

# Community Resilience: *Lessons learned from the US Gulf Coast Region*

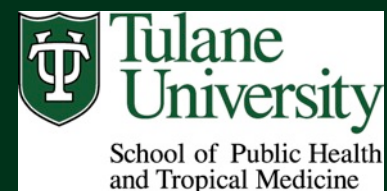


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# RESILIENCE = HEALTH ?



RESILIENCE  
=  
SURVIVAL?

JAVARESE  
SACCO  
HARRIS ARE  
SCORTINO  
BRANDON  
G.U.M.  
DAQUIN  
ALIVE



# Louisiana

- 2001-2010
  - 7 hurricanes, 2 tropical storms, severe weather
  - \$31.9 billion estimated insured property loss



# Florida



- 2001-2010
  - 8 hurricanes, 5 tropical storms, severe weather
  - \$31.5 billion estimated insured property loss

# Texas

- 2001-2010
  - Severe weather, 4 hurricanes, 2 tropical storms
  - \$23.9 billion estimated insured property loss





# Mississippi

- 2001-2010
  - Severe weather, 6 hurricanes, 2 tropical storms
  - \$14.9 billion estimated insured property loss



# Alabama

- 2001-2010
  - 6 hurricanes, severe weather, winter storms
  - \$4.9 billion estimated insured property loss





# Technological Disasters

- Four factors that make these different
  - Duration of Impact
  - Unexpectedness
  - Absence of identifiable low point
  - Perception of control
- Longer lasting effects
- Greater community dissension

**COMMUNITY RESILIENCE:**

***EXAMPLES FROM THE GULF COAST***

# Agriculture Street Landfill



• Staff photo by Thom Scott/The Times-Picayune

- Old city dump in New Orleans operated from 1909 to 1960s
- By 1951, over 250 tons of unregulated highly toxic waste was being deposited daily
- Low-income community developed on site in 1969
- 1990 Census identified 390 residential units (~1,000 people) on the site, which is predominantly (over 97%) African-American and middle-to-low income

# Public Health assessment

- Former landfill with contaminants in soil, dust, air, garden produce; residents maybe exposed through ingestion, dermal contact and inhalation
- Fenced-in, undeveloped area a public health hazard; trespassing occurs frequently
- Residential area -no apparent public health hazard
- Moton elementary school- no public health hazard
- Blood lead levels of most children below levels of concern
- **Community concerns: health problems, site clean-up, runoff of contaminants during flooding, maintenance of undeveloped area**
- Recommendations: limit exposure; undeveloped area should not be zoned residential until contamination

