



Framing and Public Engagement on Climate Change

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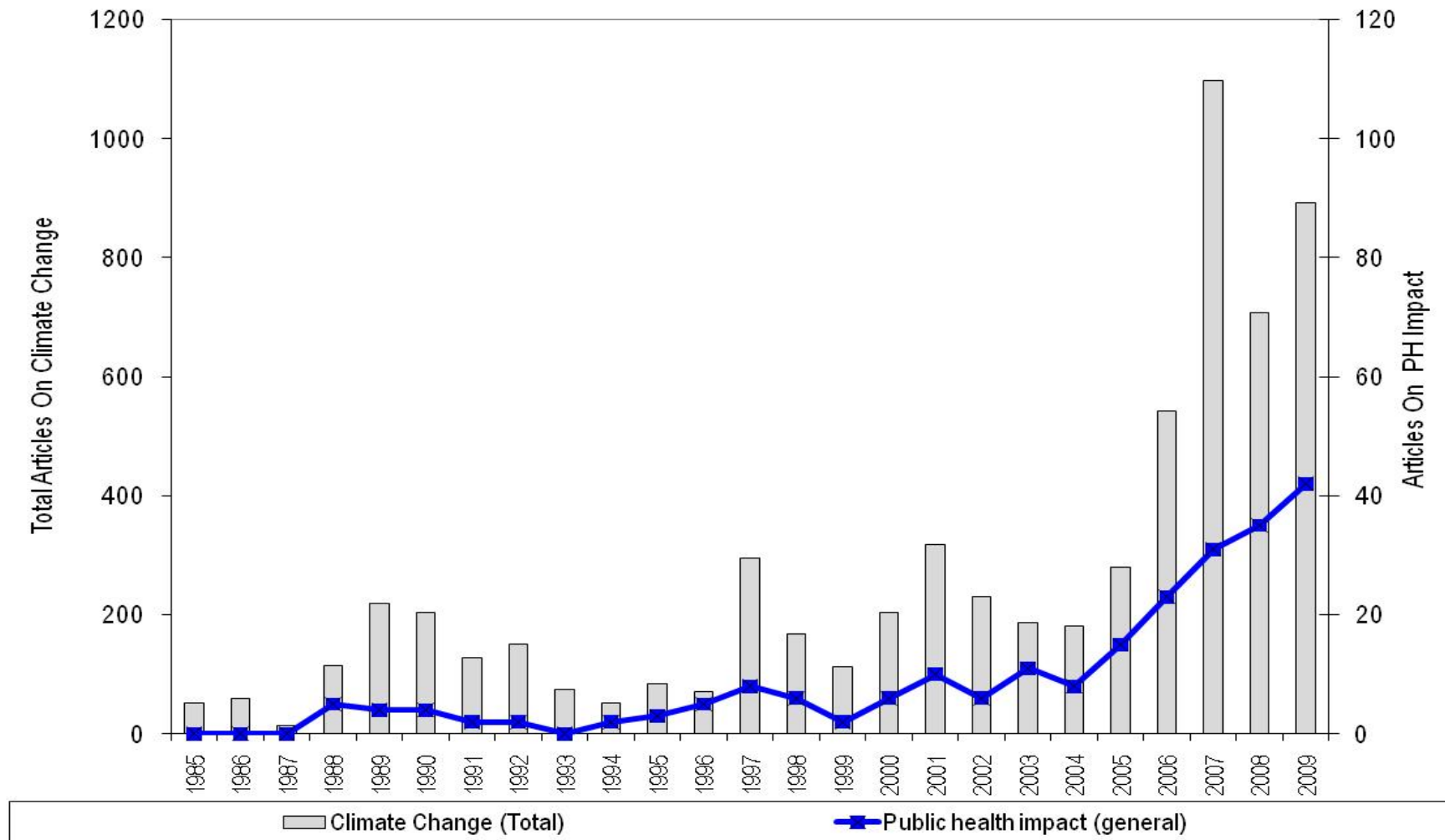
AAAS San Diego 2010



