provide

Evaluating Culture Change Around Abortion
Insights from a Multidisciplinary Learning Community

About Provide

Provide is a nonprofit organization founded in 1992. We work in partnership with health and social service providers to build a healthcare system that, in a climate of diminishing access, is equipped to respond to needs related to unintended pregnancy and abortion. We envision a healthcare system that cares for the whole person with dignity and respect, and where workers have the tools and support to offer the best care to their clients.

We see potential for any individual who cares for people to play a role in ensuring accessible abortion care. By addressing abortion within the context of the full range of people's needs and our broader values, we help partners make a significant contribution to people's health and autonomy. Engaging healthcare and social service providers and empowering them with information and skills about abortion is a critical opportunity to improve coordination of care for people seeking abortion.

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Introduction

Cultural values and norms have a profound impact on the legal, policy, financial, and service-delivery landscape around abortion. Advocates on both sides of the abortion debate have demonstrated a keen interest in developing strategies that can shift culture in a desired direction on this issue. Within the Reproductive Health, Rights, and Justice (RHRJ) communities, these strategies have ranged from mass media campaigns to workforce training programs that recognize workplaces as locations for culture change. Though these endeavors are often informed by observations of culture shifts around other significant social issues such as marriage equality, early explorations within our field suggested significant gaps in RHRJ communities' capacity to take an evidence-based approach. These gaps exacerbate tensions and biases regarding what types of activities might be considered effective vectors for culture change and limit our ability to formulate effective organizational and movement-wide strategies.

Guide to This Report

This report presents the insights and learnings generated by a multi-disciplinary learning community on culture change, with a specific interest in abortion. We offer a framework for conceptualizing culture change and a discussion of common approaches to measurement and evaluation, including key challenges and limitations. We share observations specific to culture change around abortion and conclude with a set of recommendations to strengthen the culture change learning practices of the fields of Reproductive Health and Reproductive Justice (RHRJ).

Culture change is a complex topic and we did not anticipate that we would come to consensus on how best to approach culture change or its measurement. Rather, our goal was to distill and expand upon existing knowledge and present this for use and further development. While nothing has been included on which there was significant divergence or disagreement, the ideas we present represent a range of thinking on which we did not seek total agreement. To the extent to which this report offers findings or conclusions, these should be considered developmental and not attributed to individual learning community members. Definitions, unless attributed, are those used by the group in our discussion. Similarly, we have used quotes from learning community members to illustrate and convey ideas shared within the group but have not attributed these to individuals.

One of the group's strongest areas of agreement was that there is a huge opportunity and benefit to being in common space as people working with different backgrounds and in different settings. We have aimed to write a report that is useful to a wide range of audiences, that mirrors - and extends beyond - the composition of our group. This includes doing our best to present our thinking in plain language and reducing the amount of text-heavy academic-speak that can dominate conversations about theories of change and evaluation. While we had set out to strengthen the RHRJ field's capacity to conduct and learn from culture change activities, our hope is that the reflections and recommendations described here are useful to others as well.

Our Approach

To begin to fill this gap, Provide Inc. sought to learn more about different approaches to culture change and how these are evaluated, so that we and others might apply these to our work on culture-change around abortion. Our process included four steps:

1. Identify and invite cross-disciplinary participants to join a learning community
2. Review the published literature and create an initial framework
3. Convene the learning community
4. Drawing on our review of the literature and on insights generated within the learning community, articulate and share a framework for thinking about and evaluating culture change interventions that includes recommendations for further work within RHRJ

This work was conducted by a project team that included Provide's Evaluation Department, Provide's former Executive Director (who while still at Provide was one of the original co-designers of the project), a graduate student research assistant, and an independent facilitator. We launched the project in the fall of 2019 and completed the project in early 2021. Learning community meetings took place in September and October 2020.

Forming the Learning Community

To identify learning community participants, the project team drew on our existing knowledge of those within RHRJ whose work addressed culture change on abortion. We used a snowball approach to expand our list of prospective participants. We identified several issue areas that we thought would be instructive to our exploration, either because they concerned similar themes of family, sexuality, and reproduction, or because we had observed marked shifts in cultural attitudes and norms. These included LGBTQ rights, HIV, and alcohol and tobacco use. For this latter grouping, we reviewed published literature and sought personal referrals to identify prospective members. In total, we identified and contacted over 35 prospective participants, 18 of which joined the learning community. Our learning community included academic and community-based researchers, advocates, communications specialists, philanthropic leaders, and program strategists, evaluators, and implementers. Participants' work has sought to generate positive cultural movement on issues that included tobacco use, human immunodeficiency virus (HIV), parenthood and reproductive decision-making, abortion, racial and gender equity, marriage equality, and health disparities and equity. A list of participants is presented in Appendix A.

Reviewing the Published Literature and Creating an Initial Framework

To create a foundation for our work, we took a similar approach to that which Provide had used when we convened a separate learning community on abortion referral in 2017: review the published literature and use this to generate a framework from which to launch our discussion. Our review sought formally evaluated culture change interventions that addressed social and public health issues globally and in the U.S. Articles were found using Google Scholar, PubMed, JSTOR databases, and among cited literature in relevant review articles. The original main keyword search terms included 'culture change,' the specific field (HIV/AIDS, tobacco, marriage equality, etc.) and 'interventions.' A search with 'culture change marriage equality' yielded an overview article on 'norm perception for social change,' following which we added searches on keywords 'social norms,' 'perceived norms' and specific topics. Additional topics were added due to relevant research studies on social change such as recycling, bullying, voting, and environmental activism. Participants also suggested additional articles following the formation of the learning community and we added these to the review. A total of 36 articles and resources were identified. From these, we drafted a "Culture Change Ecosystem" diagram that offered an initial theory of culture change and presented strategies for impact that had been described in the reviewed articles, alongside associated evaluation methodologies. A bibliography of reviewed articles is presented in Appendix B.

Convening the Learning Community

In convening the learning community, we wanted to create a forum for exploration, critical thinking, and discovery – an opportunity to gather, share, and learn from each other as progressive allies working in a culture change arena. While our specific goals were material, our broader vision was to create connection and build our collective "muscle" for this work.

In considering how to organize our time together, we foresaw two challenges. First, as previously noted, culture change is complex. We had also intentionally created a diverse community who would bring different and sometimes diverging knowledge and perspectives into the room. We took several steps aimed at reaching enough agreement to be able to offer insights and recommendations, while

Learning Community Goals
- Create an "eco-system" map of culture change strategies and interventions
- Describe and assess specific methodologies for evaluating culture change
- Surface important gaps and tensions
- Craft a set of recommendations for strengthening evaluation of culture change interventions on abortion

recognizing that we would not necessarily reach full consensus. These included, first and foremost, establishing a tone of humility, curiosity, and mutual respect. We used highly interactive and transparent meeting tools to ensure everyone had a voice and to surface and engage with differing viewpoints and ideas without necessarily seeking to resolve these. We used frequent "check-ins" on whether we were ready to proceed, and agreed to hold none of what we generated as the final say but rather as ideas for greater contemplation and development.

Second, the emergence of the global COVID-19 pandemic mid-way through the project period challenged all of us to shift our plans and ways of thinking about our work. To accommodate our shift from what was originally conceived of as a 1-day in-person meeting to an online convening, we organized a series of four 90-minute to 4-hour online sessions, each of which was designed to build upon the work accomplished in the previous session. A small amount of meeting pre-work was assigned between each session.