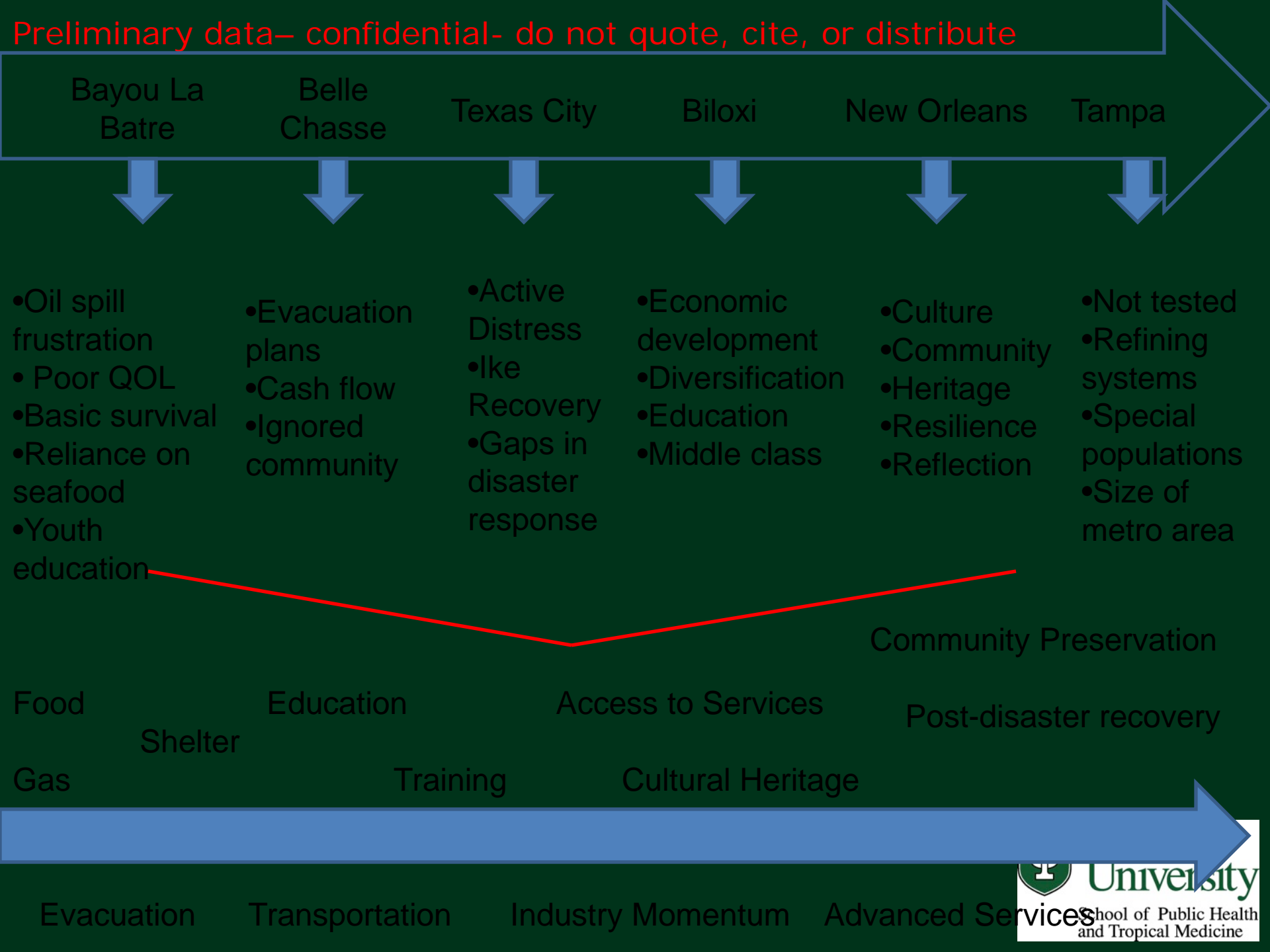
is reduced



- *“Yeah, because a hurricane is regular water, we’ve been through that before but now we’ve got oil-laced water and winds- so really what does that look like?”*
- *“Our beach life, our sea life? Which is a protection against hurricanes but it’s also this food, this house, for all our food that we love so much, I’m not sure that that will be repaired.”*

Preliminary data— confidential- do not quote, cite, or distribute





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Bayou La Batre Belle Chasse Texas City Biloxi New Orleans Tampa

- Oil spill frustration
- Poor QOL
- Basic survival
- Reliance on seafood
- Youth education
- Evacuation plans
- Cash flow
- Ignored community
- Active Distress
- Ike Recovery
- Gaps in disaster response
- Economic development
- Diversification
- Education
- Middle class
- Culture
- Community Heritage
- Resilience
- Reflection
- Not tested
- Refining systems
- Special populations
- Size of metro area

Food Education Access to Services Community Preservation  
 Gas Shelter Training Cultural Heritage Post-disaster recovery

Evacuation Transportation Industry Momentum Advanced Services



# Factors Influencing Readiness and Capability

- Density of pre-disaster populations
- Levels of isolation vs. proximity to large metropolitan area
- Extent of local infrastructure strength
- Robustness of local economy
- Availability of public transportation
- Consistent access to health and basic services
- Special population needs addressed

