

Applying a Motivated Reasoning Framework to Mitigate Cultural Conflict in Climate Change Education



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Background

Online learning holds great potential for increasing the amount and types of **environmental education and Extension training** available. Educators can, however, be reluctant to participate in training about issues like climate change because of their own strongly-held **political and social views**. To increase the number of people who will participate in these training opportunities, online resources must appeal to diverse perspectives and worldviews. Technical competence and an adequate and available supply of educational resources are essential for integrating climate change into formal or non-formal curricula, but acceptance and support from teachers, administrators, parents, and the general public will also be key factors in determining how and whether that integration takes place.¹

Objectives

To explore the cultural cognition theory and create avenues for engaging educators and Extension professionals in climate change curricula, this study aims to:

1. Evaluate the impact of a “**cultural decontamination**” strategy as a method for addressing the cultural cognition of climate change education;
2. Assess the Cultural Cognition Thesis by investigating how exposure to contrasting valuations of climate change education **affects education and Extension professionals’ perceptions** of climate change materials;
3. Identify strategies for creating climate change materials that are compatible with educators of **diverse cultural outlooks** and are consistent with sound teaching objectives.

Expected Results

It is expected that the breakdown of cultural cognition worldviews will be the same among educators and Extension professionals as it is among the American public. Further, it is expected that teachers whose cultural values leave them predisposed to question the value of climate change education **will become less polarized** when the climate change education content and its value are framed in a way that has an appropriate integration of meaning and information content. It is hypothesized that a **significant relationship** will exist between climate change perceptions and communication strategies that resonate with or conflict with different worldviews.

Cultural Cognition

Cultural cognition is the tendency of individuals to conform their beliefs about disputed facts (ie. whether or not climate change is a serious threat).³ In effect, this psychological mechanism leads individuals to subconsciously create a value-driven confirmation bias regarding certain politicized issues or ideas. The theory suggests that focusing on “climate change literacy” may do little to budge established opinions. To overcome the cultural cognition effect, environmental educators and Extension professionals must find ways to present climate change **without entangling facts with issues of cultural identity**. Previous research has sought to identify social and psychological mechanisms that drive this tendency. This research seeks to apply these findings to the creation of “**culturally decontaminated**” education materials that **speak to diverse world views** (Figure 1) using a **two-channel communication strategy** (Figure 2).⁴

Methods

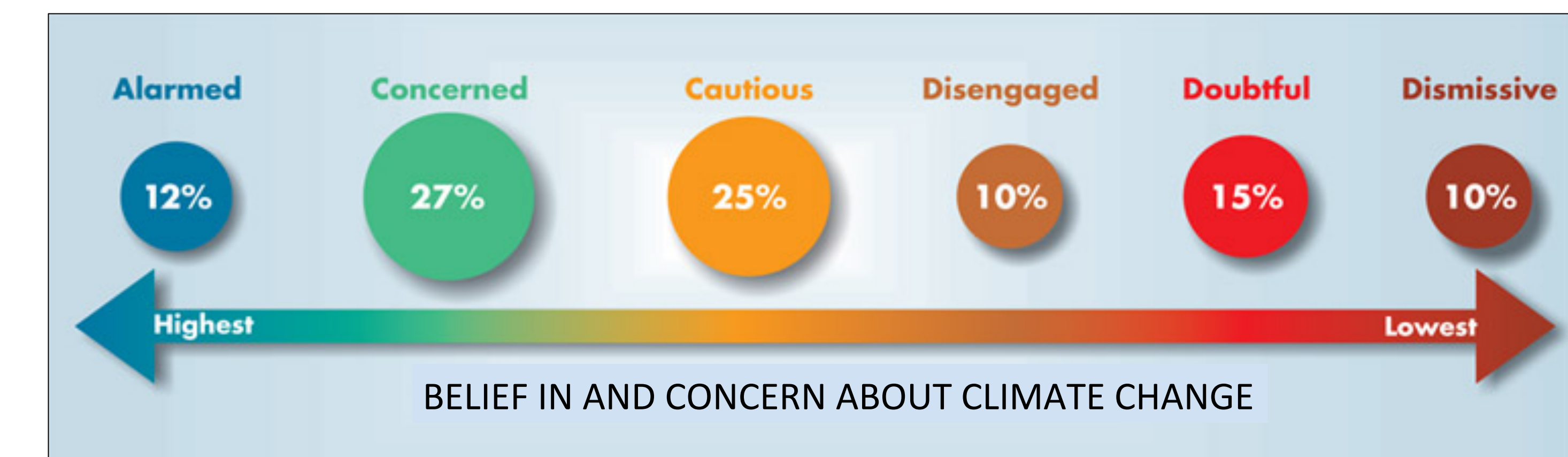
Data will be collected among randomly selected secondary educators and Extension professionals. The quantitative survey items have been used extensively in previous research.^{2,3,5,6}