Session Outline

Session 1: Introductions and Warm Up

Session 2: Approaches to Culture Change – Strategies and Interventions

Session 3: Methodologies for Evaluating Culture Change

Session 4: Applying What We've Learned to Culture Change Around Abortion

We took a number of steps to generate a sense of community and help create a productive online meeting environment, including:

- Dedicating the first session exclusively to getting to know each other, establishing meeting norms that included virtual meeting agreements/best practices, and grounding ourselves in our purpose
- Creating standing breakout groups and making frequent use of the "chat" function and online meeting tools such as virtual whiteboards, polling features, and idea-maps that allowed us to work with meeting materials in shared "real-time"
- Taking frequent breaks
- Adding a second facilitator and enlisting two additional staff for note-taking and technical support
- Collecting participant feedback following each session; holding project-team debriefings immediately following each session; and conducting facilitator planning meetings between each session, during which we regularly made adjustments to future meeting agendas and plans

Conceptualizing Culture Change

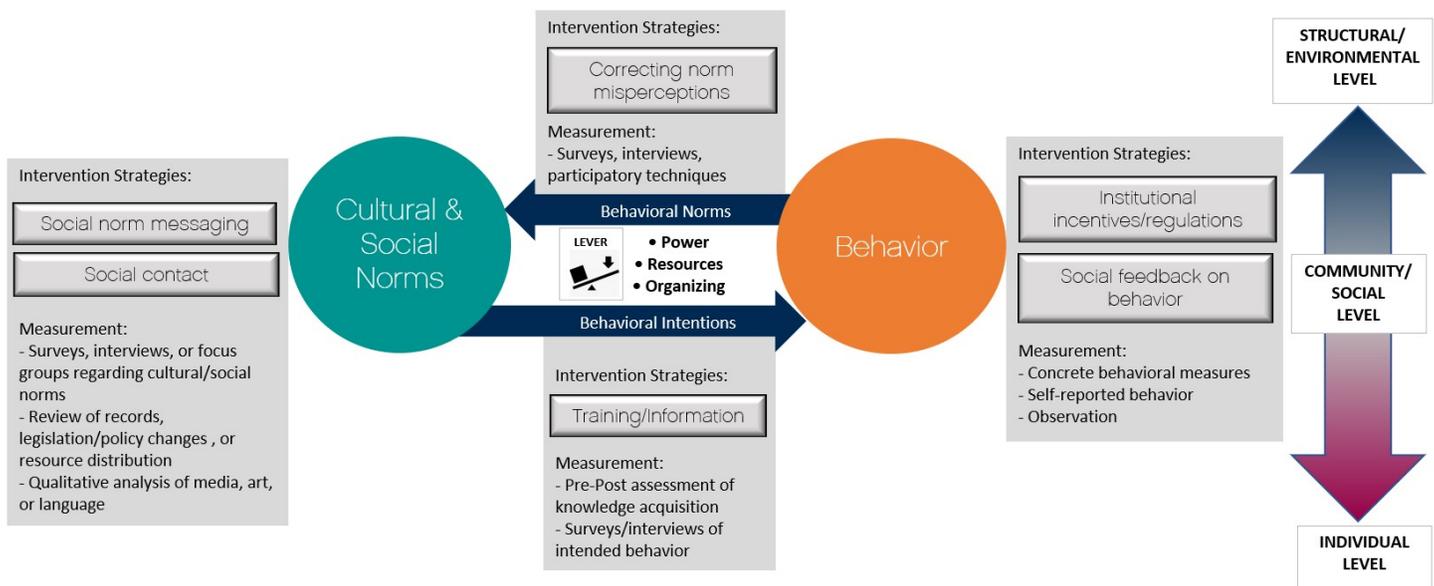> "Culture change is not linear….behavior and culture affect each other reflexively."

To ground the discussion, our group created a <u>working definition of culture</u>:

> Culture is ever-present, all-encompassing, though often implicit or unobserved. Culture exists within groups of people, institutions, or societies. It is a group's set of values, beliefs, customs, and narratives that shapes and is shaped by its history, language, policies, arts, cuisines, music, laws and processes, achievements, etc. It is molded and (re)produced through different interactions, from the individual to interpersonal to institutional, through daily habits, perceived norms, interactions, behaviors, and policies. Culture is also affected by the ways it is perceived and pressured by external and internal forces.

For our group, arriving at a shared working definition meant recognizing that while culture is shaped by and expressed through cultural products that are visible to us – our music, cuisine, language, art, customs and laws – culture itself is often unseen: "The water we swim in." The unwritten rules of culture create opportunities and constraints: guiding societies to value certain culture products over others and shaping what we say and do.

Culture Change is then understood to be the reimagining and transformation of the unwritten rules, and of the shared spaces in which these rules operate.

An Ecosystem of Culture Change Strategies

Intervention Strategies:
- Correcting norm misperceptions

Measurement:
- Surveys, interviews, participatory techniques

Intervention Strategies:
- Social norm messaging
- Social contact

Measurement:
- Surveys, interviews, or focus groups regarding cultural/social norms
- Review of records, legislation/policy changes , or resource distribution
- Qualitative analysis of media, art, or language

Cultural & Social Norms

Behavior

Behavioral Norms

LEVER
- **Power**
- **Resources**
- **Organizing**

Behavioral Intentions

Intervention Strategies:
- Training/Information

Measurement:
- Pre-Post assessment of knowledge acquisition
- Surveys/interviews of intended behavior

Intervention Strategies:
- Institutional incentives/regulations
- Social feedback on behavior

Measurement:
- Concrete behavioral measures
- Self-reported behavior
- Observation

STRUCTURAL/ ENVIRONMENTAL LEVEL

COMMUNITY/ SOCIAL LEVEL

INDIVIDUAL LEVEL

Key Definitions

Social Norms: The beliefs about which behaviors are appropriate within a given social group.

> **Injunctive Norms**: What people in a group deem to be appropriate behavior*
>
> **Descriptive Norms**: What people in a group normally do, perceived typical behavior*
>
> **Behavioral Normalization:** The process by which behavior and actions become social and cultural norms.
>
> What does it look like when groups intentionally seek to change culture? What do different groups do? How are these strategies imagined to work? And – most importantly to this group – how do we know?

To guide our exploration, the learning community created a map of strategies that groups have used to change culture. Using the ecosystem diagram as our template, we placed on this map the interventions described in the reviewed literature and those that learning community members had deployed themselves or observed. Because culture – and by extension culture change – is a dynamic process, many interventions work across the various domains. In these cases, we located specific interventions on multiple places on our map.

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*Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. Journal of Personality and Social Psychology, 58, 1015–1026. doi:10.1037/0022-3514.58.6.1015

We then used this map to then categorize culture change strategies into four broad domains:

Cultural & Social Norms: These interventions seek to shape individuals' perceptions of what is **appropriate** within a social group. They focus on the attitudes and beliefs held by members of the social group.

Behavioral Norms: These interventions seek to shape individual's perceptions of what is **common** among others within a social group. They also focus on the beliefs held by social group members.

Behavioral Intentions: These interventions seek to influence what individuals **plan to do**. These intentions may be aligned with people's perceived social and behavioral norms, or in conscious opposition. They focus on the intentions held by members of the social group.

