



The Six Americas of Climate Change: Perceptions of Southeast Extension Professionals

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Executive Summary

This study measured Extension professionals' perceptions of global climate change. With the participation of eight states and using the items validated by the Center for Climate Change Communication at George Mason University (Maibach et al. 2011), survey responses from 2,589 Extension professionals in the Southeast placed them in one of six categories ranging from alarmed through dismissive. Results show a pattern similar to earlier national studies with the general public; all six categories are represented. Distribution across these categories varies by state, political leaning, education level, gender, coastal proximity, and program area. The importance of in-service training, applicable information, and administrative support for programming on climate change mitigation and adaptation are discussed.

Background

Perceptions on climate change vary dramatically in the United States, with the general public forming six coherent categories from alarmed through dismissive (Leiserowitz et al. 2010, Maibach et al. 2009). Given the highly politicized nature of climate change and underlying doubts about science, the categories may help communicators create messages that are more likely to resonate with their audiences' values and ideas about the world.

Extension is considered “the most successful change agency” (Rogers 1995) in part because of the similarity between agents and audiences. Since Extension agents are in the business of conveying science-based research findings to adult learners, one might expect them to fall on the “concerned” side of the perception spectrum. However, if they represent their audiences, they might reflect the full range of six categories. By better understanding perceptions of climate change, regionally-developed Extension programs will be better able to attract, motivate, inform, and support agents.

The purpose of the project is to support Extension programs on climate change mitigation and adaptation. Since Extension professionals will be asked to play a role in program development and delivery, their perceptions about climate change should affect how material and training programs are developed.

Research Questions

- How do Extension professionals in the Southeast perceive the issue of climate change?
- Do their perceptions vary by state, position, or program area?

Methods

Perceptions of climate change were assessed using methods from several national studies conducted by Yale and George Mason University. Results from those studies show six distinct segments of society—Six Americas. These segments vary by belief in, concern over, and motivation to address global warming with roughly 40 percent of the public alarmed or concerned, roughly 35 percent cautious or disengaged, and roughly 25 percent doubtful or dismissive. The segments are thought to indicate relative receptiveness to climate change programming. A 56-item, Web-based survey was administered with the help of partners from eight participating states: Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, Texas, and Virginia. Additional questions were added to facilitate understanding of Extension responses. An average response rate of 68% was obtained by using personalized requests from Administrators and reminders (Monroe & Adams in press). No nonresponse bias was detected after contacting a random sample of nonrespondents. Items from the Six Americas survey retained original wording (including global warming); the reason for this was explained in the survey.

Results

Respondents include 2,589 Extension professionals from eight participating states. Six Americas segment sizes follow the pattern from national surveys (Figure 1). However, relative size of segments does vary across states (Figure 2) with respondents from Florida significantly more likely to be alarmed or concerned than other states ($p < 0.01$).^{*} Viewpoints also varied strongly by respondents' political leaning. Politically conservative respondents were more likely to be dismissive or doubtful, while politically liberal respondents were more likely to be alarmed or concerned (Figure 3; $p < 0.01$).

Other demographic associations include coastal influence, with respondents who serve coastal communities more likely to be alarmed or concerned ($p < 0.01$); age, with respondents who are 60 years or older having the highest proportion of alarmed and concerned respondents ($p < 0.05$); and education level, with respondents who have gone beyond a Master's degree more likely to be alarmed or concerned and less likely to be disengaged ($p < 0.01$).

Respondents also vary by their major program area, with agriculture agents being more doubtful and dismissive ($p < 0.05$). Natural resource agents coalesced into two groups, with forestry and wildlife agents less alarmed and concerned than environmental education agents ($p < 0.05$).

Some of these differences probably reflect demographic patterns associated with program areas:

- Natural resource respondents are less likely to be conservative.
- Natural resource respondents represent more PhDs.
- Agriculture respondents are more likely to be men.
- Agriculture respondents are more likely to be conservative.

