication on August 14, 2001; approved on May 22, 2002. This paper is part of the *Natural Hazards Review*, Vol. 4, No. 1, February 1, 2003. ©ASCE, ISSN 1527-6988/2003/1-20–26/\$18.00.

justment in a positive way to reduce the loss of life and property? Clearly, a better understanding of the practice would go far. This does not mean that we become advocates of the practice or attempt to make it the business of public policy, but rather recognize that our efforts will be more effective when we respect the cultural beliefs of the people we seek to protect.

In this paper, the role of prayer in disaster preparedness and response is explored by investigating the survey responses of Christian clergy in South Carolina, which is a place with a unique disaster and religious history. How prayer is used as an adjustment to environmental extremes—as a preventative measure, as a protective action, or as personal support—is contrasted by religious denomination and by broader faith traditions. Additionally, how the respondents believe biblical texts direct them and the church to prevent disaster and support relief are also discussed. A preliminary goal is to investigate whether differences exist between these groups in terms of their disaster response and if these could lead to a heightened hazard vulnerability. Vulnerability may arise from a number of physical or social circumstances including one's demographic profile, a lack of resources, or the physical infrastructure of the threatened place (Cutter et al. 2000). Recognition of the diversity and complexity of these factors—including religious beliefs (Gillard and Paton 1999)—has focused attention on understanding how they influence vulnerability. In this instance, the use of prayer and biblical guidance are looked upon as underlying social factors that in certain contexts could lead to unsafe conditions.

## Prayer as Hazard Adjustment

Adjustments for environmental threats are generally thought of as purposeful or incidental. Prayer for disaster can be considered a purposeful adjustment—it is generally directed and specific. For example, a predisaster prayer to develop stronger, longer-lasting building materials that may in turn reduce vulnerability to some threats (an incidental adjustment) is much less likely than a disaster-specific prayer for protection at the height of a hurricane (a very purposeful adjustment). A number of different purposeful hazard adjustments have been proposed (Burton et al. 1993; Tobin and Montz 1997) and prayer may be a part of each depending upon the perceived utility of that action.

One purposeful hazard adjustment is to change locations and remove oneself from the path of harm. A second adjustment would be to prevent the effects of the hazard through some form of mitigative activity. Building a flood wall or strengthening the structural integrity of buildings would be examples. Prayer might be used in both instances for protection—a recognition that while everything humanly possible has been done to protect property and life, humans are not always fully in control and unforeseen circumstances can occur.

A third adjustment would be to modify the event. Cloud-seeding, for instance, has been utilized to stimulate rainfall in times of drought. Prayer may be seen as a powerful mechanism to change the threat, for if God can turn it on then perhaps God can also turn it off. A belief that prayer can change the course of a hurricane and send it back out to sea is another example of this adjustment strategy. A final adjustment would be to do nothing and to simply bear the loss. Changing locations may not be practical, mitigation may be too costly, and techno-fixes to modify the threat may be futile. Deciding to do nothing is still a choice. The prayer in this instance, when no other options are perceived to be available, may simply be for perseverance and the opportunity to

soldier on after the event has passed. If God has given the disaster, then God will provide the ability to survive it.

Is prayer as a hazard adjustment preventative, protective, or simply a form of perseverance? Or is it completely irrelevant and a wasted effort? The answer likely depends on one's view of two issues: (1) God's role in the world (or the lack of a divine being) and (2) the need for human action as opposed to general passivity or external reliance in the face of disaster. The perceived utility of this particular adjustment form as it relates to these two issues may lie within the faith tradition of the believer.

## Case Study: Christian Clergy in South Carolina

### Method

Following a pilot survey with clergy from two seminaries, a questionnaire was mailed in Fall 1997 to Christian clergy across South Carolina. Clergy were surveyed as opposed to laity based upon the belief that clergy, despite their differences, are a more cohesive group than individual congregants. Due to their historical dominance, Christian religious groups were the focus of this study (see study area section). Nonchristian faiths could be observed as to their similarities or differences with these findings in the future.