Behavior: These interventions seek to influence what individuals **actually do**. These behaviors also may be aligned or in conscious opposition to social and behavioral norms. They focus on actual behaviors.

As shown on the diagram, each of these domains holds a place in a broad <u>theory of culture change</u> in which culture and social norms both *affect* behavior (through the process of shaping behavioral intentions) and are *shaped/reinforced* by behavior (through perceptions of behavioral norms). In this conceptualization, culture change is cyclical, multi-directional, and offers multiple intervention points.

Case Examples

Cultural & Social Norms

Paluck EL. "Reducing intergroup prejudice and conflict using the media: a field experiment in Rwanda." Journal of Personality and Social Psychology. 2009. 96(3):574-587.

This 1 year randomized field experiment in Rwanda tested the impact of a radio soap opera featuring messages about reducing intergroup prejudices, violence and trauma in 2 fictional Rwandan communities. 480 adults from official lists of all individuals living in a selected community were assigned to the intervention group or a control group and given a pretest and posttest 1 year apart; surveys and focus groups were also conducted. Compared with the control group who listened to a health radio soap opera, listeners' **perceptions of social norms and their behaviors** changed with respect to intermarriage, open dissent, trust, empathy, cooperation, and trauma healing. However, the radio program did little to change listeners' personal beliefs.

Behavioral Norms

Perkins WH and Craig DW. "A successful social norms campaign to reduce alcohol misuse among college student-athletes." Journal of Studies on Alcohol. 2006.

This was a comprehensive set of interventions designed to accurately convey credible facts and figures about actual student athlete norms from a previous survey of student athletes. Messages were distributed through the campus newspaper, around campus (on computers, in athletic facilities and an interactive multimedia program), and via trained student athlete peer educators.

Pre-post surveys of **perceived norms** around alcohol use and reported alcohol consumption were conducted with students. The intervention substantially reduced misperceptions of frequent alcohol consumption and high-quantity social drinking as the norm among student-athlete peers. Behaviors also changed in the treatment group including a decrease in frequent personal consumption, high quantity consumption, high estimated peak blood alcohol concentrations during social drinking, and negative consequences of drinking all declined by 30%.

Behavioral Intentions

Nyhan B, Reifler J, Richey S, Freed GL. " Effective Messages in Vaccine Promotion: A Randomized Trial." Pediatrics. 2014. 146(1); 2013-2365.

Parents (n=1759) were randomly assigned to receive 1 of 4 interventions: (1) information explaining the lack of evidence that the measles, mumps, and rubella vaccine (MMR) causes autism from the Centers for Disease Control and Prevention; (2) textual information about the dangers of the diseases prevented by MMR from the Vaccine Information Statement; (3) images of children who have diseases prevented by the MMR vaccine; (4) a dramatic narrative about an infant who almost died of measles from a Centers for Disease Control and Prevention fact sheet; or to a control group. None of the interventions increased parental intent to vaccinate a future child. Refuting claims of an MMR/autism link successfully reduced misperceptions that vaccines cause autism but nonetheless decreased intent to vaccinate among parents who had the least favorable vaccine attitudes (unique evidence of intervention "backfire"). In addition, images of sick children increased expressed belief in a vaccine/autism link and a dramatic narrative about an infant in danger increased self-reported belief in serious vaccine side effects.

Behavior

Munger K. "Tweetment effects on the tweeted: experimentally reducing racist harassment." Political Behavior. 2017. 39:629-649.

This group used direct social sanctioning to impact racist online harassment. The intervention gathered a sample of Twitter users who have harassed other users with anti-black slurs, and sanctioned them with White or Black male twitter accounts (bots) with a varying number of followers and looked at continued use of racial slur over a 2 month data collection period (n=450). Subjects who were sanctioned by a high-follower white male significantly reduced their use of a racist slur. In-group/High Follower treatment caused the largest reduction in racist language.

Our culture change ecosystem also sought to recognize that culture – and by extension, strategies to change culture – operates at multiple levels, which we named as:

- **Individual:** The perceptions, beliefs, and behaviors of a single individual person, expressed through the self-reported beliefs and reported/observed behaviors.

- **Social/Community:** The collective perceptions, beliefs, and behaviors of a defined group of individuals, often expressed via cultural products such as art and language, as well as common behaviors.

- **Structural/Environmental:** The norms and behaviors embedded within social structures and institutions that govern and regulate a group. Often expressed through laws, policies, regulations, and allocation of public resources.

Culture and Power

> "We can't talk about culture, or culture change, or evaluating culture change, without talking about power…about the systems of oppression that we are swimming in."

The group recognized power as both a critical driver and outcome of cultural change. We saw that power at all levels – individual, social, and structural – is both shaped and reflected by what, and who, is culturally valued. And we observed that culture change practitioners can build and deploy power to bring about cultural change.

A Note on Stigma

Our group contemplated that stigma – the negative view we hold of people because of certain qualities or circumstances – both reflects and shapes cultural norms. Projects to confront and reduce stigma are common in many of the fields represented by our group (particularly HIV and abortion), and sophisticated tools have been developed and employed to measure stigma and evaluate these interventions. While these efforts are instructive to work on culture change considered more broadly, we held multiple perspectives on the importance of making it an explicit area of focus in our discussions – a question that we did not resolve in large part due to time limitations.

Evaluating Culture Change

Common Measures and Methods used to Evaluate Culture Change

Measure	Method	Examples
Perceived Social/Group Norms; Norm Misperceptions	Surveys, interviews, focus groups, body sorting, pile sorting, ranking, storytelling/narrative techniques	"Changing racial beliefs by providing consensus information" (Stangor, 2001)
Reflected/Embedded Norms	Theme analyses of media, art, and language	"Divergent Successes: What the Abortion Rights Movement Can Learn from Marriage Equality's Success" (Kimport, 2016)
Knowledge Acquisition	Pre-/Post-Assessments	"Changing knowledge, attitudes, and practices of Thai oral health personnel with regard to AIDS: an evaluation of an education intervention" (Lueveswanij 2000)
Self-reported Attitudes and Beliefs	Surveys, interviews	"Effectiveness of a behavior change communication intervention to improve knowledge and perceptions about abortion in Bihar and Jharkhand, India." (Banerjee 2013)
Self-Reported Behavior Intention	Surveys, interviews	"Exploring beliefs about bottled water and intentions to reduce consumption: the dual-effect of social norm activation and persuasive information." (Van der Linde 2015)
Self-Reported Behavior	Surveys, interviews	"Correcting injunctive norm misperceptions motivates behavior change: a randomized controlled sun protection intervention." (Reid 2013)
Observed Behavior	Records review, direct observation	"A room with a viewpoint: using social norms to motivate environmental conservation in hotels." (Goldstein 2008) "Tweetment effects on the tweeted: experimentally reducing racist harrassment." (Munger 2017)
Institutional/Policy Change	Review of institutional/public regulatory/policy change; resource allocations	"Culture change from tobacco accomodation to intolerance: time to connect the dots." (Livingwood, 2016)

Following this conceptualization of culture change, the group then sought to assess the strengths and limitations of its measurement. We named commonly deployed measures and methods from the literature reviewed and group experience, and observed tendencies

toward individual-level data, often self-reported, and often aimed at single points of intervention and/or measurement. We noted traditional methods such as survey, focus-group, and interviews as "easy to default to'' given the time and investment it takes to devise new methods, potentially to the detriment of creating a more diverse and robust set of tools. The group also made the important observation that evaluation is not neutral, and can reflect and reinforce – or reduce – biases, stigmas, and systems of power and oppression that underpin, or are themselves, the cultural issues being studied. Bias is implicit in the evaluator's own training/ social location/ideas/ways of thinking. Because evaluation is often performed in service of grant deliverables and funding, funder interests (as well as practitioner interests in maintaining funding) can also influence what is evaluated, how it is evaluated, and how findings are interpreted and presented. A recognition that these interests and perspectives are not mutually exclusive is critical to the integrity of the evaluation process.

