

Conflicting Media Messages in a Health Crisis: Asymmetric Updating and Covid-19

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Introduction

There is an almost endless supply of information from the media available. The problem is determining which information to pay attention to. The asymmetric updating hypothesis posits that news confirming our preexisting attitudes and beliefs is easier to accept and incorporate into our understanding of issues, but that news that is inconsistent with those beliefs is more likely to be disputed or dismissed. Covid-19 death rates represented a pressing topic that might be influenced by this effect.

Hypotheses:

I predicted that participants would update their estimates of potential Covid-19 deaths more when information type and news source were consistent with their preexisting perceived threat of Covid-19.

Methods

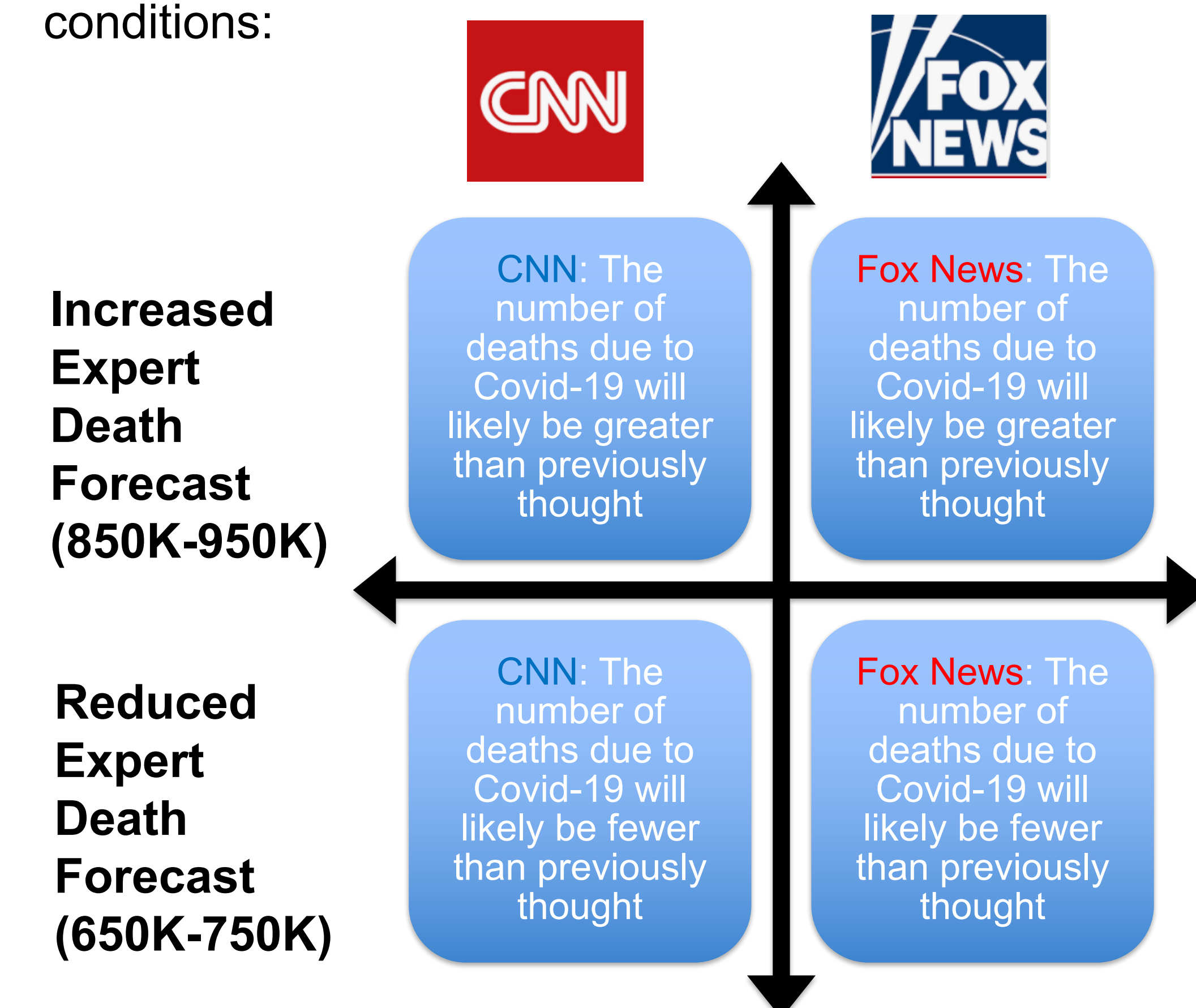
Participants: 468 USF undergraduates from psychology
Procedure:

→ Participants completed a series of ratings to measure perceived Covid-19 threat.

