

The Psychology of Misfortune



Why people fall victim to
foreseeable (and avoidable) hazards

How could a veteran cruise ship captain allow this to happen?



Why did only 40% of people owning Beachfront homes in Gilchrist, Texas, not have flood insurance?









Why did 15,000 people allow their cars to be flooded in Hurricane Sandy?

Calverton Airport, LI

EYE-YI!

WATCH

IT, N.Y.

**'Cane expected
to deal a blow**



Oct. 29 NWS Advisory

...THE COMBINATION OF AN EXTREMELY DANGEROUS STORM SURGE AND THE TIDE WILL CAUSE NORMALLY DRY AREAS NEAR THE COAST TO BE FLOODED BY RISING WATERS.

...ELEVATED WATER LEVELS COULD SPAN MULTIPLE TIDE CYCLES RESULTING IN REPEATED AND EXTENDED PERIODS OF COASTAL AND BAYSIDE FLOODING. IN ADDITION... ELEVATED WATERS COULD OCCUR FAR REMOVED FROM THE CENTER OF SANDY.

DO NOT ENTER
12' CLEARANCE



Standard explanations that turn out to be wrong

- Lack of awareness/underestimation of probabilities
- Herding
- Moral Hazard
- “System 1” biases (just not thinking clearly):
e.g., opting for the status quo of inaction

What our field work shows

- Failures to prepare are often deeply thought-out, well-reasoned mistakes
- Reason: calculations are based on a mental model of hazards that is deeply flawed.
- The result: very bad decisions that people feel very confident about (hence are difficult to dissuade)

Email from “Fifi” on October 28th, 2012

We have just heard that evacuation is mandatory by 8PM tonight. Even though we have friends that have invited us to come to their homes inland, we feel that we will be better off here. We may see water in our studio that is at ground level. We will deal with that. Our house is 50 years old and has been through many storms so we feel that it is structurally sound.

When we built it right after the '62 'Nor-easter we went around and asked questions. We were told that any house in this area that was 2 cinder blocks up had problems, 3 cinder blocks up was fine so we went up 4! In all of these years we have never had water in the house, not even the studio.

We are going to stay here and I will report in to give you updates.

Oct. 29, 9AM: first update email from Fifi

Good Monday morning from the beach. Yes, we have water - lots of it! Attached is a picture I just took looking out at our back yard.



Then, Radio Silence. No further
word through the 29th or 30th.

Oct 30, day after storm, Bethany shown in WSJ Video



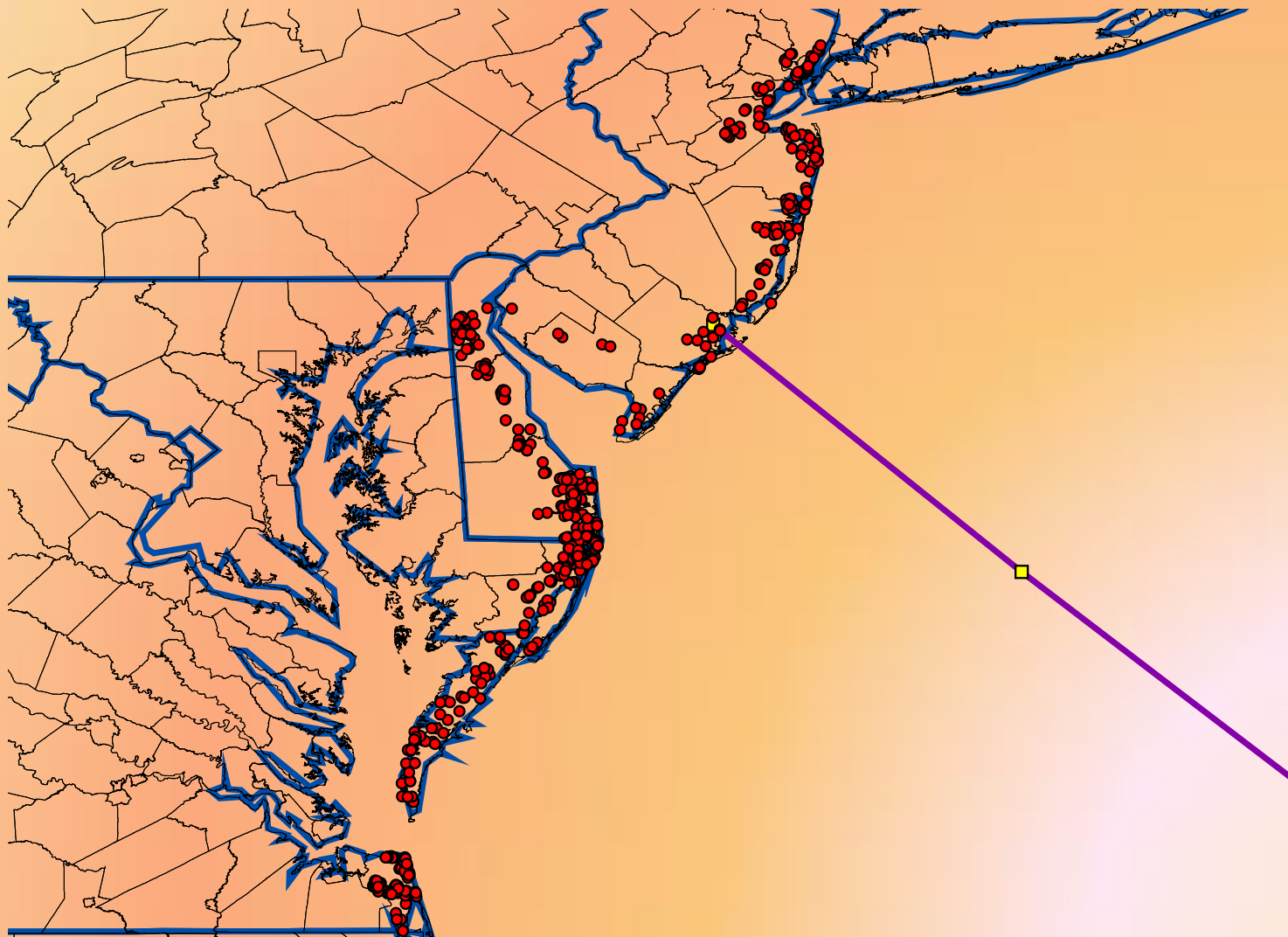
“Real-Time” Surveys

- Goal: to survey residents in areas threatened by hurricanes 3-4 days before the storm arrives, and continuously track the evolution of beliefs and behaviors
- Hope: To understand what drives decisions to invest in protection from storm threats *as they are being made*