Quantitative Surveys

- Demographics
- Climate change perceptions (Six Americas survey; see Figure 3)
- Group-grid worldview categorizations (see Figure 1)
- “Treatment” reading for different worldviews

Qualitative Interviews

- Discuss effects of cultural cognition on participants’ professional actions
- Discuss factors of cultural identity, “cultural red flags,” and strategies for ameliorating conflict among educators and Extension professionals



Highest Belief in Climate Change
Most Concerned
Most Motivated

Lowest Belief in Climate Change
Least Concerned
Least Motivated

Figure 3. General Public Breakdown of the “Six Americas” of Climate Change Perceptions⁶

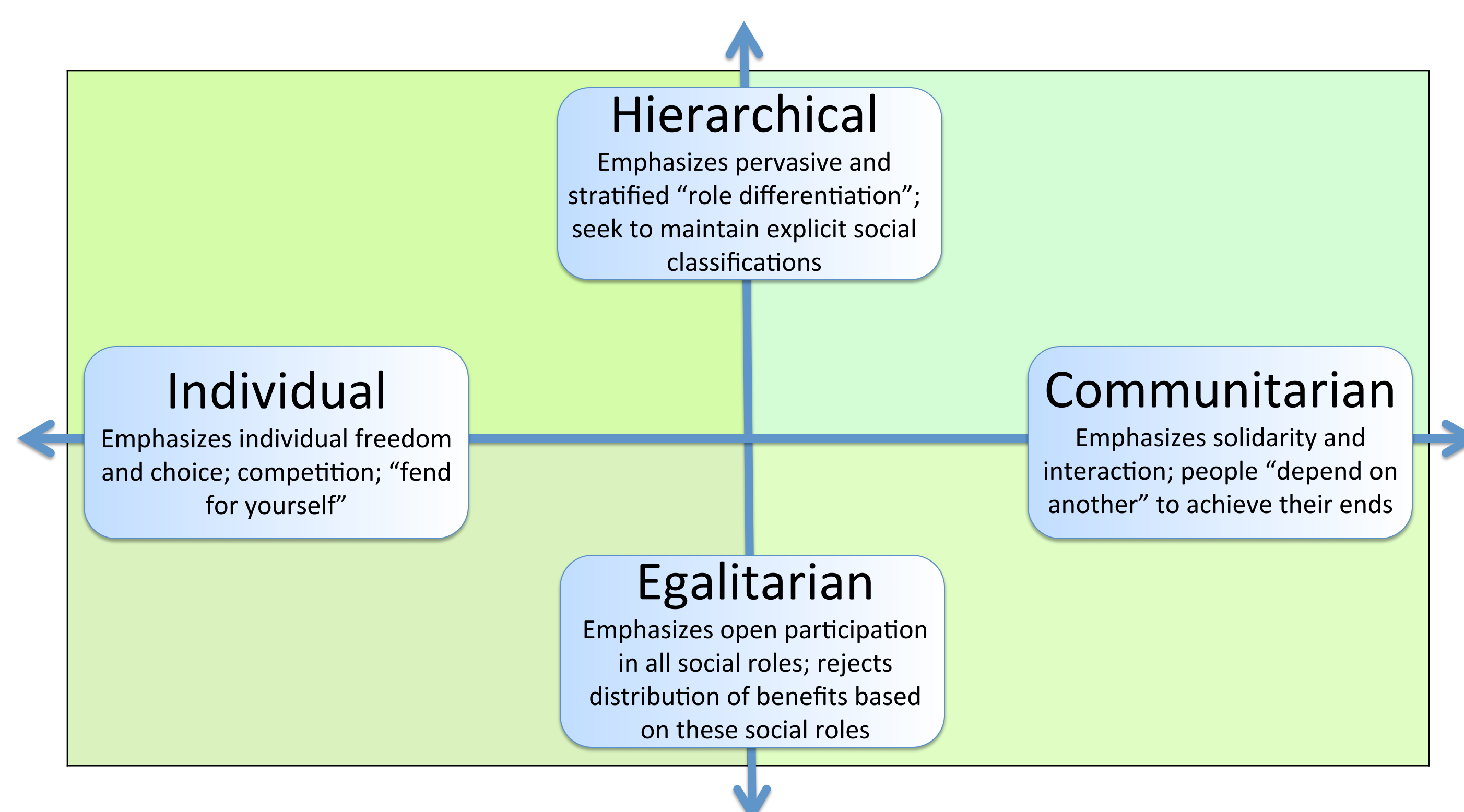