Clergy from 29 denominations were invited to participate (Table 1). These groups were drawn from their affiliation with the South Carolina Christian Action Council, an ecumenical organization with easy access to clergy across the state. Three additional groups were contacted in an effort to ensure participation by predominately African-American Christian denominations. A survey was sent to each church within the smaller denominations. For the larger denominations, 120 survey recipients from each denomination were randomly selected from a four-region stratification of the state based upon the number of congregations within each respective region. Mailing costs largely necessitated this sampling. For example, 25 surveys were sent to Bible Way congregations (25 churches), but only 120 surveys were sent to the Episcopal Church (139 churches). The total response rate (419 usable responses out of a possible 1408) was 30%.

Twenty denominations were represented among the returned surveys, although the clergy of the seven denominations returning the majority of the surveys are the primary focus of the findings reported here. These denominations are the Episcopal Church, the Evangelical Lutheran Church in America, the Presbyterian Church in America, the Presbyterian Church—USA, the Roman Catholic Church, the Southern Baptist Convention, and the United Methodist Church. The remaining 13 denominations, where mentioned, have been placed into a larger “all other denominations” category. It must be stressed that the findings reported here reflect the individual beliefs of clergy and are not necessarily representative of the followers of their faith tradition. It nonetheless provides some insight into the varying uses of prayer as an adjustment strategy. The responding sample had the following demographic characteristics: 95.7% male, 86% white nonhispanic, 72.6% aged 40 to 64, and 96% college educated. The average length of ministerial service was approximately 21 years. More than 90% of the congregations of each denomination supported disaster-relief efforts through their larger church hierarchy and at least 84% indicated support for programs within their specific congregation. These included providing money (98%), goods (84%), time (65%), or other services (21%) such as counseling.

**Table 1.** Research Participants

Participant denomination	Faith tradition	Number usable responses	Number potential responses
African Methodist Episcopal	Evangelical	9	99
Associate Reformed Presbyterian	Reform	25	59
Baptist Educational and Missionary Convention	Evangelical	8	102
Bible Way	Evangelical	1	21
Church of God	Pentecostal/Holiness	25	114
Church of God—Anderson, Ind.	Pentecostal/Holiness	5	10
Church of God in Christ	Pentecostal/Holiness	6	34
Church of Jesus Christ of Latter-Day Saints	Evangelical	9	28
Church of the Nazarene	Pentecostal/Holiness	18	56
<b>Episcopal</b>	Liturgical	38	119
<b>Evangelical Lutheran Church in America</b>	Liturgical	62	120
Lutheran—Missouri Synod	Evangelical	5	11
<b>Presbyterian Church in America</b>	Reform	36	82
<b>Presbyterian Church (USA)</b>	Reform	37	117
<b>Roman Catholic</b>	Liturgical	32	83
Salvation Army	Pentecostal/Holiness	7	17
Seventh Day Adventist	Evangelical	7	27
<b>Southern Baptist Convention</b>	Evangelical	32	120
<b>United Methodist</b>	Evangelical	33	120
Wesleyan	Pentecostal/Holiness	24	61

Note: Bolded churches are the primary focus of this paper. Two denominations, the Assemblies of God and the Pentecostal Holiness Church, declined offers to participate. No invitation response was received by the state offices of the following: Church of God—Prophecy, Christian Church—Disciples of Christ, Progressive National Baptist Convention, Reformed Episcopal Church, Society of Friends. The Christian Methodist Episcopal and Greek Orthodox churches agreed to participate but no survey responses were received. Potential responses reflect the total number of surveys delivered; undeliverable mail is not included in the total.

### Study Area

South Carolina is a hazard-prone place. Between 1989 and 1995, the state ranked fifth in terms of total Stafford Act outlays of public disaster assistance (Dymon and Platt 1999). Hurricane Hugo in 1989 was responsible for the majority of this assistance, but other outlays have also been made for floods and tornadoes. In the past, the state has also experienced serious seismic activity with significant damage occurring in Charleston during an 1886 earthquake. The state's coastal counties are also among the most rapidly growing, far outpacing the nation's population growth rate since 1980 by 15% (Ullmann 2000). This portends dangerous future consequences in terms of life and real property loss, and difficulty in evacuations as evidenced by Hurricane Floyd (Dow and Cutter 1999). These summarize a few of the more traditional natural hazards but the area is also subject to human-generated threats. Nuclear power is generated at five facilities within the state and hazardous material spills are not uncommon.