Summary of Challenges

Complexity: A variety of things influence culture and it can be difficult to fully capture – and then tease out – key drivers of change.

Time: Culture – and our perceptions – change over time. What is experienced, observed, and told in "real time" evolves as it becomes reflected upon in hindsight.

Resources: Resources are not always available to conduct evaluation that reaches beyond the individual person (as a data point) or single intervention (as the influencer of culture), and that explores changes over time.
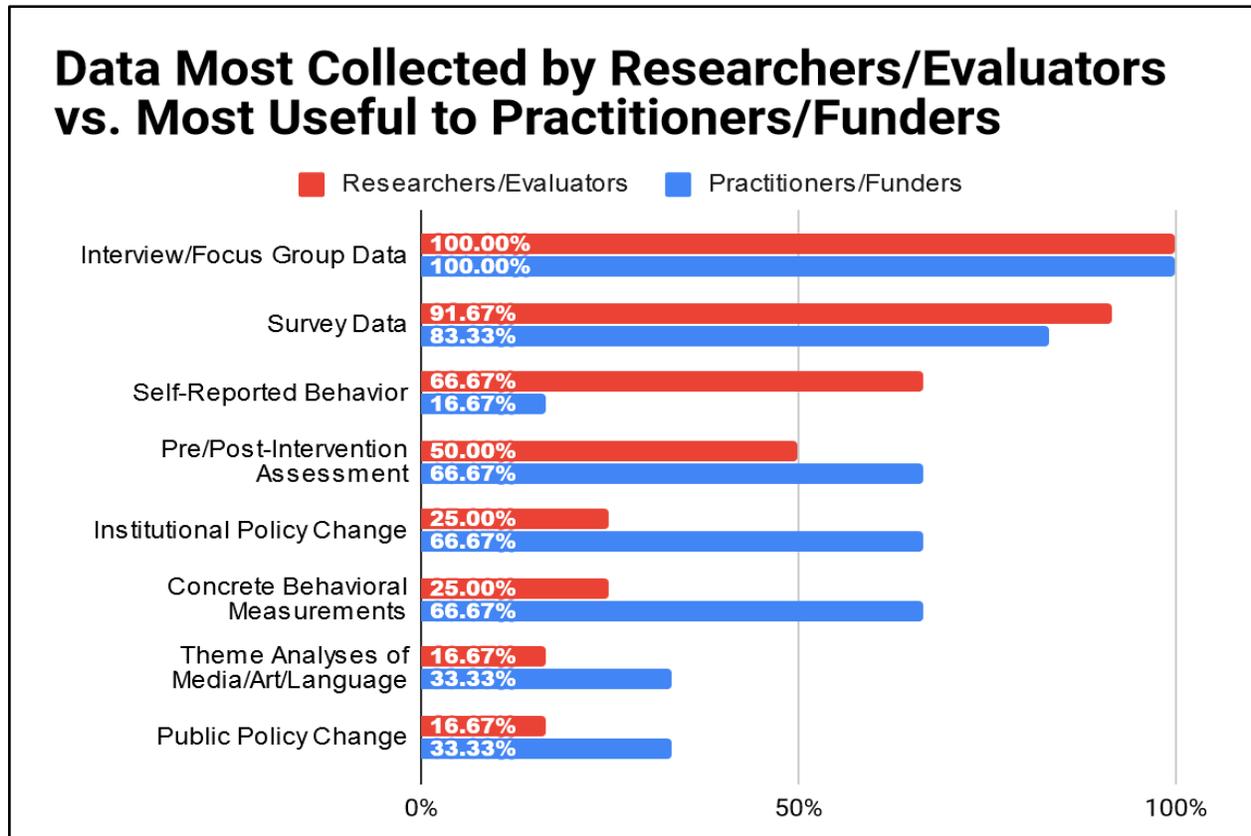
Partiality/Bias: Evaluator biases are reflected in how evaluation efforts are designed and conducted. Biases also surface among participants, who may answer questions in ways that are less truthful than they are personally or socially desirable.

Siloing: Dialogue across issue areas and disciplines is uncommon. Community involvement is even more rare. This limits our capacity to devise new methods, to generate useful data, and to develop a sufficiently nuanced and intersectional understanding of culture change.

"We have not really made much progress as expected in how we interact with communities in the field of research and evaluation."

Are we collecting the data practitioners and funders need?

Throughout our time together, participants regularly remarked on how rare it is to be in a space that brought together researcher-evaluators AND practitioners and funders. We wondered what effect this siloing may have on the quality and usefulness of data we collect. Are the data we collect, and the methods we use to collect it, aligned with what practitioners, funders, and others active in the RHRJ field (grouped together as "users" of evaluation) most need? We put together a quick, ad-hoc poll of our group to begin to gain insight in how large this gap might be. We were struck by the degree of practitioner and funder interest in less commonly used methods, and in particular those that reached for concrete observable change. Though a small sample size (and the imperfect grouping of practitioners with funders), we hope that this poll can serve as a starting point for us to begin to understand where the field is now, and where we would like it to be.

Data Most Collected by Researchers/Evaluators vs. Most Useful to Practitioners/Funders

Legend:
- Researchers/Evaluators
- Practitioners/Funders

Category	Researchers/Evaluators	Practitioners/Funders
Interview/Focus Group Data	100.00%	100.00%
Survey Data	91.67%	83.33%
Self-Reported Behavior	66.67%	16.67%
Pre/Post-Intervention Assessment	50.00%	66.67%
Institutional Policy Change	25.00%	66.67%
Concrete Behavioral Measurements	25.00%	66.67%
Theme Analyses of Media/Art/Language	16.67%	33.33%
Public Policy Change	16.67%	33.33%

Strengthening our Approach

The group described tools and practices that we observed to be anecdotes or counterweights to the challenges we described. We saw opportunity in taking a more integrated, holistic approach that mirrors culture's dynamism, interconnectedness, and fluidity, and called for progress in both how we as evaluators engage with communities, and in the design and use of newer and more innovative methods. We emphasized greater need for:

★ participatory methods that involve participants and community members in designing, administering, reviewing, interpreting, and sharing findings
★ multidisciplinary teams
★ mixed-method approaches
★ methods that examine multiple points in the culture change ecosystem and coordinate across single interventions
★ reduced reliance on individual-level data and self-reported data in particular, while simultaneously trying new approaches to collecting and using group and structural-level data
★ approaches that center race, class, gender and other intersectionalities use of near- and longer-term outcomes to capture change over time
★ attention to both intended and unintended outcomes, including cultural backlash or the emergence of organized opposition

"Storytelling/narrative techniques are a useful way to empower people in the process of collecting data from them – validating their experiences and letting them use their own words."

Culture Change and Abortion

"Given that polling data consistently show broad support for abortion, what are we trying to shift?"

