



the principles of pride

the science behind the mascots

The Principles of Pride

Authors

Paul Butler, Kevin Green and Dale Galvin

Layout & Design

David Bellard

Acknowledgements

This report is the product of more than 25 years of experience and insight from many individuals within Rare and its numerous partners. It was shaped in particular by the contributions of a number of people, including: David Bellard, Eleanor Carter, Sandra Conde, Brian Day, Amielle DeWan, Daniel Hayden, Alan Hesse, Julie McCord, Katherine McElhinny, Brooke Sadowsky, Edward Tsibulevskiy, Sarilani Wirawan, as well as many others who provided feedback on earlier drafts. This document will be reviewed and updated every so often as needed. Please send any comments or questions to info@rare.org.

The report of course would not be possible without the hard work of Rare's staff and many partners around the world. Thank you for your tireless enthusiasm and commitment to inspiring change so that both people and nature can thrive.

Citation

Butler, P., K. Green, and D. Galvin, 2013. *The Principles of Pride: The science behind the mascots*. Arlington, VA: Rare.

Available online at <http://www.rare.org/publications>

Cover photo: Jason Houston

Back cover photo: A.G. Sano

About Rare

Rare inspires change so people and nature thrive.

Conservation ultimately comes down to people – their behaviors toward nature, their beliefs about its value, and their ability to protect it without sacrificing basic life needs. And so, conservationists must become as skilled in social change as in science; as committed to community-based solutions as national and international policymaking.

Rare trains local conservation leaders all over the world to change the way their communities relate to nature. Our signature method is called a "Pride campaign" – so named because it inspires people to take pride in the species and habitats that make their community unique, while also introducing practical alternatives to environmentally destructive practices.

Contents

4	Foreward by Dan Heath
7	The Principles of Pride
10	Summary of the Principles of Pride
15	Principle 1: Conservation is about behavior
19	Principle 2: Cross the chasm
25	Principle 3: Know your audience
31	Principle 4: Simplify the choices
37	Principle 5: Make change worth it
41	Principle 6: Go beyond knowledge
45	Principle 7: Speak to the heart
49	Principle 8: Get people talking
53	Principle 9: Build a movement
61	Principle 10: Remove barriers
65	Principle 11: Measure, monitor, and manage
71	Principle 12: Plan for the long haul
77	References



Foreword

For anything to change, someone somewhere has to start acting differently: that is one of the central messages in the book *Switch* that I wrote with my brother Chip. Organizational change, community change, societal change, global change: They all begin with individual behavior change.

I was discussing this idea years ago with Brett Jenks, the CEO of Rare, and his eyes lit up. He said, “You want to talk about behavior change? Think about this: Picture some of the world’s most precious coral reefs. Those reefs are the home of countless species of fish. And now picture those same reefs being blown up by dynamite — detonated by fishers who’ve found that it’s an easy way to bag some fish. These fishers aren’t evil; they’ve just figured out a quicker, dirtier way to get their jobs done. And at Rare it’s our mission to persuade them to stop.”

I was fascinated, so I began to investigate Rare. It was, I discovered, an organization essentially founded on the idea that for the environment to be protected, someone somewhere has to start acting differently. And that “someone” is not an environmentalist in Washington DC. It is the fisher destroying reefs as he makes a living. It is the hunter in China who kills scarce tiger prey to sell to local restaurants. It is the residents of a seaside

community in Indonesia who have almost wiped out their fish stock through overfishing.

What is most stunning about the Rare story is that it is not just a story of passionate people and good intentions. It is a story of success. Rare has pioneered a methodology for changing behavior in a way that protects some of the world’s most important natural resources.

But this success was decades in the making. In fact, if you trace Rare’s story back to the early days, the road leads to a man named Paul Butler, who in 1977 led an underfunded campaign to save an endangered parrot on the island of St. Lucia. The population of St. Lucia parrots was so small that scientists felt the bird was doomed to extinction. Fortunately, that wasn’t true — on the strength of Butler’s campaign, the bird rebounded, and its numbers have grown by as much as five times in the decades since.

What made this underdog campaign successful? The secret ingredient was pride. Butler helped St. Lucians realize something: This parrot is ours. It’s something no one else on earth has. We should take pride in it and protect it. In the aftermath of the Pride campaign, the St. Lucia parrot was named the national bird of the island.



As I write this, in the fall of 2013, more than 250 Pride campaigns have been run in 56 countries. Pride, it turns out, is a universal motivator. If you were to visit one of these campaigns in progress, you would see the tools of marketing being deployed: Persuasive messages, careful audience segmentation, word-of-mouth communication, supportive visuals. And there's one final ingredient — perhaps the most well-known and visible aspect of the Pride campaign: the mascot.

The mascot looks playful. You might see someone dressed up in a giant red spooner crab costume, leading schoolchildren in a song. But behind the mascot, and the complex campaigns for which they are a symbol, is serious science. The Pride campaign methodology, which started as a scrappy guerrilla marketing campaign in St. Lucia 35 years ago, has become a model for behavior change intervention, grounded in social psychology research and battle-tested by decades of field experience.

In the pages that follow, you'll learn how and why the Pride campaign works to inspire behavior change in communities around the world. If you believe, as I do, that change starts with the individual, then you cannot help but spot the potential here: If we can convince people to take pride in their environment, and make it easier for them to act on that, then conservation becomes a universal concern. Rare is on the vanguard of organizations who have realized that to protect the planet, we must start with people.

Dan Heath

Former Rare Trustee and co-author of the *New York Times* bestsellers *Switch*, *Made to Stick*, and *Decisive*



The Principles of Pride

The Science Behind the Mascots

Rare trains local conservation leaders all over the world to change the way their communities relate to nature. Its signature method is called a “Pride campaign” – so named because it inspires people to take pride in the species and habitats that make their communities unique, while also introducing viable alternatives to environmentally destructive practices.

Pride campaigns are based largely on principles of social marketing, a field that draws on the behavioral sciences and uses techniques of commercial marketing to change behavior to achieve a specific social goal (Andreasen 1995; Kotler and Zaltman 1971). Until recently, the social marketing approach has been applied mostly to the field of public health, however conservationists have begun to embrace it as a way to move beyond traditional approaches to raising awareness. The principles of social marketing teach that to change behavior we must first identify and understand the motivations of the specific group of people whose behavior we want to change. The approach also highlights the need to appreciate the barriers that may prevent the group from changing their behavior, regardless of their knowledge of or attitude toward the issue at hand. Many of the more important tenets of the behavioral sciences and social marketing inform the Pride approach to behavior change.

Pride campaigns are run by local partners over a two to three-year period while they are trained and closely supported by Rare. At its core, a Pride campaign inspires people to take pride in the species

and habitats that make their communities unique, while also promoting alternatives to environmentally destructive practices. Rare’s partners borrow proven private sector marketing tools – like mascots, billboards, public events and radio shows – to promote more sustainable behaviors that benefit people and nature. Often times, the first thing people recognize about Rare Pride campaigns are the charismatic mascots creatively designed by partners to represent a flagship species for each and every campaign.

The following pages outline the guiding principles of Rare’s Pride program and the scientific foundations upon which they are based. It is not a step-by-step manual on how to design and implement a Pride campaign, but rather a synopsis designed to help staff, partners and other stakeholders understand how and why Pride works to change behaviors so that people and nature thrive. Entire volumes can and have been written on the extensive theory that informs these principles – duplicating that effort here is impossible. Rather, the Principles of Pride are a quick guide to the essence of Rare’s social marketing approach, its underlying theory, and the key principles which guide it. It is based on over 25 years of lessons learned from more than 250 Pride campaigns in 57 countries across the globe. Where relevant, references are cited throughout the document to enable the curious reader to explore topics in greater detail.



Figure 1. Rare's Theory of Change model

The overarching theory of how change is achieved

Pride campaigns are based principally upon a Theory of Change (ToC) (see Figure 1). This tool is a novel elaboration of a behavior-change model developed by Vaughan and Rogers (2000) to understand the impact of mass-media radio soap operas on reproductive health behaviors. Rare's model posits that most people adopt new behaviors by moving through a series of stages. The stages are adapted primarily from Prochaska and others' (1992) transtheoretical model of behavior change. Individuals are motivated to move from one stage to the next by new information and by the influence of peers and opinion leaders garnered through interpersonal communication, a construct taken from Roger's (2003) diffusions of innovations theory.

The model also assumes that many individuals carefully observe the results achieved by early adopters of the behavior before they adopt the behavior themselves, as posited by Bandura's (1977b) social learning theory. Rare's two main additions to Vaughan and Rogers' (2000) model are (1) the identification of barriers to behavior change and the inclusion of mechanisms to reduce or eliminate them as part of the social marketing intervention, and (2) the inclusion of additional stages that extend the model beyond behavior change to threat reduction and the desired conservation result. This more comprehensive model shows how the social marketing intervention is expected to impact the target audience(s) and identifies objectives at each stage, from knowledge to conservation impact.

The Theory of Change model assumes that there are certain characteristics which virtually all people share.

There is considerable debate about the extent to which human nature is universal across all cultures and geographies (Cashdan 2013). Experts disagree widely about the actual magnitude of human universals, but most agree that there are more than a few. The anthropologist Donald Brown (2000) developed a well-known list of human universals based on numerous ethnographies. Other authors have proposed human universals with respect to environmental problems in particular. Kopnina (2013), for example, has suggested three: the use of technological innovation, the desire to improve one's social status, and the notion of social justice and fairness. Whatever the complete inventory of these universals may be, the Pride approach is based on the belief that certain behavioral traits and patterns are inherent in all individuals and groups, and that, therefore, a relatively standardized (but customizable) approach to human-behavior change is possible. These categorical traits and patterns are the basis of the Pride guidelines and principles outlined in this document.

The 12 Principles of Pride are summarized in the following pages, each with corresponding descriptions and details. Minimum critical specifications are also defined to highlight conditions relevant to the given principle that enables Pride techniques to function most effectively. Each corresponding rationale describes the underlying research, theory and experience that inform the principle and justify its inclusion. Where relevant, sidebars are included to highlight examples from Pride campaigns.

A note on ethics

Any program seeking to realize a social good requires attention to ethics, but ethics are particularly relevant to a program that uses persuasion to influence a target audience and achieve its goals. In its social-marketing campaigns, Rare seeks to adhere to the three ethical principles outlined by Lynn (2001).

Principle of well-being

Particular social-marketing campaigns may target different kinds of well-being, and we cannot expect all forms of well-being to be equally pursued at all times. Even so, following the principle of well-being means that social marketing should always entail the goal of helping humans and nature flourish.

Principle of integrity

At no time should conservation advocates misrepresent facts or people's ideas, even if they do not agree with them. Nor should advocates misrepresent the intentions and consequences of particular environmental policies or instances of management.

Principle of empowerment

Social marketing should empower citizens to make democratic decisions about environmental policy and management. To do this, social marketing makes the best scientific, political and moral arguments available to the public.



Summary of Principles

1 Conservation is about behavior

Human behavior change can mitigate or reduce threats to the environment, in turn delivering sustainable conservation and socioeconomic results.

Conservation ultimately comes down to people and their behaviors toward nature. Just as people are often the source of environmental problems, they are equally the potential solution. Given the right conditions and incentives, substantive change in human resource use behavior can be both accomplished and sustained.

As such, Pride campaigns recognize that conservation is a social as well as a biological undertaking – requiring solutions founded in behavior change that strengthen the relationship between people and nature.

2 Cross the chasm

Different individuals within a seemingly homogenous group adopt new ideas and behaviors at different rates. To be effective and sustainable, a new behavior must *cross the chasm* from innovators and early adopters to the broader majority.

Adoption of a new behavior within a community or social group is not a one-off occurrence in which all individuals simultaneously accept and implement the targeted behavior. Rather, a process of diffusion occurs in which different individuals adopt the behavior at different times. Diffusion of innovations theory demonstrates that distinct types of subgroups have varying propensities toward change and explains how, why and at what rate new ideas and technologies spread through a culture.

As such, Pride campaigns recognize the importance of understanding behavior change as a process and of using innovators, positive deviants and trusted sources as examples for others to follow until new behaviors become entrenched social norms.

3 Know your audience

Different groups within a population have distinctive characteristics that influence the extent to which they pay attention to, understand and act on different messages.

Preferences, perspectives and activities vary considerably even within a small community. A successful campaign requires audience segmentation – the division of a broad target audience into more homogenous subgroups based upon defined criteria such as product usage, demographics, psychographics and media use. These subgroups are assumed to have similar interests, needs and behaviors, and compelling, targeted materials are designed to reach each of them.

As such, Pride campaigns utilize quantitative and qualitative research to segment audiences and tailor specific messages that are most likely to resonate with them.

4 Simplify the choices

The ability to accomplish a targeted change in behavior is an inverse function of the available behavioral options – to be effective, a campaign should promote only one specific solution.

Promotion and adoption of a new behavior does not occur in isolation and often involves a complex set of routines, institutions and alternatives. Environmental education targets audiences' environmental literacy and attitudes generally, while the Pride program focuses on a specific threat and its corresponding behavior. To accomplish these objectives, it is essential that a campaign promote only one new behavior or solution to the target audience(s) and that the targeted behavior be expressed in a clear, concise call to action.

As such, Pride campaigns focus on a single solution as a first step to overcoming an environmental problem and to addressing the complex issues facing a site.

5 Make change worth it

Human behavior change is achieved through an improved exchange or transformation of the real and perceived costs and benefits associated with both the prevailing and target behaviors.

Human behavior change involves the use of a subjective cost-benefit analysis in a comparison of alternatives. Change is only likely to occur when the rewards of adopting a new behavior exceed the costs of doing so and when it is deemed more beneficial than maintaining the current behavior; in other words, when the net benefit exchange is positive.

As such, Pride campaigns identify and promote a compelling benefit exchange, one in which the benefits of adopting the new behavior outweigh the costs of doing so.

6 Go beyond knowledge

Addressing the knowledge and attitudes of target audience(s) is a necessary, but alone insufficient, step toward transforming the real and perceived costs and benefits of prevailing and target behaviors.

Behavior change is best achieved by first motivating individuals to want to change their behaviors; in other words, by making the new behavior personally and socially desirable. Pride campaigns seek to change prevailing knowledge and attitudes about the habitat or resource, its threat, and the associated behaviors as a first step toward motivating behavior change. Without knowledge of the existence of the exchange on offer or a positive attitude towards it, behavior change and threat reduction is unlikely to take place.

As such, Pride campaigns recognize that knowledge and attitudes are critical to fostering a desire to adopt a new behavior and therefore target them as a necessary, if alone insufficient, stepping stone to achieving that behavior change.

