What are Social Norms?
How are They Measured?

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I. Introduction

There are many possible reasons why population groups might engage in behaviors that are beneficial or harmful to children. Many of the reasons have to do with factors such as the physical environment in which they live or their economic status. These may determine, for example, their access to health and other services or the availability of clean water. Beyond these reasons, however, there may also be social motivations that explain why a behavior – beneficial or harmful – is common in a group.

The perpetuation of harmful practices, such as not talking with infants or female genital mutilation/cutting (FGM/C), and the creation of beneficial new practices, such as exclusive breastfeeding or marriage at an adult age may have social motivations. They may involve an entire community’s attitudes and beliefs rather than simply those of individuals and their families (UNICEF 2010). For our purposes, there are two broad categories of beliefs: beliefs about the physical world, for example the belief that colostrum is bad for the newborn, and beliefs about the mental world, about people’s desires and expectations, for example the belief that my mother-in-law expects me to discard the colostrum. Most development programs give ample consideration to the former, but comparatively little to the latter which are central to the understanding of social norms.

Beliefs about what others do, and what others think one should do, often guide a person’s actions in her social setting. When one does what others do it can be because one thinks they know best what to do. When one does what one believes others think one should do, it can be because one is motivated to secure the esteem and acceptance of others in the group or to avoid their disesteem and rejection, or by one’s belief that it is legitimate to comply with their expectations. If a harmful practice is social in nature, programs that concentrate on education of the individual, or increase in the availability of alternatives, or provision of external incentives, may not be sufficient. Additionally, a program may need to support the clarification, and sometimes the revision, of social expectations of people throughout the entire community of interest.

This report offers an account of what social norms are, with special attention to child well-being, and especially child protection. It also outlines a number of measurement strategies to identify social norms and document their change over time. It does not, however, consider in detail the topic of how to change social norms (see UNICEF 2010).

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1 In this essay the term should refers to what one should do to comply with a social or moral obligation. Unless context indicates otherwise, should does not refer to what one should do solely for benefit to oneself, the prudential.

2 The document is an interim product of a Project Collaboration Agreement between the UC San Diego Center on Global Justice and UNICEF. Its contents will be further refined by original scholarly inquiry, consultation.
**Examples of effective social norms change**

*Open defecation:* Globally, 1.1 billion people practice open defecation, which directly impacts public health and has consequences for socio-economic outcomes. Historically programming has tended to target the individual or the household and to prioritize the provision of latrines. Over the last 5 years, though, UNICEF’s shift to a social norms-based strategy has yielded significantly more rapid and lasting abandonment of open defecation. It now promotes an approach that engages the full community, is demand-driven and participatory, and uses non-monetary rewards like pride and celebration instead of subsidies. Examples of success include Pakistan where, as a result of the UNICEF-supported Pakistan Approaches to Total Sanitation Program over the past two years, more than 2.7 million people live in certified open defecation-free communities. An additional 2 million live in communities that have declared to be open defecation-free but are not yet certified (UNICEF 2012).

*FGM/C:* Efforts to abandon female genital mutilation/cutting – a practice estimated to affect 92 million girls and women across Africa (WHO 2012) – typically require shift from an old norm of cutting to a new norm of not cutting. Uncut girls may face scorn and reduced marriage prospects, and their families may be stigmatized. By applying a social norms perspective and engaging entire communities in discussions of rights and well-being, the NGO Tostan has helped catalyze abandonment of FGM/C in over 5000 Senegalese villages – over half the villages in Senegal believed to be affected by the practice. (Tostan 2012).

**What are Social Norms?**

As a first approximation, a **social norm** is what people in some group believe to be normal in the group, that is, believed to be a typical action, an appropriate action, or both (Paluck and Ball 2010). A social norm is held in place by the reciprocal expectations of the people within that group, which we will also call a reference network. Because of that interdependence of expectation, social norms can be stiffly resistant to change.

The actions of an individual range from the highly independent (like remembering one’s purse on the way out the door in the morning), to the dependent (learning from an acquaintance that a radio show is entertaining,) to the highly interdependent (each driving on the right side of the road because everyone else does).

Development thinking has tended to understand individual actions of programmatic interest as being independent, or as being one-way dependent, whereby one person’s action depends on others’, as in the diffusion of innovation. However, there are human
actions where what one does depends on what others do at the same time that what others do depend on what one does (many-way interdependence). The contrast will be illustrated later in the essay by the portrayal of the adoption of oral rehydration therapy by one family from another as a way to prevent a child’s dehydration from diarrhea (one-way dependence) versus the community shift to latrine usage as a way to reduce contagious disease (many-way interdependence). Simple game theory can add to our understanding these distinctions.

The study of social norms builds on research from various disciplines. Robert Cialdini’s empirical research has shown the importance of a distinction between a descriptive norm (doing what others do) and an injunctive norm (doing what others think one should do). The Theory of Planned Behavior (developed by Ajzen and Fishbein) provides a way to predict behavior from an individual’s attitude, perceived subjective norm, and perceived behavioral control. Cristina Bicchieri offers an operational definition of social norms that we use often in this document.

In order to create beneficial social regularities or to change harmful ones, it is important to understand how they differ in structure. We present a typology here that allows practitioners to identify and address situations involving social norms; we distinguish nonsocial, weakly social, and strongly social regularities. Strongly social regularities include social conventions (in pursuit of common purpose one does what one expects others to do, and they do what they expect one does) and social norms (reciprocate the cooperation of others). Legal norms generally are like social norms, but enforced by formal institutions. Moral norms are much more motivated by conscience than by social expectations. It is important and useful to draw these distinctions, as understanding them helps us analyze how to beneficially harmonize moral, legal, and social norms for the well-being of children.

Finally, we note that social norms cannot be explained from behavioral observations alone, for three reasons. Firstly, if a prescriptive norm (what not to do) is effective the behavior it proscribes is not observed. Additionally, an effective norm is held in place by people’s beliefs about what would happen if they failed to comply. Finally, people can be motivated to comply not only by more observable actions of approval and disapproval, but also by unobserved attitudes of esteem and disesteem.

**How are Social Norms Measured?**

A social norm is held in place by reciprocal expectations in a reference group. Analysis of social norms requires knowing what an individual believes others do and what an individual believes that others believe she should do – the empirical and normative beliefs about others (rather than knowing only the individual’s own behavior and attitude). In addition, because an interdependent practice is held in place both by an

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3 What she believes about a) what others do and b) what others believe she should do

4 Whether she thinks she can bring about the behavior
individuals’ beliefs about what would happen if she complies, and an individual’s beliefs about what would happen if she did not comply, we want to be sure to know her counterfactual beliefs.