Our final task as a group was to apply the conceptual framework we had developed, and the observations we had made about culture change evaluation, to the field of abortion. What approaches to culture change are most common? What do we most want to learn from them? What steps can the field take to become more effective?

Observations and Trends

Using our ecosystem map as a guide, we identified 25 projects that directly or indirectly sought to shift cultural norms toward a more supportive stance toward abortion and located them on our map. Most projects worked within the United States but also included a handful working in other countries (Argentina, India, and Ireland).

Projects that directly sought to broadly influence culture overwhelmingly focused on using media and digital storytelling to shift community-level attitudes, values, and beliefs. They sought to correct misperceptions, promoted by the opposition, that abortion is exploitative of and harmful, anti-family, selfish, and shameful. They counter these misperceptions by using people's own words (or by creating fictional narratives e.g. in movie and television shows) to present abortion as loving, compassionate, and selfless. Perhaps most importantly, they seek to bring abortion "out of the shadows" and build recognition of abortion as a common, normal experience across all communities and social groups. A handful of these are also tied to grassroots organizing and policy advocacy. Examples include the National Women's Law Center's "Abortion Actually" campaign, Advocates for Youth's Abortion Outloud, Trust Black Women, and Shout Your Abortion.

The group also recognized projects that may have the effect of shifting community-level culture, even if this is not a primary or stated goal, by creating changes that ripple out to broader spheres. In contrast to those directly seeking community-level change, these projects tended to focus on specific, concrete behavioral outcomes, most often relating to the provision of abortion and abortion-related care, at the individual and structural levels. These projects eschewed a public media-presence, working instead behind the scenes to provide training and remove institutional barriers. As with the above grouping, these projects sought to normalize abortion – and abortion provision – as a part of healthcare, rooted in professional ethics and common values such as patient-centered care. Several of these are also tied to professional networking, organizing, and advocacy. Examples include Medical Students for Choice, the Ryan and RHEDI residency training programs, and Provide's Abortion Referrals Trainings.

Finally, the group recognized the role that policy plays in shaping cultural norm perceptions, and as a mechanism for delivering social feedback on specific behaviors (i.e., if it is illegal it must be wrong). For this reason we also included several policies and policy-initiatives on our map, particularly those with broad awareness and organizing campaigns. These included All Above All's work to lift bans that deny Medicaid coverage of abortion, and challenges to the Global and Domestic Gag Rules.

Learning about Culture Change on Abortion

With these interventions in mind, we turned our attention to the evaluation methods and data types that we identified as most commonly collected and applied, and to what we thought were the most pressing challenges and gaps in our learning. Our discussion echoed the trends and challenges we had identified in relation to culture change evaluation generally, and specifically highlighted for abortion:

- A predominance of self-reported vs. observed behaviors and norms, and toward individual vs. social/community level outcomes

- Limited resources to support evaluation of multi-level (individual, social/community, structural/environmental) inputs and outcomes over time, and across discreet projects and interventions

- Lack of strong baseline data; a solid "pre" to compare to a "post"

- Gaps between what is researched/evaluated/collected and what is of greatest interest and use to culture change practitioners, policy makers, and other "end-users"

- Uncertainty about what is our ultimate goal, and of an overarching theory of change that describes how different projects contribute

> "The misalignment I think is interesting to explore, I wonder about funding for the work that researchers/evaluators propose, and that practitioners desire being mediated by folks who are neither — but decide how the money is spent or information utilized."

Which Comes First? The Chicken and Egg of Action and Beliefs

Conventional wisdom has long held that people's actions are driven by their beliefs[1]. More recent work has demonstrated that the opposite is also true: that beliefs are formed in the context, or as a consequence, of our actions, particularly when our actions put us in touch with new experiences or information, or connect us to new or different community belief systems and norms. This opens up new possibilities for culture change work and presents a critical learning question: do interventions that guide a group of people toward a specific action regardless of their underlying beliefs, result in a change in those beliefs and does this have a community level effect?

A Critical Question

As we processed our observations, a critical question emerged: what *are* we trying to change? We observed a multitude of diverse and talented efforts to generate more positive and supportive attitudes and actions toward abortion care, toward providers of abortion, and toward people who have abortion. We also noted that these have had little effect at shifting public attitudes, which have consistently shown broad support anyway. At the same time, policy losses continue to amass and the legal foundation for the right to abortion teeters on the edge of decimation. Why is this? Are cultural attitudes and beliefs about *abortion* really the problem we need to be addressing?

This line of thinking led the group to theorize that what abortion advocates should be targeting in our culture change work may not in fact be individual attitudes and beliefs about abortion so much as the underlying racist, misogynist, and classist systems of power and oppression that marginalize abortion despite broad public support.

"If polling data shows that the majority of Americans support reproductive choice, then why are we in our current predicament? Is it that some very powerful people with money are controlling the narrative around repro choice? If so, how do we deal with that? If it's not really the culture that needs to change then, rather we need to figure out how to stop policies that harm the majority of us. It's more about fighting back about power and oppression."

Recommendations

As the prospect of a significant gutting of constitutional protections for abortion looms, the questions facing abortion culture-change practitioners, funders, and evaluators take on increasing urgency and importance. To strengthen the field's approach, we discussed that we must first and foremost better address the question of what we are trying to achieve. This means identifying the cultural norms that allow for mounting restrictions on abortion despite widespread public support. Our recommendations propose both an answer to this question (by pointing to racist, misogynist, and classist systems of power and oppression) and steps the field can take to strengthen our analysis.

Summary of Recommendations

- ➢ Address root causes
- ➢ Increase collaboration and communication
- ➢ Connect the dots between norms and behavior
- ➢ Increase use of community-engaged, participatory methods

Recommendation #1: Address Root Causes

"We need to improve our collective knowledge in order to focus on what evaluations are worth pursuing. This means paying explicit attention to the underlying values/norms/belief systems across and among different demographic groups...white supremacy, gender norms, norms re what should the structure of family be...and what abortion symbolizes to people about these things."

We discussed that reproductive control is a well-established tool of social control and oppression and that while power is both a driver and product of cultural norms on any issue, it is particularly present with respect to abortion. Recognizing this calls for a

profound shift in orientation in our work to create change around abortion, and for increased investment in conducting and learning from interventions that center gender, class, and race. We further discussed how gender, class, and race have not uniformly been applied in cultural attitudes and norms, and we called specific attention to the presence of social constructs of whiteness, and of anti-Black racism, in many common cultural narratives relating to abortion and associated stigmas.

Our recommendations include:

1. Commit to interventions and evaluations that take into account concepts of power and privilege and take an intersectional approach.
2. Support the development of analytic methods that bring data sources together on abortion attitudes, gender, class, and race.
3. Identify and cultivate greater expertise on gender, race, and class – and particularly on race and class, which are underrepresented in the field – in evaluation activities.
4. Invest in collaborations between those working on culture change on abortion and those working to shift culture on "root cause" issues of power and privilege.
5. Put resources, opportunities, mentorship into the hands of BIPOC people to develop and conduct culture change and research/evaluation strategies.