Figure 1. Worldview Group-Grid Typology²

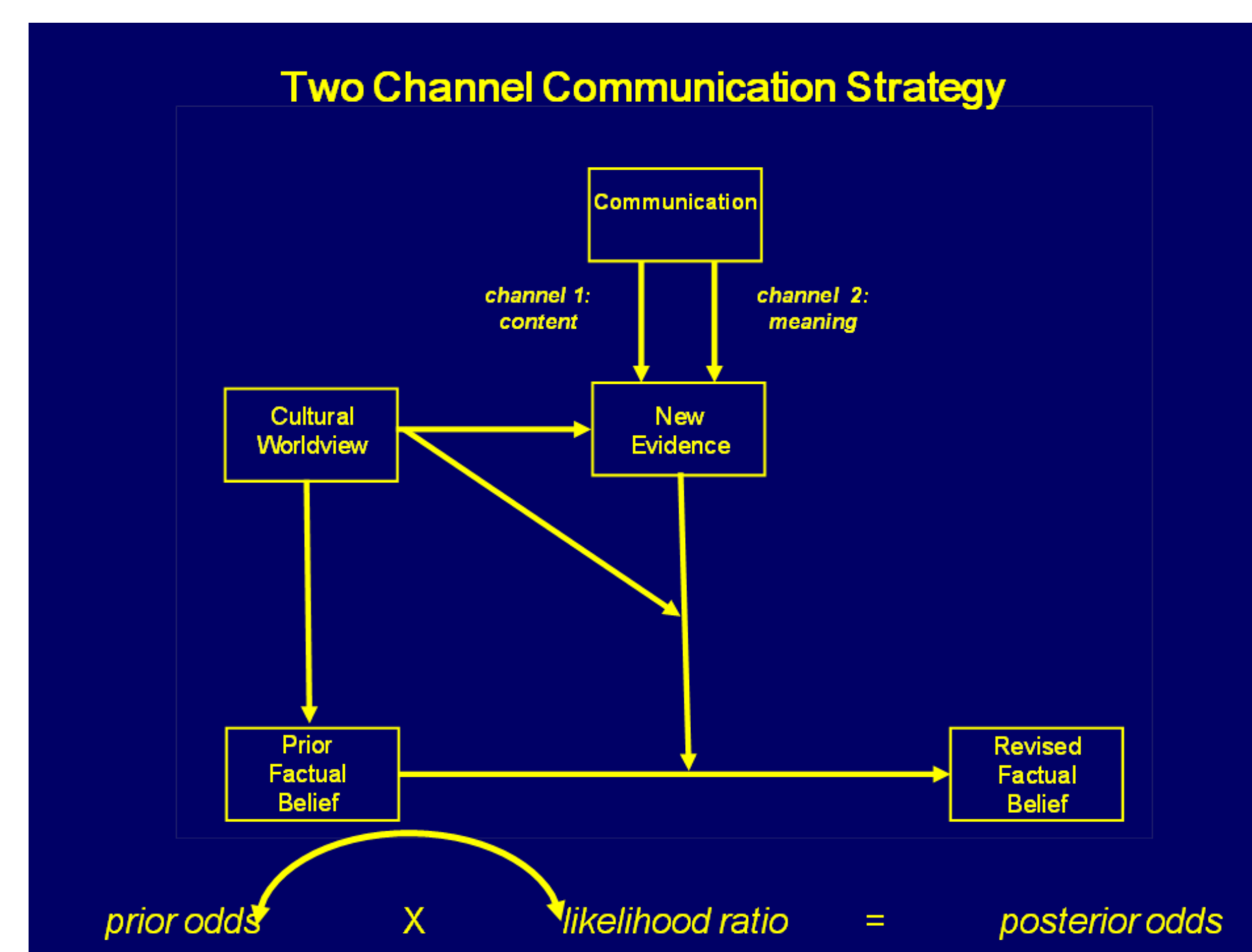


Figure 2. Two Channel Communication Strategy⁵

Study Significance

Highly politicized issues become frustrating topics for environmental education and Extension to address as value-laden confirmation bias stands in the way of meaningful communication. The results of this study can provide an avenue for environmental educators and Extension faculty to develop methods for presenting the value of climate change education in ways that do not entangle facts with issues of cultural identity and for **improving the success of environmental education and Extension resources**.

References

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