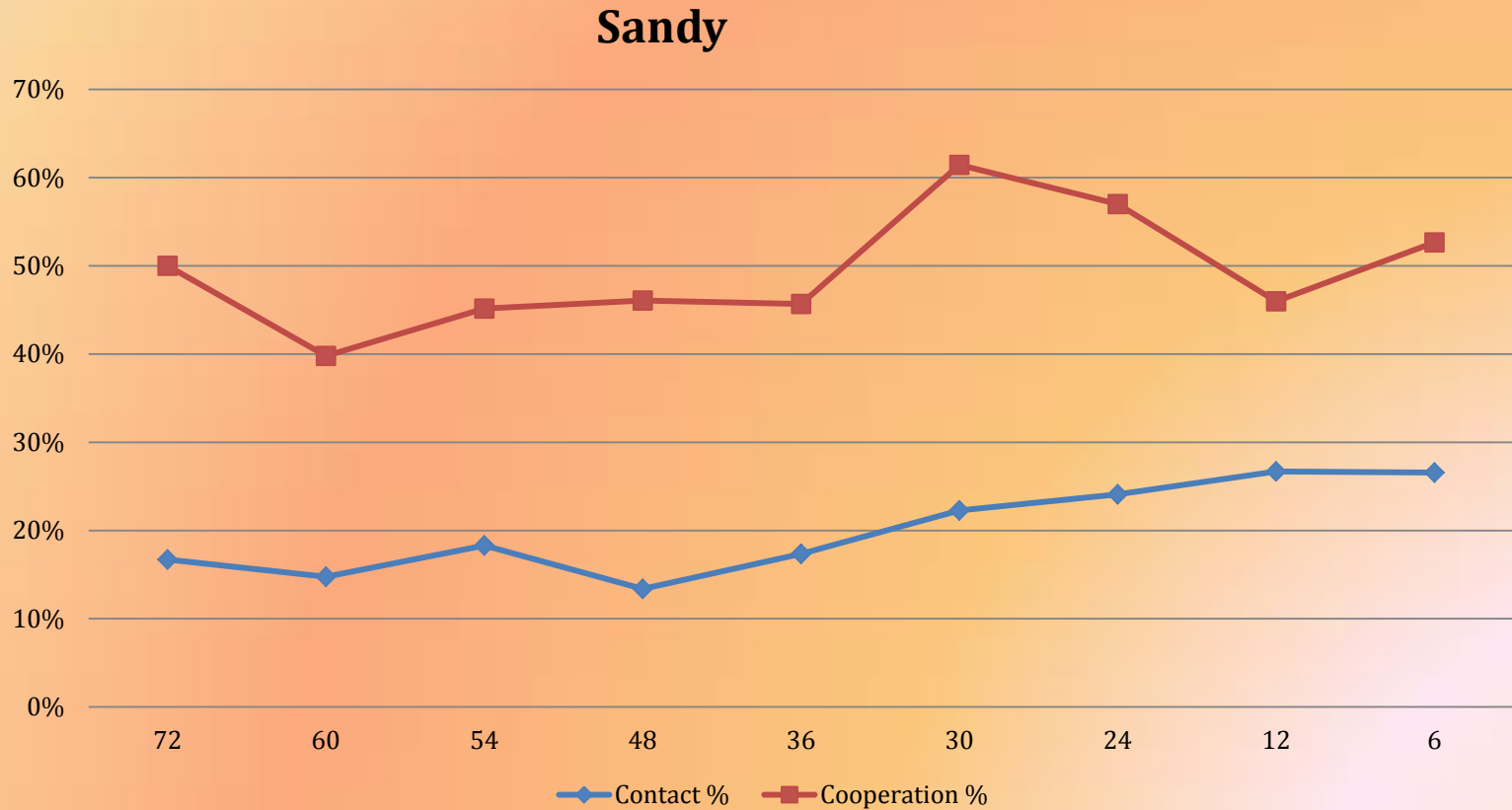
Information Gathered

- Beliefs and knowledge about the storm threat (e.g., odds that home would be hit by hurricane-force winds, degree of worry, knowledge of warnings)
- Preparedness actions, mitigation, insurance
- Information sources and communication
- Socio-demographics, past storm experience

Sandy



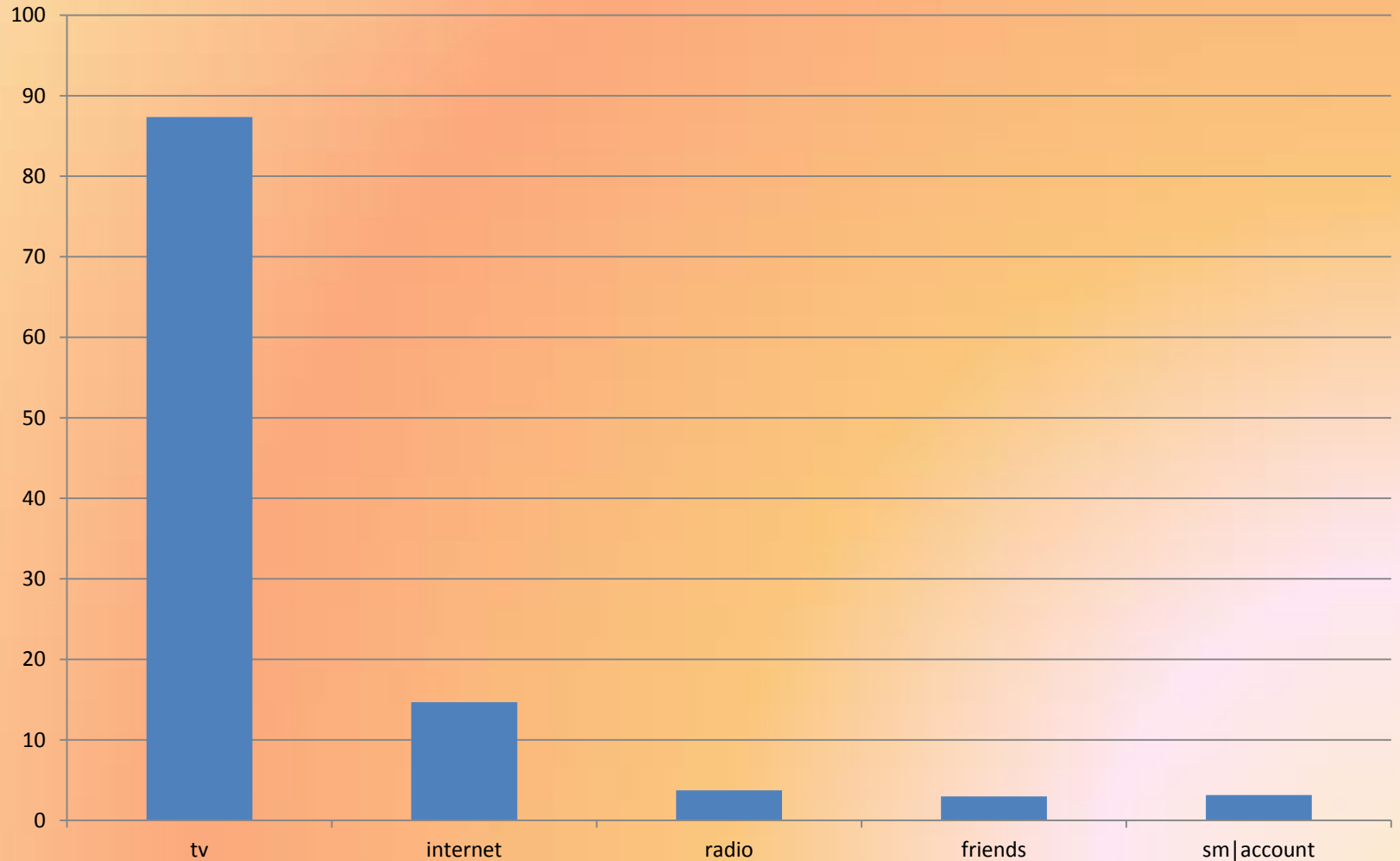
Non-response bias not a problem (for us, anyway)



How much did people know, and how did they know?



