

# **Responding to Shocks in UK Coastal Communities**

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# Resilience of Coastal Communities

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Natural Environment Research Council

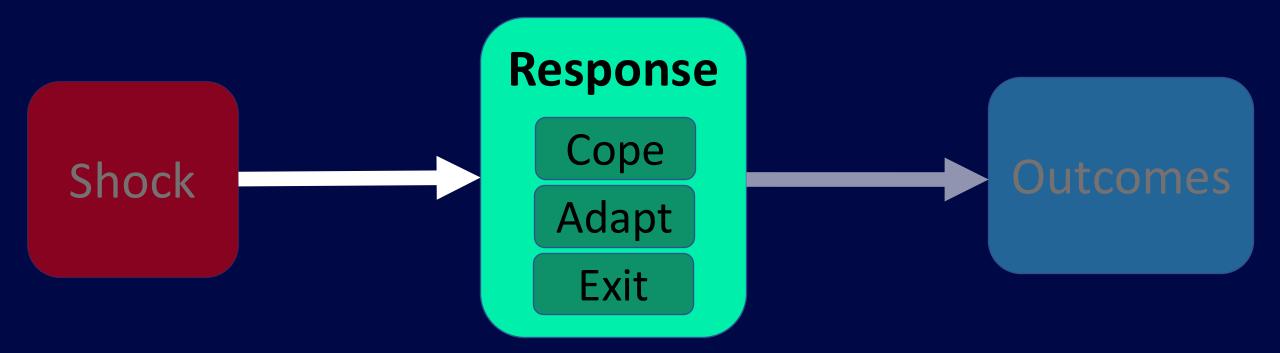




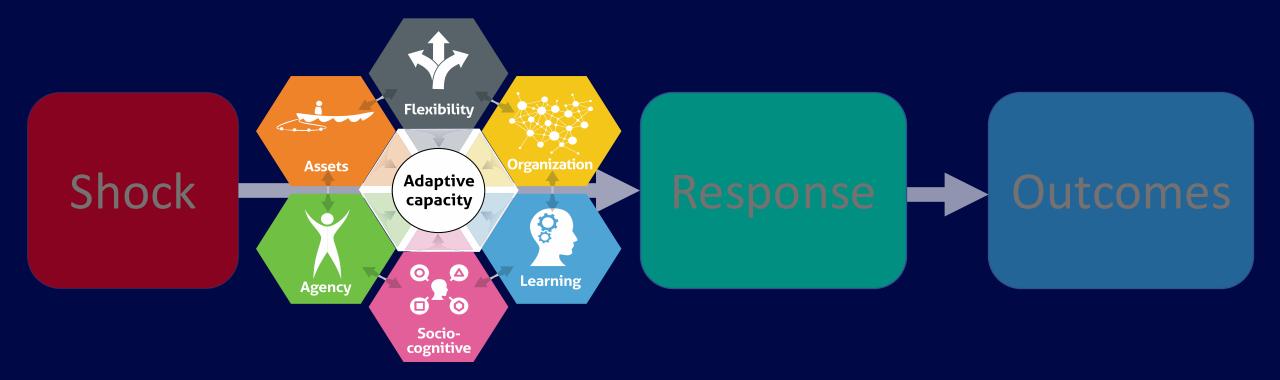


# e poor ha Resilience **Sustainability** Wellbeing

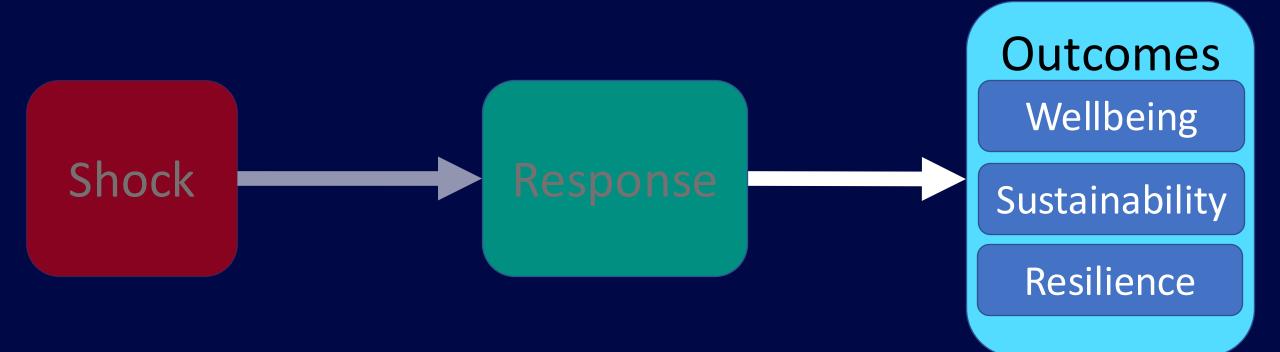


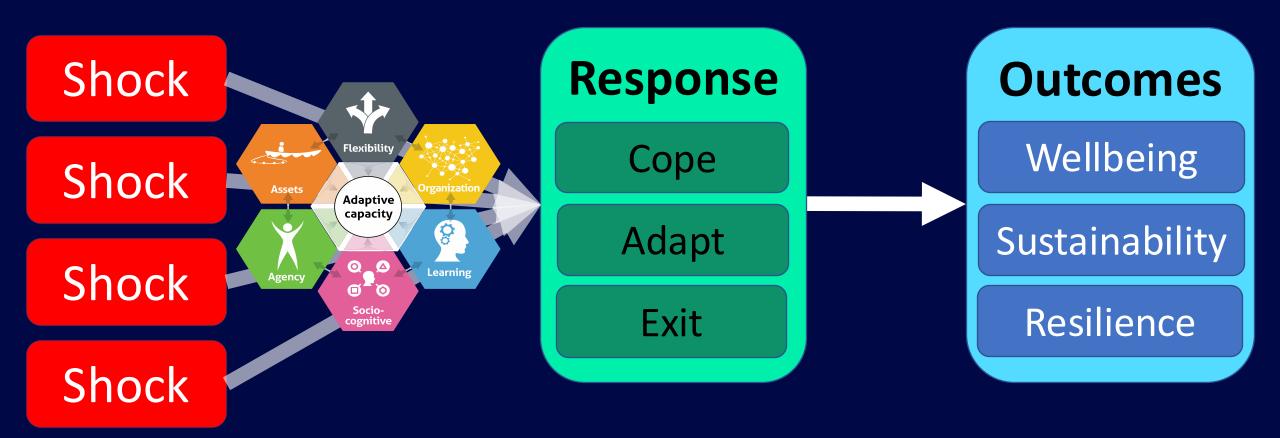