7 **Speak to the heart**

A new behavior is rarely evaluated from a purely rational or economic standpoint. Rather, subjective and emotional perceptions of the innovation strongly influence adoption.

There are in effect two opposing systems in our brains: the rational, analytical, problem-solving side (the rider) and the emotional, socially embedded side (the elephant). Our rational side may understand the need to reduce carbon emissions, but our emotional side ignores climate change if reducing emissions means we cannot vacation in Hawaii. Our emotional side is often much more powerful. A fundamental belief of the Pride program is that individuals and groups are motivated as much by emotion as by reason.

As such, Pride campaigns strive to identify and appeal to both the rational and emotional drivers of behavior change, connecting with both the head and the heart.

8 **Get people talking**

People generally adopt a significant new behavior only after they have validated it with their peers – interpersonal communication is therefore essential to behavior change.

Pride campaigns typically focus on changing the behaviors of one or two specific target audiences, but those audiences do not live in isolation. They are part of a wider community with whom they interact every day. A critical precursor to behavior change is the authentication of the new behavior through interpersonal communication (IC). In principle 2, Pride campaigns recognize validation – in which individuals discuss their intention to perform a new behavior with their peer group – as crucial to behavior change.

As such, Pride campaigns aim to foster dialogue and discussion both between peers and within the wider community. They do this by creating opportunities for conversations to take place in an atmosphere of trust.

9 **Build a movement**

A new behavior is more likely to be adopted and sustained if it becomes a new “social norm” and if it is supported and enforced by the wider community.

Individuals instinctively take behavioral cues from their social groups. Social norms are group-held beliefs about how members do and should behave in a given context. In the diffusion process, there is a point at which an innovation reaches critical mass and the new behavior has become an embedded social norm. Creating a supportive environment through community-wide mobilization encourages the adoption of new behaviors and the achievement of a new or more effective social norm.

As such, Pride campaigns strive to reach not only the specific resource users engaged in the threat but also the wider community, to create an infrastructure that encourages, supports and sustains behavioral change.

10 Remove barriers

Key barriers that block or hinder the acceptance of a new behavior must be removed or the targeted change will likely not occur.

Financial, political, technical or other barriers may prevent or hinder a new behavior, or reduce the speed at which it is accepted by the target audience. Proactively understanding and removing these barriers is critical to initial and sustained behavioral adoption.

As such, Pride campaigns proactively identify and remove barriers, whether real or imagined, to create the enabling conditions for change.

11 Measure, monitor and manage

Robust monitoring and evaluation, based on a Theory of Change with clear and specific logic, are critical to adaptive campaign management and the sustainability of change.

A Pride campaign's Theory of Change provides a comprehensive logic model of how the campaign is expected to influence both the audience(s) and the conservation target at each stage, from knowledge to conservation result. Effective monitoring, based on the ToC, lets planners know whether their efforts are having an impact and how they may need to adapt to improve on or sustain change. The primary tools for monitoring the effectiveness of a Pride campaign are (1) a set of specific, measurable, action-oriented, realistic and time-bound (SMART) objectives established for each stage of the ToC, (2) a set of clear indicators for each of the SMART objectives, and (3) appropriate research methods and tools for measurement.

As such, Pride campaigns set clear indicators, baselines and targets along a Theory of Change pathway and systematically measure the way they change over time.

12 Plan for the long haul

Behavior change takes time and must be sustained for enduring conservation and social impact.

Behavior change takes time, and unless new norms become entrenched, regression is likely to occur. As such, campaigning needs to continue for years rather than months. This requires that those who implement campaigns are strongly committed and faithful to the communities in which they work. Designing and implementing behavior-change campaigns is complicated; and training local managers and building the capacity of their institutions are critical to sustainability.

As such, Pride campaigns are implemented through a local partner organization trained in the Pride methodology and committed to the target site for the long term.



Principle 1

Conservation is about behavior

Human behavior change can mitigate or reduce threats to the environment, in turn delivering sustainable conservation and socioeconomic results.

Conservation ultimately comes down to people and their behaviors toward nature. Just as people are often the source of environmental problems, they are equally the potential solution. Given the right conditions and incentives, substantive change in human-resource-use behavior can be both accomplished and sustained.

As such, Pride campaigns recognize conservation as a social as much as a biological undertaking – requiring solutions founded in behavior change that strengthen the relationship between people and nature.

Minimum Critical Specifications

- A campaign's target threat must be driven by a defined human behavior¹ within the target community.
- Target threat must be ranked by scope, severity and reversibility as a primary threat to biodiversity, and no significant secondary threats should exist that cannot be addressed by other parties.
- Target threat needs to be reversible.

Rationale

Most environmental problems, and certainly most of those within our capacity to solve, are the result of human behavior. Habitat destruction, climate change, ocean acidification, resource depletion – all are caused predominantly by human activities.

Conservation, therefore, is fundamentally about changing human behavior (Ehrlich and Kennedy 2005; Schultz 2011). Balmford and Cowling (2006) note that “conservation is primarily not about biology but about people and the choices they make.” Whether or not all environmental problems can be resolved by changing human behavior, it is clear that an effective conservation project must adequately address human behavior.

Pride campaigns, as with any effective environmental project, begin with the desired outcome – the specific species, habitat or resource that the project seeks to protect. Pride campaigns are fundamentally about promoting new behaviors, but the purpose of course is

1. For example, fires caused by lightning strikes are a potential threat, but have nothing to do with human behavior. Fires used for hunting or slash-and-burn agriculture do.

not change for its own sake. The purpose is to inspire change in order to protect precious environmental resources so that people and nature together can thrive. So identifying those precious environmental resources – the conservation target – is the starting point.

If the first step to a conservation project is identifying the biological target, then the second must be identifying the associated threat to that target. A Pride campaign is applicable only where the threat is caused primarily by human behavior and is reasonably reversible. Pride campaigns employ an expert-validated concept model and threat rating to identify the link between biological target and relevant high-impact behavior. This process is consistent with the Open Standards for the Practice of Conservation, a set of common concepts of and approaches to project design and adaptive management administered in various forms by members of the Conservation Measures Partnership (CMP 2007)². Given the multitude of threats to biodiversity, it is important to be explicit about the threats a project can and will address.

In the training manual *Conceptualizing and Planning Conservation Projects and Programs* (Foundations of Success 2009), the authors outline the approach to threat rating:

Direct threats are primarily *human activities* that immediately affect a conservation target (e.g., unsustainable fishing, hunting, oil drilling, construction of roads, pollution or introduction of exotic invasive species), but they can be *natural phenomena* altered by human activities (e.g., increase in water temperature caused by

global warming) or *natural phenomena whose impact is increased* by other human activities (e.g., a tsunami that threatens the last remaining population of an Asian rhino). (p. 44)

Once a site's direct threats have been articulated, they need to be rated or ranked to ensure that a project is focusing on a priority threat and the behavior(s) that underlie it. These direct threats³ (together with indirect threats, such as policies or economic demand) can subsequently be represented graphically in a concept model. A concept model is intended to map out the causal relationships among factors that influence the chosen biological target, and it is the foundation upon which the approach to the conservation intervention is built (Foundations of Success 2009).

2. Available at: www.conservationmeasures.org/initiatives/standards-for-project-management

3. A good resource for identifying threats can be found at: http://www.iucnredlist.org/documents/June_2012_Guidance_Threats_Classification_Scheme.pdf

Changing behaviors to protect tigers in Lao People's Democratic Republic (Lao PDR)

In 2008, the Wildlife Conservation Society (WCS) partnered with Rare to develop a Pride campaign in the Nam Et-Phou Louey National Protected Area, in Laos, in an effort to enhance the pace and effectiveness of ongoing WCS tiger-conservation efforts. Even though the conservation target was the Indochinese tiger, campaign manager Santi Saypanya identified the main threat to the species as loss of prey, which was connected to the overhunting of other forest mammals. So the campaign focused on reducing illegal hunting in order to increase tiger prey.

Santi built his campaign on the clear connection between the conservation target (increasing tiger population), the proximate threat (illegal and unsustainable hunting of tiger prey), and the correspondingly necessary behavior change (improvements in hunting practices).





Principle 2

Cross the chasm

Different individuals in a seemingly homogenous group adopt new ideas and behaviors at different rates. To be effective and sustainable, a new behavior must cross the chasm from innovators and early adopters to the broader majority.

Adoption of a new behavior in a community or social group is not a one-time event in which all individuals simultaneously accept and implement the targeted behavior. Rather, a process of diffusion occurs in which different individuals adopt the behavior at different times. Diffusion of innovations theory (Rogers 2003) demonstrates that distinct types of subgroups have varying propensities toward change and explains how, why and at what rate new ideas and technologies spread through a culture.

As such, Pride campaigns recognize the importance of understanding behavior change as a process and of using innovators, positive deviants and trusted sources as examples for others to follow until new behaviors become entrenched social norms.

Minimum Critical Specifications

- Quantitative and qualitative research is required to

understand an individual's propensity for change and the adoption of new ideas, as well as whom or what might influence them.

- An understanding of where groups (or segments within groups) are along the diffusion curve is required to identify early adopters who might support the new behavior.

Rationale

Pride is founded on the idea that behavior change can deliver sustained and meaningful conservation results. Pride campaigns recognize that the adoption of a new idea or behavior is a nuanced process for both the individual and the group. Diffusion of innovations theory attempts to classify individuals based on the order in which they receive and adopt new ideas or innovations. It asserts that the distribution of



individuals who fall into each of these subgroups can be represented on a bell curve: the “early majority” and “late majority” comprise the middle two-thirds of the distribution, with “innovators” and “early adopters” on one end and “laggards” on the other (see figure 2).

As implied by their names, these subgroups are defined explicitly by the rate at which they adopt new innovations. The relative rates of adoption are shown by a logistic function, or S-curve (see figure 2). The innovation must ultimately be widely adopted to self-sustain – this is the point at which an innovation reaches critical mass and becomes an embedded social norm (Rogers 2003).⁴

Of course someone has to be the first (or nearly first) to adopt a new behavior, and that individual cannot do so on the basis of already entrenched behaviors and

norms. Such innovators or early adopters are a small segment of the total population and have some unique attributes. Pride campaigns use focus groups and in-depth interviews to identify those who can more easily initiate the diffusion process and to learn the percentage of the population who have already taken up the innovation.

Just as groups undergo a process in which a new behavior becomes both diffuse and entrenched, so, too, do individuals move through a series of stages in the transition to a new behavior. Prochaska’s transtheoretical model of behavior change (Prochaska et al. 1992; Vaughan and Rogers, 2000) proposes a continuum of five stages through which an individual pursues a new behavior. These are: pre-contemplation, contemplation, preparation, action and maintenance.

4. While the logistic function is drawn to 100 percent penetration, it is rare that 100 percent penetration is actually reached. In the case of conservation, it is essential to determine if a project requires 100 percent adoption to be successful or if a lower threshold is acceptable. For those interventions that require 100 percent adoption, some form of severe legal punishment may ultimately be necessary to fully enforce the

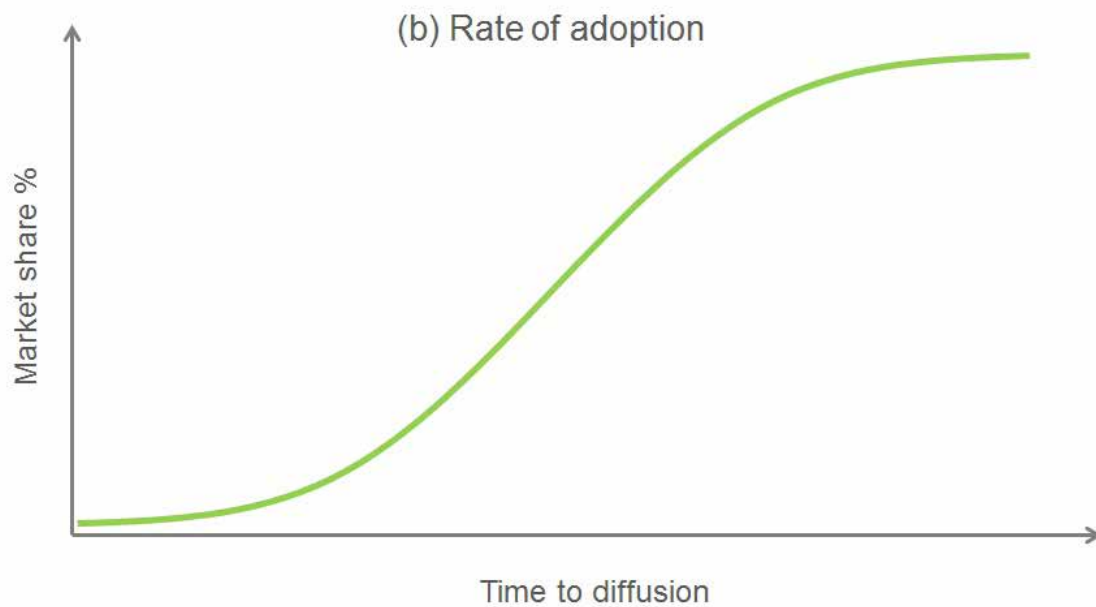
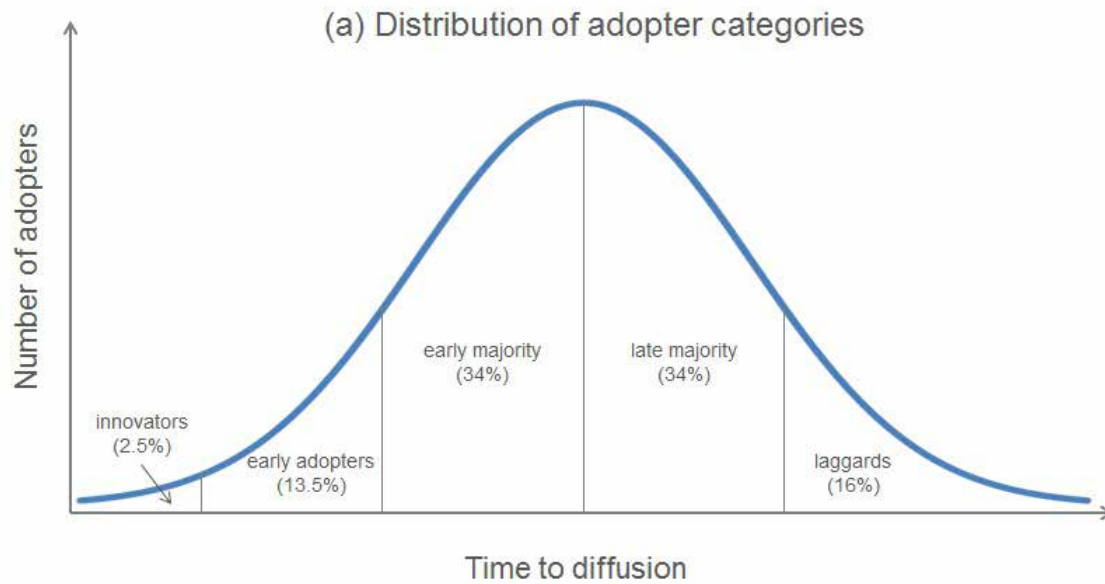


Figure 2. (a) The probability distribution function (bell curve) shows the approximate distribution of the adopter subgroups within the population. (b) The cumulative distribution function (S-curve) shows the rate of adoption of the innovation across the population (adapted from Rogers 2003).