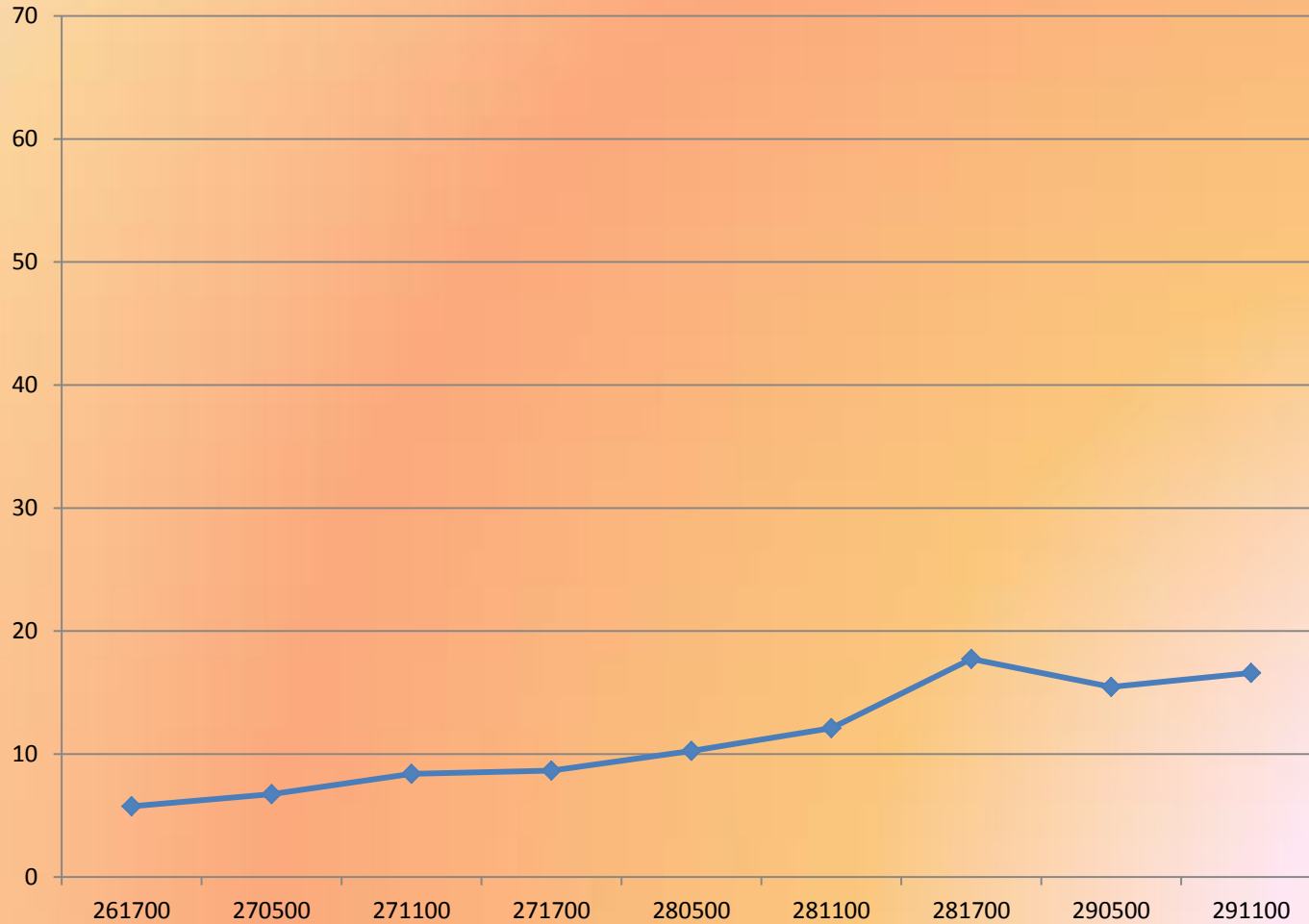
Source of Most Recent Information, Sandy (mean=2.5 hours)



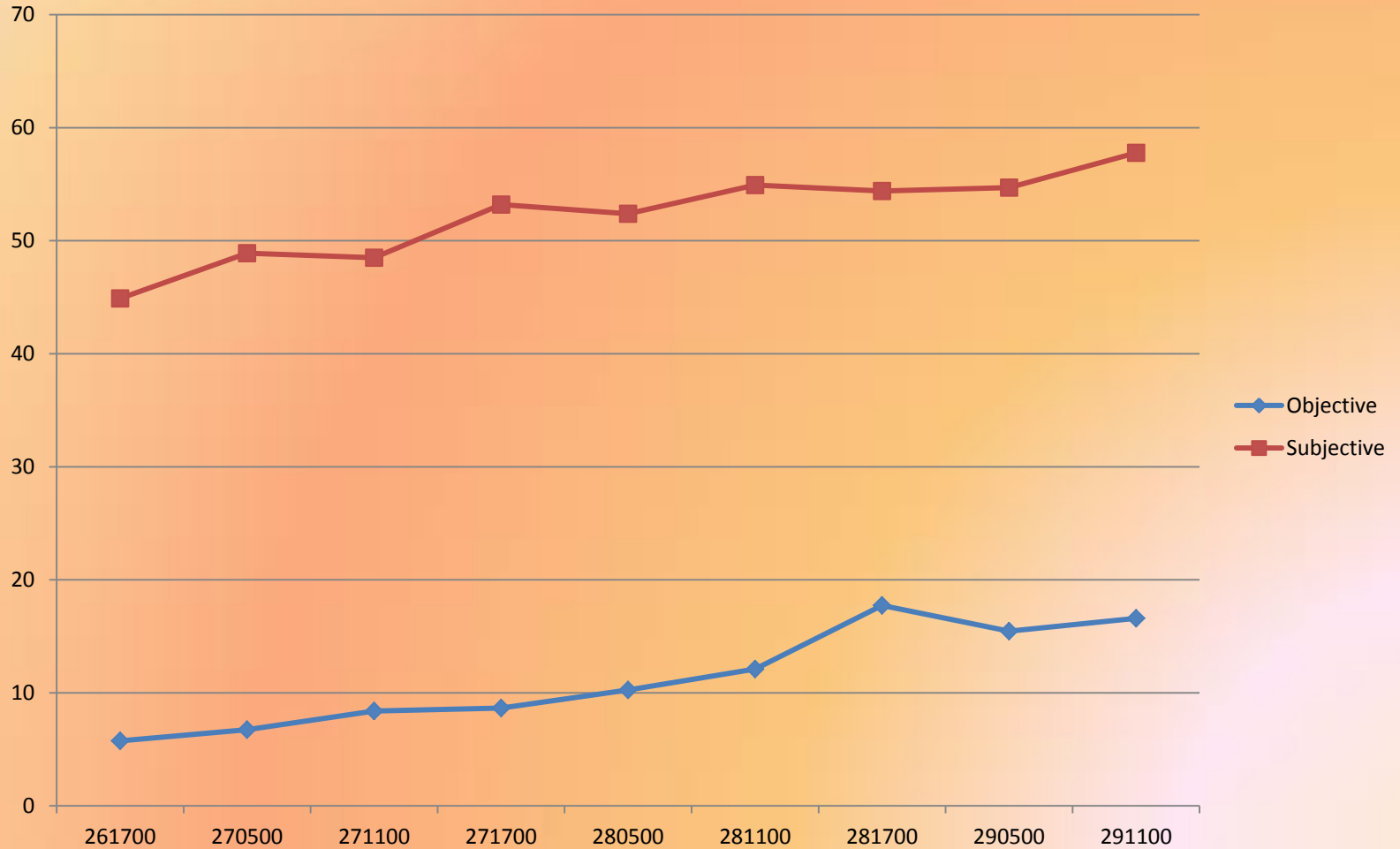
What are people (not) learning from television?