Bene et. al. 2016, Cinner et. al. 2009 Coulthard et. al. 2012 , Ojea et. al. 2020



Cinner and Barnes 2019



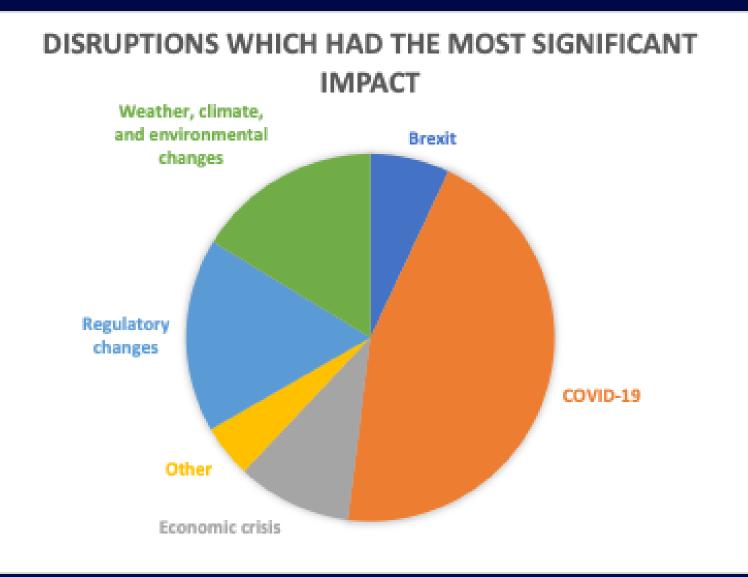


### **Research questions:**

- 1. How are marine resource users responding to contemporary changes?
- 2. What factors help them to respond effectively to achieve the nexus objectives of wellbeing, resilience and sustainability?
- 129 surveys across south-west (55 fishers; 74 tourism operators)
  24 follow-up interviews



