

Behavior Change Action Plan

Atoll Marine Centre Maldives, Naifaru, Lhavyani Atoll

Case Overview

The Atoll Marine Centre (AMC) opened in 2012 in response to a longstanding cultural tradition of locals poaching turtle nests to raise hatchlings in their own homes, often in plastic bottles full of fresh water. Despite massive efforts in community outreach, school programming, and outreach to resorts and other islands, turtle nests on local uninhabited islands continue to be poached and the AMC frequently encounters schoolchildren discussing their pet sea turtles. These hatchlings have no meaningful monetary value and are often given away for free. While laws now exist in the Maldives that prohibit the poaching of turtle nests, that has not seemed to deter the local population. With this behavior change strategy, we are targeting the following behaviors: **1) stop the poaching of nests for pet hatchlings and 2) encourage the surrender of hatchlings that locals are keeping as pets.**

Target Audience

This behavior change strategy targets parents, grandparents, and families. To-date, youth-targeted messaging has had minimal impact, therefore, workshop participants felt an intergenerational approach, engaging with family groups together, may be more effective and build better relationships between the community and the AMC.

Naifaru is a very conservative Islamic community of around 8,000 people. 'Older generations' are motivated to continue poaching nests to keep a cultural long-standing tradition alive while also providing a sense of companionship in the form of pet hatchlings for their children and grandchildren. There are very few alternatives for domestic pets on the island. A critical barrier for this audience to change their behavior is the illegality yet lack of enforcement of poaching nests. This results in ease of poaching nests yet fear of surrendering hatchlings due to perceived punishments and fines.

A few factors that were considered by the workshop participants to be 'unknown' about the audience is whether the tradition relies on live turtles or if a symbolic adoption with supervised interactions would suffice. Additionally, workshop participants wanted to know more about the AMC's relationship with the community, if the community generally respects the AMC, if AMC is run by locals, and if the community is accepting of advice from perceived outsiders. The answers to these questions may impact the design and implementation of a behavior change strategy.

Key Stakeholders

The AMC is led by a well-respected community member, Mohamed Ahmed (Kanma). Mohamed founded a non-profit charity, Naifaru Juvenile, which provides engagement opportunities for the community to promote social, economic, and environmental health. Mohamed sits on the local council and the AMC believes his leadership has led to strong relationships with the community. However, awareness of the AMC and what they do has diminished in the community. Leveraging this local well-respected voice may be needed more frequently to build stronger relationships with the community. Additional stakeholders that may be helpful to engage include the Atoll Council, Women’s Committee, other environmental groups, teachers, and law enforcement.

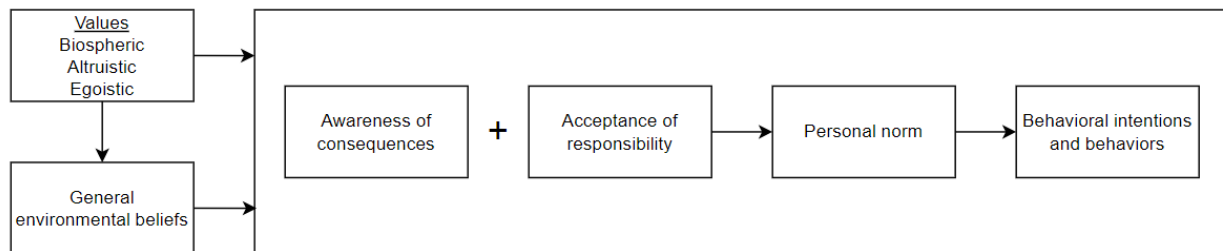
Theoretical Framework

Theoretical frameworks can help pinpoint factors that may be relevant to consider when attempting to change behavior. In this case, understanding community members’ values, beliefs, and personal norms may be helpful when crafting messages that relate to and are relevant for the local community.

Value-Belief-Norm Theory

The Value-Belief-Norm Theory and Norm Activation Theory state that an individual’s personal norms, or their internal conception about what is right and wrong, is activated under specific circumstances. According to this theory, a person must be aware of the consequences of action or inaction and accept the responsibility of taking the desired action for their personal norms to be activated. That is, they must recognize that a problem is occurring, be aware of potential solutions, and feel capable of enacting that solution. These factors are influenced by our values and general environmental beliefs. Values can be separated into three categories: biospheric- gives weight to environmental protection and non-human species, altruistic- places emphasis on human values beyond the individual (community), and egoistic- focuses on personal self-interest. It is important to know which value system your audience is starting from to craft impactful messaging. General environmental beliefs pertain to a person’s beliefs about the appropriate relationship between humans and the environment, such as human dominance over nature, the fragility of nature, and human’s ability to solve environmental problems.

