What Generates Value For The Ocean?

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ABSTRACT

Housing 15% of the world's species, regulating climate, and providing half of human oxygen, the ocean is quite literally mankind's lifeline. Unfortunately, this lifeline is dying. It is predicted that by 2050, over 1 million of the ocean's species will be lost to plastic, which makes up a greater percent of the ocean than fish. Hong Kong's flourishing marine trade and abundant use of plastic makes it especially susceptible to this threat. The problem, of course, is not limited to this. Brain biases prevent humans from assessing the dangers of the long term threat, and along with echo chambers they serve to spread these limiting views. To address the issue, this study aims to assess what factors generate value (internalized care) for the ocean and consequently lead to action in a largely young adult population. In the study, 81 participants were presented with a 15 question survey about their experience with the ocean and results were analyzed using qualitative analysis. It was found that the two major value generation factors were proximity to the ocean and experiencing life below water. The findings pose implications in supporting the increase of workplace and school efforts to augment proximity to the ocean as well as of advocacy missions which bring the ocean and its threats to the individual, allowing them to experience the underworld without restriction.

INTRODUCTION

- Every second breath is provided by the ocean.
- The ocean facilitates climate regulation, medicinal discoveries, among other benefits and that is only two percent of it.
- But the ocean is more than this, it is alive, and with life comes death.
- Hong Kong's oceans face the wrath of its busy port.
- Society is in the midst of a mass extinction and for the first time it is caused by another species. 60% of the marine species will be lost by 2050.
- Brain biases make the issue worse
  - Hyperbolic discounting: the belief that the present is more important than the future because prioritising immediate threats promotes survival.
  - Bystander effect: everyone believes another will help
- Values and beliefs are difficult to change
  - Most prominent beliefs develop by age seven. In the social media age, these beliefs, even the 'wrong' ones are reinforced through confirmation bias.
  - Echo chambers further compartmentalise society and its beliefs.

METHODS AND MATERIALS

- Survey: online and physical (15 questions)
- Demographic: Hong Kong and China, rural and city regions.
- In person surveys were conducted by me, online were done with the help of an outreach manager.
- Nature and purpose of the study were fully explained. Consent was acquired. The option to withdraw or leave questions blank was provided to promote privacy.
- Same document was shown to both groups.
- 181 surveys collected, 81 used due to quality.
- Qualitative analysis was done.

RESULTS

- 48% of people who have never experienced life below water do not take any personal initiatives for the ocean as compared to the 33% who don't among those who have experienced life below water.
- 48% of respondents who have never experienced life below water have never participated in an ocean cleanliness/awareness activity compared to the 27% who have not among those who have experienced life below water.
- Growing up next to a body of water promotes continued proximity which in turn promotes conservation efforts and initiatives.
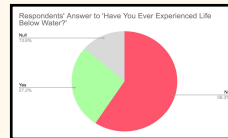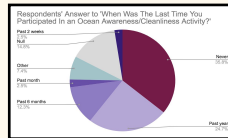

Chart 1. Life Below Water

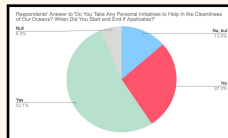**Chart 2.** Participation in conservation activity

Chart 3. Personal initiatives.

Figure 1 (both parts). Survey

DISCUSSION

- The life below water finding is supported by the tendency of humans to attribute value to beauty. In a study done by Christoph Klebl and Yin Luo from the University of Melbourne, it was found that people show a greater want to protect what is more aesthetically pleasing when it comes to animals, humans, landscapes, and buildings . Being a combination of animals and landscapes, this idea applies to the ocean.
- The proximity finding can be leveraged through field trips and work excursions (forced proximity)
- If people can't go to the ocean, bring the ocean to them.
- Encouraged contact with life below water can also promote value.
  - Miniature realistic models
    - Connects back to localised efforts making everyone's contributions believably valuable.

CONCLUSIONS

Two main conclusions
- Proximity promotes value for the ocean
- Exposure to life below water promotes value for the ocean
  - Due to perceived beauty
    - Implications: Findings can be leveraged to promote value by bringing the ocean to the people.
    - Limitations include inherent survey bias and Hong Kong's large expat population implying value could be generated elsewhere and not in Hong Kong.

REFERENCES

1. Action, J. L. (2019, May 17). *Over 46 Million single-use plastics are disposed in Hong Kong every week*. Break Free From Plastic. https://www.breakfreefromplastic.org/2019/05/17/over-46-million-single-use-plastics-are-disposed-in-hong-kong-every-week/
2. Heiphetz, L., Spelke, E. S., Harris, P. L., & Banaji, M. R. (2013). The Development of Reasoning about Beliefs: Fact, Preference, and Ideology. *Journal of Experimental Social Psychology*, *49*(3), 559. *Hong Kong*. (n.d.). Retrieved February 27, 2022, from https://datacommons.org/place/country/HKG?utm_medium=explore&mprop=count&popt=Person&hl=en