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Climate Change and Resulting Floods: Using Social Capital to Strengthen Community Resilience in Eastwick, Philadelphia a known floodplain

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Background

- Climate change will produce intense weather events like increased precipitation and flooding
- Based on climate projections, Philadelphia will be hotter and wetter, and will experience more frequent and intense weather events (OOS, 2016)
- Floods are the second most common hazards in our city (OEM, 2017)
- Vulnerable population such as children, people of color, elderly population and people with disability are severely impacted by climate change



Social Capital Definition and Methods

- Social capital consists of three components bonding, bridging, linking to services
- Interdisciplinary approach
- Built on trust, reciprocity, shared interest and collective action among community members
- Increase community resilience
- Faster recovery from disasters



Bonding -- communication, ideas and shared knowledge

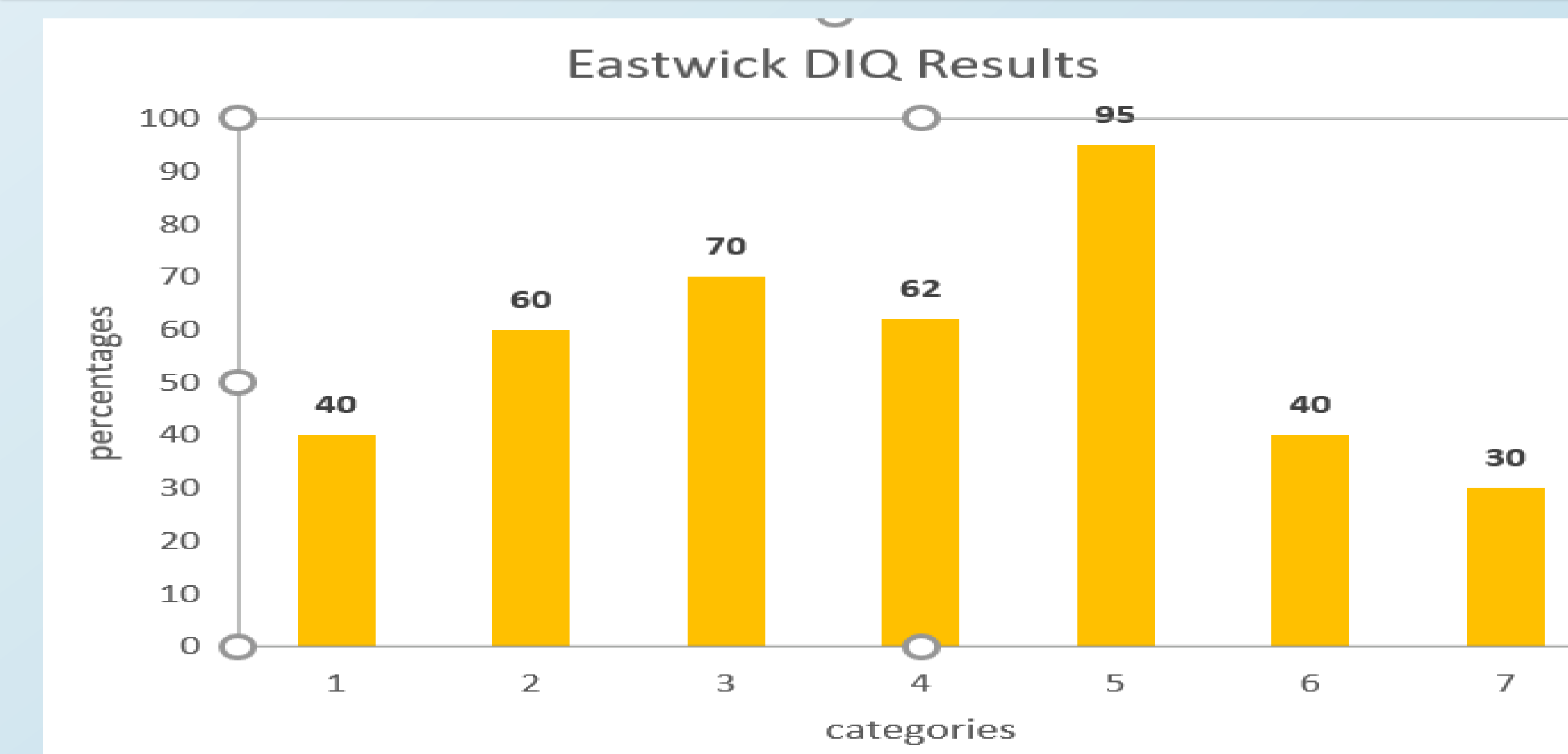


Bridging -- exchange of vital resources, tools and knowledge



Linking to services -- maximize positive end impact

Key findings



Legend

- 1=university degree
- 2=employed full time
- 3=experienced flood and described it as stressful
- 4=no involvement of government authority
- 5=no basic skills, evacuation plan in place
- 6=no access to internet and flood maps
- 7=warning received from community members, word of mouth

Conclusion and Future Public Health Implication

- Eastwick will remain as a vulnerable community,
- Community perceives that the current FEMA flood plain maps are outdated
- 🧐 People are highly concerned and show increased levels of stress.
- 📖 Educating and building awareness about negative impacts of climate change among vulnerable population is key (bridging and linking)
- ⚡ Establishing an updated warning system (linking and bridging)
- 🏃 Drafting and practicing local disaster evacuation plan is critical (bonding and bridging)

Methods

- 20 African American participants were recruited for this study aged **65 years and above**, living in Eastwick for more than 5 years through a method of snowball sampling
- Eastwick Disaster Impact Questionnaire (DIQ), a non valid instrumental tool was developed for this study
- Door to door survey administration



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