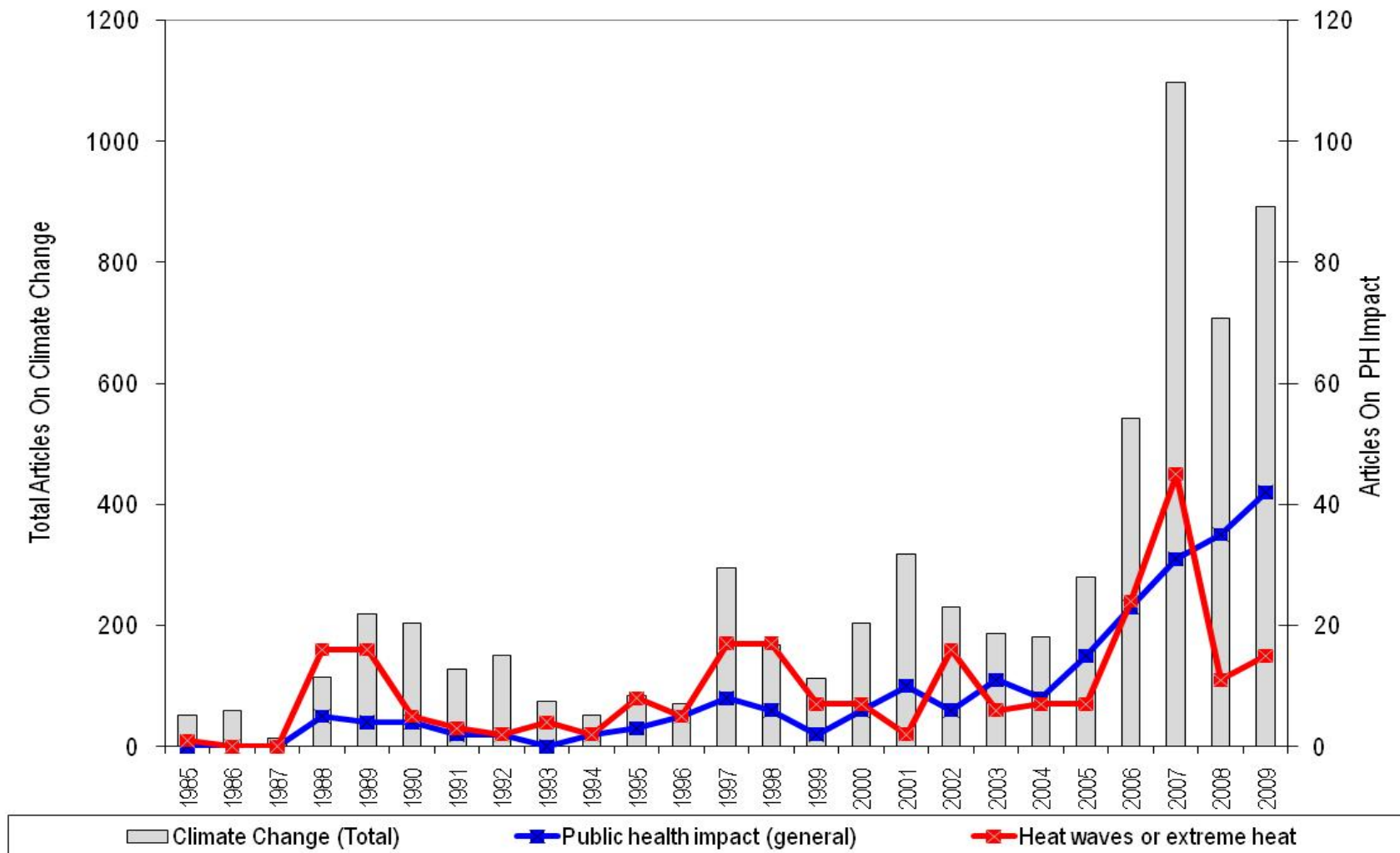
Framing Global Warming: A Matter of Public Health