- The “Cantore effect”: gross over-estimation of the odds the experiencing hurricane-force winds among people in hurricane-warning areas

...Sandy: hurricane winds were never that likely

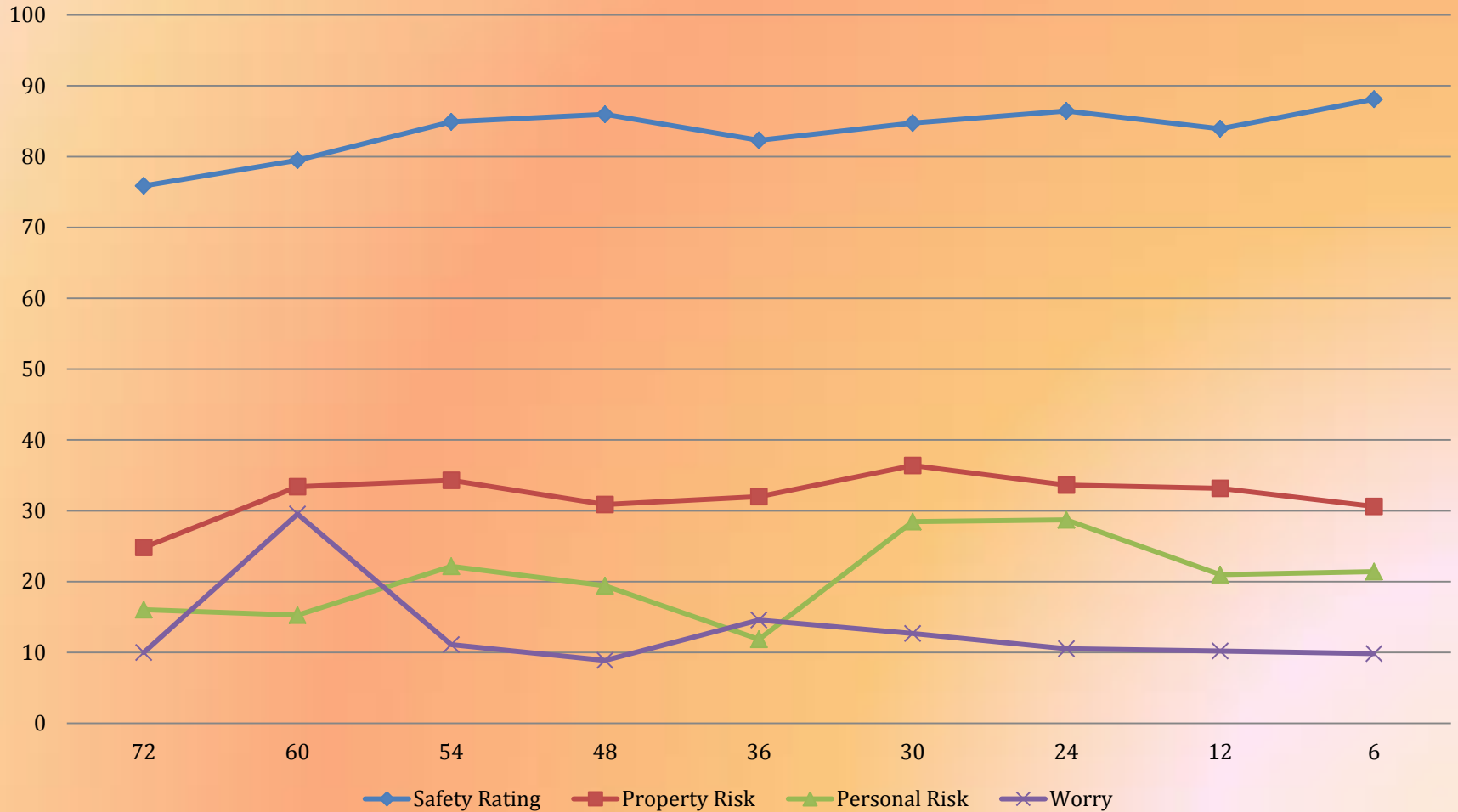


...But people thought they were



...yet few were particularly worried about it

Sandy



HURRICANE CENTRAL
SANDY POWER OUTAGES



ADVERTISEMENT



FREE Checking built FOR THOSE WHO SERVE

Sta

Hurricane Sandy: New Jersey Warned of 7- to 10- Day Power Outages

Oct. 27, 2012

By SYDNEY LUPKIN via WORLD NEWS



Bridgette Mooney, her daughter Skyler, 15 months, and husband Kevin watch from their home as Hurricane Isaac lashes their property with rain.

NEXT VIDEO >>

1.7k

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242

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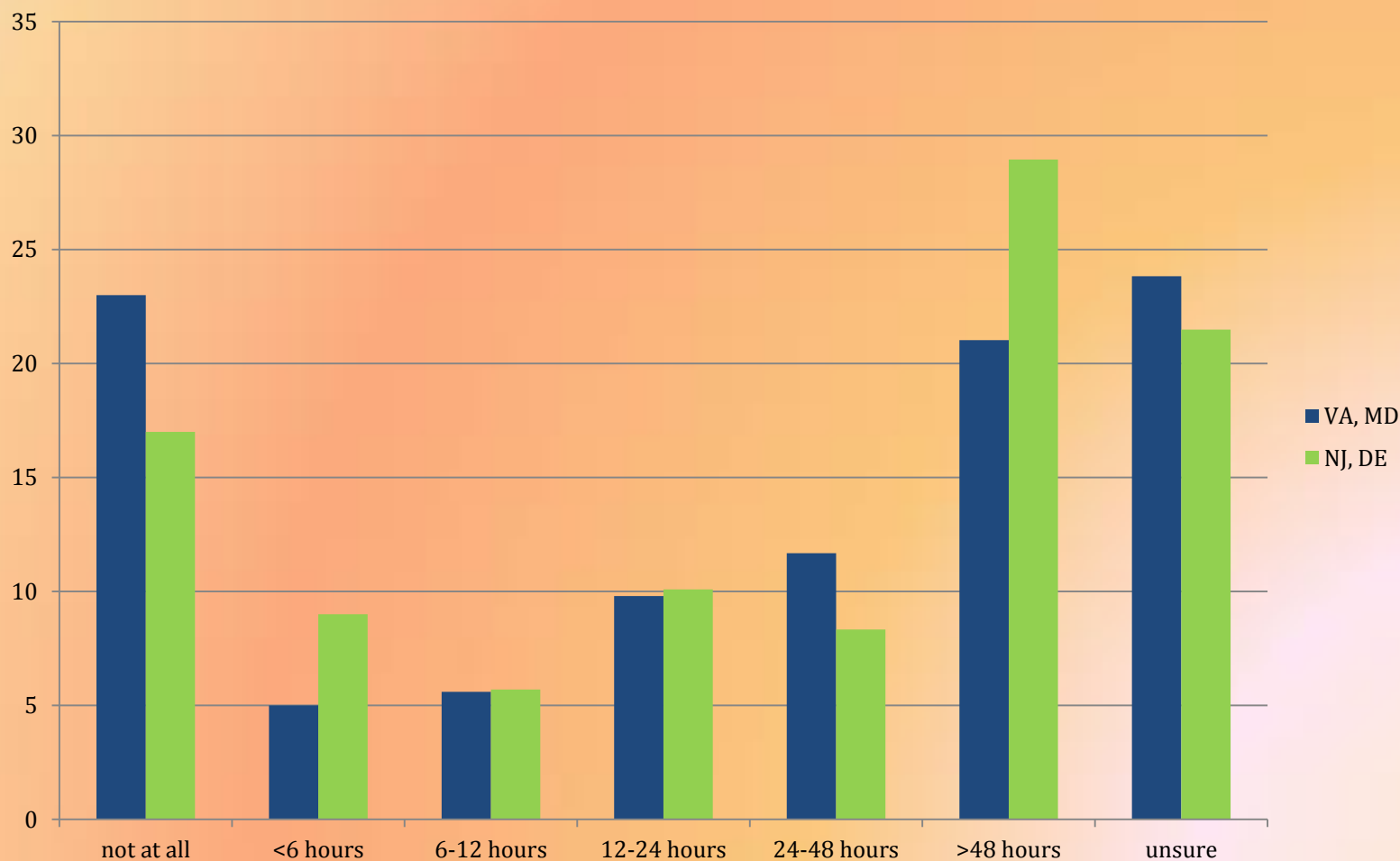
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8+1



...."Snow day analogy": people thought the DURATION would be short

Expectations of Power Outage



Why the lack of concern?