Religiously, South Carolina finds itself neatly tucked within the Bible Belt. Attributed to Baltimore newspaperman and societal critic H. L. Mencken, the term did not originally refer to a specific location, but eventually he did associate it with the "Baptist back-waters of the South" (Wilson 1989). The spatial dimensions and religious characteristics of the region have been investigated a number of times (Zelinsky 1961; Reed 1974; Shortridge 1976) with a consensus emerging that the region is predominantly Protestant, largely evangelical, and more literal regarding scriptural interpretation (Hill 1989; Wilson 1989). Importantly, South Carolina, like other states in the region, is persistent in its religious expression; the public order of the state—the social, legal, political, and cultural arrangements by which its citizens conduct their lives—has been and continues to be profoundly influenced by the private realm impressively so by religion (Lewis 1993). Whereas religion shows itself in obvious forms such as blue laws

or the establishment of religious schools, it also appears in less obvious ways. For example, if a divine entity is the ultimate protector in times of trouble, then public support for the same (e.g., public mitigation efforts) may be less for those believers. Of course much caution is warranted since we are unable to adequately separate the clearly religious from the other motives prompting public behavior. Nonetheless, religious beliefs and institutions play important roles worth exploring further. Any lessons learned here may be transferable to other locations where religion plays a central role in people's daily lives.

### The Varying Uses of Prayer

*Prayer changes things. When the praises go up, the blessings do come down* (African Methodist Episcopal minister).

*I think prayer has ... stayed judgments and the wrath of God* (Church of God minister).

*Prayer is not magic. Prayer is not a way to control God ...* (Evangelical Lutheran minister).

A variety of questions related to hazards and environmental issues comprised the questionnaire administered to the clergy. Each recipient was asked to relate which hazards they perceived to be personally the most pressing. Generally speaking, the hazards of greatest concern were those that were more likely to occur near the respondent or that the respondent had some past personal experience (Mitchell 2000). These results varied little among clergy of differing denominations. A series of open-ended questions was also posed to shed light on the relationship between religious conviction and disaster response. The following question directly related to prayer is illustrative: *What role should prayer have for the prevention or reduction of losses from hazards?* This question generated 394 responses. It was decided that a content analysis of these sometimes lengthy responses would be use-

**Table 2.** Categories of Prayer: What Role Should Prayer Have for the Prevention or Reduction of Losses from Hazards?

Code	Prayer category	Sample response
1	Prayer important—general	“Prayer plays an important role for every Christian.”
2	Prayer unimportant	“None.”
3	Pray that God’s will be done	“We are to pray that God’s will be done, not ours.”
4	Pray for protection	“Prayer should be utmost as we seek guidance, direction, and strength from Almighty God.”
5	Prayer needs action	“Prayer is only good when backed by positive actions. Prayer alone will not change one thing.”
6	Prayer can prevent	“Prayer can still storms and divert the path of hurricanes and tornadoes.”
7	Unsure of prayer role	“I’ve never thought of this.”

ful to determine if differences existed among the various religious groups. As the issue of reliability is of critical concern in content analyses, care was taken that the content was broken down into distinct and meaningful categories. A number of coding variations exist; two of the most common qualities—frequency (number of references) and typology (common themes)—were used to structure this analysis (Baker 1999). Ultimately, seven categories were systematically created based upon several key recurrent words or phrases. Table 2 shows these categories and provides an example of an actual response.

Very few of the respondents were unsure of the role of prayer or believed that it was unimportant when related to disaster (Table 3). A modest number overall (61 or 15%) believed that prayer should focus on God’s desires, not those of humans. These proportions varied little by group. More interesting results occur when comparing the proportions of each denomination in each prayer category to the proportions for the total group (Z-tests with significance at  $p \leq 0.05$  were used throughout this analysis).

The greatest number of responses for nearly all groups focused around the fourth category—the need for prayer as protection (“we should pray for God’s mercy and grace to all”—Presbyterian—USA minister). Although generally consistent throughout, the Evangelical Lutherans and the Presbyterian—America groups stand out in contrast, with the former significantly more supportive of this position than the total group and the latter much less so (Table 4). Understanding that denominational differences on these questions could be slight and masking patterns within larger faith traditions, each church was also placed in its larger faith background, either Evangelical, Liturgical, Pentecostal/Holiness, or Reform (Table 1). These categories were

derived from historical and contemporary accounts of religion in South Carolina and the South (Lippy 1993; Hill 1989). Under this categorization, the Liturgical faith tradition (comprised heavily of Lutherans) was significantly more allied with the position of prayer as protection.