Implications

Extension professionals represent the full set of perceptions about the existence and urgency of climate change, suggesting interesting implications for the development of regional programs on the issue. There are a number of approaches that could be adopted, including "ignore the dismissive," focusing instead on those most likely to deliver a strong message. For example, beginning with those who are concerned or alarmed may be the easiest way to launch activities in a state, but could backfire unless these people are well-respected by their colleagues. Alternatively, we could create materials that downplay climate change, but focus on climate change impacts like drought to reach climate change deniers. Research that bridges the gap from weather to ecosystem and community impacts will be essential. Also, administrator and specialist leadership may be helpful to make climate-related ISTs more acceptable among conservative agents. Whatever the approach, we should be mindful of the diversity within Extension when developing programs on issues like climate change.

For more information on this research contact Martha Monroe at mmonroe@ufl.edu or access the complete manuscript: Wojcik, D. J., M. C. Monroe, D. C. Adams, and R. R. Plate. 2014. Message in a bottleneck? Attitudes and perceptions of climate change in the Cooperative Extension Service in the southeastern United States. *Journal of Human Sciences and Extension* 2(1): 51-70. Available online at: <http://www.jhseonline.com/#!current-issue/c227d>

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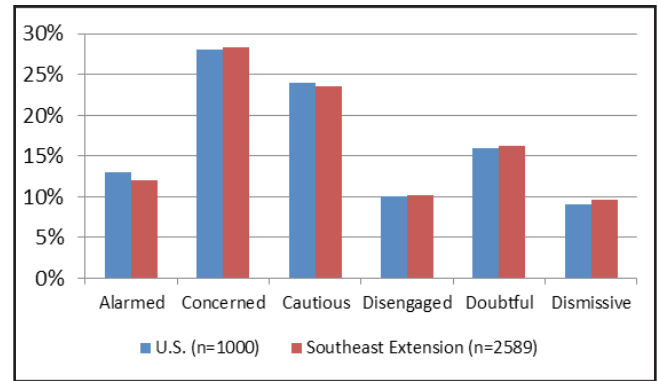


Figure 1. Extension respondents reflect all six categories.

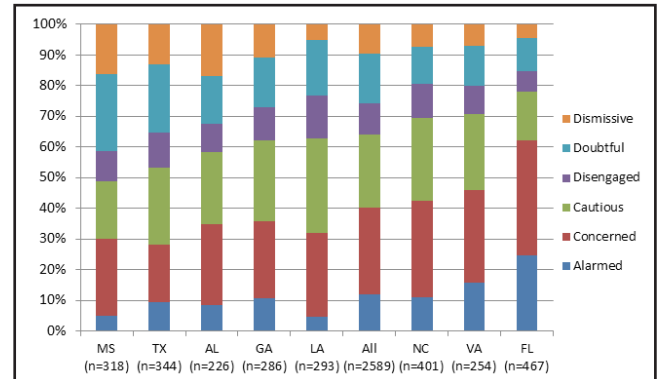


Figure 2. Distribution of respondents varies by state.

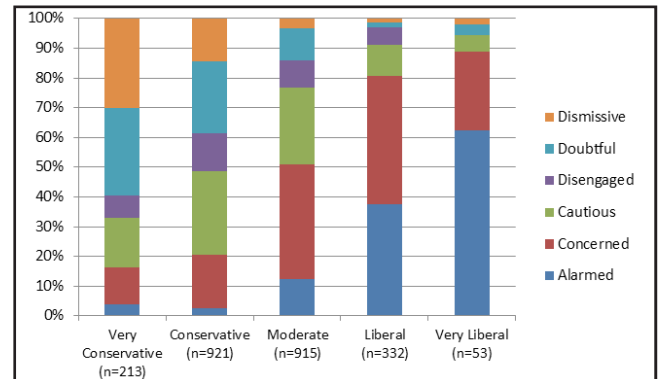


Figure 3. Political leaning is significantly predictive of perception.