Why the lack of concern?



FRANKENSTORM

PUMPKIN PUNCH

serve hot or cold.

- 1 part vanilla vodka
- 1 part apple cider (*double if hot*)
- 2 parts ginger ale (*if cold*)
- simple syrup (*if needed*)
- 1 oz. pumpkin
- orange slices
- season w/ cinnamon and nutmeg

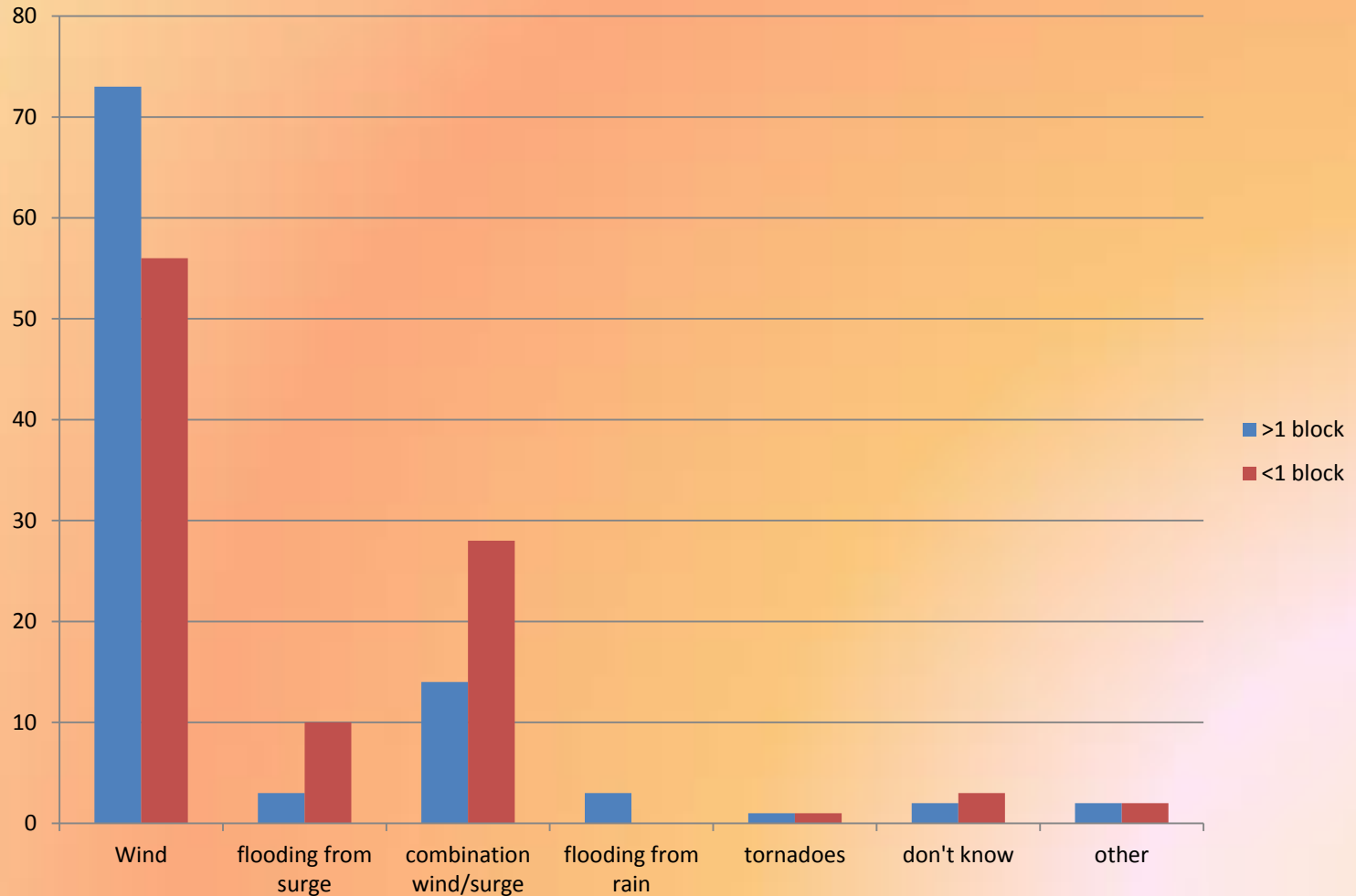


What are people (not) learning from television?

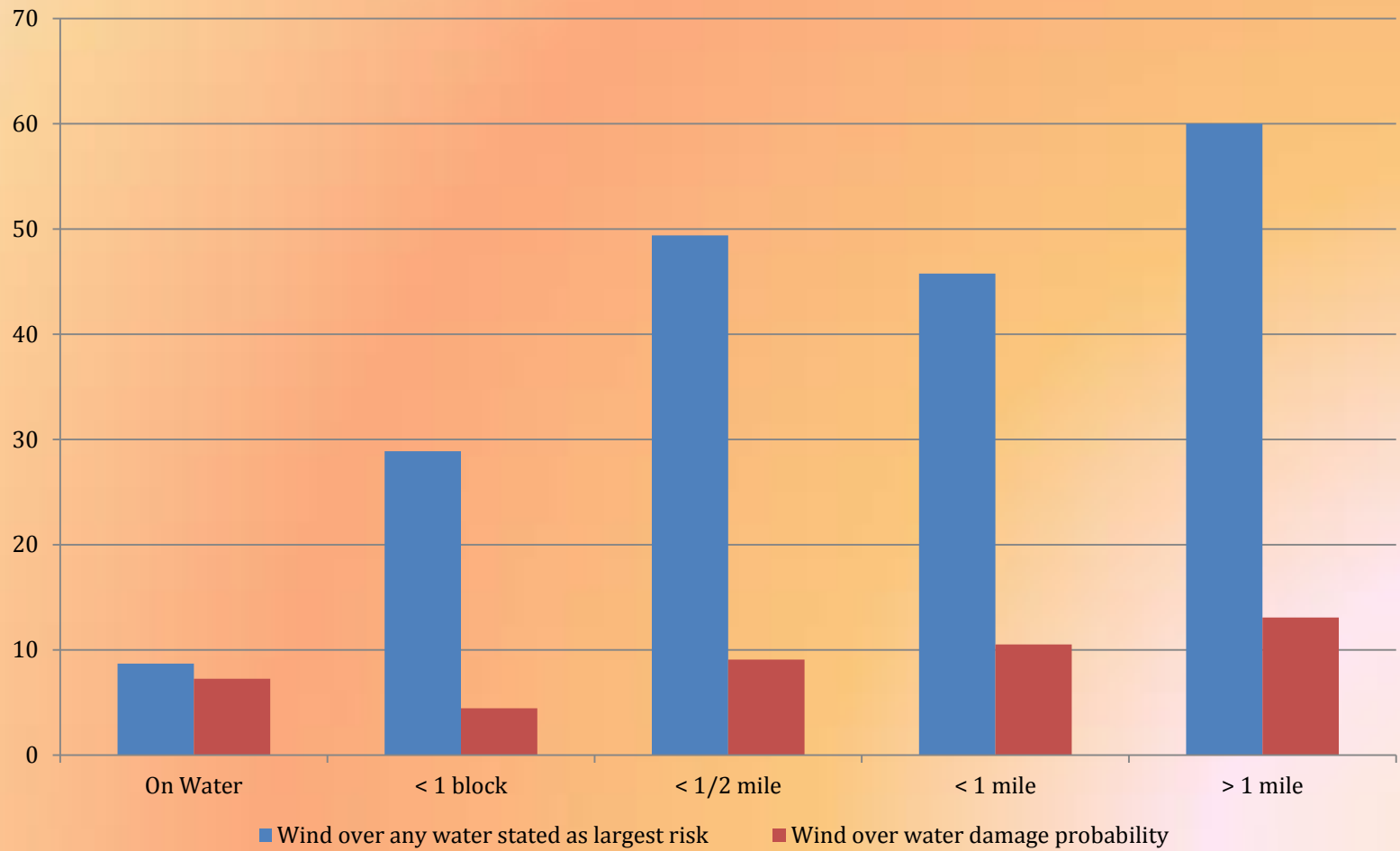
- The “Cantore effect”: gross over-estimation of the odds the experiencing hurricane-force winds among people in hurricane-warning areas
- Poor sense of what (for many people) the actual danger was