Two other categories deserve further discussion. Category 5 (prayer needs action) is reminiscent of the saying “heaven helps those who help themselves.” Here, the respondents noted that prayer also needed human action and that prayer alone would not change one thing. Prayer is seen as complementary to other actions that must also be taken to reduce hazard loss. The general view is that God has already provided many gifts to reduce losses—resources, intellect, experience—and it is the people’s responsibility to use them appropriately. The clergy of the Presbyterian—USA denomination were the most conspicuous regarding their support for this viewpoint while the Pentecostal/Holiness faith tradition appears more externally focused.

A common anecdote/picture of disaster has the overly religious person kneeling and praying for God to turn the tide rather than getting up and removing oneself from harm. The image is usually derisive and questions the intellectual capacity of the victim. The belief that prayer can literally prevent disaster by diverting events or causing their cessation is the focus of the sixth category. Overall, few clergy supported this use of prayer; some were dismissive and even on the verge of hostility (“Prayer is not a 911 button for hazards”—Presbyterian—USA). Evangelical Lutherans, and by extension the Liturgical faith tradition, were significantly less supportive of this use of prayer. In contrast, clergy of the Pentecostal/Holiness faith tradition and the “all

**Table 3.** Role of Prayer by Denomination and Faith Tradition: Respondents in Each Prayer Category

Church	1	2	3	4	5	6	7	Total
Episcopal	12	1	2	13	5	1	1	35
Evangelical Lutheran	9	0	10	31	5	1	1	57
Presbyterian—America	13	1	7	7	1	4	0	33
Presbyterian—USA	11	0	3	13	8	0	0	35
Roman Catholic	8	0	2	17	3	1	0	31
Southern Baptist	8	1	5	10	1	4	0	29
United Methodist	5	1	4	18	2	2	0	32
All other denominations	33	1	28	47	7	25	1	142
Evangelical	25	3	13	38	6	12	0	97
Liturgical	29	1	14	61	13	3	2	123
Pentecostal/Holiness	15	0	17	29	1	18	1	81
Reform	30	1	17	28	12	5	0	93
Total	99	5	61	156	32	38	3	394

Note: See Table 2 for prayer category explanation. The “all other denominations” category is comprised of the thirteen other denominations that responded to the survey.

**Table 4.** Significance Test Comparing Proportions in Prayer Category: Denomination and Faith Tradition versus Total Group

Church	Pray for protection (4)	Prayer Needs action (5)	Prayer can prevent (6)
Episcopal	-0.284	1.245	-1.339
Evangelical Lutheran	2.119 <sup>a</sup>	0.167	-1.981 <sup>a</sup>
Presbyterian—America	-2.088 <sup>a</sup>	-1.052	0.459
Presbyterian—USA	-0.284	2.873 <sup>a</sup>	-1.925
Roman Catholic	1.663	0.303	-1.192
Southern Baptist	-0.544	-0.906	0.721
United Methodist	1.843	-0.376	-0.633
All other denominations	-1.368	-1.256	2.525 <sup>a</sup>
Evangelical	-0.076	-0.639	0.795
Liturgical	1.962 <sup>a</sup>	0.841	-2.582 <sup>a</sup>
Pentecostal/Holiness	-0.637	-2.220 <sup>a</sup>	3.197 <sup>a</sup>
Reform	-1.697	1.447	-1.305

Note: Only prayer categories with statistically significant differences (Categories 4, 5, and 6) are shown.

<sup>a</sup>Z-test scores significant at  $p \leq 0.05$ .

**Table 5.** Categories of Biblical Influence: How does the Bible Influence Your Response to Hazards?

Code	Influence category	Sample response
1	General influence	“[It] provides a sense of hope in the midst of uncertainty.”
2	No influence/unimportant	“It does not—but science and reason does.”
3	Directs us to help others	“If you have done this unto the least of these you have done it unto me.”
4	Directs us to be stewards of earth	“We are to be keepers of God’s earth. People have been placed on earth as responsible stewards.”
5	God is sovereign and in control	“I believe that God is sovereign over all that happens in his creation, therefore I don’t worry about disaster.”
6	Provides message about end times	“Hazards are allowed by God and may be signs of the last days.”

other denominations” category (heavily comprised of Evangelical and Pentecostal/Holiness clergy) strongly viewed this use of prayer as appropriate. These groups have been described elsewhere as being among the most conservative and literal in their understanding of scripture, and more likely to view disasters as increasing in frequency as part of the second coming of Christ (Mitchell 2000). Placing faith in only one adjustment strategy—whether prayer or an engineered flood wall—may prove foolhardy. Nonetheless, it is a majority clergy opinion of nearly all denominations that prayer is most useful as a protective and/or supplemental, not preventative, disaster intervention. The popularized vision of prayer as prevention, while evident in some circles, is not an openly advocated adjustment.