## Responses

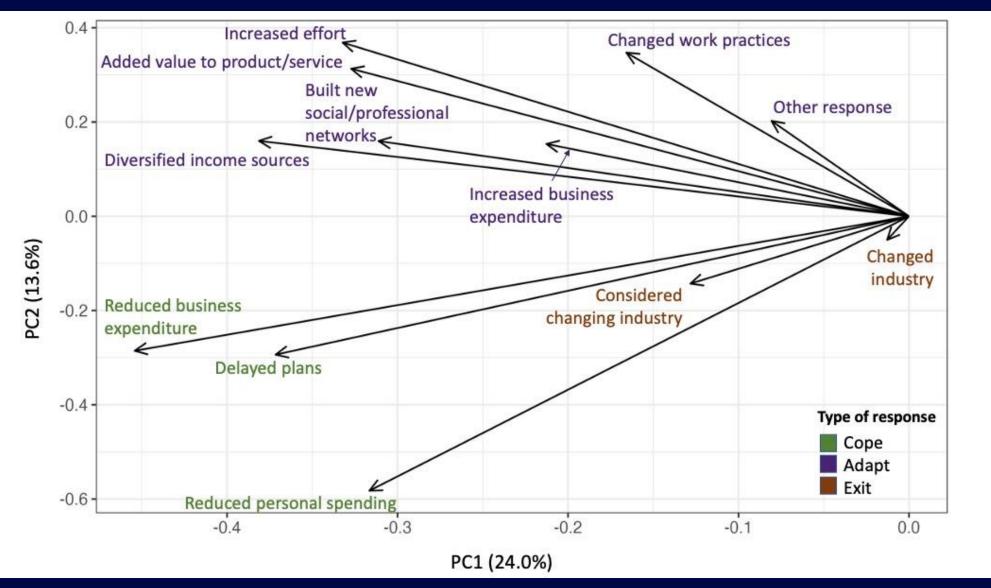


#### Sarah Sutcliffe

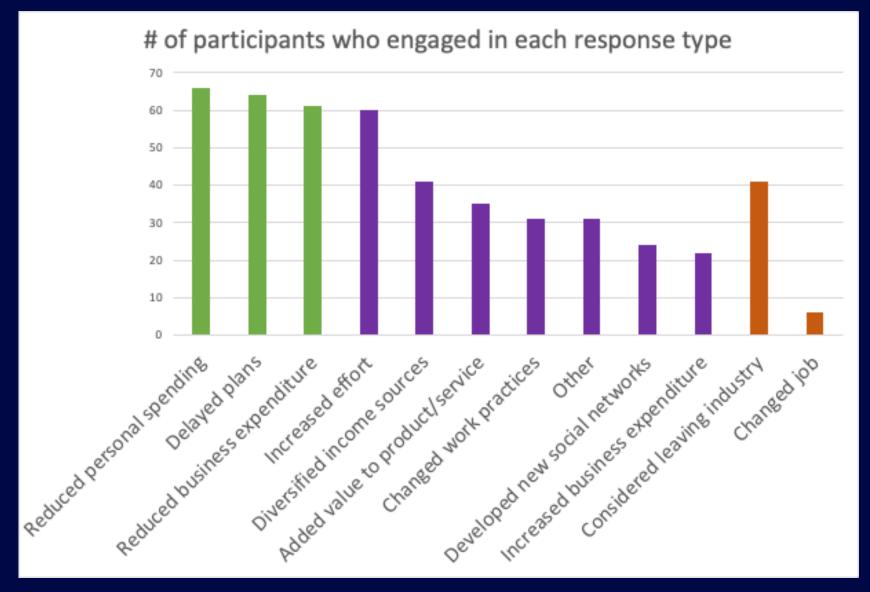
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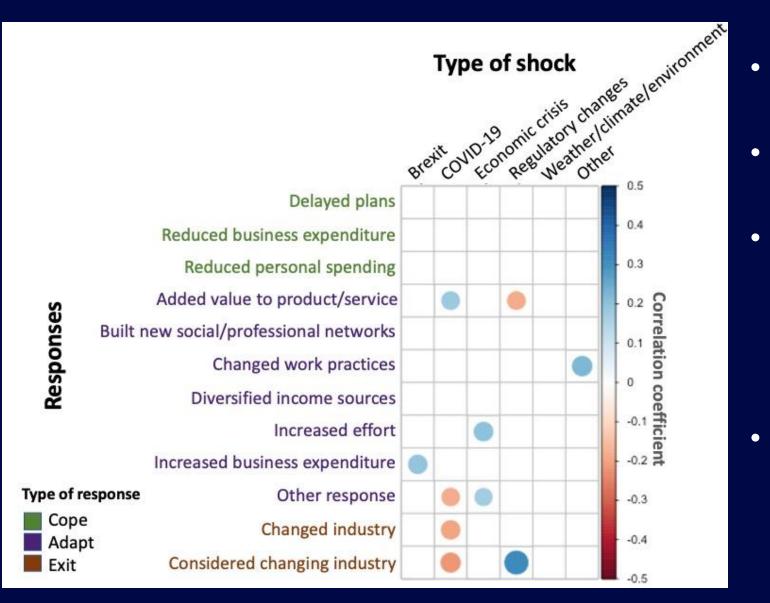
### Responses