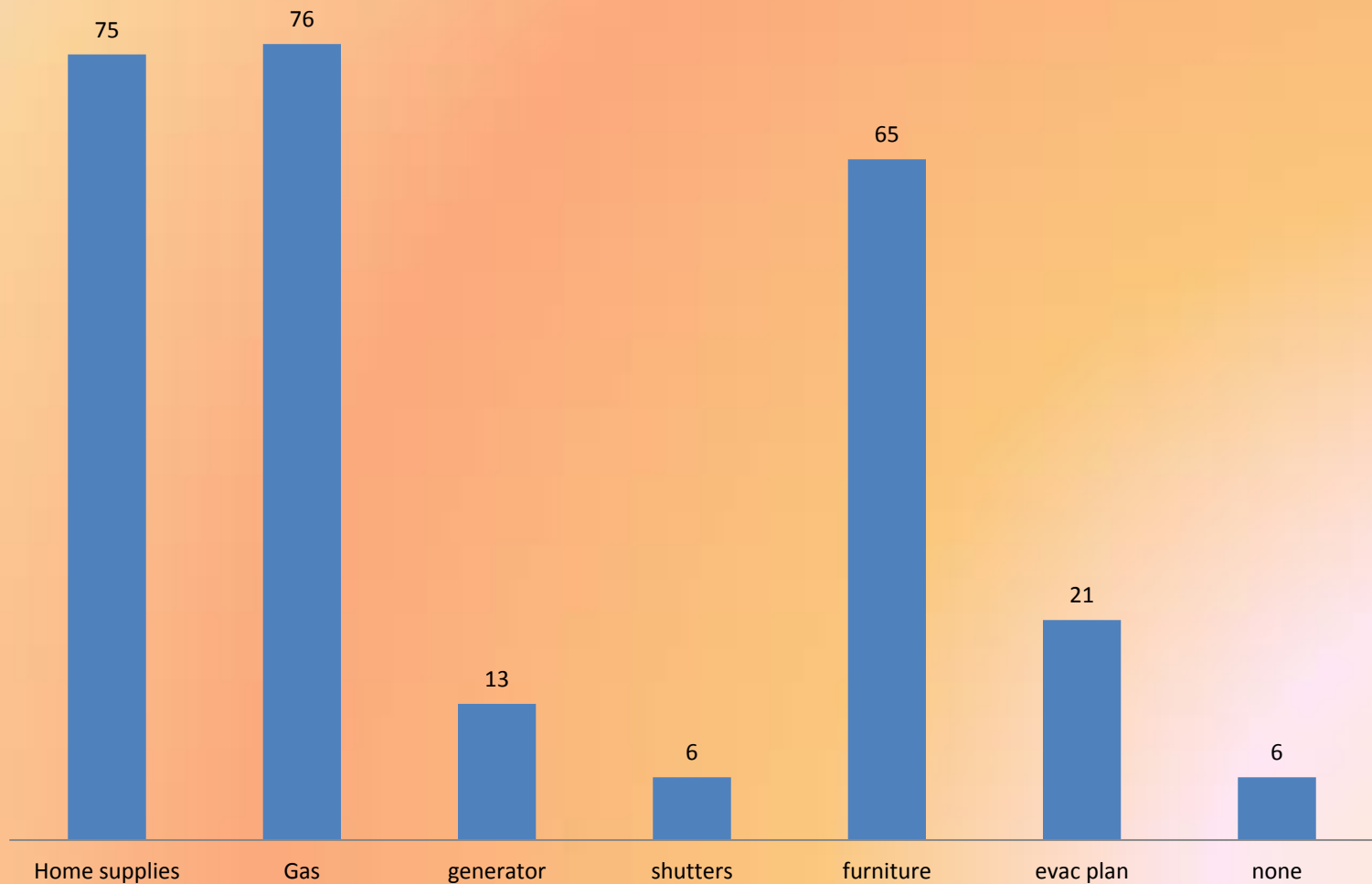
Perceived Greatest Storm Threat by Distance to Water--Sandy