Recommendation #2: Increase Collaboration and Communication

Culture, and culture change, is too complex to be meaningfully understood via a single lens or discipline. Gaps between the data that are collected/funded and desired, and recognition of common "root causes" across issue areas (such as LGBTQ rights), also point to the need to support work that is more cross-disciplinary, cross-issue, and that brings together researchers/evaluators, practitioners, and funders. This includes:

1. Prioritize and invest in cross-disciplinary, cross-issue teams to conduct evaluation.
2. Pool knowledge that has been gathered on social and cultural norms about abortion to strengthen our baseline understanding of these norms and develop a more robust theory of change that takes into account multiple levels (individual, community/social, institutional/environmental) and outcomes (attitudes/beliefs, social norms, perceived norms, intended behaviors, actual behaviors).
3. Work across issue areas to develop new evaluation tools and methods that align with practitioner needs.
4. Develop inclusive and accessible convening spaces to promote increased collaboration among researchers, funders, and practitioners, and across disciplines and issue areas.

Recommendation #3: Connect the dots between norms and behaviors.

As noted on our ecosystem map, cultural and social norms both *affect* behavior and are *shaped/reinforced* by behavior. However, evaluation tends to be limited to the one or the other domain: projects designed to influence norms often measure only norms; projects designed to influence behavior often measure only behavior. More needs to be done to connect the two if we are to develop a fuller understanding of the processes by which culture changes, and how best to influence these processes. This includes:

1. Seek more data on concrete behavioral, policy, and institutional changes that stem from interventions targeting social norms.
2. Seek more data on social norm changes that stem from interventions targeting behavior change at both the individual and structural/environmental levels.
3. Seek more data that evaluate norms and behavior change over longer time frames so as to be able to more fully assess the change process.

Recommendation #4: Increase use of Community-Engaged, Participatory Methods

Researchers' own cultural norms and behaviors can have a profound impact on the data we collect and the meaning we make of these data. Given the complex and often "hidden" nature of culture, unidirectional approaches to evaluation can also miss important contextual aspects. Participatory evaluation can help us crack open the biases and frames that influence our work, and surface important insight into "how real people talk about abortion" versus having people react to the language and frames devised by evaluators/researchers and practitioners. Participatory methods can also contribute to the empowerment and liberation of those who our work aims to benefit. While the group did not engage in a full discussion of participatory methods, we named a handful of strategies that include:

1. Conduct community engaged research that involves shared decision-making power throughout the research/evaluation process.
2. Organize convenings that share data and employ participatory methods to make meaning of data with those who are most directly impacted by it, and that invite impacted communities to challenge our thinking and strategies.
3. Use vignettes and storytelling to capture the complexity of how attitudes regarding abortion intersect with attitudes and norms regarding race and gender.

Conclusion

We initiated this project with a desire to see – if we brought together a cross section of individuals from across multiple disciplines and fields – what we could learn about how to more effectively approach and learn about changing culture, so we could apply this to efforts relating to abortion. As we concluded our time together, two things stood out. First, while there is a rich array of talented, creative, efforts to shift culture around abortion, a clear sense of toward what overarching goal what these efforts are trying to achieve – particularly in the face of broad social support for abortion – felt missing. Second, while the solutions we initially sought, and many of our recommendations, are **technical** in nature (i.e. relating to specific evaluation tools and methods), it was the **adaptive** changes – with whom we engage, what we value, how we hold and engage with power – that in the end felt most necessary and promising. This feeling of promise was fed by the riches we collectively brought into the virtual "room" we shared; the necessity brought into sharp relief by our recognition of the profound intersections of abortion, gender, and race, and by the scarcity of such spaces that reach beyond issue- and discipline-specific silos. Important work is being done that centers those most impacted and connects the dots between cultural norms, behaviors and systems of power and oppression. We offer our thinking, recommendations, and process as an invitation for further examination and development, in solidarity.

Acknowledgements

Appendix A: Culture Change Learning Community Participants

- Elizabeth Arndorfer, Program Officer, David and Lucille Packard Foundation
- Sharon Attipoe-Dorcoo, Ph.D, MPH, Economics Fellow - Centers of Disease Control and Prevention
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- Christine Clark, MPH, Program Officer (Acting Director), Global Development and Population, William and Flora Hewlett Foundation
- Nicole Clark, LMSW, Nicole Clark Consulting
- Margaret Conway, CEO, Conway Strategic
- Rocio Córdoba, Executive Director, Funders for Reproductive Equity
- Elizabeth Costenbader, PhD, FHI 360
- Fatimah Gifford, Executive Director, Provide, Inc.
- Elizabeth Janiak, ScD, Harvard Medical School
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- Monique I. Liston, PhD, Chief Strategist & Joyful Militant, Ubuntu Research and Evaluation
- Gretchen Sisson, PhD, Qualitative Sociologist, Advancing New Standards in Reproductive Health (ANSIRH), University of California San Francisco
- Anne Stangl, PhD, President, Hera Solutions
- Annie Tegen, MPH, Director, Western Region, Campaign for Tobacco-Free Kids

Appendix B: Bibliography of Reviewed Literature

Lead Author	Year	Methods/Approach	Key Findings/Conclusions
Allcott H	2011	Randomized field experiment; in which treatment and control households in the US (n=600,000) were sent letters. Tested the impact of descriptive norms (what their neighbors' behaviors was compared to theirs) and injunctive norms (households with low energy use were given "smiley faces" in their letters) on energy use.	Treatment resulted in decreased energy use on average but there were heterogeous effects of treatment; households in the highest decile of pre-treatment consumption decreased usage by 6.3% while consumption by the lowest decile decreased by only 0.3%.
Banerjee SK	2013	Quasi-experimental study aimed to increase awareness about abortion legality and availability of services as well as change negative perceptions about abortion through community level behavior change communication campaign implemented in 2008 and 2009; The campaign provided information on the legality of abortion, the location of safe providers and contraceptive services, health consequences of unsafe abortion.	Analysis demonstrated program effectiveness in improving awareness and perceptions about abortion including knowing abortion is legal and where to obtain a safe abortion. The increase in women's perception of greater social support for abortion and the increase in perceived self-efficacy with respect to family planning was greater in intervention districts than in comparison districts.
Baric L	1977	Intervention included three types of facts about abortion (visual representation of abortion, of fetal development only, and the same pictures with added description of details of development and the timing of each phase) using visual charts.	All of the students said that the intervention did not change the way they feel about abortion; however, some students changed their opinion about timing (4 increasing weeks and 2 decreasing). Information about methods increased the number of students who believed that women should be able to carry out abortions themselves.
Bloomer FK	2017	One three-hour interactive workshop on abortion law and applicable human rights, within the context of gender awareness and feminist theory to engage women with no previous exposure or with hostility to women's rights and to discuss abortion in a non-religious context. Included real life case studies, value exploration activities, information presentations, small group work.	5 main themes emerged from the analysis: 1) problematizing silence; 2) problematizing antichoice moral education; 3) talk of shift; 4) taking on a live experience discourse; 5) rehabilitating church doctrine. Participants identified the religious patriarchal norms that silence discussion on abortion or present morally loaded anti-abortion messages when abortion is discussed.