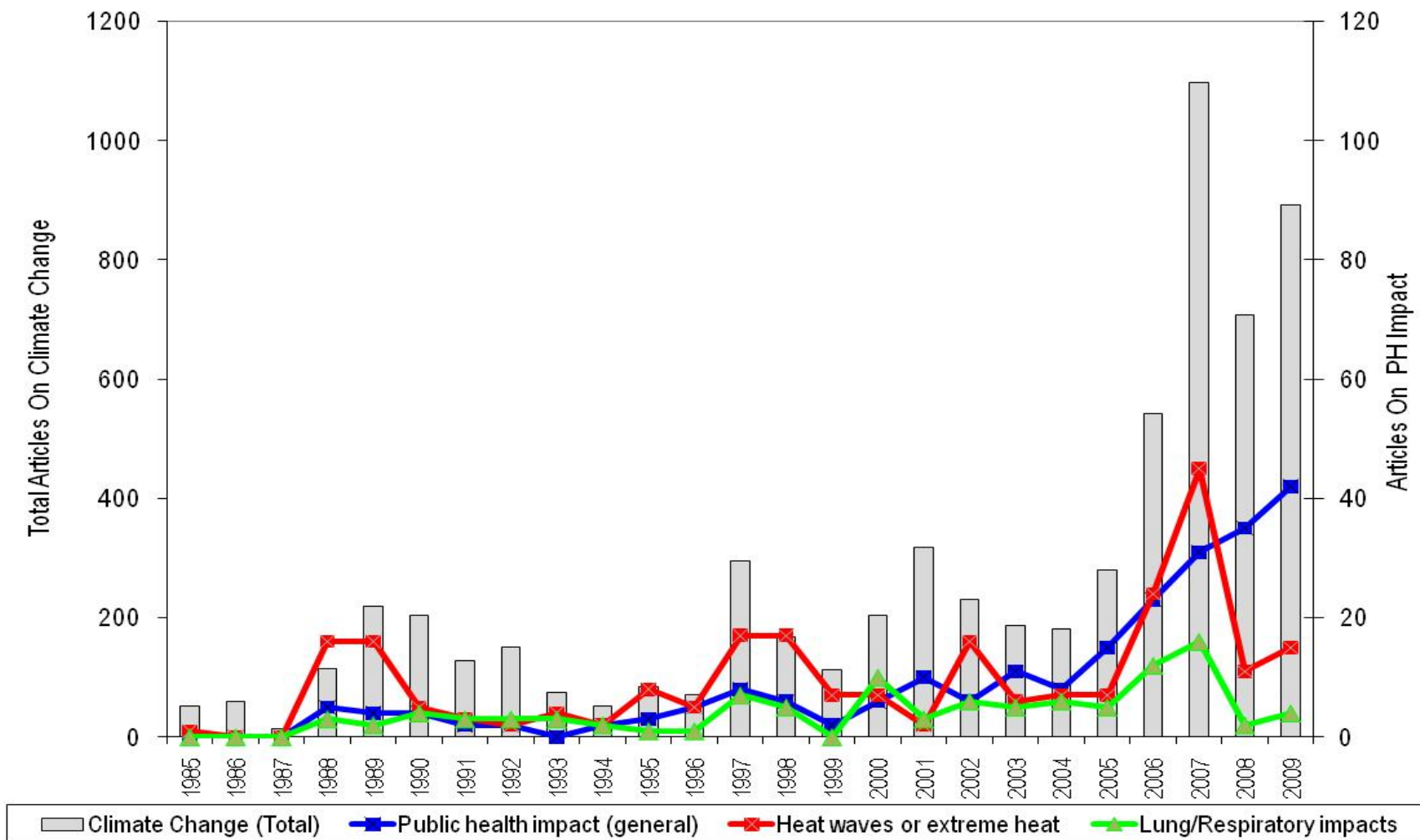
Articles Mentioning PH Impacts (General): Combined Climate Coverage *WPost* & *NYTimes*



Articles Mentioning Heat-Related Impacts: Combined Climate Coverage *WPost* & *NYTimes*



Articles Mentioning Lung/Respiratory Impacts: Combined Climate Coverage *WPost* & *NYTimes*