### Scriptural Influences

*You will not have to worry about sudden disasters, such as come on the wicked like a storm. The Lord will keep you safe. He will not let you fall into a trap (Proverbs 3: 25–26).*

*Our God is in heaven; he does whatever he wishes (Psalm 115:3).*

The Bible is rife with descriptions of disaster, and parables frequently use disaster metaphors like a strong faith in God built upon rock that can withstand the fiercest pouring rains, wind, and flooding rivers (Matthew 7: 24–27). Anticipating that clergy would rely on scripture to clarify and support their interpretations of disaster and the role of prayer (a suspicion confirmed by the frequent reference to a variety of chapters and verses), the following question was also posed: *How does the Bible influence your response to hazards?* Each of the 384 responses were coded based upon recurrent terms and themes; six categories were established (Table 5). Very few believed that the Bible had no influence or was unimportant (Table 6). Substantially more believed that scripture instructed them to aid others in times of need (Category 3) with little variance among the groups. Some more interesting findings revolve around the issue of control: are humans in charge (stewards), is God sovereign, or is a message being sent by using disaster events?

The idea that humans are responsible for taking care of their surroundings (reducing vulnerable situations where possible) and an understanding that God is in control of all situations are the subjects of the fourth and fifth categories, respectively. One of the more notable differences between groups involves the Presbyterians. The Presbyterian–USA clergy place greater emphasis on the role of people moderating disaster loss while the more conservative Presbyterian–America clergy were more resigned to the power and sovereignty of God (Category 5). The argument that a denominational label is not sufficient to ferret out religious differences apparently does not apply in this context. This difference

between human ability versus a more passive response is seen again in the responses of the Pentecostal/Holiness and the “all other denominations” groups.

Respondents of the Pentecostal/Holiness faith tradition were also more likely to see scripture as evidence that the outcome of disaster should be left in God’s hands and that there was little one could do since disaster occurrences were messages about the coming end of time (Category 6) or possibly punishment. Human godlessness is often believed to be the source of disaster with God sending disaster as a punishment. Pronouncements by televangelist Pat Robertson regarding homosexual behavior demonstrate the recency of this conviction (Wharton 1998). Bradfield et al. (1989) found that fundamentalist ministers tended to focus on this aspect of disaster in discussion with survivors—disasters were meant to punish or test people. Some other members of this faith tradition were, in fact, joyous at the occurrence of disaster (“The more frequent natural disasters come, the more excited Christians should become”—Church of the Nazarene), not for the losses incurred, but due to the fact that their entry into God’s kingdom was forthcoming. This finding seems contradictory in that this faith tradition also believes that prayer can stay disaster. The Liturgical tradition (Episcopal, Evangelical Lutheran, Roman Catholic) was strongly opposed to this viewpoint, which is not surprising given their more figurative approach toward Biblical eschatology (Mitchell 2000).

Taken together, the greatest number of responses fall within Categories 3 and 4 and provide evidence of a strong belief among many of the clergy across denominations that their faith directs them to be proactive in the face of disaster. Not only does scripture indicate that prayer is useful as an adjustment, but it also mandates that caring for others in times of need (especially disas-

**Table 6.** Biblical Influence: Respondents in Each Category

Church	1	2	3	4	5	6	Total
Episcopal	13	—	5	10	4	—	32
Evangelical Lutheran	11	1	18	12	14	1	57
Presbyterian—America	5	—	9	2	15	1	32
Presbyterian—USA	3	1	8	16	5	2	35
Roman Catholic	4	2	8	10	5	—	29
Southern Baptist	5	—	8	9	7	1	30
United Methodist	8	1	10	8	4	1	32
All other denominations	29	3	37	18	29	21	137
Evangelical	23	3	23	20	20	7	96
Liturgical	28	3	31	32	23	1	118
Pentecostal/Holiness	17	1	21	7	17	16	79
Reform	10	1	28	26	23	3	91
Total	78	8	103	85	83	27	384

Note: See Table 5 for influence category explanation.