Measuring these beliefs (particularly when they differ from an individual’s or group’s observed actions) can be challenging, particularly since – as mentioned above – social norms are not easy to infer from behavioral observations. We present a number of assessment tools which can be adapted to existing methodologies depending on project design and resources.

Additionally, we want to know who the reference network is – essentially, whose expectations matter. Social network analysis, in simple and complex applications, helps us understand reference networks and the channels of persuasion, attitude change, and behavior change within them.

We consider:

- Detection of possible social norms from non-normative data in existing national household surveys (DHS or MICS)
- Simple identification of the reference network in order to measure an individual’s beliefs about others in it.
- Sample questions to measure respondents’ beliefs about others; an incentive-compatible way of doing so; ways to inquire about social norms in focus groups and to notice social-norms discourse.

II. What are Social Norms?

The word norm has several meanings. A common meaning is that a norm is merely a statistical regularity. One notices that many people wear white in order to stay cool on a hot day. Another meaning is what people in a group believe to be typical and appropriate action in that group (Paluck and Ball 2010), such as when one sees in some group that brides wear white at wedding: a social norm. A third meaning is of a prescriptive or proscriptive rule with obligatory force regardless of social expectations, a moral norm: Thou shalt not kill! We clearly distinguish social norms from moral norms.

A personal attitude differs from a social norm. The bride may not want to wear a white wedding gown but, knowing expectations in the relevant reference network, will nevertheless comply with the social norm of wearing white. A boy may not want to hit his girlfriend for flirting with another boy, but does so because the members of his boys’ network do so and he believes they would belittle him for not doing so.

In brief, a social norm is held in place by the reciprocal expectations among the people in a reference network. A reference network is those people whose expectations matter to a given individual in the situation, those to whom the individual refers. The interdependency of beliefs and actions within a reference network means that a social
norm can be quite resistant to change, and can persist even among those who would rather not follow the norm.

Because of interdependence within the reference group, a program that aims to support change from an existing harmful social norm to a new beneficial one requires the change in reciprocal expectations among enough of the people in the reference network to bring about a shift. A program that engages with individuals only as individuals could change their attitudes toward the harmful social norm, but not change their behaviors, not change the social norm.

For the behavior of individuals in a reference network to change, it is necessary that:

- Individual attitudes change – there are enough people ready to change, AND
- Common knowledge – those who are ready to change know that enough other people are ready to change, AND
- Coordination – they do together change.

### Interdependent human action can – and sometimes must – change rapidly

Sweden’s change from driving on the left to driving on the right in 1967 provides an example of strong interdependence of action. It vividly illustrates how in cases of high interdependence, bringing about a change – such as shifting from driving on the left to driving on the right -- requires a change in the reciprocal expectations of all individuals at the same time in the reference group. In this case, the reference network is all the people who would use the highways in Sweden.

A common remark is that culture is deeply entrenched and takes generations to change. Swedish humorists at the time joked that, because this is such a big change, it should be phased in gradually: first bicycles, a few months later trucks, sometime after that buses, later cars. Each person in Sweden could have wanted to change to driving on the right, but would not do so unless she believed that a) everyone else wants to do so if everyone else does so, and b) everyone confidently expects others to change to driving on the left at the same time. Here we see that precisely because of the reasons for its deep entrenchment, this interdependent behavior could only change by achieving simultaneous change in practice by all individuals in the reference network. As interdependence weakens, change is required among most, many, or even just enough individuals in the reference network for the shift to be effective and stable.

### Interdependence in Human Actions

Human actions range from the highly independent, to the dependent, to the highly interdependent. Remembering my purse as I go out the door in the morning is mostly *independent*. Many global development and public health problems lie on the more independent side of the spectrum, and hundreds of millions of lives have been saved or
improved by policies and programs intended to solve problems of independent action.\textsuperscript{5} A default assumption is of an individual behavior that can be changed by some intervention. An individual needs better health, education, or physical security, for example, and a program provides information or other services that satisfy the need. Such interventions are fundamental. However, significant barriers exist to reaching the most deprived populations and many barriers, such as discrimination and exclusion, are of a social nature and are not fully resolved by the provision of services. Moreover, there are other problems such as the fear to report acts of sexual aggression that are almost purely of a social nature. Policies and programs that work well to resolve harmful independent human actions may not work well to resolve harmful interdependent human actions. These problems require attention to the actions and beliefs of most people in the reference network and can be more easily understood and more effectively addressed from a social-norms perspective.

Global development policy and programs are quite cognizant of one kind of dependent action: the diffusion of innovations (Rogers 2003). This line of research originated in the study of the diffusion of the adoption of hybrid corn in the state of Iowa in the USA during the 1930s. A few farmers were early adopters, many farmers were middle adopters, and a few farmers were later adopters. An early adopter plants new seed corn and gets good results. One of his neighbors observes that the first farmer got good results, tries it himself, and also gets good results. Further farmers observe those good results, and try it out themselves. Plotting cumulative adoption of the new corn over a dozen years yields the familiar S-Curve shown in the graph: adoption starts out slow, accelerates towards the middle, and then decelerates as adoption becomes widespread. The phenomenon is illustrated in a current news report on a USAID agricultural program in Malawi: “We saw others irrigate last year and were successful, while we didn’t irrigate and went hungry… So, this year, we decided to irrigate” (Kristof, July 11, 2012).

Adoption of hybrid corn is a matter of one-way dependence. My neighbor adopted hybrid corn. I saw that he got good results, so I tried it too. The neighbor did not adopt it because I adopted it. Since hybrid corn gets good results, I would not abandon the planting of hybrid corn if my pioneering neighbor stopped planting it. The diffusion of innovations approach is highly developed and widely applied, for good reason, but it almost always assumes one-way dependence.

\textsuperscript{5} Interventions such as outside agencies draining swamps and killing mosquitoes in order to control disease can have little or nothing to do with either the independence or interdependence of choices by individuals among the benefitting population.
Compare adoption of hybrid corn to an example of **two-way interdependence**. If my friend and I benefit from meeting one another regularly, then we would want to coordinate the time and place of our meeting. Our practice is to meet for lunch the first Monday of every month at Arjun’s Lassi Shop. I go to Arjun’s every first Monday because I expect my friend to be there, and my friend goes because he expects me to be there. He goes because I go, I go because he goes. If he didn’t show up at our monthly meeting, I’d be disappointed, and if he stopped going, I would stop going.