Lead Author	Year	Methods/Approach	Key Findings/Conclusions
Bond RM	2012	Randomized control trial of political mobilization messages delivered to 61 million Facebook users during the 2010 US congressional elections; All users at least 18 years of age in the US who accessed the Facebook website on 11/2/2010; Also looked at social ties (via facebook) to estimate the effect of the mobilization message on users' friends. The experiment allowed for testing on 3 user actions - clicking the "I voted" button, clicking the polling place link and voting in the election.	Users who received the social message were 2.08% more likely to click on the "I voted" button than those who received the information message. Users who received the social message were more likely to click the polling place link than informational message group. Users who received the social message were more likely to vote than users who received no message at all. Seeing friends' faces significantly contributed to the overall effect of the message on real-world voting.
Cislaghi B	2018	Reviews common pitfalls in intervention design. Theoretical discussion based on examples of interventions cited in literature.	Recommends practitioners keep in mind the following points to when designing social change interventions: 1) Social norms and attitudes are different; 2) Social norms and attitudes can coincide; 3) Protective norms can offer important resources for achieving effective social improvement in people's health-related practices; 4) Harmful practices are sustained by a matrix of factors that need to be understood in their interactions; 5) The prevalence of a norm is not necessarily a sign of its strength; 6) Social norms can exert both direct and indirect influence; 7) Publicizing the prevalence of a harmful practice can make things worse; 8) People-led social norm change is both the right and the smart thing to do.
Cockrill K	2013	Discusses the definition of abortion stigma and reviews literature around abortion stigma and interventions that address stigma (including from HIV and mental health) in order to develop a deeper understanding of measurement and programs that have contributed to reducing stigma. Presents the opinions, experiences, and programs of reproductive health care service-delivery organizations, and provides recommendations for increasing and expanding programs to address abortion stigma.	Explores a wide variety of measures including stigma scales and indexes for measuring individual/community perceptions, qualitative or categorical coding to assess stigma in law/public records/media (or surveys/focus groups to assess the impact of these types of institutional stigma on individuals).

Lead Author	Year	Methods/Approach	Key Findings/Conclusions
Corrigan P	2010	Systematic literature review of studies assessing interventions to address mental health stigma, and analysis of pros and cons of various evaluation methods.	Makes 10 recommendations for measurement of stigma change, including incorporating community-based participatory research, choosing measures less influenced by social desirability, evaluating diversity, and assessing other measures of change (e.g. emotions, knowledge, and physiological processes).
Gerber A	2009	Two randomized field experiments to test the effect of descriptive social norms on voter turnout. Respondents were called on the phone and exposed to one of two get-out-the-vote scripts in days prior to the November 2005 general election in New Jersey and June 2006 Primary election in California. The scripts were designed to influence participants perceptions whether voter turnout would be high or low (descriptive social norm for voting).	After hearing about the high or low voter turnout, respondents were asked if they intended to vote. The reported intention to vote was higher in the treatment groups exposed to high scripts than those exposed to the low scripts. When looking at voter registration, citizens with a history of low voting responded more strongly to high turnout scripts than low turnouts, while for citizens with a history of regular voting, the low and high scripts had a similar effect.
Goldstein NJ	2008	Field experiments assessed the effectiveness of signs requesting hotel guests' participation in an environmental conservation program to reduce towel use.	Guests who saw a sign about social norms had a towel reuse rate that was significantly higher than industry standards or the reuse rate of guests who saw only environmental messaging.
Hart Blanton	2008	This article discusses the influences of perceived social norms, especially normative misperceptions of health behaviors, and describes social norm campaigns.	Argues that studies often take a "one-size-fits-all" approach to social norm interventions, but that people are affected by local norms of their peer groups, and that those with a personal history of risk may exhibit a boomerang effect. The authors suggest "conformity isolation" as a social norm changes - pursuing an idea that is designed to create resistance to social norms.
Heijnders M	2006	Literature review of interventions designed to reduce health related stigma - specifically HIV/AIDS, mental illness, leprosy, TB and epilepsy. Reviews different approaches to interventions designed to change stigma.	Identified several levels at which stigma-decreasing interventions and strategies are being implemented - intrapersonal, interpersonal, organization/ institutional, community, and government/ structural. The most effective strategies identified mainly concentrated on individual and community level interventions.

Lead Author	Year	Methods/Approach	Key Findings/Conclusions
Huber R	2018	Interventions tested: 1) Participants informed that the Swiss government recently enacted a law obligating fossil fuel importers to compensate 10% of carbon emissions (institutional signal); and 2) Participants viewed a testimonial in which an "average car owner" explains his positive stance towards voluntary carbon offsetting and reports that his social environment thinks similarly.	Found treatment effects for actual offsetting behavior. Individuals in group information condition on average paid less compared to the control group. The combination of both treatments outperforms the control group; Despite high costs around 25% of the sample expressed a willingness to offset, and 11% actually paid to offset their emissions.
Kimport K	2016	Exploration of structural factors in influencing culture change.	Discussion of the structural elements that led to divergence between the success of the same-sex marriage movement and the abortion rights movement.
Knott D	2008	A "discussion paper" by a branch of the UK government that lays out a theory of culture change and how it may most effectively be impacted by policy.	Recommendations: 1) Recognise the importance of cultural capital in how people make decisions; 2) Be clear about who the population target is and precisely how their behaviour is; 3) Use segmentation and profiling techniques to build up a detailed cultural capital map of different target populations; 4) Tailor and personalise policy interventions to these profiles; 5) Communicate and engage with the public; and 6) Don't seek or expect short-term results – invest in securing big change over the long term
Learning Collaborative to Advance Normative Change	2019	Detailed and comprehensive guide for implementers seeking to measure social norms in reproductive health.	Covers exploring social norms, defining and aligning, measuring social norms, understanding and acting on norms.
Li L	2013	Randomized controlled trial in which Popular Opinion Leaders (POL) in China were identified and trained to deliver intervention messages to peer providers in their medical communities.	At 6 months, providers in contact with POLs showed a significantly higher level of message diffusion and lower levels of prejudicial attitude and avoidance intent than other non-POL intervention providers
Livingood WC	2016	Examined the role of mass communication in the cultural transformation that reduced tobacco use, through legislative changes; health communication interventions; public consensus and support; attitudes, behaviors and norms	Although many surveys and public opinion polls have tried to quantify this cultural change, they have usually been inadequate. The field keeps returning to individual behavior and linear casual models as the foundation but there is more complexity to what enabled and supported the change.

Lead Author	Year	Methods/Approach	Key Findings/Conclusions
Lueveswanij S	2000	Intervention was a three-day educational workshop that provided knowledge regarding aspects of HIV/AIDS and the detection and treatment of oral manifestion, improved attitudes towards increased willingness to treat persons with HIV/AIDS, and improve practices in infection control.	Outcomes included knowledge and attitudes regarding HIV/AIDS, perception of occupational risk, willingness to treat HIV infected persons and adherence to recommended infection control procedures. The educational intervention resulted in significant improvement of attitudes and practices of oral heath personnel.
Macq J	2005	Describes an intervention aimed at decreasing social stigma that afflicts people affected by tuberculosis and improving the care provided by first line government health services in Nicaragua. The researchers presented the participants with scenarios of people affected by TB and asked the participants (n=77) to respond.	Stakeholders' feelings and behaviors towards PATBs of family members were feelings of affection and supportive, and confident that PATBs were unlucky while community members had more fear, isolation and mistrust towards PATB as most of them expressed feelings and attitudes of fear of contagion.
Munger K	2017	Group norm promotion and social sanctioning on racist online harassment. The intervention was designed to reduce the use of anti-black racist slurs by white men on Twitter by sanctioning the harassers and varying the race and number of followers that the subjects are sanctioned by; the sanctioners were bots controlled by the researcher	Subjects who were sanctioned by a high-follower white male significantly reduced their use of a racist slur; In-group/High Follower treatment caused the largest reduction in racist language.
Network for Improvement and Innovation in College Health	2020	Collection of frameworks for making culture change in higher education.	Presents various frameworks and theoretical models for shaping health and well-being in higher education.
Norr K	2012	Two-group quasi-experimental design to evaluate the effects of the an intervention study on HIV stigma conducted with health workers at public clinics.	At baseline, health workers did not differ in the measures of stigmatizing attitudes, public contact, and client contact stigma; At 3 months post-intervention, all attitude measures, except condom attitudes, were signficantly more favorable for the intervention group including a more positive ranking of health worker training about HIV, less stigmatizing attitudes toward general contact and patient contact.