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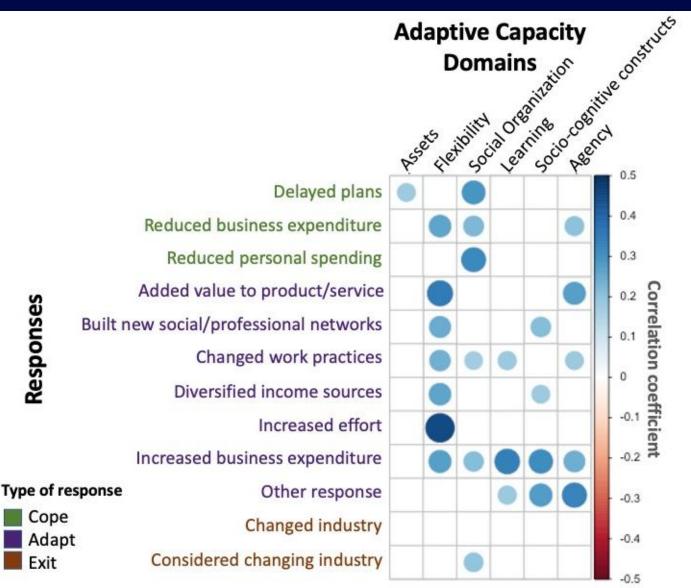


# Responses by shock type



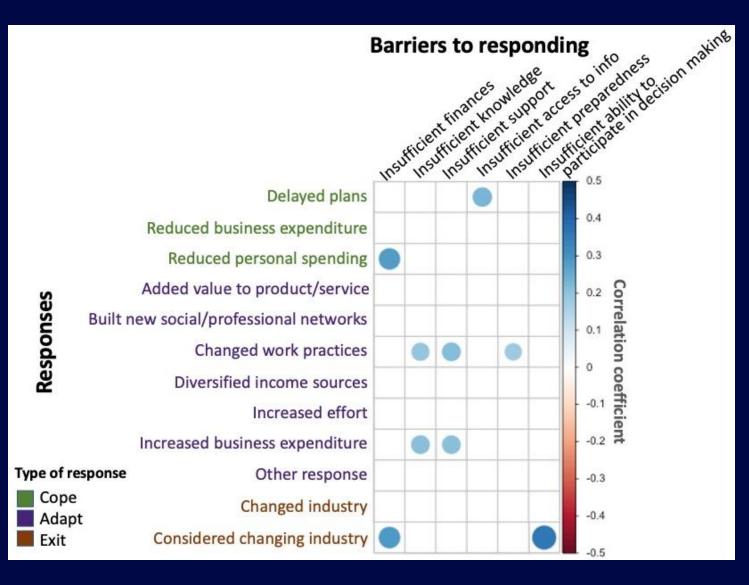
- Some effect of type of shock on how people responded
- COVID-19 and regulatory changes most different
- Significant positive correlation between adding value to products/services for COVID-19 and corresponding negative correlation for regulatory changes
- Regression analysis- significantly more likely to take an exit response due to regulatory changes than COVID-19