Global Warming's Six Americas: Maibach, Leiserowitz & Roser-Renouf, Fall 2008

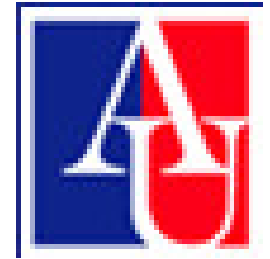
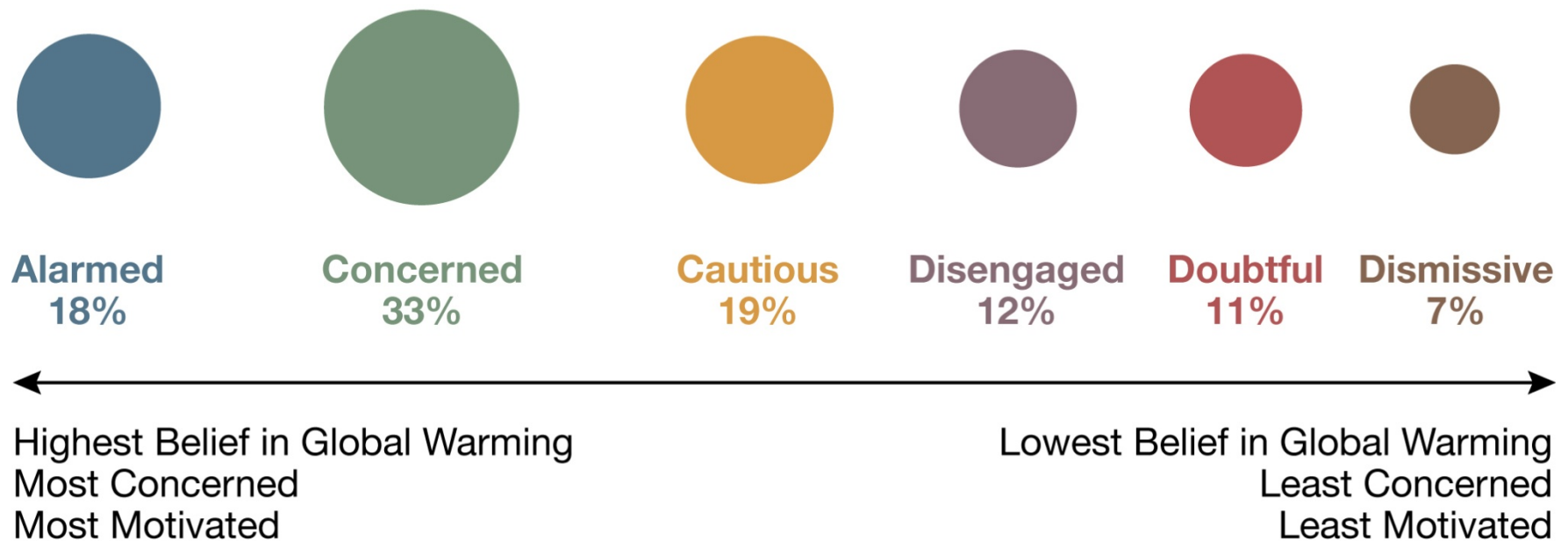


Figure 1: Proportion of the U.S. adult population in the Six Americas

Proportion represented by area



n=2,129

Stage 1: In-Depth Interviews w/ 70 Subjects from Six Distinct Audience Segments (Summer 2009)



Participant # _____

Global Warming is a Threat to Peoples' Health & Wellbeing

Most people agree with the sentiment that "good health is a great blessing." Although not yet widely known, global warming poses a very real threat to the health and wellbeing of Americans and other people around the world. Experts at the World Health Organization say that global warming is already leading to an increase in the rate of some diseases and is causing many deaths. If our government and other governments around the world do not soon take steps to limit global warming, a growing number of people in the United States will likely be harmed and killed. Conversely, if our government does take steps to limit global warming, our health and wellbeing will likely improve in a number of important ways.

