**BACKGROUND**

- Research has shown that people who have experienced traumatic events like natural disasters may be psychologically impacted with increased stress levels (that may be uncontrollable), anxiety, post-traumatic stress disorder, substance dependence, depression, and more.  
- Previous studies from the SIP Study showed that hardships during natural disasters affected babies in terms of distress, fear and sadness at 6 months of age, and that this was higher for children born before the storm.  
- Mother’s objective exposure during Sandy was associated with higher levels of fearfulness in children ages 6-24 months.  
- Affectionless control parenting is a risk factor for depression 7 and children with anxiety tend to have parents with high controlling behavior.  
- Protective-demanding and authoritarian parenting styles were also able to predict anxiety sensitivity in adolescence.  
- Literature states children and adolescents in the pandemic had increased stress responses, along with depressive symptoms and anxiety.  
- A self-selected sample of parents reported increased levels of mental health issues in children aged 4-11 during the March-May 2020 lockdown.  
- **Hypothesis:** Mothers with a higher level of objective hardships during Superstorm Sandy and with an affectionless control parenting style will have children with higher levels of fear during the Covid-19 pandemic.

**RESULTS**

**Graph 1**  
Average Child Fear Response When Considering Sandy Objective Hardship and Affectionless Control Parenting Style  

<table>
<thead>
<tr>
<th>Objective Hardship</th>
<th>Affectionless Control</th>
<th>Other</th>
<th>Low Objective Hardship</th>
<th>High Objective Hardship</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.250</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Significant increase in child fear (CF) during Covid-19 in mothers with high objective hardship (M= 2.615) compared to those with low obj hardship (M= 2.27). There’s also a significant increase for CF in mothers with affectionless control parenting (M= 2.788) compared to those with other parenting styles (M= 2.231).

**Graph 2**  
The Interaction of Parenting Style and Objective Hardship During Sandy on Child Fear During Covid-19  

**COMPETING CHILD FEAR MEANS**  
Low Hardship + Other = 2.221  
Low Hardship + AFLC = 2.355  
High Hardship + Other = 2.3  
High Hardship + AFLC = 3.653  

The interaction of objective hardships during Sandy and affectionless control parenting impact children's stress response during the Covid-19 pandemic.

**DISCUSSION/CONCLUSION**

- **Sex of the child was not significant as a covariate (p=0.131).** A follow up study comparing stress responses in male and female children (with a larger population size) should be considered.
- **Conditions such as climate change mean that natural disasters and their severity will continue to increase in amount and intensity.**  
  - Children are vulnerable to traumatic events (like natural disasters) in childhood, parental stress, and respond differently to certain parenting styles. I believe more research should be done on how these factors affect children, their stress responses, and their possibility of developing anxiety disorders.
- **We must think about the factors that make some populations more vulnerable to natural disasters.** The mental health of natural disaster survivors and mental health services as part of recovery efforts should also be considered.
- **We must also understand the reasons (many of which are related to social inequities) why mental health services are not accessible to various populations such as low income and/or BIPOC communities and what changes need to be made in order to reach inclusive levels of care, services, and access.**

**REFERENCES**