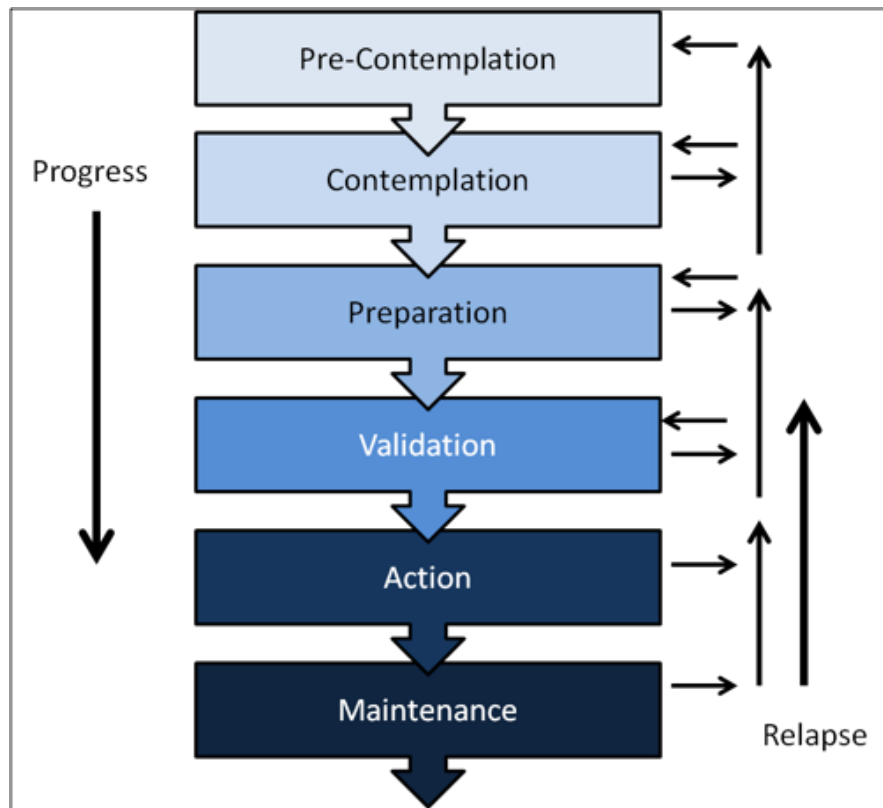


Figure 3. The stages of behavior change model as applied to Rare's Pride campaigns (adapted from Prochaska 1979 and other sources).

Based largely on Prochaska et al (1992) and Vaughan and Rogers' model (2000), Pride campaigns include an additional stage between preparation and action, called *validation*, which recognizes the importance of discussing significant behavioral or ideological choices with trusted sources and social groups before actual adoption can occur (see principle 8). Figure 3 shows the stages-of-behavior-change model as Rare applies it to Pride campaigns. Research by Prochaska and his colleagues have generalized the occurrence of these stages across numerous problem behaviors, particularly in the health sector (Prochaska and DiClemente 1983; Prochaska et al. 1992, 1994a, 1994b).

Understanding where both individuals and groups are located in the transition to a new behavior is essential to a Pride campaign, in order that it may effectively develop social marketing messages and materials.

Watershed conservation innovators in Ecuador

In 2010, Luis López, a conservationist from Naturaleza y Cultura Internacional, began a Pride campaign to promote reciprocal water agreements (ARAs) in the San Andrés watershed of Ecuador. Using his Pride training, Luis convinced a landowner to sign an agreement to set aside two hectares of his land – land that, though still forested, was under an increasing threat of being cleared for agriculture. A few days later, a neighbor of the landowner, having heard of this innovation, signed his own agreement to set aside a similar amount of forested land on his property. When the first landowner heard about this, he sought out Luis, and, unwilling to be outdone, pledged to set aside another 11 hectares of forest.

In only a week, among Luis' target audience, the campaign went from zero adoption to 14 hectares signed over to conservation – a number that, with Luis' tireless work, continues to grow to this day. These are small amounts of land, but the two landowners who signed on to the new agreement before anyone else initiated the diffusion of innovations process.





Principle 3

Know your audience

Different groups within a population have distinctive characteristics that influence the extent to which they pay attention to, understand and act on different messages.

Preferences, perspectives and activities vary considerably even within a small community. A successful campaign requires audience segmentation – the division of a broad target audience into more homogenous subgroups based upon defined criteria such as product usage, demographics, psychographics and media use. These subgroups are assumed to have similar interests, needs and behaviors, and compelling, targeted materials are designed to reach each of them.

As such, Pride campaigns use quantitative and qualitative research to segment audiences and tailor specific messages that are most likely to resonate with them.

Minimum Critical Specifications

- Quantitative and qualitative research is required to

segment the community according to agreed-upon criteria such as demographics, psychographics, media use, current behaviors and receptiveness to the proposed new behavior.

- For each audience, there must be a clear and compelling marketing mix designed according to audience research.

- Materials and activities must be designed that most effectively reach the audience, with messages that can be comprehended, retained and acted upon. This requires a unifying brand that ties the materials together such that each can be used to instruct the audience about the what, why and how of the desired change.

Rationale

Just as individuals within a population adopt innovations at different rates, individuals differ in the ways in which they receive, interpret and act upon information. Audience segmentation is the process of dividing a large population into relatively homogeneous subgroups based on shared characteristics of interest (Boslaugh et al. 2005; Slater 1996). It is derived from the early work of John Dewey (1927), who sought to explain the variance in public opinion within a population. At the simplest level, a population may be segmented into subgroups on the basis of demographic variables such as age, race, gender, income or some combination of these.

Boslaugh and others (2005) write that “the goal of audience segmentation is to identify population subgroups that are homogeneous with respect to certain variables associated with a given outcome or behavior. When such groups are identified and understood, targeted intervention strategies can be developed to address their unique characteristics and needs.”

The practical applications of segmentation grew out of the innovative commercial-marketing strategies of the 1950s that sought to increase market share by appealing to specific subgroups of consumers (Slater 1996).

Research has shown that simple segmentation strategies relying on demographic variables alone yield little improvement over no segmentation at all. Audience segmentation appears to afford more homogeneous subgroups when psychosocial and other factors are combined with demographic variables (Rimal et al. 2009). To segment audiences, Pride campaigns combine in-depth interviews and other forms of qualitative research with quantitative knowledge, attitude and practice (KAP) surveys. Audiences are typically segmented into *primary* audiences, which contain those individuals who share the same underlying resource behavior and psychographic profile. Demographic and behavioral analyses provide detail and data, but understanding the “consumer” in depth depends on psychographics garnered from in-depth conversations. Secondary audiences in Pride campaigns typically include key

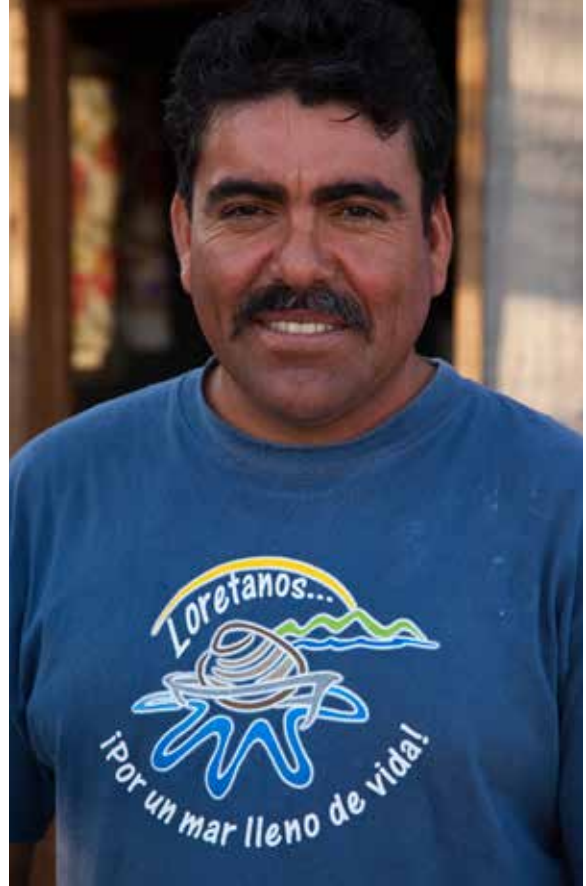


influencers or those individuals or groups of individuals who have the power or ability to remove barriers or facilitate the benefit exchange.

Understanding the audience is essential to the development of a marketing mix, a tool used in conventional and social marketing to tailor a campaign to the habits and needs of a target audience. Rare's target audience is that group of people who must substantially change their behavior to reduce the threat to the conservation target. The marketing mix is a summary of the "Ps" – product, price, place, promotion and positioning – as they apply to the target audience. Rare has added a fifth P – positioning – to the conventional four to stress the importance of positioning the new behavior as better, easier or somehow more desirable than the old behavior.

Together, the five Ps demonstrate that social marketing is about much more than simple promotion. Before making *promotional* decisions about, say, poster design or message development, a successful campaign must identify a *product* or behavior that appeals to the audience; a *price* (whether monetary, emotional or opportunistic) that is neither too expensive nor too cheap; the *places* (whether media channels or physical locations) where the audience is most likely to encounter and absorb the message; and the most effective *positioning* of the new behavior in relation to the old.

Using extensive qualitative and quantitative research, Rare's campaign managers can identify all of the Ps for their target audience, and thus develop a strong and effective marketing mix. If a campaign has more than one target audience (i.e., more than one subset of people whose behaviors must change), then multiple marketing mixes are developed.



Using qualitative research to better understand audiences in Honduras and the Philippines

.....

In Cayos Cochinos, Honduras, where Marcio Arrone and Martin Galo were working hard to improve fisheries management and reduce intrusions into a Fishery Replenishment Zone (FRZ), the two men initially thought they were dealing with a relatively small group of registered fishers. In fact, their initial research, which leaned heavily on quantitative surveys, essentially confirmed this assumption. But as they dug in deeper, they soon realized that their assumptions were slightly off. They knew that they needed more comprehensive qualitative research to paint the full picture. What they ultimately found was that in actuality, there were many more fishers operating in and around the FRZ, many of whom were fishing illegally. Not surprisingly, this finding had significant implications for the campaign strategy, none of which would have been understood without sufficiently deep study of the target audience.



Halfway around the world, in the Philippines' Island Garden City of Samal, Campaign Manager Juniemar Montera was operating on a similar assumption about his own fisher target audience. Initially he planned to work with a very small group of fishers within the Santa Cruz barangay to increase reporting of Dapia Marine Protected Area (MPA) infractions. Surveying this small audience showed him that a lack of reporting was preventing the recently gazetted sanctuary from functioning effectively. But it was through extensive and thoughtful qualitative research that he found low acceptance for the sanctuary across the entire community, which was leading to low participation in sanctuary management generally. Virtually everyone agreed that there were no clear benefits to denying fishers and the community of their traditional fishing territory.

Thanks to his qualitative research, Juniemar ultimately decided that his campaign would need to focus on building support for the fish sanctuary across the entire community and encourage community members, fisher or otherwise, to report violations to the authorities.





Principle 4

Simplify the choices

The ability to accomplish a targeted change in behavior is an inverse function of the available behavioral options – to be effective, a campaign should promote only one specific solution.

Promotion and adoption of a new behavior do not occur in isolation and often involve a complex set of routines, institutions and alternatives. Environmental education targets audiences' environmental literacy and attitudes generally, while the Pride program focuses on a specific threat and its corresponding behavior. To accomplish its objectives, a campaign should promote only one new behavior or solution to the target audience(s), a behavior that is expressed in a clear, concise call to action.

As such, Pride campaigns focus on a single solution as a first step to overcoming an environmental problem and achieving a conservation target.

Minimum Critical Specifications

- A campaign should promote one solution: that is, it should promote only one new behavior to the target audience(s).

- The target behavior of a Pride campaign must be specific and must be impactful enough to meaningfully reduce the stated threat. Overall increases in environmental literacy and improvements in attitudes are helpful, but by themselves are not enough to reduce a specific threat and achieve a particular conservation result.

- Marketing materials and activities must include a clear and concise "call to action" and be unified into a single, cohesive campaign message and brand.

Rationale

Different groups within a population receive and interpret information in distinctive ways. One key piece of information is the very behavior the group is being asked to perform. The targeted behavior change promoted by a campaign must be specific. Research

has consistently demonstrated that campaigns that target a *specific* pro-environmental behavior are significantly more effective than those that foster generally pro-environmental behavior. As Fishbein and Cappella (2006) note, “The most effective behavior-change communications will be those directed at changing specific behaviors (e.g., walk for 20 minutes three times a week) rather than behavioral categories (e.g., exercise) or goals (e.g., lose weight).” The more choices people are offered, the less likely they are to select any one of them in particular.

This is true not only because targeting a specific behavior is crucial to conveying a clear call to action and promoting self-efficacy, but also because innovation adopted within a timeframe sufficient to reach a critical mass is subject to diminishing returns. In his well-known 1995 monograph *Two Ears of Corn*, Roland Bunch describes an agricultural intervention that precisely demonstrates this lesson.

Teaching one idea to hundreds of people has turned out to be preferable. ... For example, one integrated program in Central America tried to introduce some twenty different practices, including contour ditches, fertilization, latrine construction, and family planning. ... Even though the program succeeded in convincing, say, 60% of a community to try out one innovation or another, never did more than 20% of the community try out any one specific innovation. 80% of the community, the vast majority, was always unfamiliar with any one particular innovation. (pp. 84-85)

Because diffuse and sustainable adoption requires the attainment of a critical mass, it turns out that promoting and adopting one new solution rather than many is preferable. Moreover, focusing on only one behavioral choice helps to ensure that the target audience(s) is clear about what it is being asked to do. In a recent public health study, Jones, Vernon and Woolf (2010) found that confusion is a significant barrier to undergoing screenings for colorectal cancer. The authors surveyed patients aged 50 to 75 who had recently visited a clinician and found that those who were informed of two or more options for colorectal screening were 1.6 times more likely to be confused than those who received one option, and, further, that patients who reported being confused were almost twice as likely not to adhere to screening. This is just one example of a phenomenon known in the literature of psychology as the “paradox of choice,” in which people generally express a desire for abundant choices but suffer decisional paralysis when the choices become available (Schwartz 2005).