**Table 7.** Significance Test Comparing Proportions in Bible Category: Denomination and Faith Tradition versus Total Group

Church	General (1)	Stewardship (4)	Sovereignty (5)	End times (6)
Episcopal	2.670 <sup>a</sup>	1.180	-1.218	-1.551
Evangelical Lutheran	-0.178	-0.184	0.501	-1.525
Presbyterian—America	-0.637	-2.123 <sup>a</sup>	3.235 <sup>a</sup>	-0.847
Presbyterian—USA	-1.684	3.122 <sup>a</sup>	-1.019	-0.294
Roman Catholic	-0.849	1.523	-0.555	-1.477
Southern Baptist	-0.480	0.990	0.220	-0.777
United Methodist	0.629	0.374	-1.218	-0.847
All other denominations	0.213	-2.270 <sup>a</sup>	-0.109	2.883 <sup>a</sup>
Evangelical	0.784	-0.276	-0.167	0.089
Liturgical	0.795	1.120	-0.494	-2.560 <sup>a</sup>
Pentecostal/Holiness	0.242	-2.693 <sup>a</sup>	-0.019	3.687 <sup>a</sup>
Reform	-2.058 <sup>a</sup>	1.304	0.754	-1.317

Note: Only bible categories with statistically significant differences (Categories 1, 4, 5, and 6) are shown.

<sup>a</sup>Z-test scores significant at  $p \leq 0.05$ .

ter) and caring for the earth as a piece of God's creation are responsibilities for all believers (Table 7).

## Conclusion

This paper began with two questions: Is prayer viewed as prevention, protection, or perseverance with regards to hazards adjustment? Are there variances across faith traditions? From the responses provided by this research, the answer is a mixed one. There is ample evidence across the sample to suggest that prayer plays an important role for perseverance. Scripture and prayer provide direction to help others (clearly seen through the very active relief activities) and strength to try to understand God's plan through the disaster event. This particular role for prayer is not only important for the Christian denominations investigated here, but also for followers of other religions (Schmuck 2000).

Protection is also seen by most as an appropriate use for prayer, but some strings are attached. Several clergy indicate that prayer for protection is legitimate as long as the believer recognizes that God is sovereign and that God's plan may be contrary to the believer's wishes. Others go further to note that prayer for protection is only useful when backed by positive human actions. The general idea is that God has already provided the believer with a remedy: the ability to purchase insurance, the ability as a community to provide services to the needy, the foresight to locate a home out of the floodplain and so on. Prayer in this case protects by providing the wisdom to use God's gifts wisely.

The third use—prevention—is much less widely subscribed to despite what popular lore may have us believe. The invocation of divine intervention at the time of crisis to prevent, for example, a tornado striking your home was viewed derisively by most clergy (prayer is not magic). The few who advocated this position largely fall within the Evangelical and Pentecostal/Holiness faith traditions, two groups that appear to be more externally located (Mitchell 2000) and therefore may show a greater potential for a passive disaster response (Sims and Baumann 1972). How to approach this group of believers positively will be a challenge. Is it possible to suggest protective measures other than prayer that still fit within their externally located framework?

If any broad generalizations can be made from these observations, it would be that prayer as perseverance is widely accepted, that prayer as protection enjoys support under certain conditions, that prayer as prevention garners little support except among some more fundamentalist, conservative clergy, and that each group uses and interprets Biblical texts to support their positions. The ability to test the effectiveness of any of these particular prayer adjustment strategies is, of course, scientifically impossible. Several other questions still remain:

- Does the venue (geographic location of the sample) color these results?
- How do these views of clergy transfer (or do they) to lay believers?
- What is the impact of the sample demographics (largely white, middle-aged males)?
- Since not all believe that prayer is a useful adjustment, how do we protect people and property while still respecting their religious views?

