



Can marine protected areas (MPAs) drive socio-psychological changes in communities?

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Something fundamental had changed...



Psycho - social change

- MPA can lead to socio-psychological impacts that may be more powerful motivations for conservation than extrinsic factors

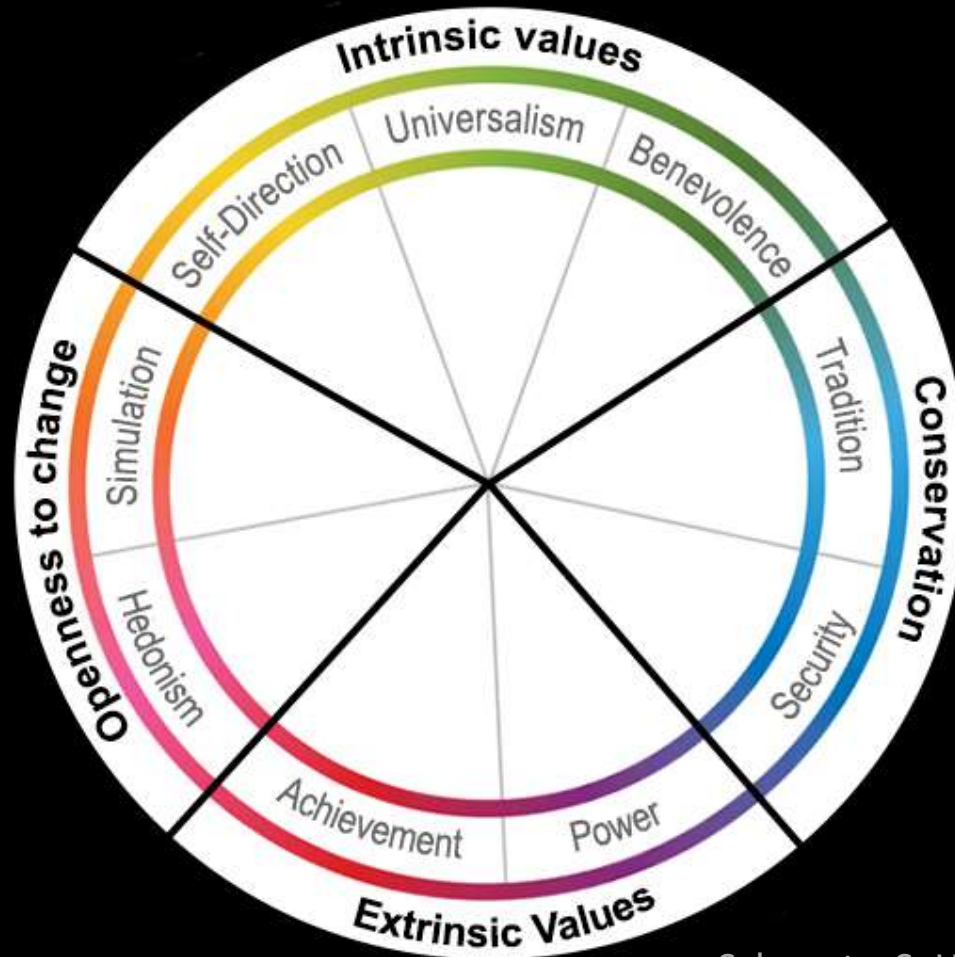




Research Aim

- Enhance understanding of the psycho-social impacts of MPAs
- Assess psycho-social impacts
 1. Human basic values theory
 2. Self-determination theory

Basic Human Values Theory



Schwartz, S. H. (1992)

Can MPAs shift people towards intrinsic values?



Self-Determination Theory

- Autonomous motivation (AM)
 - Curiosity, meaning, mastery, learning
 - Driven by internal motivations
- Non-autonomous motivation (NAM)
 - Money, rewards, punishment
 - Driven by external motivations
- Do NAMs inhibit or spur AMs?
- Do MPAs lead to a growth in AMs?



Study Site

- Southern Leyte Province, Eastern Visayas, Philippines
- 6 communities with MPAs
 - 2 new MPAs (established in 2016)
 - 4 older MPAs (established between 1996 and 2011)



Methodology

- One-on-one interviews (n=177) with individuals from 6 communities
- Semi-structured (qualitative) and structured (quantitative) interview questions
- Conducted in Visayan





Methodology - Research Participants

- **Group 1** – Members of the barangay council who are currently involved in MPA management
 - *Examples:* Barangay captain, Committee of Environment member of the barangay
- **Group 2** – Former MPA participants and other people engaged in MPA management
 - *Examples:* Marine guard, former barangay council member
- **Group 3** – People who have never engaged in MPA management



Results - Quantitative

Basic human value theory

- *Can MPAs shift people towards intrinsic values?*
- **Intrinsic values:**
Older MPAs > New MPAs (P = 0.002)

Self-determination theory

- *Can MPAs shift people towards more autonomous motivations?*
- **Autonomous motivation:**
Older MPAs > New MPAs (P = 0.0006)



Results- Qualitative

Perceived impacts

“I feel proud that I am one of the members to protect the sanctuary. My life changed since I got involved. I have more friends and feel empowered and my concern for nature increased.”

-Participant from an older MPA



Results- Qualitative

Perceived impacts

“The sanctuary is great for the next generation to have a better future and easier fish catch for the future.”

-Participant from a new MPA



Results- Qualitative

Autonomous motivation and shift towards autonomous motivation

“As long as I’m still in this barangay, I will continue to help watch over the sanctuary for my family and for my grandchildren and for the future.”

-Participant from an older MPA

“We don’t have incentives guarding the sanctuary but we continue to guard it for the future generations. If we don’t guard it, the corals will be damaged and the fish will also be gone.”

-Participant from a new MPA

Results- Qualitative

Changes in attitude over time





Conclusion

- MPA values and motivations change over time
- Participants in older MPAs show a significantly higher score for
 - Intrinsic versus extrinsic values of MPAs
 - Autonomous motivations for MPAs
- These changes may enhance MPA sustainability and managers need to be aware of, and promote, these values rather than current emphasis on extrinsic values and non-autonomous rewards

Thank you