Prochaska’s transtheoretical model of behavior change posits two key predictors for transition to a new behavior: *decisional balance* (see principle 5) and *self-efficacy*. Simply put, self-efficacy is confidence in one’s ability to perform a given behavior. Self-efficacy is a key component of Bandura’s (1977a) social cognitive theory, which holds that “people process, weigh, and integrate diverse sources of information concerning their capability [i.e., self-efficacy], and they regulate their choice behavior and effort expenditure accordingly” (p. 212). Correspondingly, and not surprisingly, the easier a behavior is perceived to be, the higher the degree of self-efficacy and subsequent likelihood of performance (see principle 10). Feelings

of self-efficacy have also been inversely correlated with the number of available choices (Reed, Mikels and Löckenhoff 2012), lending additional support to Schwartz's "paradox of choice" phenomenon.

The important corollary of this idea is that the ability to understand what behavior is being targeted is essential to the perception of one's ability to perform it. Understanding one's audience and what might motivate change is crucial to Rare's work, but equally important is being able to convey the targeted behavior clearly and concisely. If the target audience cannot understand what is being asked of them, they are unlikely to feel confident that they can do it. Targeted messages have to reach the intended audience, be understood, resonate and then be acted upon. A campaign must therefore have a definitive call to action. A marketing piece with no call to action is simply an awareness tactic.

A well-articulated call to action:

- Clearly explains how the target audience should respond to the offer (the "what," as in, What precisely should I do? For example, respect a no-take zone – an area where fishing is prohibited – by not fishing there and helping in its enforcement). A salient feature of the "how" is to ensure self-efficacy.

- Clearly conveys to an audience member what he or she is going to receive (the "why," as in, Why should I do this? What's in it for me? In essence, this is the benefit exchange: if you help protect the no-take zone, then you will receive guaranteed rights to fish in the spill-over zone).

- Relays a deadline and explains why the audience should act by the deadline (the "why now"? For example, Fish stocks are crashing, and the catch is declining; soon it will be too late).

Clearly articulating a singular specific solution is the most effective way to achieve a targeted change in behavior, but there are risks. The most significant is that the selected behavior or solution will not deliver a significant enough impact to produce the desired conservation result – what environmental economist Maria Csutora has called the Behavior-Impact Gap, or BIG, problem (2012). Importantly, Rare identifies proven bright spots that have the potential for real impact, and Pride campaigns therefore promote only a solution that has the ability to overcome this gap and adequately reduce the targeted threat. If it is not possible for the new behavior to sufficiently reduce the given threat or for the campaign to change enough of that behavior to do it, then another solution must be pursued.

The power of focus in Mongolia and Indonesia

Gaana Balbar's 2009-2011 Pride campaign on Mongolia's Onon River focused on protecting the taimen, the world's largest salmonid species. There are many threats to the taimen, but Gaana's campaign focused on just one – the practice of catching taimen to display in one's home. The campaign message was simple: When you catch a taimen, you should release it back into the water. The simplicity of the goal is what helped it catch on so easily, and fishers quickly devised other ways of demonstrating their fishing skills, such as taking photographs of caught taimen before releasing them back and displaying the photos instead.



**ХААН ТУЛ ЗАГАСАА ЭРХ
ДУРААР НЬ БАЙЛГАЯ !**

ЗАГАСЧИД БИД ОНОН ГОЛЫНХОО ТУЛ ЗАГАСЫГ
БАРЬЖ АГНААД БАЙВАЛ ЦЭНГЭГ УСНЫ ХААН
ТУЛ ЗАГАС МААНЬ УСТАХ АЮУЛД УЧРАНА.
ХЭРЭВ ТА ТУЛ ЗАГАС БАРЬВАЛ ЗУРАГАА ХАМТ
АВАХУУЛАД БУЦААЖ ТАВЬВАЛ ГАЙХАМШИГТ
ТУЛ ЗАГАСАА АВРАН ХАМГААЛНА. ТАНЫ
БАРИАД ТАВЬСАН ТУЛ ЗАГАС УСАНДАА БАЙГАА
УЧРААС ОНОН ГОЛ, ТУЛ ЗАГАС, ТА БИД БҮГД
БАЯРТАЙ БАЙХ БОЛНО.

Хэрэв тул загас барьвал буцааж тавинай!

Байгаль, орчин сайдын 2008 оны 79 дугаар
тушаалаар батлагдсан «АН АМЬТАН АГНАХ,
БАЙГАЛ ЗӨВШӨӨРЧӨГ ЦУГЦАХ ЖУРГАМ»-ын
17.06. Тул загасыг барьвал нэг сайма
сэлтүүртэй, зуувартай сарсангүй дэлгэр
мөхтөл, байдал өгөөшөөр гүйцэтгэгч
Барж, буцаж усанд нь тавина.

WWF RARE

Yusuf Syaifudin's Pride campaign in Karimun Jawa National Park, on the coast of Central Java, Indonesia, took a similar approach to delivering a simple goal with a simple message: do your fishing outside the no-take zone. Campaign objectives focused on explaining the multiple benefits of respecting the no-take zone – protecting long-term fish stocks for food security, reducing the risk of arrest and prosecution, and securing a stable source of income. But the campaign slogan distilled the benefits into a simple message: "Di luar Agar Aman"; in English, "For our safety, get it from outside." The message pervaded campaign materials and activities and was regularly accompanied by the image of a market buoy. With a simple call to action, people understood what they were being asked to do and could rally behind a simple, straightforward cause.





Principle 5

Make change worth it

Human behavior change is achieved through an improved exchange, or transformation, of the real and perceived costs and benefits of the prevailing and target behaviors.

Human behavior change involves a subjective cost-benefit comparison of alternatives. Change is likely to occur only when the rewards exceed the costs of adopting a new behavior, and the latter is seen as more beneficial than maintaining the current behavior; in other words, when the net benefit exchange is positive.

As such, Pride campaigns identify and promote a compelling potential *benefit* exchange, one in which the benefits of adopting the new behavior outweigh the costs of doing so.

Minimum Critical Specifications

- Quantitative and qualitative research is required to understand the real and perceived costs and benefits of the prevailing and target behaviors.

- The human, financial and/or other resources required to deliver the benefits to the target audience in a timely manner must be available at the right time and place and in sufficient quantity to foster widespread adoption.

Rationale

The specific behavior promoted by a campaign is tied directly to the benefit exchange associated with its performance. The benefit exchange is a simple concept that describes the tradeoff in net benefits (benefits minus costs) between two alternative behaviors (prevailing and target). Costs and benefits can take many forms – financial, social, emotional and physical, among others. The exchange of pros and cons between opposing behaviors has otherwise been called the *decisional balance* (Janis and Mann 1977).

The transtheoretical model of behavior change, which

describes the stages through which an individual moves from one behavior to another (see principle 2), claims that decisional balance is one of two key predictors for transition to a new behavior (the other is self-efficacy, or confidence in one's ability to perform the behavior) (Prochaska and DiClemente 1983; Prochaska et al. 1994). Thus, the aim of social marketing is to arrange incentives in such a way that the new behavior is perceived as offering the maximum possible net benefits (Rabinowitz 2013).

Andreasen (1995) proposes a three-pronged approach to ensuring a compelling benefit exchange, summarized as SESDED: “create a Superior Exchange that is Socially Desirable and Easily Done.” These three prongs are demonstrated by Principles 5 through 8 of the Pride Guidelines. The first, superior exchange, is simply another way of expressing the concept of positive benefit exchange. According to Rabinowitz (2013), there are three primary ways of creating a superior exchange:

- Increase benefits.** This could mean adding benefits to those already anticipated; providing information about previously unknown benefits; or heightening the perception of a known benefit's importance.

- Decrease costs.** Decreasing costs could involve subsidizing actual financial costs; changing conditions to make other kinds of costs less of an issue; or changing the perception of a particular cost's importance.

- Decrease the desirability of competing alternatives.** Badmouthing the competition is a standard commercial (and political) marketing technique. For social marketers, it is useful only when

the competition is a behavior detrimental to the health or well-being of the individual or society. If the goal is to replace the detrimental behavior with the changed behavior, then making the detrimental behavior less desirable makes sense. If the competition is a different program or treatment, then trying to discredit it may be unethical, and may easily backfire.

Qualitative research in the form of in-depth interviews and/or focus groups must be used to understand why people do what they do (the prevailing behavior) and what incentives might facilitate adoption of a new behavior. The benefit exchange might vary considerably among individuals and groups in the population. One must realize that when it comes to behavioral decisions, perception is reality: costs and benefits must be evaluated from the perspective of the target audience(s). It is the individuals in a given target audience who decide which behaviors to engage in – the costs and benefits as they perceive them are at least as important as the costs and benefits truly are. Principles 6 through 8 provide more context for how Pride campaigns try to influence the overall benefit exchange among individuals and communities, and principle 9 elaborates on the Pride program's use of emotional drivers to increase the perceived value of the exchange on offer.

Making change worth it in Loreto Bay, Mexico

Loreto Bay National Park, in the heart of the Gulf of California, is a truly significant center of marine biodiversity and its surrounding waters an important part of the area's fishing economy. A 2008 campaign led by Loretanos Perla Lozano Angulo and Ulises Mendéz sought to encourage fishers and community members to respect park regulations by including them in a dialogue and decision-making process from which they had traditionally been excluded. The two developed a marketing strategy to involve the entire community in taking pride in their marine resources while getting fishers to understand and respect fishing legislation. 3,000 community members participated in festivals and more than 26 murals were painted across Loreto.

But the campaign did not only succeed on the strength of the pride and enthusiasm it generated. The campaign brought new demand for sustainably harvested products. Fishers traditionally sold the chocolate clam, for example, for \$1 at the beach. Working with the campaign team and Loreto Bay officials to sustainably manage their fishing grounds, many fishers can now process and sell sustainably harvested chocolate clams for \$5- \$7 per clam. The change in behavior brought a higher value to their product, because Loretanos became willing to pay for it. Fishers now make more income and are able to pay for enforcement of fishing regulations with their increased profits.



PERBANDINGAN JUMLAH TELUR GEROPA DEWASA YANG KECIL DAN YANG BESAR

18 cm



Satu ekor ikan Geropa Dengan Panjang **18 cm**,
Satu kali dia bertelur sebanyak **2000 butir**

Tapi...

Satu ekor ikan Geropa dengan panjang **36 cm**,
Dia bertelur **40.000 butir**

JADI

Supaya Ikan Geropa Di laut Ada terus
Kiterang pilih **JAGA** Yang Mana ?

36 cm



CONSERVATION
INTERNATIONAL
Indonesia



RARE
Inspiring conservation

Principle 6

Go beyond knowledge

Addressing the knowledge and attitudes of target audience(s) is necessary but alone not enough to transform the real and perceived costs and benefits of prevailing and target behaviors.

Behavior change is best achieved by first motivating individuals to *want* to change their behaviors; in other words, by making the new behavior personally and socially desirable. A Pride campaign's first step toward motivation is to try to change prevailing knowledge and attitudes about the habitat or resource, its threat, and the behaviors associated with it. Without knowledge of the exchange on offer or a positive attitude towards it, behavior change and threat reduction is unlikely to take place.

As such, Pride campaigns recognize knowledge and attitude as key to fostering the desire to change one's behavior and therefore target them as a necessary (if alone insufficient) stepping stone to achieving that change.

Minimum Critical Specifications

- Quantitative and qualitative research is required to understand the prevailing knowledge and attitudes of the target audience(s).
- The targeted behavior must involve a choice that the target audience(s) can theoretically be motivated to make (or not).

- Effective campaigns inform their audiences of the benefit exchange and why its adoption is urgent.

Rationale

Tipping the benefit exchange in favor of a new behavior involves complicated expectations about costs and benefits. Pride campaigns are built on the belief that voluntary change is not only ethically superior to compulsory change, but also almost always more effective against problems of conservation and the use of natural resources. Conservation is a social and political as much as an ecological process (Brechin et al. 2002; Ghimire and Pimbert 1997); the implications of this are ignored by the strict exclusionary approach to protected areas and conservation. Policies and programs must therefore be viewed in terms of an ecological standard as well as pragmatic achievability (not to mention moral permissibility). Local communities, it turns out, are surprisingly efficient at undermining the state's ability to promote conservation (Agrawal and Gibson 1999; Balint 2006). A pragmatic approach acknowledges that only a relatively tiny fraction of the planet can be set aside as protected

areas, making it clear that biodiversity conservation has to happen, at least as often, outside such areas, where human-environment interaction is inevitable.

Thus coercion alone cannot address the exigencies of global environmental decline. From Pride's point of view then, the first step in changing behavior toward conservation is to motivate members of a target audience to desire to change of their own volition.

Fishbein's (2000) integrative model of behavioral prediction says that performing a behavior is primarily a function of the intention to do so, and that "intention to perform a behavior follows reasonably (but not necessarily rationally) from specific beliefs that people hold about the behavior" (Yzer 2012). Pride campaigns therefore begin by targeting the *knowledge* and *attitudes* of relevant audiences, both of which are seen as fundamentally affecting intention. Frick, Kaiser and Wilson (2004) argue that three types of knowledge must work in tandem to promote ecological behavior: *systems knowledge* about ecological systems and processes, *action-related knowledge* of what can be done about environmental problems, and *effectiveness knowledge* about the benefits of responsible actions (Kaiser and Fuhrer 2003). A successful campaign targets all three.

Many environmental education programs rely exclusively on changes in knowledge to promote ecological behavior, but experience shows that knowledge does not automatically translate into behavior. "Information may improve people's knowledge of a problem or contribute to a change in their attitude towards it, but there is a vast gulf between knowing about a problem and doing something about it, as anyone who's tried to give up smoking or lose weight knows" (Spehr and Curnow 2011). Consequently, Pride campaigns recognize that knowledge is necessary, but alone usually insufficient, to change behavior.