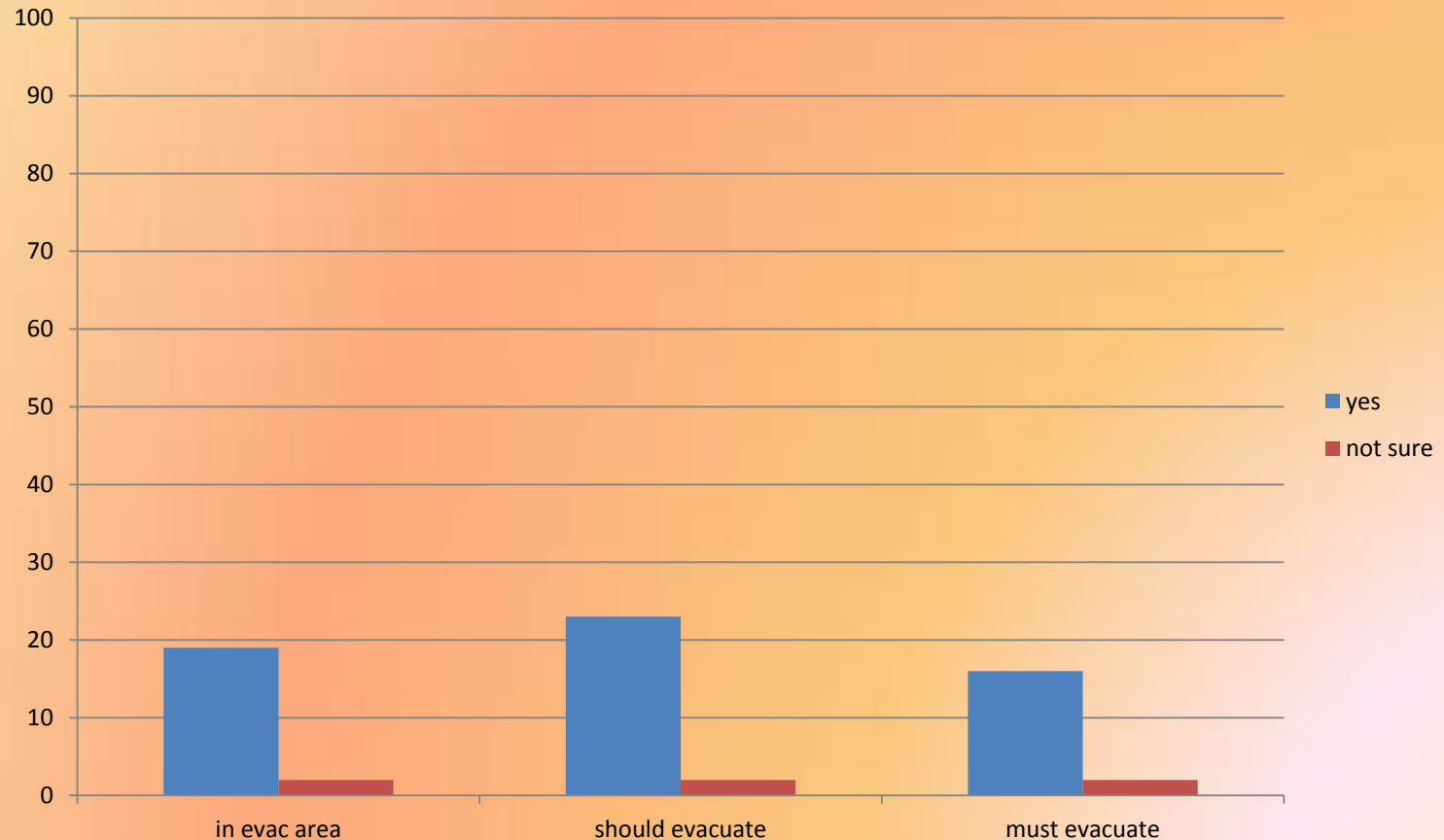
Sandy



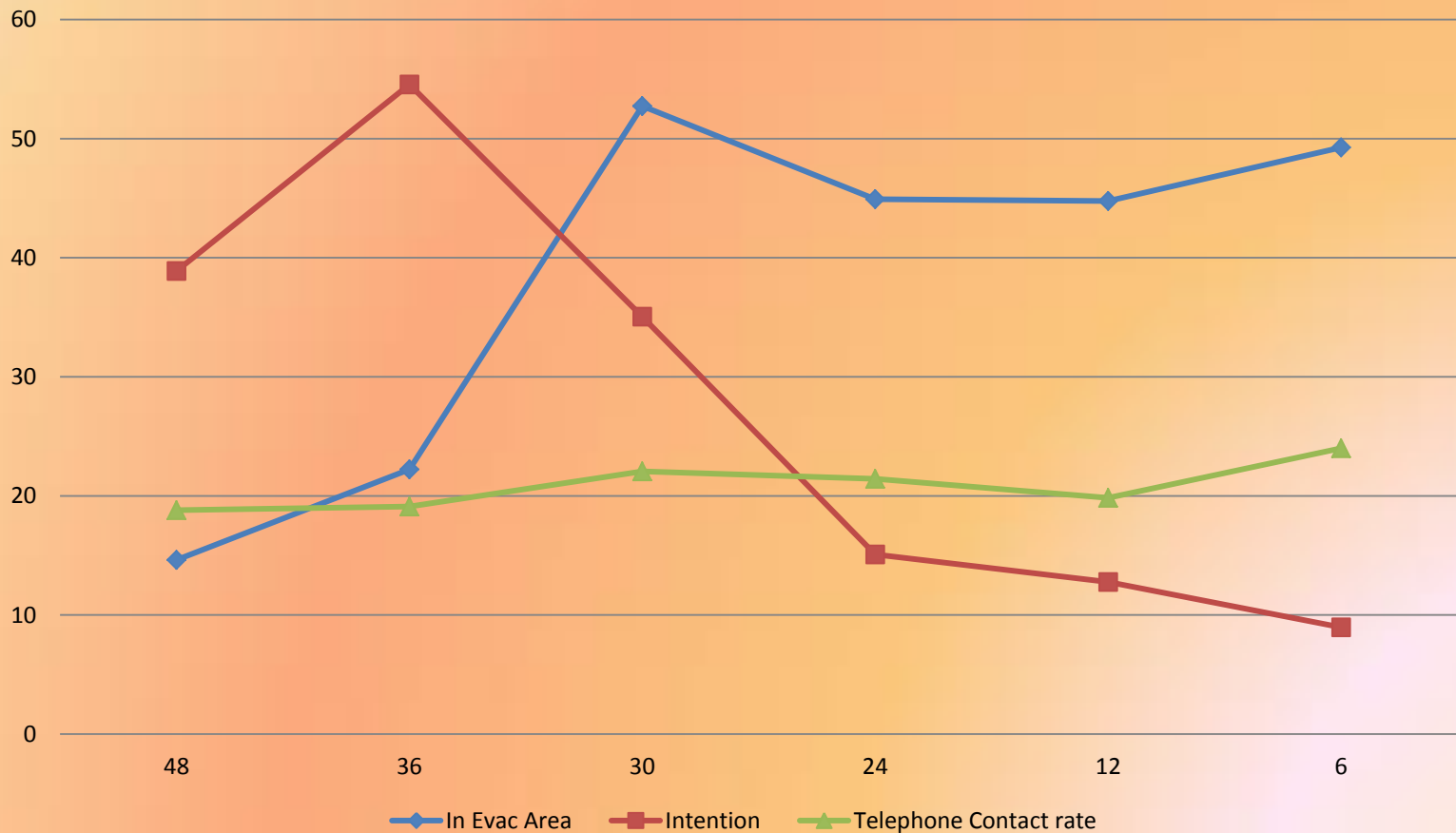
The consequence: lots of light-weight preparation