**Many-way interdependence** is illustrated by a local farmers’ cooperative that has a fixed meeting every three months on the first Saturday, at its office, where matters important to business success are discussed and decided. Each farmer goes because he or she expects most others to go. The regular meeting could just as easily be held at some other time or place, and those could be changed, but for now the convention of every three months on the first Saturday at the office stands; that is what everyone expects.

We will illustrate the distinction between more independent and more interdependent action with two stylized development examples (the point is not to make empirical claims, please just accept the stipulations). Adoption of oral rehydration therapy (ORT), which has saved so many lives, is a good example of a process of one-way dependence. ORT, a simple mix of clean water, sugar, and salt in the right proportions, is an effective way to save children from death by dehydration from diarrhea. One observes that one’s neighbor adopted it and it worked well, or hears from credible health care workers that it’s a good idea, or finds media messages about its beneficial consequences believable, and adopts it. Similarly, I use ORT because I learned it from my neighbor who already uses it. However, my pioneering neighbor uses it because she has found it to be effective, not because I learned it from her.6

In the next Figure, we show the cumulative change in attitude towards ORT, and the cumulative change in practice. Attitude changes gradually in the group, and practice trails attitude.

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6 This is an oversimplification since one obstacle to adoption of ORT is false shared causal beliefs about diarrhea and dehydration. One absorbs the inherited causal beliefs of one’s group, probably because it is generally beneficial to assume that what most people believe is correct, rather than to investigate every issue afresh and on one’s own. In the case of ORT, the easy observability of clear benefit was enough to at least bracket contrary local beliefs.
Community adoption of latrine usage to decrease the incidence of disease is a good example of strong many-way interdependence. Poor sanitation is recognized as a major human-rights problem that needlessly kills millions of people and in many places provision of latrines and even of subsidies for using them, has not prompted wide-scale sustained uptake. Community-led total sanitation (CLTS, Kar and Chambers 2008) and community action for total sanitation (CATS, UNICEF 2009) are programs which mobilize whole communities to shift from a regularity where individuals defecate in the open, to a new social norm of community-wide latrine usage, involving community discussion and decision, plan of action, and plan of enforcement.

Some attribute the dramatic successes of CLTS to the virtues of participatory method. Yet there are features of the situation – namely the interdependent nature of the problem – which have at least as much if not more to do with the dramatic change. Unless almost all in the community shift to consistent latrine usage, the benefits of disease and death reduction would not be realized. Any individual acting alone to build a latrine would incur a cost for no benefit; only if nearly all comply would each individual benefit. Each individual may be materially tempted to let everyone but himself make the change. Thus, an individual must come to believe either that compliance with the new norm is a legitimate expectation of others who comply, or believe that some others in the community would punish noncompliance or reward compliance with the new norm. In addition, to be a lone adopter exposes one to the ridicule of others. If all adopt, then ridicule would shift to lone open-defecators.

Attitude to adopting latrine usage might shift cumulatively over some period of time. Due to the necessity of coordinated shift however, the behavior of adopting latrine usage would be delayed until most are ready to change and most decide to change, and then would onset rapidly. Moreover, after the shift to a new norm and its associated sanctions,
some with a negative attitude towards latrine usage may nevertheless adopt it. This is shown in the following Figure.

![More Interdependent Action Shift to Community Latrine Usage](image)

Personal belief or attitude differs from social norm. A program could seek to change individual attitudes towards use of oral rehydration therapy. One kind of program could persuade each individual of its advantages; another kind of program could persuade some individuals in the community of its advantages on the expectation that others in the community would learn from the first adopters.

Matters are different with community latrine usage. In a community without latrines, an individual could have a favorable attitude towards their use yet lack the motivation to be the only one to adopt, as we have seen. In a community with a social norm of latrine adoption, an individual could be unfavorable to use, yet because of the social norm would adopt.

**The Theory of Interdependent Action (Game Theory)**

This project is about understanding and measuring interdependent human practices. Game theory is a method to describe, understand, and explain interdependent human action. The choice made by one player depends on the choice of the second player, whose choice depends, in turn, on the choice of the first. In a larger group, the choice of each depends on the choice of all. The structure of such interdependence can be different in different situations.

Simple game theory systematizes and clarifies intuitions known to all humans about interdependent actions (Schelling 1960, Wydick 2008). Its apparatus can be initially

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7 As Janine Schooley of Project Concern International pointed out to Mackie.
unfamiliar and confusing. Once one becomes comfortable with this way of thinking, insights into social patterns are sharpened.

What is important to know is that game theory can distinguish among different structures of interdependent action, depending on how the several people involved value alternative actions. Game-theoretic analysis shows that in some circumstances interacting humans find themselves in an equilibrium state from which no individual has an incentive to deviate – even if that equilibrium state does not yield the best outcomes for the people involved. This is of great interest, because it helps us understand how a harmful practice can exist and be stable. It allows us to see that the practices that exist are not necessarily the best practices that could exist.

Here, two “games” of special interest will be explained in story terms. In a coordination game, it is in most people’s interest to coordinate on one way of doing something or on another way of doing it. We can all coordinate on driving on the right-hand side of the road, or on driving on the left-hand side of the road. All-left and all-right are each a pure equilibrium, meaning that for those born into a country where all drive on the left, there is no motivation for any individual acting alone to switch to driving on the right.

One faces the coordination problem anew each time one takes to the road, and as the problem is repeated, drivers quickly come to expect others to coordinate on the same equilibrium as they did last time. A history of people in a reference network coming to expect its members to coordinate on one equilibrium over another in a repeated coordination game is called a convention. Conventions can be a matter of indifference, or one convention can be better for everyone than another worse convention, and people can be trapped by their history in the worse convention. This was so for the Swedes, who were trapped in the convention of driving on the left, even as transportation connections to the rest of right-driving continental Europe increased. Every Swede would be better off driving on the right, but they could only do so by all changing at once.

In a repeated coordination game, change from an old convention in equilibrium to a new convention in equilibrium is stable with no further regulation. Once the Swedes switch to driving on the right, excepting some initial confusion, an individual has no reason to switch back to driving on the left.

In a social dilemma the situation is different. A change from an old way of doing things to a new way of doing things in a group requires ongoing regulation such as moral, social, or legal norms. For program purposes, this is the main reason for understanding the difference between a coordination game and a social dilemma.
The so-called tragedy of the commons is an instance of a social dilemma (which is what we call the many-person version of the more familiar two-person prisoners’ dilemma). Suppose that we share a common fishery, and for the moment that we have no moral, social, or legal influence over one another. All are better off when each Cooperates on a limited catch, the total not exceeding the sustainable limits of the fishery. In the absence of any regulation, however, each is tempted to overfish, or to Defect. The one equilibrium choice in the game is for all to overfish. No individual would deviate from the equilibrium choice of Defect, but all would be better off if each Cooperated.