Attitudes, in addition to knowledge, are key predictors of behavior change (Heimlich and Ardoin 2008; Kaiser,

Wölfling and Fuhrer 1999). The attitude-behavior link is a consistently contested theme in the literature of behavioral change, and some studies (e.g., Hines, Hungerford and Tomera 1986) have found only weak correlations between pro-environmental attitudes and pro-environmental behaviors. There is a consensus, however, that *specific* attitudes about *specific* behaviors are generally more significantly predictive of those behaviors (Bell et al. 1996; Kaiser, Wölfling and Fuhrer 1999; Monroe 2003). In a recent study by a team at the University of Groningen in the Netherlands, researchers found that moral and attitudinal motives for checking tire inflation (which impacts gas mileage) were significantly stronger predictors of compliance than economic or other motives (Bolderdijk et al. 2013). The findings demonstrate that a pro-environmental attitude or ethic may more strongly influence adoption of a new behavior than economic or safety-related incentives.

Pride campaigns use messages, materials and activities designed to increase the knowledge and influence the attitudes of target constituencies, but attitudes alone are also often not enough to effect meaningful behavior change (McKenzie-Mohr 2011). In one well-known study, 94 percent of interview respondents said that it was everyone's responsibility to pick up litter when they saw it. Immediately upon leaving the interview, however, only 1.4 percent of the more than 500 participants stopped to pick up litter that had been planted by the research team (Bickman 1972).

Another study in the United States found that recyclers and non-recyclers differed very little in their attitudes toward recycling (De Young 1989).⁵ That said, Pride campaigns are based on the idea that voluntary behaviors derive from intentions (i.e., desire), that intentions are, at least in part, a function of knowledge and attitudes, and that changing the latter is the first step toward behavior change.

5. Interestingly, when they were asked, non-recyclers pointed overwhelmingly to a lack of information about how to participate in recycling as the major barrier to doing so. For more on this subject, see principle 6.

Going beyond knowledge to stop destructive fishing in Hainan, China

In his 2010-2012 Pride campaign in Hainan, China, Campaign Manager Chen He sought to reduce destructive fishing inside the Dongzhaigang National Nature Reserve, a mangrove habitat serving as, among other things, a key food source for local fishers as well as a critical feeding ground for the endangered black-faced spoonbill. Through his initial pre-campaign surveys of local fishers, Chen found that 61% already knew, thanks in part to other environmental protection efforts, that widespread destructive fishing was the main cause of fish decline in the reserve. Even more, more than 80% knew that these destructive fishing techniques, including fishing with electricity, were illegal.

However, looking at data for other elements of his campaign Theory of Change, Chen knew that this knowledge alone was not enough to encourage fishers to even report infractions by others, let alone to stop themselves. In fact, he found that of those roughly 700 fishers, only 48% agreed that destructive fishing should be illegal, and only 9% had ever actually reported an infraction to authorities.

Chen had his work cut out for him, but through his targeted Pride social marketing approach, he was able to go beyond knowledge, to improve attitudes, increase interpersonal communication, and remove barriers to change. He and his team started a community co-management committee and trained monitoring teams on patrolling and enforcement. His marketing techniques sought to change the hearts and minds of local fishers, and by the end of the campaign, the percentage of fishers agreeing that destructive fishing should be illegal nearly doubled, to 82%. Further, the percentage of those who had ever reported an infraction more than tripled, to 30%.





Principle 7

Speak to the heart

A new behavior is rarely evaluated purely from a rational or economic standpoint; rather, subjective and emotional perceptions of the innovation strongly influence diffusion and adoption.

There are in effect two opposing systems in our brains: the rational, analytical, problem-solving side and the emotional, socially-embedded side. Our rational side may understand the need to reduce carbon emissions, but our emotional side ignores climate change if reducing emissions means we cannot vacation in Hawaii. Our emotional side is often much more powerful. A fundamental belief of the Pride program is that individuals and groups are motivated as much by emotion as by reason.

As such, Pride campaigns strive to identify and appeal to both the rational and emotional drivers of behavior change, connecting with both the head and the heart.

Minimum Critical Specifications

- In the promotion of a benefit exchange, a campaign must appeal to both sides of the brain. While rational appeals might seem the most logical, emotional appeals often are more compelling. Appealing to “pride of place” has been shown to reduce adoption times/costs and make behavior change more sustainable in the absence of more tangible “rewards.” Every campaign must have an emotional and a rational appeal.

Rationale

A commonly held but mostly false belief is that behavior follows directly from rational decisions based on available information (see principle 6). This fallacy is derived partly from traditional rational choice theory, which says that individuals are self-interested, utility-maximizing decision-makers acting on internalized cost-benefit calculations (Ostrom 1998). What we know from extensive psychological and anthropological research is that this is rarely the full story. Prendergrast and others (2008) note that “people, it turns out, often aren’t actually all that ‘rational’ in their behaviors and decisions. They don’t conduct some sort of complicated cost-benefit analysis when faced with a choice.” The reality is that individuals are motivated at least as much by emotion and social context as they are by a strategic self-regarding calculation (see principle 5).

People are greatly influenced by the behavior of their in-group peers, so group identities often have as much to do with behavior as they do with internally facing intention (see principle 9). Similarly, emotional impulses, which themselves are strongly guided by social context, exert extraordinary power over behavior.

In some ways, it is helpful to conceive of human psychology as a composite of two opposing forces: the rational and the emotional.

In their 2010 book *Switch: How to Change Things When Change Is Hard*, Dan and Chip Heath invoke psychologist Jonathan Haidt's (2006) analogy of elephant and rider to capture the essence of our bipolar world of decision-making:

If you want to understand your brain, picture a human rider atop an elephant. The rider represents our analytical, planning side. The rider decides, "I need to go somewhere, here's the direction I want to go," and sets off. But it's the elephant, the emotional side, that's providing the power. The rider can try to lead the elephant, but in any direct contest of wills the elephant is going to win—it has a six-ton weight advantage. That power imbalance is what makes a diet hard, and by extension, any kind of change—it's not easy to think our way into change. So if you want to lead change, in your organization or in society, you've got to speak to both sides of the brain, pointing out the direction for the rider but also motivating the elephant to undertake the journey.

For environmental psychologist George Lakoff, emotions are deeply intertwined with rational thought. "Emotions are an inescapable part of normal thought... Without emotion, you would not know what to want, since like and non-like would be meaningless to you" (Lakoff 2010). Even rational decisions are impossible without the emotional frames in which to situate them.

Pride in particular is a powerful motivator that can be harnessed as an emotional key to behavior (Katzenbach 2003; Williams and DeSteno 2008).

In a 2009 study, Patrick, Chun and Macinnis divided a group of people into three subgroups, put each subgroup in a separate room, and set a large piece of chocolate cake in front of each person. All the groups were told to eat as much or as little cake as they

wished. One group received no further instructions. Another was told to imagine the shame they would feel if they ate the cake. The third was told to envision the pride that would come from resisting the urge to devour it. What they found was fascinating – the group that envisioned pride ate significantly less than both of the other groups. Their findings point to the idea that emotions are not only powerful motivators, but that positive emotions, such as pride, more effectively encourage positive behavior than negative emotions discourage the opposite behavior.

Pride campaigns get their name because they aim to inspire this powerful emotion in target communities. Campaigns use numerous techniques and tools to illicit emotional responses like pride. One of these is the use of a charismatic campaign mascot that is creatively designed to represent the campaign's flagship species.

Every Pride campaign has a flagship species, which often acts as a campaign messenger and serves as a conduit for people's emotions. Its image is included in almost all major pieces of marketing material. Rare has developed numerous criteria for selecting an appropriate flagship species. Most importantly, the flagship species must be a species found locally, and is preferably endemic to the site. Localism heightens the sense of community pride evoked by the species and campaign.

The most visible representation of the flagship species is the mascot costume, which is used at many campaign events and activities. The mascot is designed to be approachable, inviting the audience's trust and empathy. One of the most important qualities of the mascot is that it is an anthropomorphized depiction of the flagship species – a campaign representative to which the target audience can relate. It assumes the identity of a fellow community member and often demonstrates the new behavior itself. It gives people a tangible, approachable embodiment of the flagship species, fostering the same kind of concern and emotional attachment members of the audience would have for a fellow human being.

Tigers and honeybees in northern China

Successful campaigns appeal to both the rational and emotional “sides of the brain.” In 2008, Lang Jianmin of the Wildlife Conservation Society launched a Pride campaign to protect the Siberian tiger in the Hunchun Nature Reserve of northeast China. Many farmers in the province supplemented their incomes by poaching the scarce prey of the endangered Siberian tiger with snares and traps. Lang’s campaign miraculously encouraged farmers not only to give up hunting with snares but also to actively join community patrols against it!

Lang’s campaign provided bee boxes to those who participated (thereby providing an alternative livelihood) and simultaneously made the tiger a living symbol and proud resident of their township. Being a member of the patrol that was protecting the beloved and majestic tiger led to honor in the community; eating wild game trapped illegally led to penalties, thus reducing demand. By the end of the campaign, the percentage of villagers eating wild game dropped from 56 percent to 18 percent, and the monthly average of poaching incidents fell from 23 to six.





Principle 8

Get people talking

People generally adopt a significant new behavior only after they have validated it with their peers – interpersonal communication is therefore essential to behavior change.

Pride campaigns typically focus on changing the behaviors of one or two specific target audiences, but those audiences do not live in isolation. They are part of a wider community with whom they interact every day. A critical precursor to behavior change is the authentication of the new behavior through interpersonal communication (IC). In principle 2, Pride campaigns recognize validation – in which individuals discuss their intention to perform a new behavior with their peer group – as crucial to behavior change.

As such, Pride campaigns aim to foster dialogue and discussion both between peers and the wider community. They do this by creating opportunities for conversations to take place in an atmosphere of trust.

Minimum Critical Specifications

- Campaigns must actively promote opportunities

for face-to-face communication about the targeted behavior among and within the target audience(s).

Rationale

Pride campaigns recognize the value of discussing significant behavioral or ideological choices with trusted sources and social groups before adopting them. People typically talk to one another before deciding to adopt a new behavior or purchase a high-value product. People like to have their decisions validated by those they know and trust (Vaughan and Rogers 2000). Indeed, these conversations teach or reinforce social norms, and influence individual decisions.

Social learning theory (Bandura 1977b; Heimlich and Ardoin 2008) posits that behavior is acquired through the process of observational learning, much of which



is situated in peer-to-peer interactions. Behavioral adoption is therefore collaborative: behaviors are learned among and tested and validated by members of one's social group(s), including family, friends and colleagues. Before an individual fully adopts (or even tries) a new behavior, she is highly likely to test the idea in her peer group(s) to gauge its success among them (see principle 4, on self-efficacy) as well as their attitude toward it and degree of acceptance. Numerous studies in the field of public health have identified interpersonal communication with friends, neighbors and family as the principal motivation to adopt family planning (Farooqui 1994).

In a study of the effects of an entertainment-education radio soap opera in Tanzania (*Twende na Wakati*), Vaughan and Rogers (2000) found that spousal communication about family planning was strongly related to contraceptive use, and that mass-media messages about interpersonal communication were effective at fostering those conversations.

"In Tanzania, many individuals incorrectly believed that their spouse was opposed to family planning. ... *Twende na Wakati* stimulated discussions about family planning

between spouses, which led to more accurate perceptions of a spouse's [positive] opinion of family planning."

Getting people to talk about a new behavior is therefore just as important as giving them the idea in the first place. Pride campaigns are created to foster peer-to-peer conversations. While marketing and materials may spread information, it is conversations that spread adoption. When an individual reaches out to his or her network in the validation process, it is important that these influencers proactively validate the decision rather than argue against it. Pride campaigns therefore aim to encourage interpersonal communication, not only about the importance of the new behavior, but also to promote discussions about specific plans to perform it.

Promoting communication about forest conservation in Veracruz, Mexico

In the Central Coast of Veracruz, Mexico, expansion of sugar cane production, cattle ranching and urban development threatens the tropical deciduous forest that serves as stopover habitat for numerous species of migratory raptors, among them the peregrine falcon *Falco peregrinus*. To conserve this important habitat and slow deforestation pressures, Adolfo Balcazar and his organization, Pronatura Veracruz, partnered with Rare in 2008 to run a Pride campaign to motivate landowners to join a network of private conservation areas in exchange for ecosystem service payments under Mexico's national Payments for Ecosystem Services program. The pure economic rationale for Payments for Ecosystem Services adoption had been slow to take off in the area, so the campaign sought to use social marketing to build a movement around its adoption.

Adolfo and his team devised a simple campaign slogan – 'Certifica tu Tesoro [Register your treasure]'. Radio spots, television advertisements, calendars, school visits and even a campaign song were created to deliver key information and reinforce the campaign messages. The team selected the peregrine falcon as the campaign's flagship species and created a mascot, named Peri.

By July 2010, 14 landowners had signed agreements to protect a total of 1,584 hectares, more than three times as many as the campaign team had hoped. As with all Pride campaigns, the team measured its objectives both before and after the campaign. While changes in knowledge and attitudes were variable, and sometimes inconclusive, the most significant changes by far came in interpersonal communication. Adolfo and his team observed a 27 percentage point increase in landowners discussing the benefits of tropical deciduous forest and a 35 percentage point increase in those discussing Private Conservation Area registration. These results suggest that many landowners already knew about opportunities for certification and may have been thinking about joining, but only through the Pride campaign process were they able to communicate with their neighbors and get the validation that they ultimately needed.





EXHIBITING

MABAW
REEF IS OUR
PRIDE

Principle 9

Build a movement

A new behavior is more likely to be adopted and sustained if it becomes a “social norm” and if it is supported and enforced by the wider community.

Individuals instinctively take behavioral cues from their social groups. Social norms are group-held beliefs about how members do and should behave in a given context. In the diffusion process, there is a point at which an innovation reaches critical mass and the new behavior has become an embedded social norm. Creating a supportive environment through community-wide mobilization encourages the adoption of new behaviors and the achievement of a new or more effective social norm.

As such, Pride campaigns strive to reach not only the specific resource users engaged in the threat but also the wider community, to create an infrastructure that encourages, supports and sustains behavioral change.

Minimum Critical Specifications

- Quantitative and qualitative research is required to understand the prevailing social norms and communication patterns of the target audience(s).
- While the focus of all campaigns will be on those audience(s) that are directly or indirectly tied to the specific threat, campaigns must also target the wider community to promote broad social norms that support the new behavior. As such, the wider community must be mobilized to understand why and how they can endorse and support the campaign and its call to action.
- Campaigns must plan for the time, money and manpower to reach a societal critical mass – the point at which the majority of the target audience has adopted the new behavior and it has become a behavioral norm.