Our health will suffer if we don't take action:

Global warming can harm people both directly and indirectly. Directly, global warming causes more extreme weather patterns including more frequent heat waves, more violent storms, and rising sea-levels – all of which can lead to people being harmed or killed. Indirectly, global warming harms the quality of our water, air and food, and our ecosystems, all of which can lead to increasing rates of disease and death. If we do not act now to limit global warming, experts at the U.S. Centers for Disease Control and Prevention say that global warming will harm people in every region of the United States. As a result of the poor air quality caused by global warming, children will become more likely to develop asthma, and the asthma they suffer from will be more severe; adults who have heart and lung diseases will become more likely to be hospitalized or die from their illness. An increasing number of extreme heat waves, floods, storms, fires and droughts caused by the changes in our climate will lead to more people being injured or killed. New infectious diseases (such as West Nile Virus) and old infectious diseases that we had previously eradicated from the United States (such as malaria and Dengue Fever) are likely to become an increasing problem for us as our climate warms.

Our health will benefit if we do take action:

According to a recent study published in the medical journal *Lancet*, taking actions to limit global warming – by making our energy sources cleaner and our cars and appliances more efficient, by making our cities and towns friendlier to trains, buses, and bikers and walkers, and by improving the quality and safety of our food – will improve the health of almost every American. Cleaner energy sources and more efficient use of energy will lead to healthier air for children and adults to breathe. Improving the design of our cities and towns in ways that make it easier and safer to get around on foot, by bike and on mass transit will reduce the number of cars on our roads and will help people become more physically active and lose weight. Increasing our consumption of fruits and vegetables, and reducing our intake of meat – especially beef – will help people maintain a healthy weight, will help prevent heart disease and cancer, and will play an important role in limiting global warming.

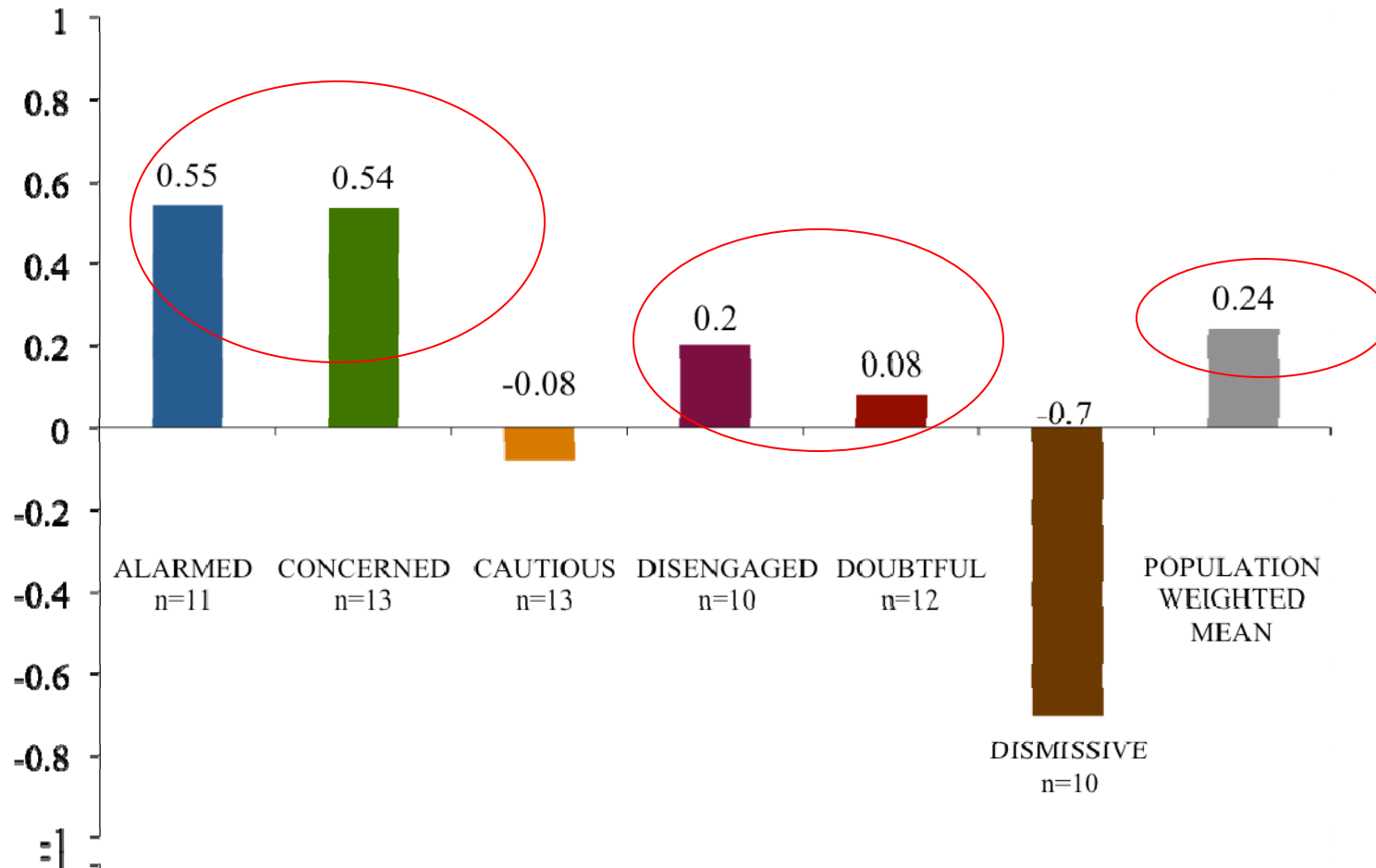
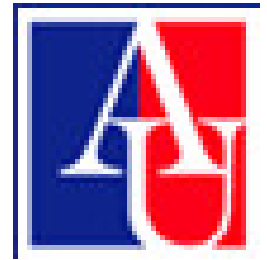
Conclusion:

Peoples' health is dependent on the health of the environment in which we live. Global warming offers America an opportunity to make choices that are healthier for us, and for our climate.

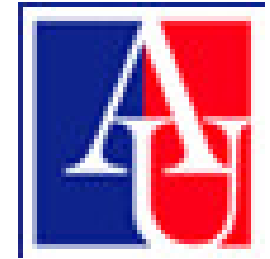
Global Warming In-Depth Interview

Thoughts on the Public Health Essay?

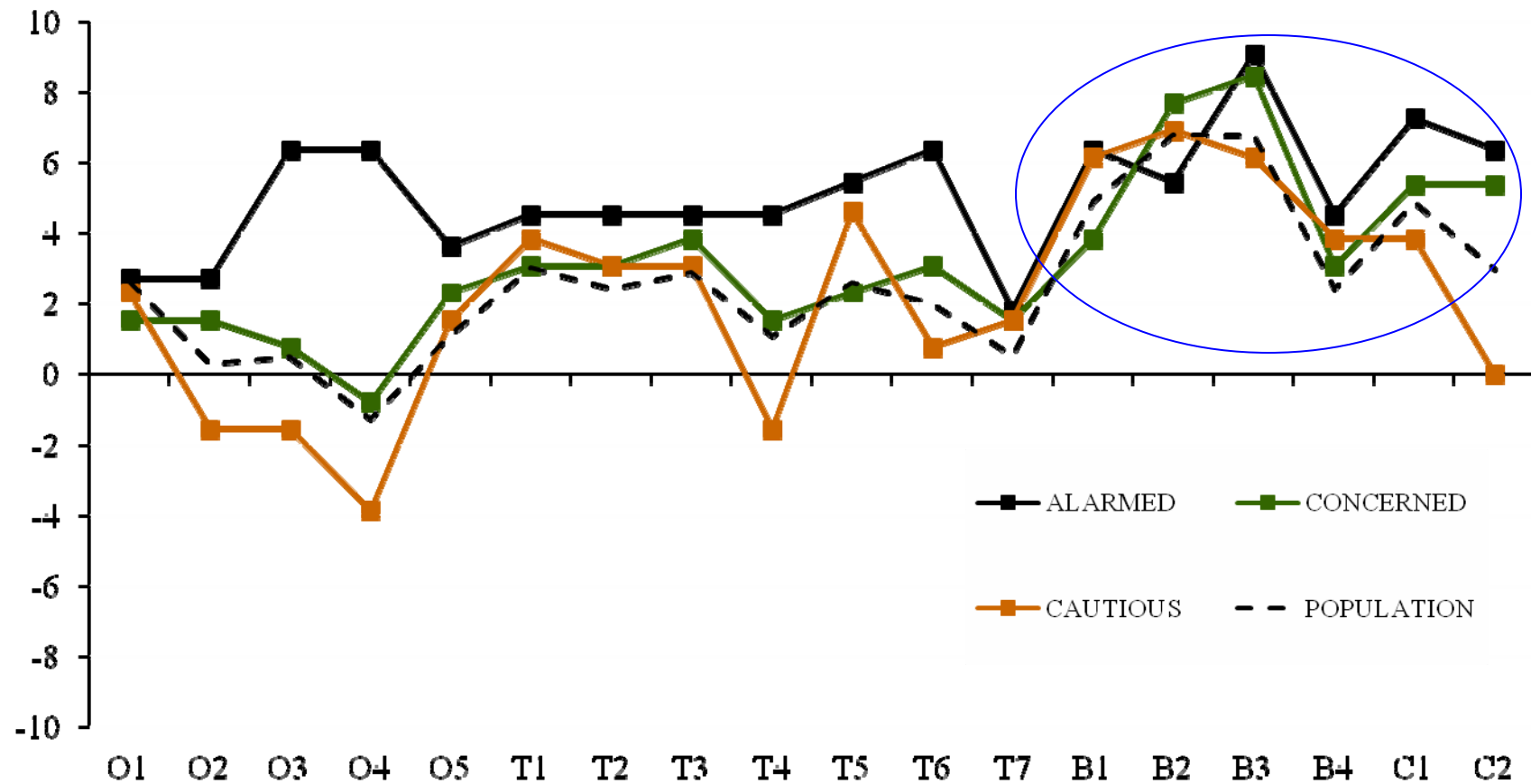
Positive (1) to Negative (-1) Rating of Comments