Another example, already discussed, is community adoption of latrine usage. Each is better off Cooperating on community-wide latrine usage. In the absence of any regulation, however, each is tempted not to install and not to use a latrine, that is, to Defect. The one equilibrium choice in the game is for all not to install and not to use. In overfishing, or in latrine adoption, when positive social sanctions make the cooperative choice worthwhile, or negative social sanctions make the temptation to defect not worthwhile, or a when there is the belief that choosing to Cooperate is the right thing to do, the situation transforms into a coordination game, adding a new equilibrium of mutual Cooperation. In a situation that is originally a coordination game, shifting from a worse equilibrium to a better one is stable with no further regulation. But in a situation that is originally a social dilemma, change to better equilibrium requires ongoing moral, social, or legal regulation.

The Study of Social Norms

Social norms are mentioned throughout the historical record, beginning with the ancient Greeks. They distinguished between nature, physis, that which is common everywhere, and convention, nomos, that which varies from place to place. Montaigne’s (1993/1592 122-139) 16th-century essay on custom reports that, “There are countries...where womanhood is rated so low that they kill the girls who are born there and buy women from their neighbors when they need them;...where it is the men who carry things on their heads and the women who carry them on their shoulders;...where the women wear copper shin-guards on their legs;...where they circumcise females;...where they let all their hair grow on the left of the their body and keep all the other side unshaven;...For the Rule of rules, and the Law of laws, is that each should observe those of the place wherein he lives.”

In the mid-20th century sociologist Talcott Parsons (1951) dominated social science. His theory conceived of societies as if they were individual organisms which function to survive and reproduce. He assumed that all social norms function for the benefit of society, and he explained observed social regularities as being due to social norms, with little explanation of what social norms are, how they work, and how they change. His structural-functionalist theory fell into disuse.

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8 For information on the prisoners’ dilemma, see the entry at en.wikipedia.org/wiki/Prisoner’s_dilemma, and for more detail see the Stanford Encyclopedia of Philosophy entry at plato.stanford.edu/entries/prisoner-dilemma/.
A new approach to social norms emerged from economist Thomas Schelling's reorientation of game theory (1960, 1978), which generated bounteous hypotheses for the explanation of regularities in human action. For example, Schelling showed how the philosopher David Hume's noteworthy account of social conventions – likening the coordinated rowing of a boat to coordination on constructed political institutions of justice – could in good part be explicated by game theory. This approach blossomed at the University of Chicago in the 1990s.9 Gerry Mackie (1996), a graduate student at Chicago, applied Schelling’s ideas to the harmful practices of footbinding in China and female genital mutilation/cutting in Africa, arguing that what worked to end footbinding could be adapted to help end FGM/C.

Social-psychology carries on an independent tradition of the investigation of conformity, including social norms. Cialdini is a leading social-psychological researcher of social norms (Cialdini and Trost 1998). He richly investigated the distinction between descriptive norms and injunctive norms.

Humans have the goal of effective action. One important way to do this is to rely on social proof, that is, in novel, ambiguous, or uncertain situations: do what others do (descriptive norm). When in Rome, do as the Romans do, the saying goes. Humans also have the goal of building and maintaining social relationships. Injunctive norms are constructed from one’s belief about what most people approve or disapprove of: do what others think one should do. Additionally, humans have the goal of managing self-concept, according to Cialdini and Trost. They follow moral norms, based on values: do what is morally right.10 His focus theory of normative conduct hypothesizes that a norm, descriptive, injunctive, or moral, does not predict behavior unless made salient in the situation. Cialdini devised a focus theory of normative conduct: that norms activate behavior when they are salient, and if applicable norms conflict the more salient norm governs.

Another line of thought and practice in social psychology is based on the concept of pluralistic ignorance. Pluralistic ignorance means that some privately reject a group norm but incorrectly believe that most others accept the norm. Thus a norm is persistent and even publicly favored even though privately opposed by some. Pluralistic ignorance is a striking and memorable concept, but we caution against unthinking generalization. More typically in development settings harmful norms persist because people correctly believe that most others accept the norm. Pluralistic ignorance is more likely to be found in eras and settings of rapid social change.

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10 We here call these moral norms, Cialdini called them personal norms.
The “social norms approach” to pluralistic ignorance

Perkins and Berkowitz (1986) found that American college students believe that their peers drink alcohol more frequently and in greater amounts than they actually do, and that their peers are more tolerant of alcohol abuse than they actually are. They suggested that if an alcohol education program credibly corrected such beliefs, students would reduce alcohol abuse. Thus was born what its creators called the “social norms approach” to campus binge drinking (and other health and justice issues). The education program presents accurate information about the frequency or alcohol use among peers and about their attitudes to abuse. Results are mixed.

Fishbein and Ajzen (2010) devised the Theory of Planned Behavior, meant to account for the frequently observed gap between attitude and behavior. A positive personal attitude towards a behavior (attitude), a belief that relevant others want one to perform the behavior (subjective norm), and a belief that it is possible to perform the behavior (perceived behavioral control) each make it more likely that the intention and the behavior will occur.\textsuperscript{11}

Cristina Bicchieri (2006) has developed a theory of social norms combining game-theoretic and psychological approaches, and she carries out an active program of human-subject research on norms. In recent years she has worked with UNICEF and Gerry Mackie on social norms, exploring in development contexts her operational definition of social norms. Bicchieri (formal, in 2006, 11; informal and paraphrased below, in 2012, 28) offers a definition of a social norm based on conditional preferences, empirical expectations, and normative expectations. This definition was put into graphic form by Guillot (2012), whose work we copy and mildly amend:

\textsuperscript{11} The theories have been applied in several hundred published studies about a wide variety of behaviors, especially in health. This research tradition has been repeatedly tested and refined in application, and is a promising source of ideas about how to measure social norms and social-norms change.
Bicchieri’s (2006, 11) approach revises and refines Cialdini’s distinction between descriptive and injunctive norms. The descriptive aspect is overhauled as the empirical expectations condition, and the injunctive aspect as the normative expectations condition. The expectations reformulations make clear that a social norm is constructed from beliefs and desires of individuals in the reference network.