This research was conducted in a region that is generally more conservative religiously (Reed 1974) and with a limited segment of the religious community—its clergy. Variations in these two factors may lead to other results elsewhere. To expect that other adherents of their faith tradition will think or behave in the same way regarding prayer may be an unwarranted assumption. Prayer is, after all, a highly personal endeavor. It is important to note, however, that many faith communities identify strongly with their clergy and their views carry great weight. Their views on hazard response are often prominent (Mitchell 2000) and could carry over to their congregations. In either case, it is incumbent upon hazard researchers to recognize both the potentially positive and negative roles prayer can have for disaster. The recovery process may be aided positively by prayer, but in other instances people may fail to recognize simple earthly protection opportunities.

Clearly, this research demonstrates that people of differing religious backgrounds hold contrary beliefs about how, when, and if prayer should be used as a hazard adjustment. Approaching these groups from the viewpoint to which they are accustomed should aid us in future protection efforts. Communicating the threat of disaster and prompting proactive responses has been and continues to be a problem. To remedy this, greater attention has been called for regarding the context in which disaster occurs (Mitchell et al. 1989). Economic, political, environmental, and sociocultural contexts all color our interaction and response with hazards. Religion, and prayer as one of its primary tools, though poorly understood by many, must also be recognized and respected as are the many other contextual subtleties that differentiate people and disaster-prone places from one another.

## Acknowledgments

The writer would like to thank the journal editors and the anonymous reviewers for their constructive comments on this research. Special thanks go to Deborah Thomas and John Polhill. Funding support for this research was provided by Sigma Xi—the Scientific Research Society.

## References

- Alam, S. M. N. (1990). "Perceptions of flood among bangladeshi villagers." *Disasters*, 14(4), 354–357.
- Baker, T. L. (1999). *Doing social research*, McGraw-Hill, Boston.