Initial expert forecast was presented: **800,000 Covid-19 deaths in the U.S. by the end of 2021**

→ Participants provided their own death estimate for 2021

Next an updated expert forecast was provided in 1 of 4 conditions:



→ Participants then gave their own updated death estimate.

Note. Error bars = ±1 standard error; Extreme estimates (< 100K, >1200K) of N = 62 (12%) participants were removed prior to analysis

Figures

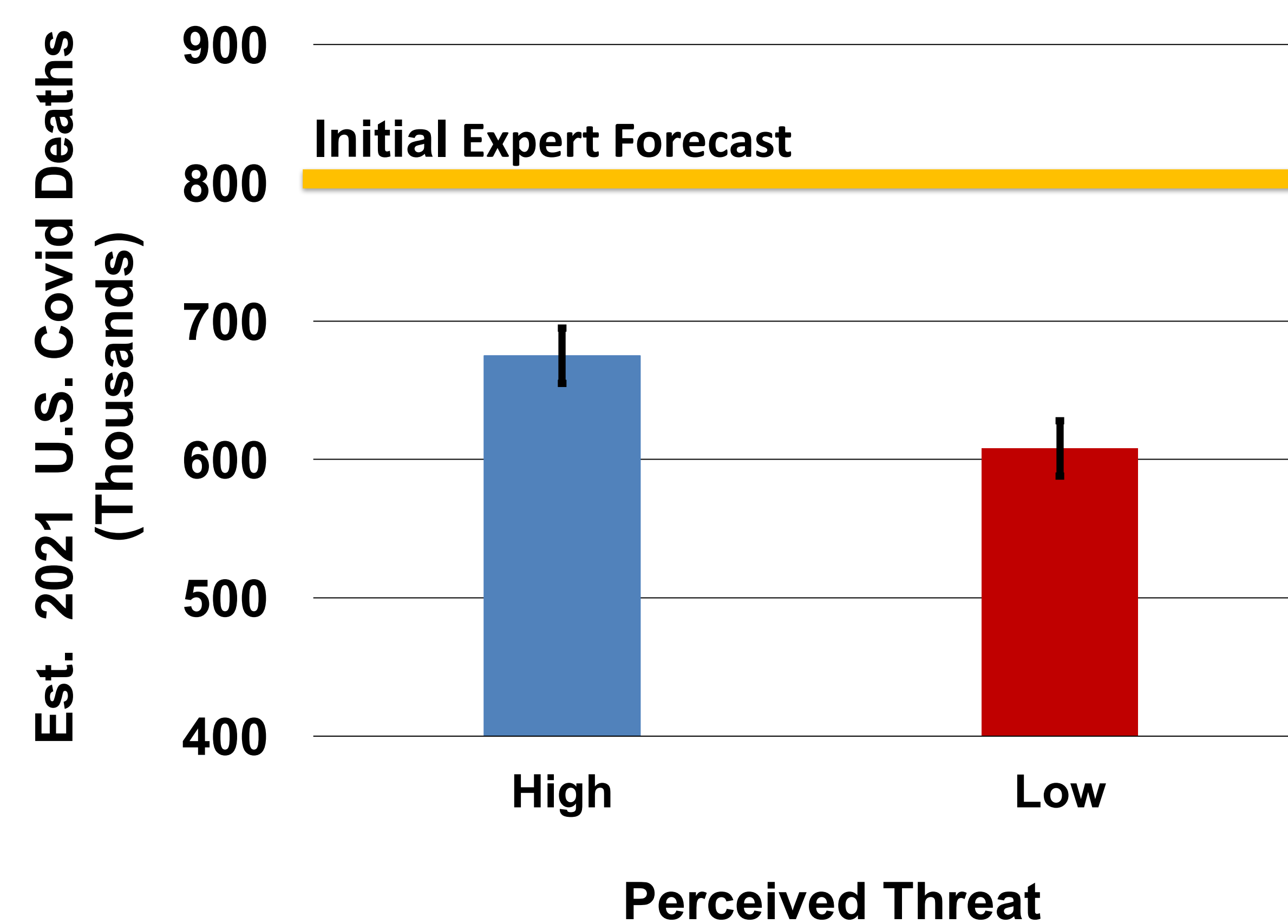


Figure 1. Participant Baseline 2021 Covid-19 Death Estimates

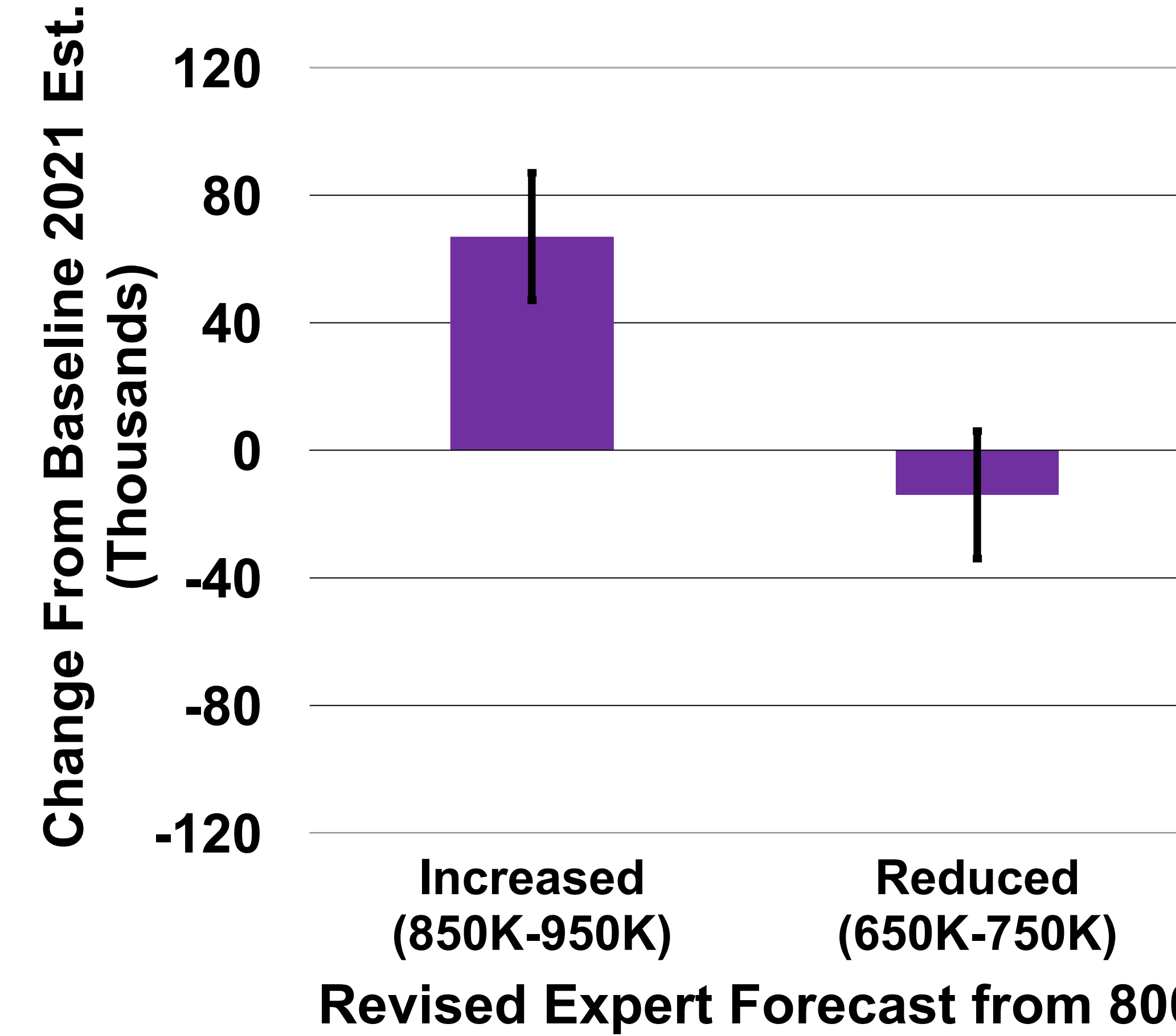


Figure 2. Main Effect Of Comparative Information On Change from Baseline

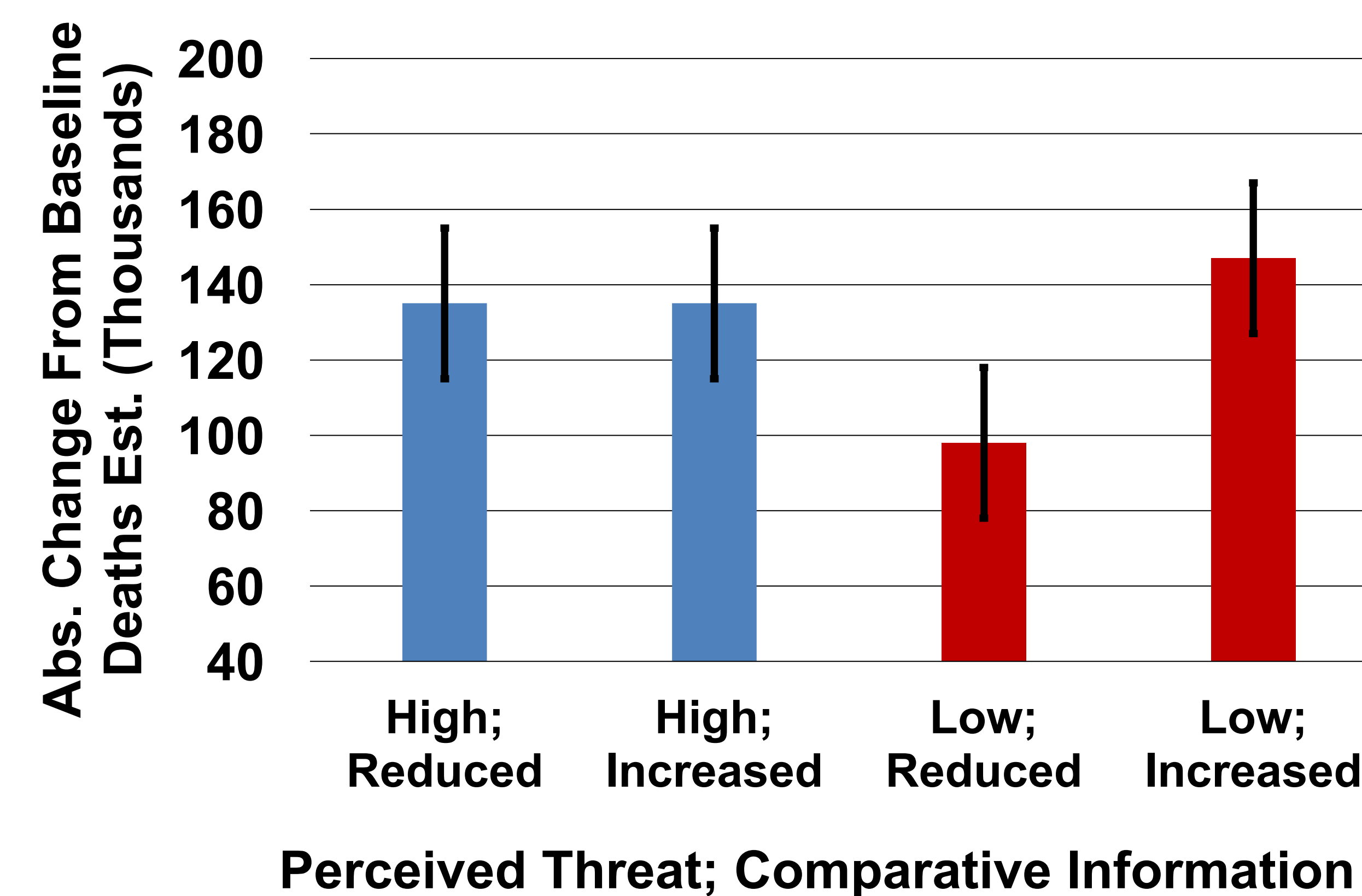


Figure 3. Lack of Classic Asymmetric Updating Interaction

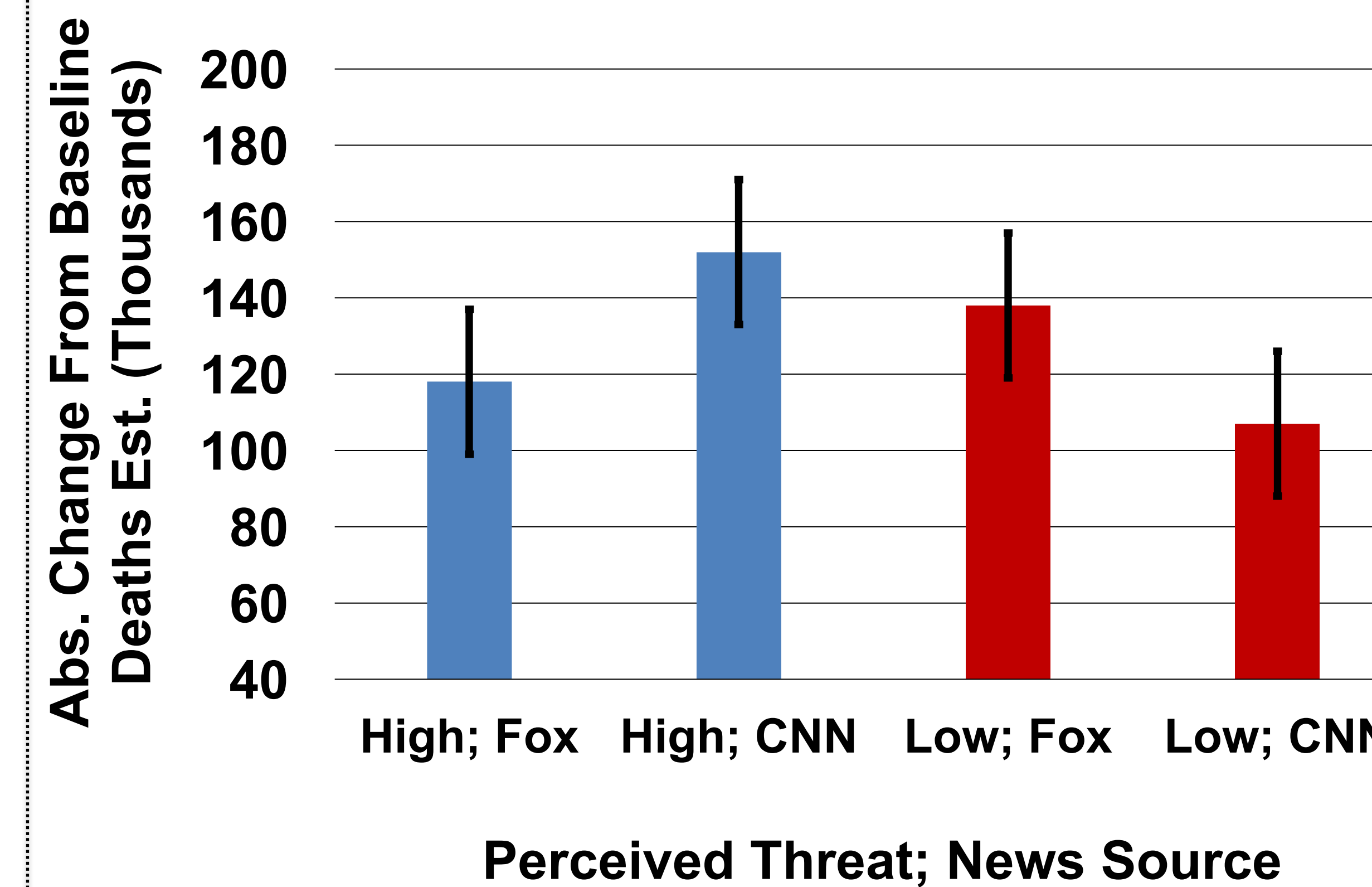