# Adaptive capacity and responses



- Flexibility most utilized domain and associated with the most types of responses, particularly critical for adaptation.
- Agency and social organization also important
- Adaptive responses associated with drawing on a more diverse range of adaptive capacity domains
- Social networks associated with coping and exit responses (regression analysis)
  - Personal and situational attributes rather than physical resources

# **Barriers to responding**



- Inability to participate in decision making significantly associated with considering changing industry, i.e. a lack of agency.
- Links between lack of agency, exit responses, and regulatory changes.
- Exiting due to a lack of adaptive capacity rather than high levels of adaptive capacity facilitating transformation

# Factors influencing outcomes

### How well they felt they responded overall:

- Type of shock (COVID-19 better than environmental changes)
- People with high agency felt they did better

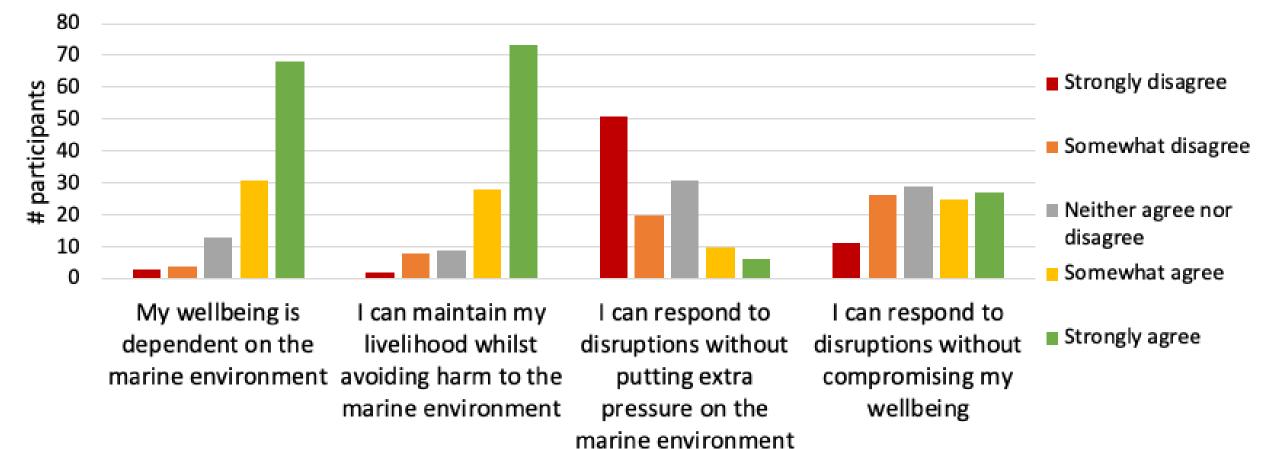
### Subjective wellbeing (perceived quality of life)

• Negatively associated with a lack of social support, i.e. people with better social support systems felt less of an impact on quality of life

• Exit responses associated with feeling they responded worse, lower material wellbeing and lower subjective wellbeing

# Wellbeing-Sustainability-Resilience Nexus

#### **NEXUS INTERACTIONS**



# Factors influencing outcomes

 Only 15/129 participants (11%) achieved positive outcomes across our resilience, sustainability and wellbeing indicators following the disruption and how they responded to it (4 or 5 on 5-point Likert scales)

• 54/129 participants (42%) achieved neutral or positive outcomes across the nexus (3-5 on 5-point Likert scales)

• Overall, most people were not able to respond to disruptions in a way which maintained wellbeing, sustainability and resilience.

## Conclusion