Intentions to evacuate among those in evacuation areas



A decline in early evacuation intentions as the storm approached

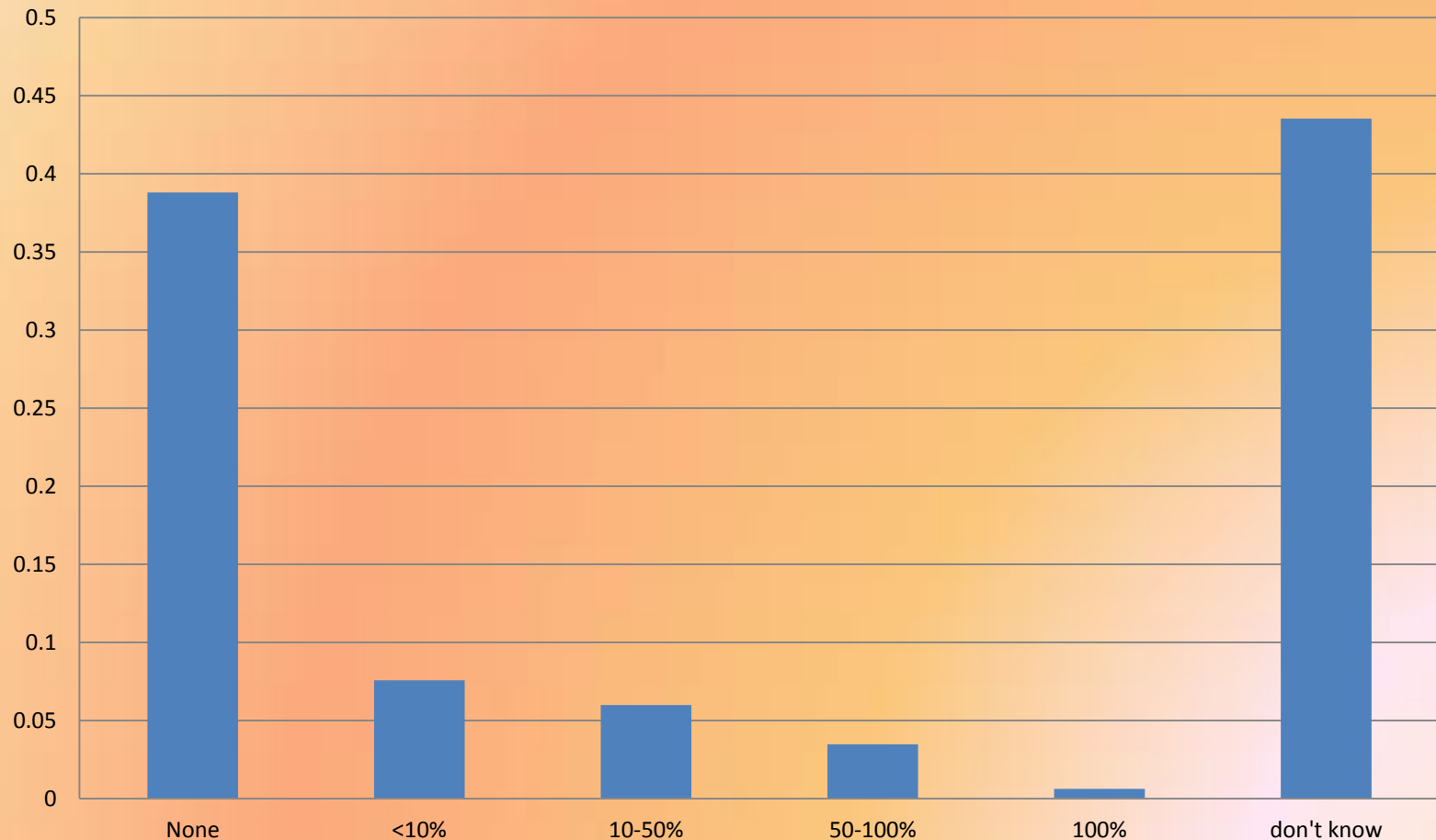


Longer-term effects: ownership of flood policies limited and misunderstood.

- Sandy: % Living within 1 block of water with a separate flood policy: 48% (5% unsure)
- Of those who THOUGHT their HO policy covered flood loss, 59% did not have a separate policy.

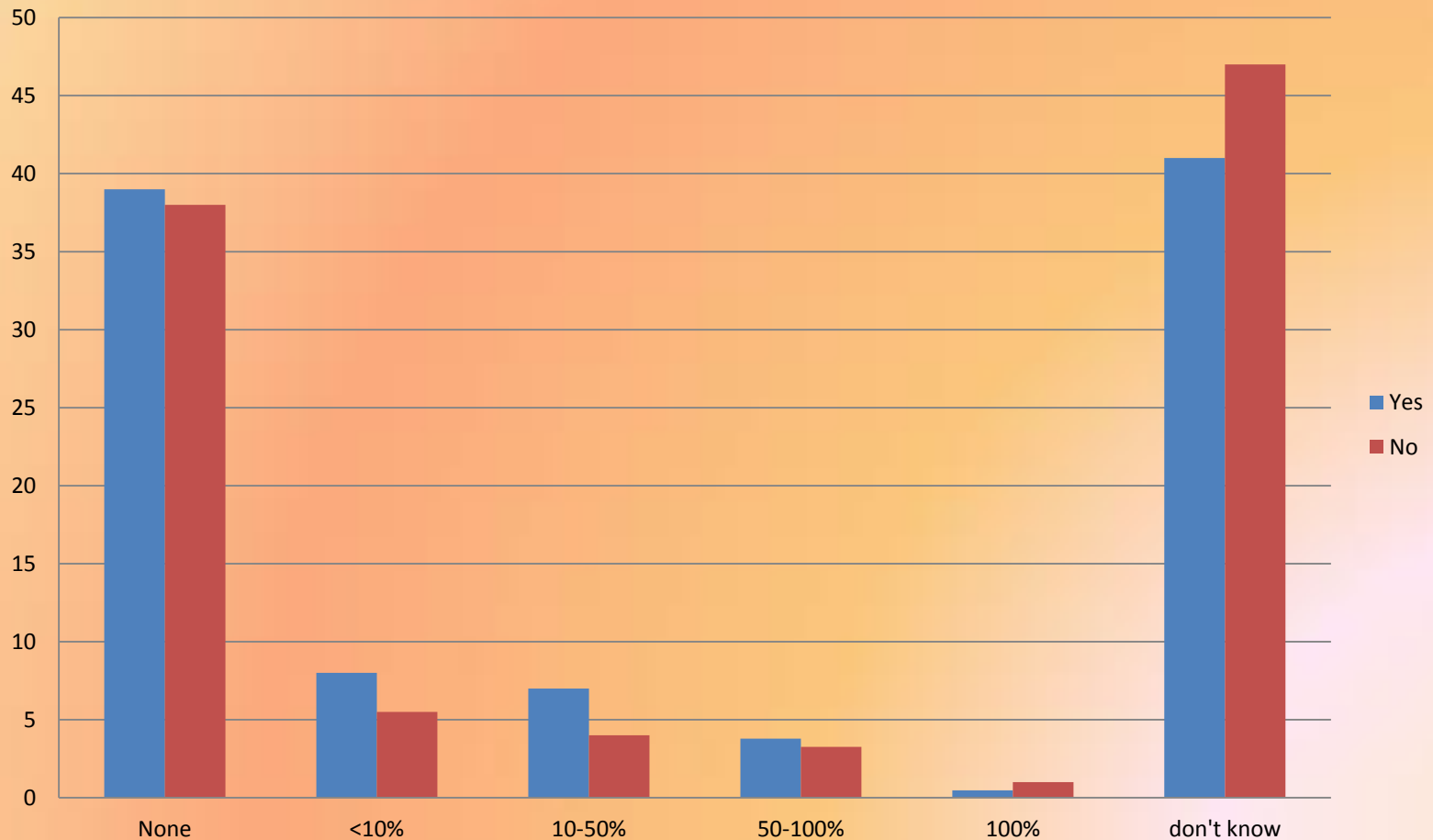
Moral Hazard? Little Evidence

Expectations of Government Assistance



Expectations of aid does not influence ownership of flood policies

Assistance Expectations by Owership of Flood Policies



Bottom Line

- Preparation decisions in Sandy showed every evidence of being well-thought out---but appropriate for a short-duration wind event, not a long duration water event

Will We Learn? Probably not.

- The return period for these events is too long, the impacts (ironically) too survivable to be optimistic that Sandy will teach people anything.

Solutions

- Figure out how to make people truly afraid of hurricanes?



Lot # 1553

Better: improved communication, creative decision architecture

- Teach people that hurricanes are WATER DISTASTERS first, wind disasters second (replace the S-S scale)
- Use mobile communications to override the monolithic view of storm impacts obtained by watching the Weather Channel
- Make the default action protection, not non-protection (e.g., LT Insurance contracts, declinable hurricane prep kits)