Rationale

The ultimate objective of the Pride program is to move a community or a critical subset of the community (the target audience) to that point where the desired behavior has reached a critical mass and been adopted as a social norm. Social norms are group-held and socially enforced beliefs and standards about how members should or should not behave in a given context. Cialdini and Trost (1998), in the *Handbook of Social Psychology*, write that

“most norms that guide our daily activities have evolved from behaviors that are performed and rewarded repeatedly, either directly or through vicarious reinforcement from others in the society. The behaviors then become the preferred responses to particular situations because of their reward power. The strength of these preferences will depend on the extent to which (1) there are communication opportunities between people in the social group that allow them to pass the norm to others, (2) the group is a cohesive unit and values uniform behavior, and (3) the norm is important for the group.

Once these preferences are established and the costs associated with non-normative behavior are made known, members of the social network will discourage any deviant tendencies by voicing what other members “should” or “ought to” do. These norms are, at that point, accepted and internalized by the group members. Sanctions, such as laws, may then develop to support the norms.”

Behaviors themselves do not occur in isolation. Effective campaigns recognize that changing behavior is about changing the routines that arise around a specific behavior. A central component of Bandura’s (1977b) social learning theory (see principle 8) is that individuals learn and make decisions about new behaviors based on models demonstrated in their social networks. Models not only convey the self-efficacy required for the performance of a new behavior (see principle 4) but also demonstrate which behaviors are customary for other members of the social or kin group – in other words, what the norms of the group are.

Individuals take their behavioral cues from the norms of their social groups. Rather than objectively evaluating the possible consequences of a decision or behavior, a person will often approach the decision from the perspective of identity. This is known as the identity model of decision-making (March 1994). In this model, the individual will consider what type of a person she is and what choice people with the same or similar identity would make in the given situation (Heath and Heath 2010). In other words, she will act on the basis of what is most acceptable or common to the identity and norms of her social group(s).

It is also important to recognize that there are differences among *types* of norms. *Descriptive* norms refer to the prevailing beliefs and behaviors among the group (i.e., what individuals in the group do), while *injunctive* norms encompass beliefs about how group members ought to behave (i.e., what individuals in the group should do). Effective Pride campaigns distinguish between the two, recognizing that individuals are motivated to behave like other

members of their in-group and thus often are more apt to follow descriptive norms than injunctive norms. In a well-known study that compared the effectiveness of signs that asked hotel guests either simply to reuse their towels or to reuse their towels to conserve water and avoid environmental pollution, Goldstein, Cialdini and Griskevicius (2008) found that the signs that expressed a descriptive norm (i.e., that most hotel guests reuse their towels) were significantly more effective at encouraging reuse than signs that appealed to environmental protection, at a difference of more than 25 percent.⁶ Further, the researchers found that the most effective descriptive norms were those most in keeping with the individuals' immediate circumstances (i.e., that most hotel guests *in this room* reuse their towels) – norms referred to as “provincial norms.” In line with these findings is the problematic nature of campaign messages that present conflicting descriptive and injunctive norms: they give inconsistent

suggestions about what behavior an individual should adopt.⁷

Even narrowly defined behaviors have community-wide implications that affect more than just the resource users. In many ways, a broad community is easier to win over than a target audience. Since the action being asked of them (vocal support and encouragement) may be comparatively small and the potential benefits being offered (food security, cheaper protein, community pride) comparatively large, they are easier to sway than a target audience.

If the community accepts the behavior change as right and necessary, an enabling environment is brought into being in which the primary target audience feels confident and secure enough to make a change. A communal buzz around the issue validates that the primary audience has made the right choice for



6. Specifically, the descriptive-norm appeal yielded a 44.1 percent reuse rate versus only a 35.1 percent reuse rate with the appeal to environmental protection – a difference of almost 10 percentage points, or more than 25 percent.

7. For instance, a famous example cited variously by Cialdini, McKenzie-Mohr, and other psychologists is the story of the Iron Eyes Cody public-service announcement that appeared on television in the United States during the 1970s and 1980s. The ad showed a Native American with a tear rolling down his face standing by a riverbank while drivers passing by tossed litter from their car windows. Researchers suggest that the ad may not have been as effective as previously thought, largely because of competing injunctive and descriptive norms. The ad showed both that people frequently and habitually litter (descriptive) and that this behavior is disapproved of (injunctive). Individuals who see

themselves and their community (see principle 8). It also reassures them: since they are not the only ones who have made the responsible choice, the benefits will not be compromised by others.

Along with targeting the specific behavior of a small group of resource users, Pride campaigns also strive to build wider community support to:

Make a greater impact. For example, if individuals outside the narrow confines of a fisher community proactively support the reporting of infringements, then the efficiency of a campaign is increased many fold. Any task that requires manpower is that much easier with community support.

Sustain the change effort by promoting community ownership and change in cultural norms and practices. The greater the sense of community ownership of the purposes of the campaign, the more likely it is to succeed over the long term.

Increase the perceived cost of the prevailing (negative) behavior by building community support for the new behavior. For example, if community-wide social norms about illegal fishing or fishing within no-take zones change – such that these behaviors are deemed unacceptable – then pressure to comply is exerted on the fishers (by their own social network), given the potential social costs associated with noncompliance.

Facilitate policy changes that further enable the adoption of new behavior. When policymakers or implementers realize that the community supports efforts to provide enforcement, for example, they may speed up the process of making it happen.

The goal of a Pride campaign is to reach a critical mass at which point the new behavior becomes self-sustaining (see principle 2). Rogers (2003) defines this critical mass as “the point at which enough individuals in a system have adopted an innovation so that the innovation’s further rate of adoption becomes self-sustaining.” Among the many who have addressed this point are Granovetter (1978), with the *threshold model*, and Crane (1991), with the *contagion model*, in the literature of sociology; Shermesh and Tellis (2002), in the field of marketing research, with the variable called *time-to-take-off*, and Gladwell (2002), in popular psychology, with *The Tipping Point* – the concept and book of the same name. In each case, the essential idea is that the prevalence of a behavior tends toward equilibrium. As Crane (1991) explains, if it remains below a critical mass, “the frequency or prevalence of the [behavior] tends to gravitate toward some relatively low-level equilibrium.” But at the critical mass, the process of diffusion becomes self-repeating and results in a much higher level of equilibrium.

Understanding the assumptions behind the phenomenon of critical mass is significantly easier than identifying the actual level at which it occurs; the latter relies on a number of factors, among them, the characteristics of the population and of the innovation

itself. One characteristic is the degree to which the innovation is interactive, as in the case of new communication technologies. With an interactive innovation, there is a *reciprocal interdependence* in which “the benefits from each additional adoption ... increase not only for all future adopters, but also for each previous adopter” (Rogers 2003).

For example, the telephone or fax machine, whose technologies are of benefit only insofar as enough people use them.

A related characteristic is that of network externalities, “a quality of certain goods and services such that they become more valuable to a user as the number of users increases” (Mahler and Rogers 1999). The rate of adoption therefore is partly a function of the presence of network externalities – only at that level of adoption where enough individuals have perceived enough network externalities does critical mass occur. In the case of the fax machine, it occurred about 1987, even though fax technology had effectively been invented almost 150 years earlier, in 1843 (Rogers 2003). By 1987, according to Holmlöv and Warneryd (1990), business use of the fax machine had become more or less normalized: people had begun to believe that “everybody else” had a fax machine. Like new communications technologies, innovations for social good can also be marked by reciprocal interdependence and network externalities – consider, for example, the use of emission-control devices on motor vehicles to reduce pollution or the practice of





sustainable, nondestructive hunting or fishing in critical habitats.

One reason it is hard to predict the exact point at which critical mass occurs in a population is that individuals have different *thresholds* at which they are persuaded to adopt an innovation, and each population contains different combinations of individuals and their thresholds. A threshold for any given individual is essentially the number of others who must adopt the innovation before he or she will adopt it (Granovetter 1978). The point is that the critical mass operates at the level of the system or community, while the threshold operates at the level of the individual – the critical mass for any given behavior is therefore a function of the composition of individuals (and their corresponding thresholds) in a population.

With many behaviors, an individual can easily observe how many others are performing the behavior and so decide whether his or her threshold has been reached. For example, the contagious pattern of high-school dropouts in “low quality” neighborhoods (Crane 1991), or, more positively, the spread of

hybrid vehicles in cities across the United States and Europe. Other innovations, however, such as the use of contraceptives, are significantly harder to observe. What is essential, then, is to worry less about predicting the actual point of critical mass and focus more on ensuring that communication and interaction occur often enough to adequately publicize behaviors and the implicit norms that surround them (see principle 7). Essential to Pride, therefore, is the promotion of opportunities for face-to-face communication among and within the target audience(s).

“Size Matters” in Abaco Island, Bahamas

The tiny Bahamian island of Abaco is a major exporter of spiny lobster (also known as crawfish). In fact, in 2008, \$7,391,740 worth came ashore on Abaco Island. However, in recent years the spiny lobster catch has steadily declined as a result of overfishing and illegal fishing techniques, such as harvesting of undersized juveniles. And although a law exists against harvesting lobsters with tails smaller than five and a half inches, many fishers did not know about the regulation, much less abide by it. So in 2009, d'Shan Maycock, with the support of Rare, launched a Pride campaign to reduce the harvesting, sale and purchase of undersized lobsters.

Equipped with the tools and techniques of Pride, she knew that she had to build a movement behind the need for five and a half inch or greater tails. So with a catchy slogan, a charismatic mascot, and a straightforward call to action, build a movement is exactly what d'Shan did. She discovered that even when fishers knew about the size restriction, they had no way to actually measure their catch. So she distributed size gauges to local fishers and gave training to over 400 of them.

Perhaps most importantly, d'Shan's campaign slogan – Size Matters! – took the island absolutely by storm and became the embodiment of the movement sparked by her campaign. Geno D, a popular Bahamian musician, recorded the campaign theme song which eventually became a national hit. Schoolchildren across the island could be found wearing campaign materials, like stickers and pins. The “Size Matters!” campaign was featured in national media, and the Bahamian fisheries department has since discussed taking the campaign national. D'Shan's campaign is one of the best examples in Rare history of how a simple, straightforward campaign could inspire a movement.





Principle 10

Remove barriers

Key barriers that block or hinder the acceptance of a new behavior must be removed or the targeted change will likely not occur.

Financial, political, technical or other barriers may prevent or hinder a new behavior, or reduce the speed at which it is accepted by the target audience. Proactively understanding and removing these barriers is critical to initial and sustained behavioral adoption.

As such, Pride campaigns proactively identify and remove barriers, whether real or imagined, to create the enabling conditions for change.

Minimum Critical Specifications

- Qualitative research is required to understand the real or perceived barriers that might prevent the adoption of the desired new behavior.
- The human, financial and other resources required to remove these barriers in a timely manner must be available at the right time and place and in sufficient quantity to foster widespread adoption.
- Barrier removal strategies should ideally be developed

around proven bright spots or approaches that have been adopted elsewhere for similar threats and audience segments.

Rationale

The desire to adopt a new behavior does not always imply the ability to do so. Economic, political, technical and other barriers – all can keep the target audience from easily adopting the proposed behavior. For behavior change to take place, these barriers need to be identified and removed (or at least sufficiently reduced). “If the behavior is inconvenient, unpleasant, costly or time-consuming, ... your community-based social marketing strategy will be unsuccessful” (McKenzie-Mohr 2011).

Put another way, even if we inform resource users about the environmental threats their activities pose and show them alternative behaviors that may be available (*knowledge*), and even if we foster positive attitudes towards adopting these new behaviors

(*attitude*) – and start conversations in the broader community that shift social norms to encourage and support them (*interpersonal communication*) – external impediments to adopting the new behaviors may still arise, making adoption unlikely. For instance, an individual may strongly want to ride her bike to work as an alternative to driving, but if she thinks there is nowhere in or near her workplace to securely store the bike, or knows of no safe bike route between her home and office, she is unlikely to pursue the desired behavior. In a study on the prevalence of composting in Waterloo, Canada, McKenzie-Mohr and others (1995) found that inconvenience was among the most significant barriers to composting – the inconvenience of not having a composting unit as well as the difficulty of doing it. Of the 300 homes surveyed, 84 percent expressed interest in receiving a free composting unit, reflecting a desire to perform the behavior. So the local government instituted a program to give away many free composting units. During a follow-up survey, the researchers found that 77 percent of the recipient households were using their unit.

Meaningful change is almost always difficult – an important part of successfully achieving change is making it as easy as possible to do (Ardoin et al. 2013). Barrier removal may therefore require that we provide technical assistance, such as teaching resource users how to create firebreaks or how to use controlled burns. Alternatively, it may involve distributing new, more resource-friendly technologies, such as fuel-efficient stoves or solar ovens. Or it may involve some kind of financial benefit exchange, such as reciprocal agreements where, in return for protecting forest parcels in a key watershed, a farmer receives in-kind compensation from water users downstream. Without the provision of socially acceptable, economically

viable and easily adoptable barrier removal strategies, behavior change is unlikely.

The only way to remove external barriers to change is first to know what they are. Qualitative research in the form of in-depth interviews and focus groups must be done to understand the precise barriers to behavior change, how many there are, and how they can be effectively removed or mitigated. Sometimes, a simple identification of the barriers themselves yields straightforward answers to the other questions. Oftentimes, however, removing the most significant barrier(s) requires creativity, as well as a sense of whether the barrier is real or imagined.

It is essential to remember that a perceived barrier is just as significant as one that is real, since to the individual making the behavioral choice, perception is reality. Further, knowing how many barriers need to be removed depends on what barriers have been identified through qualitative research. Usually, though not always, removing one or two of the most significant external barriers to change is enough to tip the scales in favor of the new behavior. That said, if the barrier makes the new behavior difficult enough, there is no limit to the number of barriers that must be removed to enable adoption of the targeted behavior. If human, financial and other resources are not available to remove these barriers in a timely manner, then a Pride campaign cannot be effective. This question must be consistently reevaluated.

Reducing fuelwood use and protecting monkey habitat in the Yuhe Nature Reserve

.....

In the Yuhe Nature Reserve of Gansu Province, China, timber harvesting for household fuelwood is a significant threat to the shrinking habitat of the Sichuan golden monkey. In 2009, Xiaohong Li began a Pride campaign to protect the golden monkey's habitat by reducing demand for fuelwood with the use of fuel-efficient stoves. Li's social-marketing strategy focused largely on promoting pride in the Sichuan golden monkey among local villagers and inspiring them to want to protect its threatened habitat. But villagers in and around the Yuhe Nature Reserve are mostly poor, and simply wanting to protect their local endangered species was not enough to heat their homes or cook their food. Villagers still needed to harvest fuelwood from the reserve. They were still confronted with a very large barrier to change.