- Bolin, R., and Bolton, P. (1986). "Race, religion, and ethnicity in disaster recovery." *Program on Environment and Behavior, Monograph #42*, Institute of Behavioral Science, Univ. of Colorado, Boulder, Colo.
- Bradfield, C., Wylie, M. L., and Echterling, L. G. (1989). "After the flood: The response of ministers to a natural disaster." *Sociological Analysis*, 49(4), 397–407.
- Burton, I., Kates, R., and White, G. (1993). *The environment as hazard*, 2nd Ed., Guilford, New York.
- Camp, K. (1999). "Children sang as tornado pounded DeKalb church." *The Baptist Standard*, (<http://www.baptiststandard.com>) (July 2001).
- Chinnici, R. (1985). "Pastoral care following a natural disaster." *Pastoral Psychology*, 33(4), 245–254.
- Cutter, S. L., Mitchell, J. T., and Scott, M. S. (2000). "Revealing the vulnerability of people and places: A case study of Georgetown County, South Carolina." *Annals of the Association of American Geographers*, 90(4), 713–737.
- Davis, I., and Wall, M. (1992). *Christian perspectives on disaster management: A training manual*, Interchurch Relief and Development Alliance, London.
- Dow, K., and Cutter, S. (1999). "South Carolina's response to Hurricane Floyd." *Quick Response Rep. #128*, Natural Hazards Research and Applications Information Center, Boulder, Colo.
- Dymon, U., and Platt, R. (1999). "U.S. federal disaster declarations: A geographical analysis." *Disasters and democracy*, R. Platt, ed., Island Press, Washington, D.C., 47–67.
- Dynes, R., and Yutzey, D. (1965). "The religious interpretation of disaster." *Topic 10: A Journal of the Liberal Arts*, (Fall 1965), 34–48.
- Fisher, A. L. (1985). "Voluntary labor, Utah, the L.D.S. church, and the floods of 1983: A case study." *Int. J. Mass Emergencies Disasters*, 33(3), 53–74.
- Gibbs, M. (1989). "Factors in the victim that mediate between disaster and psychopathology: A review." *J. Trauma Stress*, 2(4), 489–514.
- Gillard, M., and Paton, D. (1999). "Disaster stress following a hurricane: The role of religious differences in the Fijian Islands." *Australasian Journal of Disaster and Trauma Studies*, (<http://www.massey.ac.nz/~trauma/issues/1999-2/gillard.htm>) (July 2001).
- Hewitt, K. (1997). *Regions of risk*, Longman, Essex, U.K.
- Hill, S. S. (1989). "Religion." *Encyclopedia of southern culture*, C. R. Wilson and W. Ferris, eds., Univ. of North Carolina, Chapel Hill, N.C., 1269–1274.
- Hoffman, S., and Oliver-Smith, A. (1999). "Anthropology and the angry earth: An overview." *The angry earth*, A. Oliver-Smith and S. Hoffman, eds., Routledge, New York, 1–16.
- Jackson, E., and Mukerjee, T. (1974). "Human adjustment to the earthquake hazard in San Francisco, California." *Natural hazards: Local, national, global*, G. F. White, ed., Oxford University Press, New York, 160–166.
- Kirkby, A. (1974). "Individual and community responses to rainfall variability in Oaxaca, Mexico." *Natural hazards: local, national, global*, G. F. White, ed., Oxford University Press, New York, 119–128.
- Kroll-Smith, J., and Couch, S. (1987). "A chronic technical disaster and the irrelevance of religious meaning: The case of Centralia, Pennsylvania." *Journal for the Scientific Study of Religion*, 26(1), 25–37.
- Lachman, R. and Bonk, W. J. (1960). "Behavior and beliefs during the recent volcanic eruption at Kapoho, Hawaii." *Science*, 131(April), 1095–1096.
- Lewis, K. (1993). "Religion in South Carolina addresses the public order." *Religion in South Carolina*, C. H. Lippy, ed., University of South Carolina Press, Columbia, S.C., 182–197.
- Lifton, R., and Olson, E. (1976). "Death imprint in Buffalo Creek." *Emergency and disaster management: A mental health sourcebook*, H. Parad, H. Resnik, and L. Parad, eds., Charles, Bowie, Md., 295–308.
- Lippy, C. H., ed. (1993). *Religion in South Carolina*, University of South Carolina Press, Columbia, S.C.
- Meredith, R. (1985). "Drought, famine, war...Has god lost control?" *The plain truth*, May 12–14, 38.
- Micklin, M. (1973). *Population, environment and social organization*, Dryden, Hinsdale, Ill.
- Mileti, D. (1980). "Human adjustment to the risk of environmental extremes." *Sociol. Soc. Res.*, 64(3), 327–347.
- Mitchell, J. K., Devine, N., and Jagger, K. (1989). "A contextual model of natural hazard." *Geogr. Rev.*, 79(4), 391–409.
- Mitchell, J. T. (2000). "The hazards of one's faith: Hazard perceptions of South Carolina christian clergy." *Environmental Hazards*, 2(1), 25–41.
- Murton, B., and Shimabukuro, S. (1974). "Human adjustment to volcanic hazard in Puna District, Hawaii." *Natural hazards: Local, national, global*, G. F. White, ed., Oxford Univ. Press, New York, 151–159.
- Reed, J. S. (1974). *The enduring south: Subcultural persistence in mass society*, University of North Carolina Press, Chapel Hill, N.C.
- Schmuck, H. (2000). "An act of Allah: Religious explanations for floods in Bangladesh as survival strategy." *Int. J. Mass Emergencies Disasters*, 18(1), 85–95.
- Shorridge, J. R. (1976). "Patterns of religion in the United States." *Geogr. Rev.*, 66(4), 420–434.
- Sims, J. H., and Baumann, D. (1972). "The tornado threat: Coping styles of the North and South." *Science*, 176, 1386–1392.
- Smith, M. (1978). "American religious organizations in disaster: A study of congregational response to disaster." *Mass Emergencies*, 3, 133–142.
- Tobin, G., and Montz, B. (1997). *Natural hazards: Explanation and integration*, Guilford, New York.
- Ullmann, O. (2000). "Facing mother nature's fury." *USA Today*, July 24, 6A.
- Watch Tower Society. (1995). "Man's fight against disasters." *Awake!*, July, 4–8.
- Wharton, T. (1998). "Evangelist Robertson says gays bring earthquakes, tornadoes." *The State*, (<http://www.thestate.com/newsdocs/10robert.htm>) (June 10).
- Wiebe, K. (1976). *Day of disaster*, Herald, Scottsdale, Pa.
- Wilson, C. R. (1989). "Bible belt." *Encyclopedia of southern culture*, C. R. Wilson and W. Ferris, eds., University of North Carolina Press, Chapel Hill, N.C., 1312–1313.
- Zelinsky, W. (1961). "An approach to the religious geography of the United States: Patterns of church membership in 1952." *Ann. Assoc. American Geographers*, 51, 139–93.