

UNDERSTANDING

TORNADO WARNINGS. FALSE ALARMS, AND COMPLACENCY

Tornadoes in the Southeastern U.S. are the most lethal

of any region, even though other regions experience

more tornadoes on average.1 Scientists have long had concerns that <u>false alarms</u> for

to future warnings and react ineffectively.

START researchers interviewed 77 people across 10 focus

groups in three cities: Tuscaloosa, AL, Winston-Salem,

NC, and Lexington, KY. Their findings are listed below.

weather events can cause people to become complacent

COMPREHENDING PROTECTIVE

ACTIONS People generally understand what shelter in place means,



but might not take action until knowing how urgent the situation is. To encourage people to shelter in place after a tornado warning, focus group participants recommend including more directive language in warnings.

received information which often then led to more active information

COMMUNICATIVE BEHAVIORS

seeking/sharing. PREFERRED INFORMATION

Participants indicated that they first



meteorologists as the primary source for information on tornadoes. Friends and family are also often cited as key sources.

There is a <u>clear preference for local</u>

Focus group participants indicated that they would like national agencies to give information to local sources, showing people's strong preference for local meteorologists.



coming

COMMUNICATION PREFERENCES

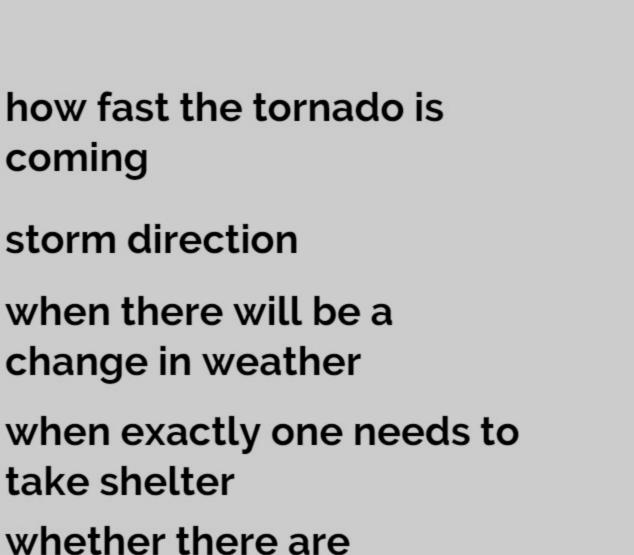
PROTECTIVE DECISION-MAKING A wide range of information helps people decide what to do during tornado watches and warnings. These include:



Focus group participants had a wide range of behavioral responses to false alarms. Some would not take future warnings



 Sympathy Annoyance Relief Apathy Confusion Dissapointment about trust



emergency shelters nearby

Some would aim to Some would not be more prepared change their behavior for next time having been notified of the regardless of seriously. false alarms. risk of tornadoes.

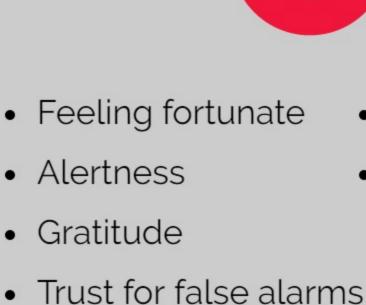
While previous studies primarily showed that people mostly feel

negative emotions such as anxiety, sadness, and fright for

natural disaster, people in the Southeastern U.S. also

demonstrated further positive and negative emotions:

COMPLACENCY



ENVIRONMENTAL CUES AND

TORNADO MYTHS

There are many myths and false environmental cues that people pay

attention to when it comes to weather events (e.g., animal behavior, leaves turned up or down, sky color, and joint pain). These can

making during a tornado.

be obstacles to effective decision-

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Findings from:

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Liu, Brooke F., Holly A. Roberts, Michael J. Egnoto, and Jung Kyu (Rhys) Lim. Understanding Tornado

Sources: 1. Ashley, W. S. (2007). Spatial and temporal analysis of tornado fatalities in the United States: 1880-2005. Weather and Forecasting, 22, 1214-1228.