So Li's campaign introduced fuel-efficient stove technology, educated villagers about the benefits, and trained them on their use. With fuel-efficient stoves, communities could use less fuelwood, requiring less energy for harvesting and protecting golden monkey habitat – a win-win for people and nature. But changing something so integral to daily life as a stove is a complicated social process; Li relied on Pride techniques to carefully transition social norms toward the new stove technology. In a follow-up survey in 2012, 43.1 percent of households reported using fuel-efficient stoves, up from a 2009 baseline of 12 percent.





Principle 11

Measure, monitor, and manage

Robust monitoring and evaluation, based on a Theory of Change with clear and specific logic, are critical to adaptive campaign management and the sustainability of change.

A Pride campaign's Theory of Change (ToC) provides a comprehensive logic model of how the campaign is expected to influence the audience(s) and conservation target at each stage, from knowledge to conservation result. Effective monitoring based on the ToC allows planners to know whether their efforts are having an impact and how they may need to adapt to improve or sustain change. The primary tools for monitoring the effectiveness of a Pride campaign are (1) a set of SMART objectives established for each stage of the ToC, (2) a set of clear indicators for each of the SMART objectives, and (3) appropriate research methods and tools for measurement.

As such, Pride campaigns set clear indicators, baselines and targets along a Theory of Change pathway and systematically measure the way they change over time.

Minimum Critical Specifications

- A Theory of Change that contains specific objectives for each target audience must be drawn up for every site in which a campaign is launched.
- Objectives must be SMART: Specific, Measurable, Action-oriented, Realistic, and Time-bound.
- Objectives must have clear baselines and targets, as well as defined methods for timely and sustained data collection, all along the Theory of Change pathway.
- When practical, statistically comparable control sites should be incorporated into the research design to enable understanding and attribution of effect.
- Human and financial resources must be allocated to collecting and collating appropriate data to measure

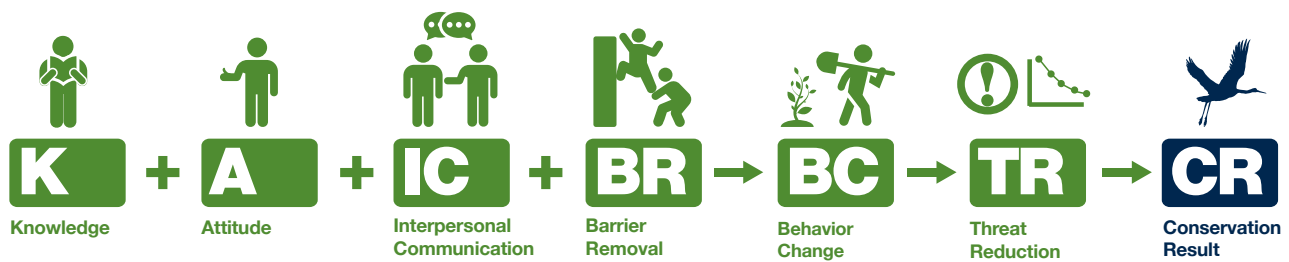


Figure 5. Rare's Theory of Change model

a campaign's efficacy all along the Theory of Change pathway.

- Partners must be committed to long-term monitoring of conservation and social results.

Rationale

The principles outlined thus far illustrate the assumptions that justify and guide the Pride approach to behavior change. To realize these assumptions, a Pride campaign must follow a cohesive strategy that defines the campaign's goal and the steps needed to achieve it. Rare's model posits that most individuals and groups adopt new behaviors by moving through a series of summative (but not necessarily linear) stages.

The Theory of Change informs Rare's hypothesis about how its campaigns can help to address critical biodiversity issues; it is built upon all the principles outlined in this document. For instance, the right half of the Theory of Change is based directly on principle 1, that behavior change can reduce threats to the environment and ultimately deliver conservation results. The knowledge and attitude elements of the Theory of Change are based on principle 6, among other things, and the interpersonal-communication piece is derived from principle 7. Barrier removal, not

surprisingly, emerges directly from principle 8. Indeed, each principle has a place in Rare's theory of how change is achieved, campaign by campaign. Because Rare's work relies on multiple partners working toward a common goal, the critical step of producing a shared Theory of Change is conducted before finalizing a program of action at the site or cohort (group of sites) level. While a common Theory of Change is used by all the campaigns in a single thematic cohort, local implementing partners must adapt it to the needs and cultural norms of their site and community. Every Pride campaign must have a Theory of Change upon which to base the strategy and outputs of the campaign. The Theory of change provides the path in Heath's elephant and rider analogy.

A Theory of Change develops through iteration as expert consultations and quantitative and qualitative research yield more and more information. The ultimate result is usually one overarching Theory of Change and specific variations for each target audience. Critical to a Pride campaign are logical strategies for implementation, monitoring impact and evaluating success. Funders often require some level of program evaluation as a key project component. Though this is no doubt useful to them, it is, at the least, of equal benefit to the project implementers. To improve

programs already on the ground and those planned for the future, nothing is more important than evaluation (Weinreich 1999). Effective monitoring lets planners know whether their efforts are making an impact. Monitoring is also integral to the *Open Standards for the Practice of Conservation* (CMP 2007), the adaptive-management framework upon which Pride campaigns are built. Since the usefulness of monitoring is a function of the information it provides, it is just as important to collect the *right* information, at the right time, as it is to collect information at all.

The two types of monitoring important to a Pride campaign are process monitoring and *impact* monitoring (or evaluation). Process monitoring is about collecting information while a project moves forward, to ensure that progress is on track and problems are resolved quickly, and to track leading indicators of project success. Pride campaigns use the Pride Scorecard to assess the process of planning, implementation and management. As program goals and tactics evolve, process-monitoring metrics must be revised to reflect new information about leading indicators of success.

By contrast, impact monitoring is the evaluation of a campaign's impact based on data associated with a campaign Theory of Change. Impact monitoring must be woven through the planning and implementation of a social-marketing campaign. Baseline measures must be established before a campaign begins, and interim measures may be needed to make mid-course corrections. Establishing objectives is critical to campaign design and campaign impact monitoring.

To monitor the effectiveness of a communication campaign, you need (1) a set of SMART objectives for each stage of your ToC, (2) a set of indicators for

each of your SMART objectives, and (3) appropriate research methods and tools with which to measure the indicators.

For each variable in the ToC, there is at least one *objective*. An effective way of setting objectives is by following the acronym **SMART**:

Specific: The objective is written to clearly define a precise outcome for a target audience at a specific stage of the ToC. The objective includes a measure of the change you expect to achieve, whether in terms of rate, number, percentage or frequency.

Measurable: There is a reliable system in place to measure progress towards the objective.

Action-oriented: The objective describes conditions that lead directly to the desired conservation result. An objective is action-oriented if it is linked to one of the ToC's stages of change and if it can help individuals move along the ToC pathway.

Realistic: The objective can be achieved with a reasonable amount of effort, with the given resources and within the given timeframe.

Time-bound: The objective contains a clearly stated or defined finish and/or a start date.

An objective that follows the SMART format is more likely to succeed because it is clear (*specific*) – you know exactly what needs to be achieved. You can tell when it has been achieved (*measurable*) because you have a way of measuring completion. A SMART objective is likely to have an impact because it is *action-oriented*: once achieved, it helps move an audience along the Theory of Change pathway. Before

setting a SMART objective, resources, time and the like should be taken into account to ensure that the objective is *realistic*. Finally, the *time-bound* variable provides a deadline, which helps people focus on the tasks required to achieve the objective.

Indicators are the measurable components of SMART objectives. A good indicator is (1) practical – it uses available resources and staff; (2) reliable across time; (3) easily communicated to partners and other interested parties; and (4) able to measure the SMART objectives of the communication, education and awareness campaign. Indicators should be developed for each SMART objective, and should derive directly from the objective itself.

Besides indicators that measure SMART objectives, indicators that track other aspects of a campaign may also be necessary or useful. These indicators might monitor:

- Exposure to the various media components of a social-marketing campaign, such as posters or radio spots.
- Perceptions of campaign messages.
- Involvement with campaign activities, such as festivals or workshops or petition signing.
- Media “buzz” about the campaign, or reports about it

in the press.

- Participation by partners, such as donations of money, materials or time.
- Campaign sustainability, in terms of securing funding for future work, or of staff who are hired by partners.

Measuring for success in Cortes, Philippines

In 2010, Vincent Dueñas' began his Pride campaign in Cortes, Philippines to engage local communities in the management and enforcement of marine protected areas (MPA). Vince's campaign is a bright spot in measurement, monitoring and management due in large part to a carefully constructed Theory of Change, well-defined SMART objectives and a robust measurement approach.

Across all of Vince's Knowledge objectives, his campaign saw an average increase of 30.2 percentage points, from 66.7% to 97.1%. Average levels of Attitude across all campaign objectives also increased by 18.6 percentage points and Interpersonal Communication by 31.1 percentage points. Among other things, Vince's campaign was able to motivate local women to become volunteer guards of the MPA (*Bantay Dagat*). Increased women participating in MPA guarding broke the traditional male-dominated MPA guarding tradition in the country. His monitoring results showed a drastic reduction of reported intrusions in Cortes MPAs, and fish biomass inside the MPA, at the time of post-campaign data collection, increased by 71% from 5.2 to 8.9 MT/km².

There were eleven other marine campaigns running in the Philippines at the same time and each had their own carefully designed Theory of Change, SMART objectives, and rigorous monitoring approach. Their hard work enabled sophisticated impact assessment and adaptive management of their campaigns, which then enabled Rare to evaluate the aggregate impact across an entire cohort of campaigns. By the end of the campaign cycle, 9 out of 12 sites reduced intrusions into the MPA by local residents and 10 of 12 reduced intrusions by neighboring villagers. Fish biomass inside the MPAs increased an average of 38% and fish abundance by 47%. In contrast, no increase in fish biomass was observed in 3 control sites, lending support to the idea that the positive impact can be attributed to the campaigns themselves. As more data are collected at these sites over time, particularly with respect to biological indicators such as fish biomass, Rare and partners will get a better sense of the true conservation impact.





Principle 12

Plan for the long haul

Behavior change takes time and must be sustained for enduring conservation and social impact.

Behavior change takes time, and unless new norms become entrenched, regression is likely to occur. As such, campaigning needs to continue for years rather than months. This requires that those who implement campaigns are strongly committed and faithful to the communities in which they work. Designing and implementing behavior change campaigns is complicated, and training local managers and building the capacity of their institutions are critical to sustainability.

As such, Pride campaigns are implemented through a local partner organization trained in the Pride methodology and committed to the target site for the long term.

Minimum Critical Specifications

- Pride campaigns must be implemented by partners who have completed (or are participating in) Rare's comprehensive training program or an approved alternative.
- The training component of a Pride campaign lasts for up to two years. But to ensure the entrenchment and sustainability of behavior change and, ultimately, conservation results, the campaign may need to be extended (many) years beyond the initial training phase. As such, campaign managers and partners should be committed to working at the site for extended periods of time.

Rationale

It takes a long time to achieve lasting behavior change. Numerous studies done during or at the end of social-marketing and communication campaigns have documented their success in the short term (e.g., Jonick et al. 2010). Rare itself has collected extensive data during the course of many Pride campaigns that measure pre-post changes in Knowledge, Attitudes, and Practices (KAP) (see principle 11). The following tables contain the summary results of past campaign achievements in terms of knowledge, attitude, interpersonal communication and survey-related behavior change. The data were collected from 49 campaigns that addressed a variety of conservation issues. All were completed between 2009 and 2012.

Knowledge

Baseline (X)	Average percentage point change	Sample size (no. of objectives)
$X \leq 20\%$	32.9	140
$20\% < X \leq 40\%$	18.7	112
$40\% < X \leq 60\%$	21.3	104
$X > 60\%$	10.1	82

Attitude

Baseline (X)	Average percentage point change	Sample size (no. of objectives)
$X \leq 20\%$	50.4	42
$20\% < X \leq 40\%$	29.7	88
$40\% < X \leq 60\%$	17.7	80
$X > 60\%$	6.7	125

Interpersonal Communication

Baseline (X)	Average percentage point change	Sample size (no. of objectives)
$X \leq 20\%$	30.6	144
$20\% < X \leq 40\%$	19.5	72
$40\% < X \leq 60\%$	24.3	40
$X > 60\%$	2.3	18

Behavior Change

Baseline (X)	Average percentage point change	Sample size (no. of objectives)
$0\% \leq X \leq 2.5\%$ [Innovators]	37.7	18
$2.5\% < X \leq 16\%$ [Early Adopters]	23.3	51
$16\% < X \leq 50\%$ [Early Majority]	16.5	71
$50\% < X \leq 84\%$ [Late Majority]	1.4	32
$84\% < X \leq 100\%$ [Laggards]	4.4	7

Changing an individual's behavior is one thing, however; ensuring that it is maintained is another. Regression or relapse is not only possible – unless planned for, it is highly likely. Regression occurs when individuals revert to an earlier behavior. In situations where the full complement of benefits may only accrue (or gather pace) over time, interim benefits (quick wins) and continual reminders or reinforcements of campaign messages are crucial. Without continual reinforcement, enthusiasm for a new behavior or idea is likely to wane (Heimlich and Ardoin 2008). In a review of 31

interventions, Porter and others (1995) found that very few demonstrated consistent maintenance of the behavior after discontinuing messaging. Brodie and others (2001) found a reversion rate of 100 percent two months after substantial gains in public-health awareness had been made through the medium of a television drama.

In a longitudinal study of four Pride campaigns that measured pre- and post-campaign responses, Vaughan and others (2011) found that though each campaign



Figure 6. Rare's three Cs framework for capacity, constituency and conservation

showed statistically and substantively significant increases in knowledge (14 percentage points [pp]), attitudes (16 pp), interpersonal communication (19 pp) and behavior change (5 pp), there was considerable regression in the months and years following the campaigns. The amount and rate of regression did not appear to correlate with the amount of time that had passed since the campaigns' conclusions. The campaigns included in the study ended between one and five years prior to the 2010 survey, so the range of time was not large.

Nonetheless, one might expect that if regression were a simple function of time, it would be possible to detect it, especially given the high rates of regression that were measured. A correlation was found between regressions in knowledge, attitudes, and practices and whether follow-up campaigning had continued after the end of the project. The campaigns that seemed to have lapsed the most were those that (for whatever reason) extended their campaigning the least. The lesson is that campaigning must continue at least until the critical mass has been reached – behavior then becomes socially normalized and embedded in the routines of the target audience(s) (see principle 9).