# Community Disaster Navigator Functions

Referral → Linking → Management → Advocacy → Communication → Vision →

BLB

PLAQ

BLXI

NOLA

CASH FLOW EVACUATION INFRASTRUCTURE CULTURE

JOBS FOOD ACCESS HEALTHCARE GROWTH

TRANSPORTATION HOUSING ECONOMIC DEV. LEADERSHIP

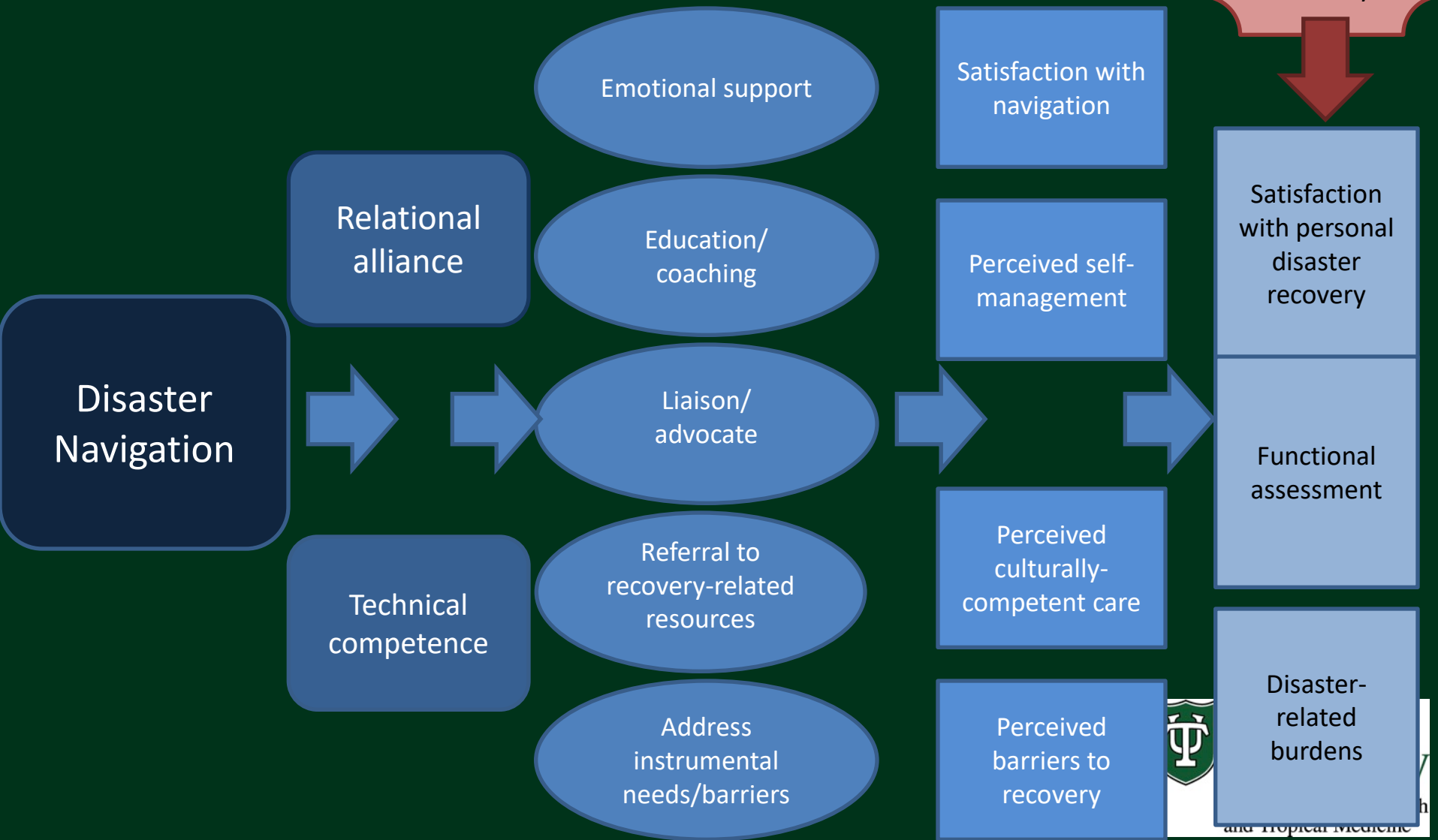
Lower Order Needs

Higher Order Needs

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# Disaster Navigation Model

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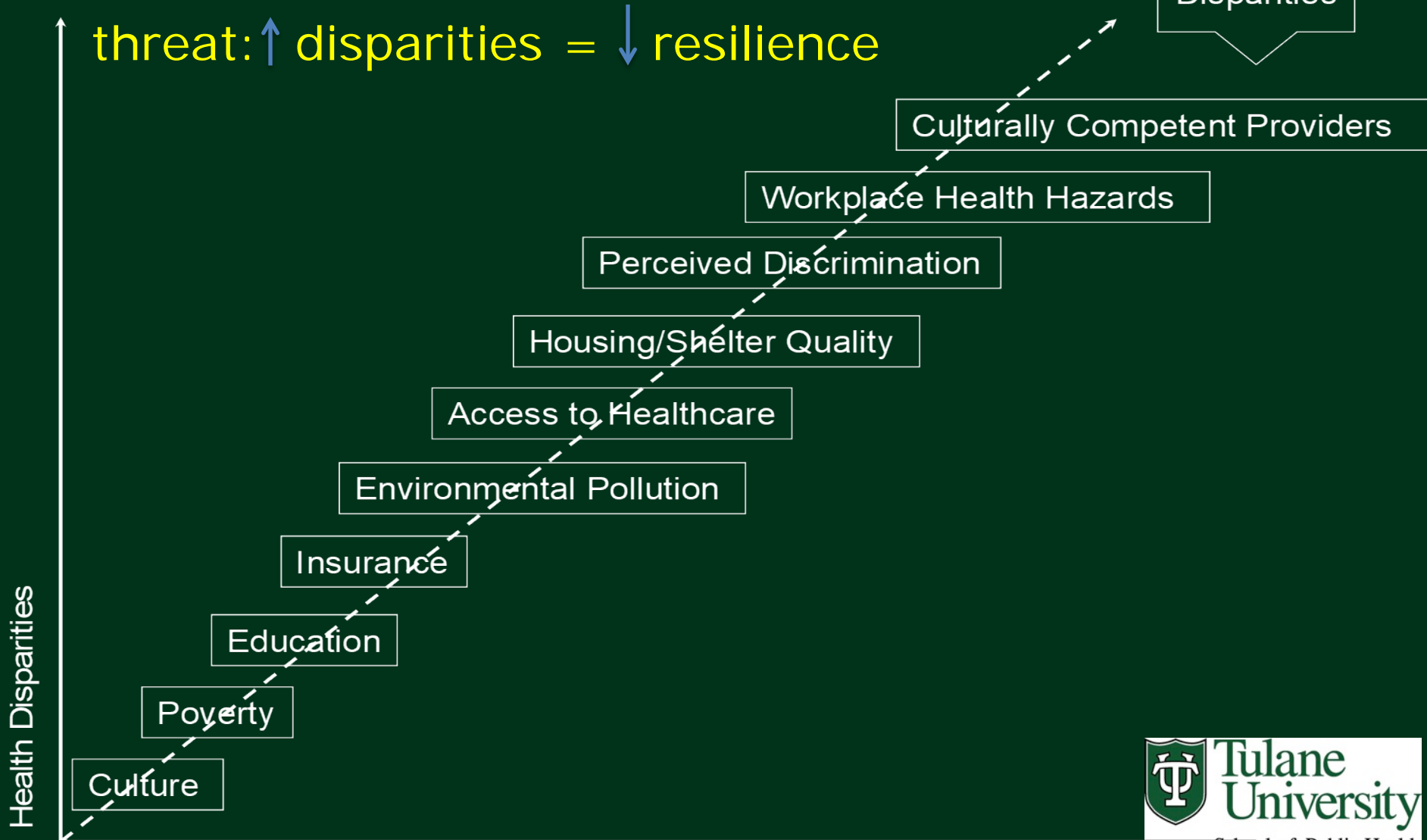
# GROWH

Gulf Resilience on Women's Health

- Community-based participatory research
- Target population of pregnant women and women of reproductive age living in SE Louisiana
  - Determine the effect of the DWH disaster on mental health
  - Determine pre- and post- DWH disaster attitudes related to environment and seafood
  - Build community resilience through embedding disaster interventionists



# Influencers of Health Disparities



Influencing Health Needs and Vulnerabilities

# Indicators of Health

The range of personal, social, economic, and environmental factors that influence health status are known as indicators or determinants of health.

Determinants of health fall under several broad categories:

- Policymaking
- Social factors
- Health services
- Individual behavior
- Biology and genetics

# Opportunity: *Realizing Community Resilience*



# What is a Community?

- Space and Boundaries-- Place
- Social Institutions-- Assets
- Social Interactions-- Coherence
- Social Control-- Values, Customs

## Bonding Social Capital

social networks  
between  
homogenous  
groups of people

## Bridging Social Capital

social networks  
between  
heterogeneous groups

Community Resilience



# Topics for dialogue

- What Characteristics must a Resilient community have in order to bounce back from natural and technological disasters?
- What must a Community do day-to-day to create these characteristics before a disaster occurs?
- What efforts at forecasting must resilient communities make?

NEVER AGAIN....

