



Florida's Hurricane Preparedness, Response, and Recovery amid the COVID-19 pandemic

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ABSTRACT

In the status quo, Florida communities are working to address the challenges posed by the composite effects of sea levels rising and the active hurricane seasons from the Atlantic. Simultaneously, the emergence and rapid spread of the respiratory virus known as COVID-19 stretched the traditional ways that public administrators would go about planning for disaster preparedness, response, and recovery. Between draining emergency budgets, gutting supply chains, and everything in-between, no country or community has been entirely unaffected by COVID-19. As for coastal communities, the challenge of facing hurricane season in the midst of a global pandemic led by a highly-contagious virus meant that administrators had to address these issues in an even further complicated scenario. This study utilized a qualitative approach using structured interviews with emergency managers from federal, state, and local levels of government in Florida and non-profits to discover these challenges and pose possible solutions. In any context, the results showed that disasters (hurricanes and COVID-19) have a disproportionately greater effect on rural communities. This can be largely attributed due to the lack of ICT (information and communication technology) infrastructure. Ultimately, however, the biggest challenges indicated were insufficient financial resources, lack of human capacity, digital divide, and collaboration challenges. As this is an on-going research project, our expected results yield a heavy emphasis on interdisciplinary collaboration across all sectors as a requirement for solving these challenges.

INTRODUCTION

Background research:

- Ongoing efforts of organizations were reviewed in the humanitarian assistance, water and sanitation, disaster management and health sectors, aiming at proposing policies and approaches to manage dual disasters of flooding and COVID-19 (Ishiwatari et al, 2020).
- Several challenges in multi-agency collaboration which contain challenges of collaboration, information, communication, environmental, social, political, inter-organizational, intra-organizational, and infrastructure challenges. (Adbeen, 2021)

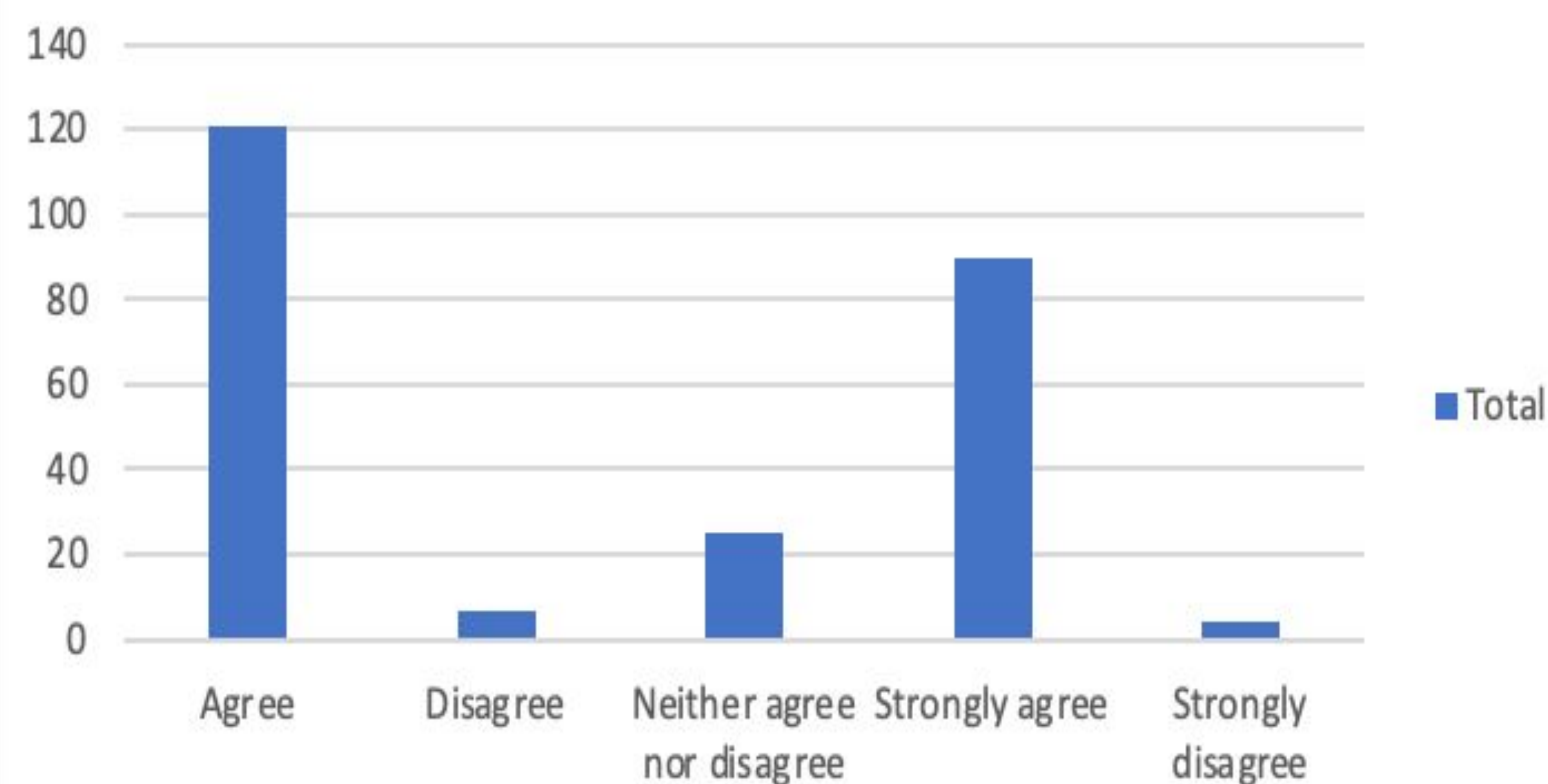
Research Questions:

- How did COVID-19 affect the preparedness, response, and recovery for hurricanes in Florida?
- What challenges did FL governmental agencies have in each stage during dual disasters?
- What strategies did FL government agencies use to cope with these challenges?

METHODS

Selected participants who were intimately connected to the emergency management domain in the state of Florida were interviewed, in which the audio of the interview was recorded and transcribed, all with the consent of the interviewees. These interviews were collected over 13 months and interacted with individuals on the local, state, and federal level. Interviews lasted about 60 minutes and asked questions ranging from the effects of COVID on hurricane preparedness, communication changes during dual disaster response, and everything in-between. Depending on answers given by the interviewees, follow-up questions were asked regarding the changes made in shelters, transportation, nonprofit organizations, and solid waste during hurricane season due to the COVID-19 pandemic. Once the interviews were completed, we coded the answers into different sections and strategies using the qualitative data analysis software, Nvivo. This helped us differentiate specific nuances in each response that was given to us. The work and individual experiences that each interviewee had from being involved in the government on a different level than the previous participant allowed us to gauge the significance in difference of work that spans across the different levels of government regarding dual disaster resilience.

The extent to which participants agree that local government leaders are the most important for facilitating cooperation in city networks.



RESULTS

Considering that this research is still ongoing, our results are preliminary but have been significant thus far.

- Deciding how to implement sheltering while staying in-align with COVID-19 protocols deemed a significant challenge. Hurricane response protocol calls for a large number of citizens to mass gather in areas, but with social distancing protocol, this was made difficult
- Not all counties having the same resources and funding, lack of human capacity, and the lack of information and communication technology (ICT) infrastructure in local governments are the biggest contributing factors to the challenges of dual disaster resilience.
- Expected findings are that the solution to these issues is going to be increased interdisciplinary collaboration across all sectors. When able to work effectively with different government agencies that have specialized interests and resources, authorities are able to ensure that locations are able to prepare for a hurricane efficiently while simultaneously working in the confines of COVID-19 protocol.

DISCUSSION

Findings from this paper can be easily referenced in future projects dealing with emergency management. Knowing that interdisciplinary collaboration between all sectors of the government is crucial to being able to manage dual disasters allows the government to lobby for legislation that follows through with emergency situations with proper protocol, no matter the circumstance. Furthermore, it shines light on the current complications that exist within the sphere of collaboration between government agencies. Though united together, they often find each other struggling to communicate effectively to craft the best solution to a given problem. Perhaps this paper can be the catalyst to facilitating change and making sure that communication between governments time progresses. This idea gets magnified when discussing topics of dual disaster resilience.

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REFERENCES

- Abdeen, et al. "Challenges in Multi-Agency Collaboration in Disaster Management: A Sri Lankan Perspective." *International Journal of Disaster Risk Reduction*, Elsevier, 19 June 2021, <https://www.sciencedirect.com/science/article/pii/S2212420921003605>.
- Ishiwatari, et al. "Managing Disasters amid Covid-19 Pandemic: Approaches of Response to Flood Disasters." *Progress in Disaster Science*, Elsevier, 25 Apr. 2020, <https://www.sciencedirect.com/science/article/pii/S2590061720300338>.

Overarching Challenges	Level 1 subcategories	Frequency	% of interviewees)	Pre-disaster	Disaster Response	Disaster Recovery
Conflict Between Sheltering and COVID-19 Prevention		13	56.25%	x	x	