Figure 4. Lack of Source*Threat Asymmetric Updating Interaction

Results

Figure 1: Those with higher perceived threat of Covid-19 estimated slightly higher 2021 U.S. Covid-19 deaths than those with lower perceived threat.

But: These baseline death estimates were generally lower than the experts' original forecast of 800,000 deaths.

Figure 2: For participants given an increased death forecast, their average change from baseline moved in the direction of experts. There was not a consistent shift in the direction of the reduced forecast but estimates were often lower than the reduced forecast.

However, 63% followed experts when death forecast increased (27% no shift, 10% opposite) whereas, only 42% followed experts when death forecast reduced (39% no shift, 19% opposite). Unexpectedly, these patterns were consistent across threat groups.

Figure 3: Contrary to prior studies, there was little evidence that strength of participant updates differed based upon the consistency between the direction of information received and preexisting perceived threat level.

Figure 4: There was little evidence that strength of participant updates differed based upon the consistency between the typical news source messaging and preexisting perceived threat level.

Implications

Feeling higher threat can go along with predicting higher death estimates, but still can be less than what experts predict.

Updating estimates may take expert forecasts into account, but the amount of actual view change may not be strong and may even be in the opposite direction at times. People might be likely to pay more attention to changes in expert forecast when the information is negative (i.e., increased death estimates), but more research is needed regarding when this might be true.

In our study, we did not find a difference in willingness to process and integrate information based upon the connection between prior beliefs, and either the information content or news source. This suggests that asymmetric updating may not always occur. Here, it seems to raise the question of how invested students are in learning general information about national trends and purported expert forecasts regarding potential large-scale outcomes of this health crisis.

References:

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