Conducting surveys, interviews, or focus groups with key members of your target audience may help determine their values and beliefs as they pertain to the environment.



Stern, M. J. (2018). *Social science theory for environmental sustainability: A practical guide*. Oxford University Press.

Key Message

In a changing and increasingly unsustainable world, we must revisit our traditions and modify them to ensure the central meaning of the tradition lives on. While it was once a core tradition to keep sea turtles as pets, the unfortunate reality is that sea turtle populations are declining at an alarming rate and we must do our part to protect this resource so future generations can enjoy their presence for many years to come. Together, we can change our practices from collecting and keeping sea turtles as pets to enjoying their presence from a distance as they nest on our beaches.

Depending on the audience's value orientations, the message could focus on the benefits of protecting sea turtle populations by not illegally harvesting them from an environmental, community, or individual perspective. The AMC should make clear the potential consequences of not protecting sea turtle populations and what that could mean for the community and their long-standing traditions. People tend to be less likely to deny their personal responsibility if they are directly asked to commit to a specific action (like not keeping sea turtles as pets) which sometimes can come in the form of a signed pledge. Additionally, denial is less likely when they perceive social pressure to act in the desired way. The more the community believes in this action, the more likely an individual will choose not to keep sea turtles as pets. Focusing on collective action can be helpful in bolstering social norms within a community- the sense that we are all in this together.

Locals are going to be key spokespeople for this effort, particularly if the community does not know or trust the AMC to be advocates for the community as well as sea turtles.

Implementation

This behavior change plan will be best suited for in-person community events and signage placed near community gathering locations as well as schools. This could include parades, holiday celebrations, planned events related to turtles, block parties, school gatherings, or any instance in which the community comes together. Additionally, if the AMC is able to find key spokespeople within the community, relaying the message through informal communication may also be successful.

It is important to stick to one key message so that the audience hears the same message repeatedly and it is clear and concise. Get to know your target audience as much as possible and connect the behavior you wish to change with something they already inherently care about. This could include things like pride in the island, cultural traditions, or community resilience. Focus on bringing awareness to the problem, highlighting the consequences of inaction, and building self-efficacy to solve the problem as a community and for the benefit of the community. While youth have the potential to influence their families, an intergenerational approach may be more effective in this case of long-held cultural traditions.

Evaluation

Partnering with local law enforcement and schools may present avenues to collect data on pet ownership numbers. It would be beneficial to understand all of the different types of pets that locals own and how those trends shift over the time of your strategy implementation.

Pre- and post-campaign surveys may be useful to understand how community members' values, attitudes, and beliefs about the environment and sea turtle conservation as well as their perceived efficacy to change their behaviors shift over time. In addition, it may be helpful to understand how the community perceives the AMC which could influence the selected spokespeople for this campaign (whether internal or external to the organization might produce better results).

Conclusion

Reducing the number of sea turtles kept as pets in Naifaru, Lhavyani Atoll is a complex challenge, but one that can benefit immensely from science-based messaging efforts and behavior change strategies. Spend time building relationships within the community and exploring each specific audience you must reach to further develop custom action plans. Develop your evaluation plan alongside your action plan to ensure you are measuring relevant indicators of success that align with your action plan.

You might find helpful resources on our webpage: <https://www.seaturtlestatus.org/team-beach>.

This peer-reviewed publication explores the impact of a behavior change program on children's attitudes towards keeping endangered cotton-top tamarins as pets in Colombia and may have relevant examples that could be modified and implemented in your context.

Savage, A., Díaz, L., Pasion, J., Torregroza, K., & Guillen, R. (2023). Proyecto Titi: Teaching children that cotton-top tamarins (*Saguinus oedipus*) are not appropriate pets. *American Journal of Primatology*, 85(5), e23431.

Another resource that may be beneficial is a behavior change toolkit developed by Provita, a Venezuelan non-profit organization. This toolkit currently includes three modules and uses the case study of the Yellow-shouldered Amazon, a parrot species that has traditionally been kept as pets motivated by affection and need for companionship. These resources were sent along with this behavior change plan.

Thank you for submitting this case study to Team BEACH for further exploration. We hope this plan gives you ideas to begin to tackle this conservation challenge. If you would like to further collaborate with Team BEACH, reach out to one of our members:

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