The importance of sustaining social-marketing campaigns is clear. To facilitate sustainability, Pride campaigns are implemented not by Rare staff, who have at most temporary commitments, but by local partners who live in or near the campaign site. Training individuals who are committed to the community and site is central to Rare's approach to sustainability. As such, Pride is ultimately a *training* program. The Pride approach is to teach local organizations methods of social and behavioral change – relying on them to inform the program with their understanding of local culture and norms. The local implementing partners are critical to both achieving and sustaining impact at the community level. This is the core of Rare's strategy, the three Cs, which illustrate that the first step toward changing behaviors and achieving conservation results is building the local capacity to do it (see figure 6).

Making change last on behalf of the red knot

Lasting change requires time and commitment. While many campaigns reach the 'Action' stage within the initial two-year timeframe of a Pride campaign, achieving the final 'Maintenance' stage and creating a lasting social norm requires a longer term commitment. German Montero's Pride campaign in the Rio Gallegos estuary of Argentina shows how sustaining change and achieving maintenance makes a difference.

Each year, the red knot travels one of the longest migratory bird routes in the world, flying thousands of miles between the Arctic region and the southern tip of South America, sometimes in less than a week's time. The Rio Gallegos estuary plays a critical part in the journey as it provides the birds with a lush feeding ground. German and his team recognized that a lack of solid waste management and disposal sites was damaging this essential habitat and threatening the ability of the red knot to complete its journey. In 2008 he began a Pride campaign to address this threat and at the end of his initial two-year campaign in 2010, 17 percent of Rio Gallegos residents had participated in a coastal clean-up program, and 53 percent of residents were convinced it would be easy to dispose of waste in proper facilities established by the municipality. But for German, this was only the beginning.

In late 2010, German convinced the mayor of Rio Gallegos to dedicate an old building at the entrance to the estuary, which used to be a landfill site, to becoming an Interpretive Center for red knot conservation. In 2011 he launched the Interpretive Center, which has since become a source of community pride for Rio Gallegos and beyond. The Center not only provides the community with information about the red knot, but German also regularly hosts bird watching excursions for community members and tourists. In a true example of the best possible outcome for capacity-building and sustainability, German has even begun to work with Rare to co-mentor a new campaign on the opposite coast, in Chiloé, Chile, where he provides his now vast expertise in shorebirds and solid waste management.





References

- Agrawal, A., and C. C. Gibson. 1999. Enchantment and disenchantment: The role of community in natural resource conservation. *World Development* 27 (4), 629-49.
- Andreasen, A. 1995. *Marketing social change: Changing behavior to promote health, social development, and the environment*. San Francisco: Jossey-Bass.
- Balint, P. J. 2006. Improving community-based conservation near protected areas: The importance of development variables. *Environmental Management* 38 (1), 137-48.
- Balmford, A., and R. Cowling. 2006. Fusion or failure? The future of conservation biology. *Conservation Biology* 20, 692-95.
- Bandura, A. 1977a. Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review* 84 (2), 191-215.
- . 1977b. *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bell, P. A., T. C. Greene, J. Fisher, and A. Baum. 1996. *Environmental psychology*. Fort Worth: Harcourt Brace.
- Bickman, L. 1972. Environmental attitudes and actions. *Journal of Social Psychology* 87, 323-24.
- Bolderdijk, J. W., L. Steg, E. S. Geller, P. K. Lehman, and T. Postmes. 2013. Comparing the effectiveness of monetary versus moral motives in environmental campaigning. *Nature Climate Change*.
- Boslaugh, S. E., M. W. Kreuter, R. A. Nicholson, and K. Naleid. 2005. Comparing demographic, health status and psychosocial strategies of audience segmentation to promote physical activity. *Health Education Research* 20 (4), 430-38.
- Brechin, S. R., P. R. Wilshusen, C. L. Fortwangler, and P. C. West. 2002. Beyond the square wheel: Toward a more comprehensive understanding of biodiversity conservation as social and political process. *Society and Natural Resources* 15, 41-64.
- Brodie, M., U. Foehr, V. Rideout, N. Baer, C. Miller, R. Flournoy, and D. Altman. 2001. Communicating health information through the entertainment media. *Health Affairs* 20 (1), 192-99.
- Brown, D. E. 2000. Human universals and their implications. In *Being human: Anthropological universality and particularity in transdisciplinary perspectives*, ed. N. Roughley. New York: Walter de Gruyter.
- Bunch, R. 1995. *Two ears of corn: A guide to people-centered agricultural improvement*. 3rd ed. Oklahoma City: World Neighbors.

- Cashdan, E. 2013. What is a human universal? Human behavioral ecology and human nature. In *Arguing about human nature: Contemporary debates*, ed. S. M. Downes and E. Machery. New York: Routledge.
- Cialdini, R. B., and M. R. Trost. 1998. Social influence: Social norms, conformity, and compliance. In *The handbook of social psychology*, 4th ed., ed. S. T. Fiske, D. T. Gilbert, and G. Lindzey, 151-92. New York: McGraw-Hill.
- Conservation Measures Partnership (CMP). 2007. *Open standards for the practice of conservation*. Version 2.0. Available at: http://www.conservationmeasures.org/wp-content/uploads/2010/04/CMP_Open_Standards_Version_2.0.pdf
- Crane, J. 1991. The epidemic theory of ghettos and neighborhood effects on dropping out and teenage childbearing. *American Journal of Sociology* 96 (5), 1226-59.
- Csutora, M. 2012. One more awareness gap? The behaviour-impact gap problem. *Journal of Consumption Policy* 35, 145-63.
- De Young, R. 1989. Exploring the difference between recyclers and non-recyclers: The role of information. *Journal of Environmental Systems* 18, 341-51.
- Dewey, J. 1927. *The public and its problems*. New York: Holt, Reinhart.
- Downes, S. M., and E. Machery, eds. 2013. *Arguing about human nature: Contemporary debates*. New York: Routledge.
- Ehrlich, P., and D. Kennedy. 2005. Millennium assessment of human behaviour. *Science* 309, 562-63.
- Farooqui, N. M. I. 1994. Interpersonal communication in family planning in Pakistan. *Pakistan Development Review* 33 (4), 677-84.
- Fishbein, M. 2000. The role of theory in HIV prevention. *AIDS Care* 12, 273-78.
- Fishbein, M., and J. N. Cappella. 2006. The role of theory in developing effective health communications. *Journal of Communication* 56, S1-S17.
- Foundations of Success (FOS). 2009. *Conceptualizing and planning conservation projects and programs: A training manual*. Washington, DC: Foundations of Success. Available at: <http://www.fosonline.org/resource/conceptualizing-and-planning-manual>
- Frick, J., F. G. Kaiser, and M. Wilson. 2004. Environmental knowledge and conservation behavior: Exploring prevalence and structure in a representative sample. *Personality and Individual Differences* 37, 1597-1613.
- Ghimire, K., and M. Pimbert, eds. 1997. Social change and conservation: An overview of issues and Concepts. In *Social change and conservation: Environmental politics and impacts of national parks and protected areas*. London: Earthscan.
- Gladwell, M. 2002. *The tipping point: How little things can make a big difference*. New York: Back Bay Books.
- Goldstein, N. J., R. B. Cialdini, and V. Griskevicius. 2008. A room with a viewpoint: Using social norms to motivate

environmental conservation in hotels. *Journal of Consumer Research* 35.

Granovetter, M. S. 1978. Threshold models of collective behavior. *American Journal of Sociology* 83, 1420-43.

Haidt, J. 2006. *The happiness hypothesis: Finding modern truth in ancient wisdom*. New York: Basic Books.

Heath, C., and D. Heath. 2010. *Switch: How to change things when change is hard*. New York: Broadway Books.

Heimlich, J. E., and N. M. Ardoin. 2008. Understanding behavior to understand behavior change: A literature review. *Environmental Education Research* 14 (3), 215-37.

Hines, J. M., H. R. Hungerford, and A. N. Tomera. 1987. Analysis and synthesis of research on responsible environmental behaviour: A meta-analysis. *Journal of Environmental Education* 18 (2), 1-8.

Holmlöv, K. P. G., and K. E. Warneryd. 1990. Adoption and use of the fax in Sweden. In *Modeling the innovation: Communications, automation and information systems*, ed. M. Carnevale, M. Lucertini, and S. Nicosia, 95-108. Amsterdam: Elsevier Science.

Janis, I. L., and L. Mann. 1977. *Decision making: A psychological analysis of conflict, choice, and commitment*. New York: Free Press.

Jones, R. M., S. W. Vernon, and S. H. Woolf. 2010. Is discussion of colorectal cancer screening options associated with heightened patient confusion? *Cancer Epidemiology, Biomarkers & Prevention* 19 (11), 2821-25.

Jonick, T., E. L. Anderson, S. Lin, C. M. Bruni, P.W. Schultz, S. Groner, and F. Orrala. 2010. What's the catch? Reducing consumption of contaminated fish among anglers. *Social Marketing Quarterly* 16, 32-51.

Kaiser, F. G., and U. Fuhrer. 2003. Ecological behavior's dependency on different forms of knowledge. *Applied Psychology: An International Review* 52 (4), 598-613.

Kaiser, F. G., S. Wölfling, and U. Fuhrer. 1999. Environmental attitude and ecological behavior. *Journal of Environmental Psychology* 19, 1-19.

Katzenbach, J. 2003. *Why pride matters more than money: The power of the world's greatest motivational force*. New York: Crown Business.

Kopnina, H. 2013. Environmental problems and the grand old theory of "human nature." *Journal of Ecological Anthropology* 16 (1), 73-80.

Kotler, P., and G. Zaltman. 1971. Social marketing: An approach to planned social change. *Journal of Marketing* 35 (3), 3-12.

Lakoff, G. 2010. Why it matters how we frame the environment. *Environmental Communication* 4 (1), 70-81.

Lynn, W. S. 2001. The ethics of social marketing for conservation: A learning module. In *RARE Training Manual*. London: RARE.

- Mahler, A., and E. M. Rogers. 1999. The diffusion of interactive communication innovations and the critical mass: The adoption of telecommunications services by German banks. *Telecommunications Policy* 23, 719-40.
- McKenzie-Mohr, D. 2011. *Fostering sustainable behavior: An introduction to community-based social marketing*. 3rd ed. British Columbia, Canada: New Society Press.
- McKenzie-Mohr, D., L. S. Nemiroff, L. Beers, and S. Desmarais. 1995. Determinants of responsible environmental behavior. *Journal of Social Issues* 51 (4), 139-56.
- Monroe, M. 2003. Two avenues for encouraging conservation behaviors. *Human Ecology Review* 10 (2), 113-125.
- Ostrom, E. 1998. A behavioral approach to the rational choice theory of collective action. *American Political Science Review* 92 (1), 1-22.
- Patrick, V. M., H. H. Chun, and D. J. Macinnis. 2009. Affective forecasting and self-control: Why anticipating pride wins over anticipating shame in a self-regulation context. *Journal of Consumer Psychology* 19, 537-45.
- Prendergrast, J., B. Foley, V. Menne, and A. Karalis Isaac. 2008. *Creatures of habit: The art of behavioral change*. London: Social Market Foundation.
- Prochaska, J. O. 1979. *Systems of psychotherapy: A transtheoretical analysis*. Homewood, IL: Dorsey Press.
- Prochaska, J. O., and C. C. DiClemente. 1983. Stages and processes of self-change in smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology* 51, 390-95.
- Prochaska, J. O., C. A. Redding, L. L. Harlow, J. S. Rossi, and W. F. Velicer. 1994a. The transtheoretical model of change and HIV prevention: A review. *Health Education & Behavior* 20, 471-86.
- Prochaska, J. O., W. F. Velicer, J. S. Rossi, M. G. Goldstein, B. H. Marcus, W. Rakowski, C. Fiore, L. L. Harlow, C. A. Redding, D. Rosenbloom, and S. R. Rossi. 1994b.
- Rabinowitz, A. 2013. Promoting behavior changes by making it easier and more rewarding: Benefits and costs. Chap. 45, sec. 6 in *The Community Toolbox*. University of Kansas. Available at: <http://ctb.ku.edu>
- Rimal, R. N., J. Brown, G. Mkandawire, L. Folda, K. Böse, and A. H. Creel. 2009. Audience segmentation as a social-marketing tool in health promotion: Use of the risk perception attitude framework in HIV prevention in Malawi. *American Journal of Public Health* 99 (12), 2224-29.
- Reed, A. E., J. A. Mikels, and C. E. Löckenhoff. 2012. Choosing with confidence: Self-efficacy and preferences for choice. *Judgment and Decision Making* 7 (2), 173-80.
- Rogers, E. M. 2003. *Diffusion of innovations*. 5th ed. New York: Free Press.

- Schultz, P.W. 2011. Conservation means behaviour. *Conservation Biology* 25 (6), 1080-83.
- Schwartz, B. 2005. *The paradox of choice: Why more is less*. New York: Harper Perennial.
- Shermesh, S., and G. Tellis. 2002. The international takeoff of new products: The role of economics and culture. Unpublished manuscript, Los Angeles: Univ. of Southern California.
- Slater, M. D. 1996. Theory and method in health audience segmentation. *Journal of Health Communication* 1, 267–83.
- Spehr, K., and R. Curnow. 2011. Improving your program: Making a start. Community Change: Behavior Environment Research Education. Available at: www.communityexchange.com.au/insights-and-tools.html
- Vaughan, P.W., D. Hayden, P. Butler, and M. Pearce. 2011. Longitudinal study of KAP regression in four Pride 1.0 campaigns. Unpublished manuscript.
- Vaughan, P.W., and E. M. Rogers. 2000. A staged model of communication effects: Evidence from an entertainment-education radio soap opera in Tanzania. *Journal of Health Communication* 5, 203-27.
- Weinreich, N. K. 1999. *Hands-on social marketing: A step-by-step guide*. Thousand Oaks, CA: Sage Publications.
- Williams, L. A., and D. DeSteno. 2008. Pride and perseverance: The motivational role of pride. *Journal of Personality and Social Psychology* 94 (6), 1007-17.
- Yzer, M. 2012. The integrated model of behavioral prediction as a tool for designing health Messages. In *Health communication message design: Theory and practice*, ed. H. Cho, 21-40. Los Angeles:

Photo credits

.....

Jason Houston: pgs 14, 18, 26, 36, 39, 44, 50, 60, 64, 76.
 AG Sano: pgs 4, 24, 52, 58.
 Djuna Ivereigh: pgs 48, 70.
 Ralph Lee Hopkins: pg 27.
 Rare: All others.