Bicchieri’s normative expectations are importantly different in another way from Cialdini’s injunctive norm. According to her definition, an individual believes that others have a right to expect conformity and the individual an obligation to conform, or an individual believes that some others in the reference network would sanction conformity and nonconformity. Cialdini’s injunctive norm is only indicated by the observation of the application of positive and negative sanctions. The possibility that a social norm can be held in place by beliefs about the legitimacy of others’ expectations of conformity is often omitted in both the economic and social-psychological traditions. The definition of social norm in terms of empirical expectations, normative expectations, and conditional preference is more operational and more testable, according to Bicchieri.

An Aside on Social Norms of Group Demarcation. Group identity is frequently offered as an explanatory cause for the presence and force of social practices. This would mean that one engages in practice X because one identifies with group Y. Identification is some kind of cognitive or affective oneness with other members of the group.

12 Many students of social norms are familiar with the descriptive-injunctive distinction. In this paper we shall distinguish between empirical expectations (similar to descriptive) and normative expectations (similar to injunctive).
But we must be careful not to confuse description with explanation. Someone speaking Italian is much more likely to be Italian than German. However, do Italians speak Italian because they want to mark themselves as different from the Germans, or do they speak Italian because they want to communicate and normally the people adjacent to them expect them to speak in Italian? Speaking Italian happens to serve as an ethnic marker, but normally that is not its purpose. Italian did not emerge and is not maintained for demarcation purposes.

In contrast, the markers of an American outlaw motorcycle gang -- the colors and other signs -- are adopted for the purpose of group demarcation. They are costly to obtain, and anyone who tried to fake them would be severely punished by group members. The markers declare a member’s loyalty to the group, and by group reputation declare to outsiders that harm to a marked member can be retaliated by other members of the group (adapted from Bicchieri 2006). To avoid confusion: One is frequently able to distinguish social groups by the obvious compliance of their members with one or more norms; however, one should not automatically assume that group demarcation is the reason for either the origin or maintenance of the norm.

**Typology of Reasons for Behavioral Regularities**

**Overview.** Understanding how observed regularities differ from one another in their structure helps us understand how a practice works. If we better understand how practices work, we are better able to propose ways to change harmful ones, or to strengthen or create beneficial ones. The following table by Mackie, borrowing from prior literature including Bicchieri’s (2006) work, displays types of reasons for behavioral regularities.
### TYPOLOGY OF REASONS FOR BEHAVIORAL REGULARITIES

<table>
<thead>
<tr>
<th>Not Social</th>
<th>Weakly Social</th>
<th>Strongly Social</th>
<th>Institutional</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal Norm</strong></td>
<td><strong>Social Proof</strong></td>
<td><strong>Social Convention</strong></td>
<td><strong>Legal Norm</strong></td>
</tr>
</tbody>
</table>
| Something an individual might do regularly for her own prudential reasons. 
*I usually eat a mango for breakfast.* | Following a rule because others do; typically because one believes they know better what they are doing (one-way empirical). 
*As a tourist in London, when I exit the underground train I follow the locals to the exit.* | Following a rule because one believes others do and because others believe one does (many-way empirical). 
*Our group meets for casual lunch on the first Monday of every month.* | Mostly like social norms but formally enforced by state institutions. 
*I do not rob petrol stations, because I respect the law, or I believe I may be punished by the state for doing so.* |
| **Population Regularity** | **Social Norm** | **Moral Norm** |
| Individual response to a nonsocial constraint, or selection by a force outside the population. 
*On a hot sunny day, I stand in the shade, you stand in the shade, she stands in the shade.* | Following a rule because one believes others do (and others likely believe one does); and because one believes others think one should follow it (and one likely believes others should follow it.) Many-way empirical and many-way normative. 
*I cooperate in helping keep the village clean because others keep it clean too, and because I believe that others’ expectation that I do so is legitimate or that my compliance may be positively sanctioned or noncompliance negatively sanctioned by some of the others.* | Motivated by an inner conviction of right and wrong (moral norms are much less conditional on what others do or think one should do than are social norms). 
*I do not injure others because I believe that is morally wrong, no matter what others do or say.* |
Of course, reality is much fuzzier than this typology, especially because a specific human action may be motivated by more than one of these reasons. Nonetheless, these focused distinctions provide a useful starting point for categorizing observed regularities in human populations.

Personal Norms. A personal norm is followed by an individual for her own prudential reasons, largely independent of her expectations of others and their expectations of her. Examples include remembering to take one’s purse in the morning, having a mango for breakfast each morning, not relaxing unless one’s chores are done, and the like.

We see a regularity in one individual’s behavior. To change that regularity one would focus on that individual’s prudential reasons for repeating it.

Population Regularity. One usage of the word norm is to refer to a statistical regularity, such as the average height of maize plants in Guatemala in 1949. Looking at human populations, we shall call it a population regularity. A regularity is observed in some population, but it has little or nothing to do with the dependence of one individual’s beliefs and actions on the beliefs and actions of others.

The regularity is due to some cause external to the population. For example, wherever one goes in the world, in the hot sun people seek shelter in the shade. Because each is observed seeking shade does not mean that each seeks shade because others do. A selection mechanism can also cause a population regularity not due to dependence within the group. Students the India Institute of Technology study lots of mathematics. Mostly, they do not do so because their fellow students do so (although they may be happy to be among their own kind). It is mostly because the admissions committee had reason to select students of this type.

In program contexts, many regularities observed in a population may be due to causes external to it that relate to something in the larger political, economic, or physical environment. For example, in an area where maternal health services are distant and costly, we may observe that the poorer stratum of the population gives birth at home rather than in the health center. The primary reasons for this may be the distance of the health center, or the cost of the transportation or of the health service. As is done by most programs, changing those regularities requires addressing these causes external to the population of interest.

A social cause could also be relevant. Perhaps important people in the community believe that birth should continue to take place at home with traditional birth attendants as per tradition and would negatively sanction those who would seek to give birth in the health center. Perhaps people in the poorer stratum believe they would be given poor or no treatment if they sought care at the health center. Then, we would also seek to change the cause internal to the population.
**Social Proof (One-way Empirical).** This is the weakly dependent action we discerned in the discussion of the diffusion of innovations, like adoption of oral rehydration therapy. A tourist to London, using the underground train, doesn’t need to know what route to take to exit the station. She can just follow everyone else, on the assumption that they know where they’re going. Some people are part of a regularity because each expects some others to do so (the tourists, relying on the locals), but some of those others are part of it for reasons other than expecting others to do so (the locals, who already know which way to go).