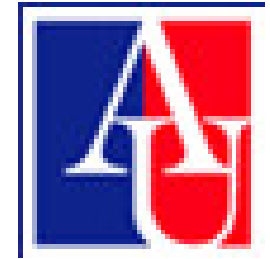
The mean valence of respondent comments when asked their general reactions to the public health essay by audience segment and by a national population estimate.



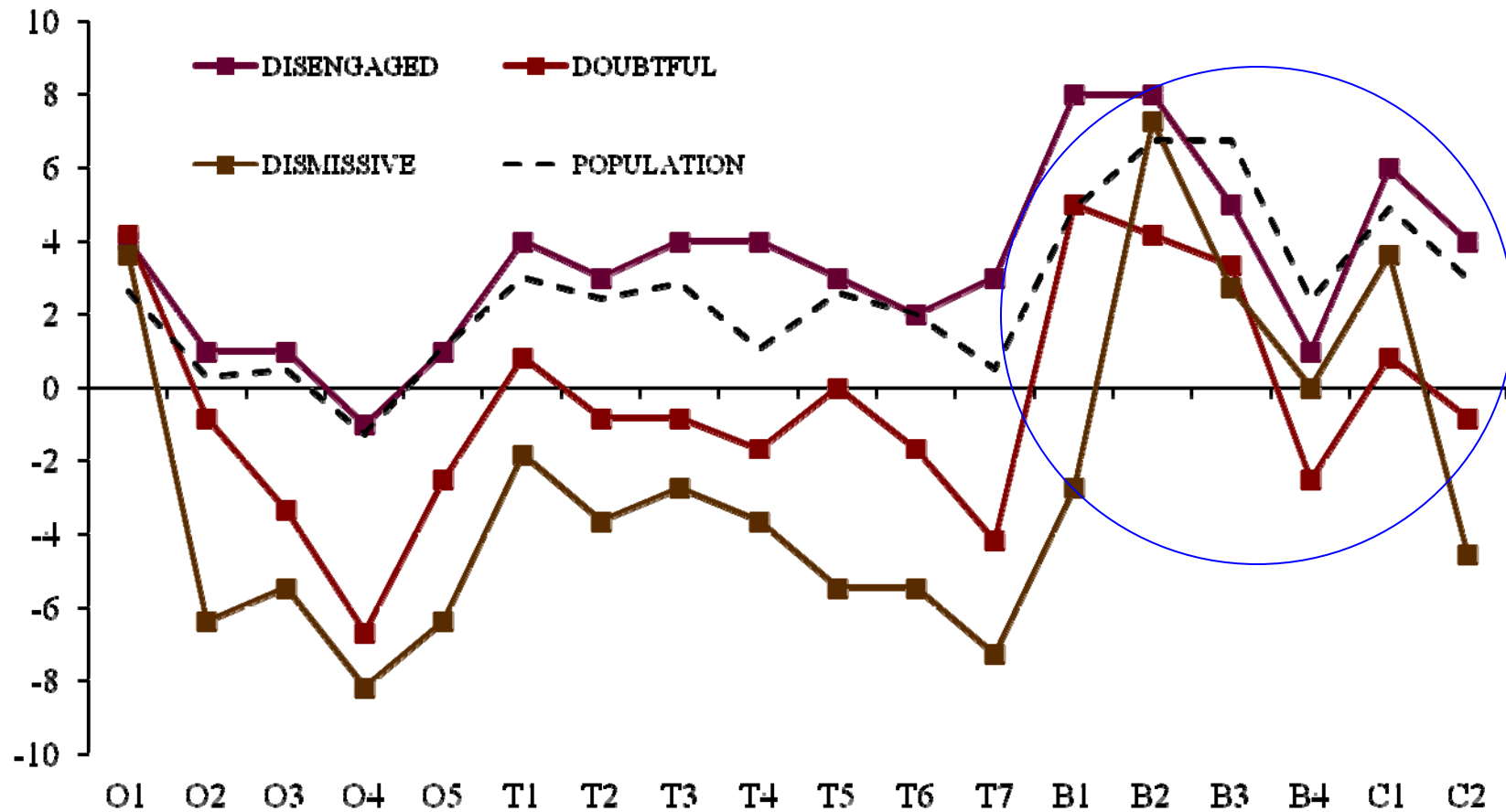
Segments 1-3: Sentence Specific Reaction To Public Health Essay



Scores reflect respondent average values by segment for the difference between the number of times each of 18 sentences were marked “especially clear or helpful” and “especially confusing or unhelpful.”



Segments 4-6: Sentence Specific Reaction To Public Health Essay

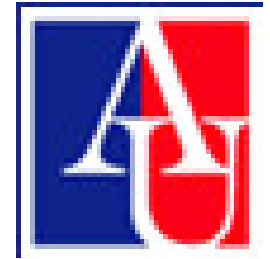


Scores reflect respondent average values by segment for the difference between the number of times each of 18 sentences were marked “especially clear or helpful” and “especially confusing or unhelpful.”

Audience Assessment of the Essay: Preliminary Conclusions



- All six Americas embrace the positive health frame:
O1: "good health is a great blessing."
- All six Americas embrace mitigation actions w/ public health co-benefits:
B2: *Cleaner energy sources and more efficient energy use lead to healthier air to breathe.*
B3: *"Improving the design of our cities and towns for walking, biking, and mass transit will reduce cars and help people be more active and lose weight."*
B1: *"Taking actions to limit global warming – by making our energy sources cleaner and our cars and appliances more efficient, by making our cities and towns friendlier to trains, buses, and bikers and walkers, and by improving the quality and safety of our food – will improve the health of almost every American.*
All six Americas reacted negatively to proposed changes in diet and food choices:
B4: "Increasing our consumption of fruits and vegetables, and decreasing our intake of meat, especially beef, will help people keep a healthy weight, will help prevent heart disease and cancer, and will play an important role in limiting global warming."



Stage II: Embedded Experimental Design in National Survey

- Participants: Six Americas respondents, N=2,150
- Pre-test measures from Fall 2008 survey to re-classify into segments
- Random assignment to frame conditions
- Web-based information presentation and post-test data collection
- Behavioral outcome measures such as send an email to friend, to representative in Congress, evaluation of agreement with and clarity of essay.

	Alarmed	Concerned	Cautious	Disengaged	Doubtful	Dismissive
Health Frame						
National Security Frame						
Environmental Frame (Comparison)						

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