Lead Author	Year	Methods/Approach	Key Findings/Conclusions
Nyhan B	2014	Parents were randomly assigned to receive 1 of 4 interventions: (1) information explaining the lack of evidence that MMR causes autism from the Centers for Disease Control and Prevention; (2) textual information about the dangers of the diseases prevented by MMR from the Vaccine Information Statement; (3) images of children who have diseases prevented by the MMR vaccine; (4) a dramatic narrative about an infant who almost died of measles from a Centers for Disease Control and Prevention fact sheet; or to a control group.	None of the interventions increased parental intent to vaccinate a future child. Refuting claims of an MMR/autism link successfully reduced misperceptions that vaccines cause autism but nonetheless decreased intent to vaccinate among parents who had the least favorable vaccine attitudes. In addition, images of sick children increased expressed belief in a vaccine/autism link and a dramatic narrative about an infant in danger increased self-reported belief in serious vaccine side effects.
Paluck EL	2016	Randomized anticonflict intervention across 56 middle schools schools, n=24191 students; determined the relative power of certain individuals to influence the behavior of others; goal was to determine whether influence from a small group of influential people is enough to shift a community's behavior.	Compared with control schools, disciplinary reports of student conflict at treatment schools were reduced by 30% over 1 year; the effect was stronger when the seed group contained more "social referent" students; social referents spread perceptions of conflict as less socially normative.
Paluck EL	2009	1 year randomized field experiment in Rwanda tested the impact of a radio soap opera featuring messages about reducing intergroup prejudices, violence and trauma in 2 fictional Rwandan communities. Communities were randomly assigned to treatment and control and matched (n=480 adults).	Compared with the control group who listened to a health radio soap opera, listeners' perceptions of social norms and their behaviors changed with respect to intermarriage, open dissent, trust, empathy, cooperation, and trauma healing. However the radio program did little to change listeners' personal beliefs.
Perkins HW	2006	A comprehensive set of interventions communicating accurate local norms regarding alcohol use targeted student-athletes was conducted annually for 3 years. Assessment of these interventions included pre/post tests and a cross-sectional survey.	The intervention substantially reduced misperceptions of frequent alcohol consumption and high-quantity social drinking as the norm among student-athlete peers. Behaviors also changed in the treatment group including a decrease in frequent personal consumption, high quantity consumption, high estimated peak blood alcohol concentrations during social drinking, and negative consequences of drinking all declined by 30% in treatment group.

Lead Author	Year	Methods/Approach	Key Findings/Conclusions
Reid AE	2013	This intervention was designed to test injunctive norms on sun-tanning. Participants received an information sheet from the American Academy of Dermatology plus a personally-tailored normative feedback sheet. Women (n=189) were encouraged to compare their perceptions with the true normative values.	The true injunctive norms for tanned skin as good, healthy and more attractive were overestimated by the women. PNF participants believed the injunctive norms favoring sun protection to be stronger than did controls and reported more favorable sun protection attitudes, and intentions at posttest. At the 4 week follow up, participants reported greater intentions to sun protect and greater facial sun protection.
Sparkman G	2017	Interventions aimed at testing dynamic norms (how others perceive people's behavior changing over time) in 3 online and 2 field experiments using norm statements regarding meat and water consumption.	Participants expressed more interest in reducing their meat consumption and reported eating less meat in the dynamic norm conditions. Dynamic norms increased interest in eating less meat because it led participants to believe that people would eat less meat in the future.
Stangl AL	2013	Literature Review of Interventions designed to reduce HIV/AIDS stigma	The majority of interventions used two or more strategies to reduce stigma and discrimination, and 10 included structural or biomedical components. Most interventions targeted a single socio-ecological level and a single domain of stigma. While the majority of studies were effective at reducing the aspects of stigma they measured, none assessed the influence of stigma or discrimination reduction on HIV-related health outcomes.
Stangl AL	2002	Systematic review of studies and reports that assessed the effectiveness of interventions to reduce HIV stigma and discrimination from 2002-2013.	The development, validation, and consistent use of globally relevant scales of stigma and discrimination are a critical next step for advancing the field of research in this area. Studies comparing the effectiveness of different stigma-reduction strategies and studies assessing the influence of stigma reduction on key behavioral and biomedical outcomes are needed to maximize prevention efforts.

Lead Author	Year	Methods/Approach	Key Findings/Conclusions
Stangor C	2001	Experiment designed to demonstrate whether racial stereotypes can be changed by providing information about how other ingroup members perceive a given target group, (n=23 European American students).	Learning about the perception of others can have a significant impact on the expression of racial stereotypes. The influence of consensus is greater when it comes from an ingroup source versus outgroup members. Providing information that others agreed with an individual's own stereotypes bolstered them such that they were more resistant to subsequent change attempts.
Tankard ME	2016	Review of interventions designed to influence individuals' perceptions of norms.	Group member behaviors can shape perceptions of norms; information about groups can shape perceptions of norms; institutional signals can shape perceptions of norms.
Tankard ME	2017	Controlled experiment that investigated the relationship between a Supreme Court ruling on same-sex marriage and perceived attitudes in the real world by experimentally manipulating participants' perceptions of the likelihood (prior to the ruling) that the Supreme Court would rule in favor of same-sex marriage.	Found an increase in perceived social norms supporting gay marriage after the Supreme Court Decision but did not find a change in personal attitudes. These findings provide the first experimental evidence than an institutional decision can change perceptions of social norms, which have been shown to guide behavior, even when individual opinions are unchanged.
Van der Linden S	2015	Online survey of Dutch university students testing 3 strategies for behavioral change in bottled water use. Respondents (n=454) were randomly allocated to four different conditions (an information-only, social norm-only, combination, or a control group).	7-point "outcomes belief" scale rated the likelihood of different outcomes related to use of bottled water, and behavior intentions regarding the number of bottles of water respondent intended to purchase in the next 4 weeks. The largest reduction was observed in the treatment that combined the activation of social norms with persuasive information messaging.
Zhang X	2010	Social norm change paradigm program, California Tobacco Control Program, began in 1989 and has focused its tobacco control activities on three priority areas (1) countering protobacco influences, (2) reducing exposure to secondhand smoke and (3) reducing the availability of tobacco. CPTI activities curb tobacco product retail advertisements and marketing practices, tobacco industry sponsorship and depiction of tobacco products in the entertainment industry	Respondents who rated high on the SHS construct were about 70% more likely to have made a recent quit attempt in the last 12 months and about 100% more likely to intend to quit in the next 6 months than respondents who rated low on the SHS scale. For respondents who rated high on CPTI scale, respondents were 67% more likely to have made a recent quit attempt and 62% more likely to have intentions to quit smoking in the next 6 months compared to those respondents who rated low on the CPTI scale