Why would a person do what others do? We are not proposing a general disposition to conform, or some instinct to imitate. Humans do imitate, better than do other animals including their ape cousins, but from an early age they imitate selectively (Hurley and Chater 2005). When a person does what others do, we should always look for the reasons. Cialdini calls one kind of reason a *social proof*: in a novel, ambiguous, or uncertain situation, do what others do. For example, the aggregation of many opinions may be more accurate than a single expert opinion. On the television game show, *Who Wants to be a Millionaire?*, a stumped contestant can choose to consult either an expert friend or the audience. Friends are right two-thirds of the time, the audience is right nine out of ten times (Page 2007, 182).

Depending on the context, one might copy those in proximity, those in similar situations, those with similar characteristics, or similar in some other relevant way; and one might copy the most frequent action, or copy the most successful actors. Many social practices of interest to development policy and programs are of this type. The theory, techniques, measurement methods, and program experiences of the diffusion of innovations approach apply.

This type of behavioral regularity is made in part by the one-way empirical expectations of some of its members and is thus weakly social. To change that regularity, one would seek to credibly provide better information to individuals in the group; often, for the sake of efficiency, one would provide that information to early adopters of innovation who would trigger its diffusion further through the group. The *positive deviance* approach works to make beneficial innovators in the group salient to the remainder of the group (Pascale, Sternin, and Sternin 2010).

In social-proof circumstances, change in attitude and behavior can be gradual through the group. Next, we turn to more strongly social practices, usually more resistant to behavioral change.

**Social Convention (many-way empirical).** Social proof is one-way dependent. A social convention is multi-way interdependent. In Thailand one drives on the left *because* one believes others will drive on the left, and others drive on the left *because* they believe one will drive on the left.

A reason why someone would do what others do is if they all had a sufficiently common purpose, such as to avoid collision. Often, there is more than one way to pursue a common purpose. By coordinating with one another on one way of pursuing that common
purpose, each does better than if they fail to coordinate. Examples include driving on right (or left), rowing a boat together, performing a musical quartet. Recall that the history of people in a group coming to expect its members to coordinate on one equilibrium over another in a repeated coordination game is called a convention.

This type of behavioral regularity is made up of empirical expectations between many members of the group and is strongly social. Each driver in Sweden, for example, believes that almost all drivers in Sweden would drive on the left. To shift from an old convention to a new one, enough members of the group must believe that enough members of the group will coordinate on the new convention. Each driver in Sweden must come to believe that as of a certain moment almost all drivers in Sweden would drive on the right.

The driving convention is highly interdependent – nearly all must comply or risk mayhem. Across the reference network, change in attitude towards adopting the new convention could be gradual and even incomplete. Eventual behavioral change, however, must involve nearly all in the reference network, who must publicly coordinate on the new rule. Changing from a convention of ignoring traffic signs to a convention of obeying them is somewhat less interdependent. We benefit even if many rather than all shift. Here, for a stable trajectory of change, enough people must believe that enough people are starting to obey traffic signs.

**Social Norm (empirical, many-way normative).** A social convention is held in place by reciprocal, many-way, empirical expectations. One follows a rule because one believes others follow it, and others follow the rule because they believe that one does so. A social norm includes empirical expectations but adds normative expectations: one also follows a rule because one thinks that others believe one should do so (and they likely believe that one believes that they should do so).

One reason why one would do what others do is if one has reason to reciprocate positive action with positive action or negative action with negative action. In some interdependent situations (exemplified by the social dilemma) one may cooperate if and only if one expects enough others to cooperate, or cooperate now in response to others’ past acts of cooperation. One would do one’s fair share if one believes others would. My cooperation is conditional on yours, yours is conditional on mine.

In the social dilemma, the original interests of the parties are such that each is motivated to Defect even though all would be better off to Cooperate. The empirical expectations and normative expectations that compose a social norm can be sufficient to motivate a cooperative choice by all. One expects that a) enough others Cooperate, and b) that enough others believe that one should Cooperate (and that their expectations are legitimate, that others would sanction, or both). This transforms the game from a social dilemma to a coordination game. In the coordination game there is now a better equilibrium (All Cooperate) and a worse one (All Defect).

This type of behavioral regularity is made up of normative and empirical expectations among many members of the group. It is strongly social and it is a social norm. Suppose
that in a community there is a social norm of using violence to discipline children. Most individuals do use corporal punishment, and most individuals believe one should use it to discipline children. To change that social norm, one would seek to change the normative and empirical expectations among enough members of the community. They would need to believe that the members of the community now believe that one should not use violence to discipline children (because it is right, there are positive sanctions for compliance and negative sanctions for noncompliance, or both), and that the members of the community do use non-violent forms of discipline.

**Legal Norms.** Legal norms are much like social norms, but are formally enforced by state institutions. Important reasons for obeying a legal command are belief in the legitimacy of the authority (respect for the law), and the authority’s negative sanctions such as fines and imprisonment.

**Moral Norms.** One follows a moral norm because one believes it is right to do so, conscience requires it. Whereas social norms are more conditional on the actions of others, moral norms are much less conditional. One tends to follow a moral norm regardless of one’s beliefs about what others do or think one should do. Nado, Kelly and Stich (2009) summarize the views of Turiel and his coworkers, on the difference between the moral and what we here call the social, as follows:

- Moral rules are held to have an objective, prescriptive force; they are not dependent on the authority of any individual or institution.
- Moral rules are taken to hold generally, not just locally; they not only proscribe behavior here and now, but also in other countries and at other times in history.
- Violations of moral rules involve a victim who has been harmed, whose rights have been violated, or who has been subject to an injustice.
- Violations of moral rules are typically more serious than violations of social rules.

**An Aside on Religious Norms.** Religious norms are distinctive because of their reference to divine command, but otherwise they function as social, legal, or moral norms. A religious norm can be a social norm, held in place by empirical and normative expectations and informally enforced; or can be a legal norm, held in place by the formal enforcement of a religious authority; or can be a moral norm motivated by conscience.

**Diagnostic Tree.** The following diagram, adapted from Bicchieri 2012 and Mockus 2002, guides the analysis to identify the nature of a behavioral regularity. Focusing on the reasons for its existence, the decision tree can be used to determine if a behavioral regularity is a social norm. It is a social norm when individuals follow it because they see or believe that others around them engage in it and because they believe there is a social obligation to follow it.
Harmonization of Moral, Social, and Legal Norms. Carefully distinguishing among moral, social, and legal norms can be important for program design and measurement. For example, a baseline survey carried out by Project Concern International for USAID in Western Cape and KwaZulu-Natal, South Africa (Parker and Makhubele, 2010) disclosed the following attitudes. Only a small percentage of male and female respondents think it is okay for a husband to hit his wife over a disagreement; most think this would be bad for the children to see, and there are further findings showing that people believe that such violence is morally wrong. There are empirical expectations of normality, however: about half of respondents say that men in this community often hit their girlfriends. If the data are correct, the challenge here is social, not moral. A program engagement could appeal to widely held moral beliefs in order to motivate creation of new social norms supporting...
community regulation of spousal violence. This would be the harmonization of an existing moral norm with a new social norm that would better realize the moral norm.

In Senegal, a legal norm prohibiting FGM/C is not strong enough on its own to end the practice, but strengthens the new social norm of no cutting adopted by some communities (UNFPA-UNICEF, 2010). Where this happens, legal norm and social norm are in harmony.

In the 1990s Bogotá, Colombia was one of the most violent cities in the world. An innovative municipal administration, led by mayor Antanas Mockus, designed a Citizenship Culture program based in large part on the idea of the harmonization of moral, social, and legal norms. Mockus distinguishes three regulatory systems, and the main reasons to obey in each. The following table is an adaptation of his scheme (e.g., Mockus 2002).

<table>
<thead>
<tr>
<th>Positive Reasons</th>
<th>Legal Norms</th>
<th>Moral Norms</th>
<th>Social Norms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legitimacy of authority, respect for the law</td>
<td>Good conscience</td>
<td>Esteem</td>
<td>Acceptance</td>
</tr>
<tr>
<td>Negative Reasons</td>
<td>Authority's penalties</td>
<td>Bad conscience</td>
<td>Disesteem</td>
</tr>
<tr>
<td>A typical emotion in a violator</td>
<td>Fear</td>
<td>Guilt</td>
<td>Shame</td>
</tr>
</tbody>
</table>

The idea is to agree, under conditions of political pluralism, on a few basic moral norms. For enhancing citizen culture in Bogotá it was: human life is sacred. Legal norms should reflect the moral norms, that is their main purpose. Social norms should support correct moral and legal norms. In Bogotá, many did not obey traffic laws, and in part of the population there was a social norm of legal disobedience: one should not follow the law and those who did were looked down upon. In that context, adopting harsher legal penalties for traffic violations would have made no difference. Instead the city government made vivid to the public that traffic regulation is meant to reduce injury and death (moral conscience). In the city center, a corps of mimes ridiculed traffic violators (social rejection). Hundreds of thousands of thumbs-up (social esteem) and thumbs-down (social disesteem) cards were distributed to drivers who used them to manifest their approval or disapproval of the actions of other drivers. Normative expectations about traffic compliance changed, and as they did, injuries and fatalities went down. As injuries and fatalities went down, the city publicized the fact, changing empirical expectations in the population, leading to further decline. Due to a number of such initiatives respect for the law increased.
Review

These points can be simplified. From the game-theoretic tradition, when we observe a regularity of action in a group, we know to ask whether an individual’s action is:

- Independent of the beliefs, desires, and actions of others, or
- One-way dependent on the beliefs and actions of others, or
- Many-way interdependent with the beliefs, desires, and actions of others

From the social-psychological tradition we know to ask:

- What are the descriptive (empirical) aspects of a norm? (What do I and others do?)
- What are the injunctive (normative) aspects of a norm? (What should I and others do?)

From the philosophical elaborations of the game-theoretic tradition, we know to ask:

- What are an individual’s beliefs about what others in the reference network do (empirical) and her beliefs about what others believe one should do (normative)?

From norms-change efforts at large scale, we know to ask:

- How do moral, social, and legal norms influence the individual? Are the different regulatory systems in harmony or conflict?

An Aside on “Behavioral Observations.” Generally, for purposes of measurement, observations of actual behaviors are preferable to reports of desires and beliefs. However, it is difficult to infer from behavioral observations alone that a social norm is in place or that a change process is underway in a reference network. There are three different reasons for this. First, as Bicchieri (2006, 8) points out, some norms are proscriptive, they tell us not to do, and it is difficult to observe what people do not do.

Second, a social norm is held in place by the beliefs of individuals within a reference network about what the bad consequences would be if one did not comply. If the norm is effective, and many are, then one would rarely observe what happens in the event of noncompliance.

Third, we have talked about how others can motivate an individual’s norm compliance with positive sanctions such as approval, or negative sanctions such as disapproval – these are observable behaviors. But a positive sanction is an action which expresses an underlying attitude of esteem, and a negative sanction is an action which expresses an underlying attitude of disesteem (Brennan and Pettit 2004). A person may be motivated to comply with a norm because she believes that others have unobserved attitudes of esteem for compliance and disesteem for noncompliance, even though those others do not express those attitudes with observable actions of positive or negative sanction.
Suppose there is a local social norm to do one’s fair share by contributing a day’s work each month on the maintenance of the irrigation canal, and that one fails to comply with the norm. Also suppose that no one expresses disapproval of one’s failure to comply. Still, one might believe that others hold one in disesteem for that failure. One’s reputation would be damaged, and there are instrumental reasons to want a good reputation: one might worry that others’ unexpressed attitude of disesteem would in contexts beyond irrigation management move them to quietly avoid one’s company, to distrust one, to not initiate or to decline beneficial relationships in the future.

In addition, for some people on some matters, reputation is intrinsically valued, valued in itself, not just for its good consequences: one can be sensitive to the normative expectations of one’s beloved ancestors, of a dead parent, of total strangers, of future generations.

Measurement of change in individuals’ independent actions could be as simple as counting up how many engage in the harmful behavior before and after the program intervention. To identify social norms and measure the progress of their change, however, requires inquiry into an individual’s beliefs about others, and even into one’s beliefs about the beliefs of others. In the next section we offer ideas about how to do this.
III. Ways to Measure Social Norms

A social norm is interdependent between individuals in a reference network, thus exists with respect to the network, and is maintained by the reciprocal expectations of its members.

This section proposes some general observations and some sample techniques for the measurement of social norms. We consider:

- Detection of possible social norms from non-normative data in existing national household surveys (DHS or MICS)
- Inquiry into respondents’ beliefs about others; what they believe would happen for not complying with a norm; and the nature of their reference network.
- Simple identification of the reference network in order to measure an individual’s beliefs about others in it.
- Sample questions to measure respondents’ beliefs about others; an incentive-compatible way of doing so; ways to inquire about social norms in focus groups and to notice social-norms discourse.
- Standard methods for inquiring into sensitive topics.
- Strategies under development.

Simple Indicators in DHS or MICS Suggesting the Presence of a Social Norm

Most research surveys have not collected data specific to social norms, requiring researchers to attempt to identify and measure them by creative adaptation of data gathered for other purposes. Ongoing conversations among those working with UNICEF on social norms have identified some simple indicators suggesting the presence of social norms. They are based on inspection of Demographic and Health Surveys, and of UNICEF’s parallel Multiple Indicator Cluster Surveys. These indicators do not establish the presence of a social norm. Rather, they suggest that a more rigorous inquiry be undertaken. A more formal way to use DHS and MICS data to measure social norms is multilevel modeling, discussed below.

The suggestive indicators are: High spatial or ethnic variation in a practice, high discrepancy between attitude and behavior, comparative persistence of the practice, or comparatively rapid shift in the practice.

1. **High spatial or ethnic variation in the practice.** If prevalence of a practice is very high in one place or ethnic group, and very low in another one “nearby,” that suggests the possibility of a social norm. The more fine-grained the data, the more suggestive the indication.
DHS and MICS collect data on the location and ethnicity of respondents, but not data about social relations. Colocation and ethnicity are rough proxies for actual social relations among people. In the Figure below, we see subnational prevalence of female genital mutilation/cutting in Africa, and subnational prevalence of child marriage in India.

![Map showing geographical concentration and high variations of FGM/C prevalence and mean age at marriage in India.](image)

Statistics and Monitoring Section, Child Protection, UNICEF

Again, these results are not intended as scientific measures. Data at this meso level are hardly a proxy for the actual relationships of people at the micro level in reference networks of reciprocal expectation. The variations observed could easily be due to any number of other factors: climate, political economy, income, education, and so on.

2. High Discrepancy Between Attitude and Behavior. If many people oppose a practice, but nevertheless follow it, that suggests the possibility of a social norm.

For example, a UNICEF study on child disciplinary practices suggests the presence of a social norm of inflicting physical punishment on children. It shows that in the preceding month anywhere from about 55% in Kazakhstan to 95% in Algeria of mothers or primary care-givers who support physical punishment of children used physical or psychological violence to punish a child aged 2-14 (the median across countries is about 85%). For them attitude and behavior are consistent. However, it also shows that among caregivers opposed to physical punishment, 20% to 90% (the median across countries is about 50%) nevertheless punish children. For them attitude and behavior are inconsistent.
Attitude-behavior discrepancies are frequently observed, and could be due to any number of causes. Respondents may want to give an answer that pleases researchers. The discrepancy could also be due to any number of other reasons explored in the social psychology literature (detailed by Fishbein and Ajzen 2010, 53-63). One possibility is that individuals engage in the behavior because they see others engage in it (empirical expectations) and think that others believe they should engage in the behavior (normative expectations). They do so even though they personally are against the behavior and would stop if the expectations were absent. If this is the case, a social norm is the cause of the discrepancy.

3. Comparative Persistence of the Practice. Lengthy persistence of a practice can also be determined by simple inspection of DHS and MICS. Longer persistence could be defined by comparison to the shorter persistence of other practices, especially those which normally change rapidly with other “modernization” variables. For example, the 1995 Demographic Survey of Egypt shows no meaningful variation in the prevalence of female genital mutilation/cutting among ever-married women across seven 5-year age cohorts from 15-19 to 45-49: prevalence trembles between 96% and 98% (171). In contrast, the prevalence of no education among household females across seven 5-year age cohorts from 15-19 to 45-49 increases positively with age cohort, from 19.4% to 54.7% (20). Again, this contrast could be due to many other factors (maybe the government worked to expand education, but not to discourage FGM/C), and this finding is merely suggestive.
4. **Comparatively Rapid Shift of Practice.** Footbinding in China lasted for a thousand years, but ended in a single generation, at the beginning of the 20th Century, and never revived. This pattern indicates strong reciprocal expectations, causing both sturdy maintenance and rapid demise. Again, DHS and MICS data may indicate both lengthy persistence and a sudden shift. For example, data indicating a rapid increase in the percentage of population using improved sanitation in certain districts suggests that a social norm of ending open defecation may have been established there.

**Multilevel Modeling.** Researchers who would like to understand to what degree community level norms are associated with individual level outcomes are increasingly using multilevel modeling. Answers to questions reflecting the norms of interest are aggregated at a community level reflecting the mean value for that community (Storey & Kaggwa, 2009). These measures are then included in statistical regression models, with the addition of cluster level random intercepts for each cluster in the analysis. If the community level variables are significant in the model, then there is support for the fact that a community effect is actually correlated with the outcome of interest.

Multilevel modeling of social-normative influence based on DHS and MICS data has been used in a variety of studies, spanning outcomes as diverse as female genital mutilation/cutting (Hayford, 2005), domestic violence (Boyle et al., 2009), sexual violence against women (Peterman et al., 2011), youth aggression (Bernburg & Thorlindsson, 2005), alcohol abuse (Barrientos-Gutierrez et al., 2007), and adolescent smoking (Wium et al., 2006).

Aggregate measures of attitudes and behaviors are created from which norms are inferred. This use of DHS and MICS data to identify and measure social norms is limited in several ways, including the absence of standard questions measuring the respondent’s beliefs about what others do and what others think one should do, and the definition of community units for the analysis that may not coincide with actual communities of reciprocal expectation. Nevertheless, it is a good way to deal with the limitations of existing data, and the results of such analyses might prompt more targeted investigations.

**General Considerations in Measuring Social Norms**

A social norm is held in place by reciprocal expectations in a reference network. We would want to know what an individual’s beliefs are about others, her empirical and normative expectations. Because an interdependent norm is held in place both by an individuals’ beliefs about what would happen if she complies, and about what would happen if she did not comply, we want to be sure to know her counterfactual beliefs as well. We would also want to know whose expectations matter, what is the reference network for the particular norm.

**Beliefs About Others.** Suppose that use of contraception is a social norm in some group. Standard survey research would develop a measure of contraceptive use, perhaps self-report in a survey, or some more objective measure. From that the researchers would
make a population-level estimate of the prevalence of contraceptive use. The social-norms researcher has a different interest: What are the respondent’s empirical expectations? What does the respondent believe is typical? Does she believe that hereabouts none, few, some, many, or all use contraception?

Standard survey research would probably ask what the respondent’s attitude is towards contraception. The social-norms researcher wants to know, What are the respondent’s normative expectations? What does she believe about how many others in the reference network believe that she should use contraception? The accuracy of the respondents’ estimates is not the point. The purpose is to uncover what the respondent believes about the expectations of others in her reference network with regard to contraceptive use. If she believes, rightly or wrongly, that many do use contraception and that many believe one should do so (and prefers to comply with such empirical and normative expectations), then she is under the influence of a social norm.

For the measurement of empirical expectations and their change over time, the number of others she believes engage in the behavior of interest, the frequency with which she believes they engage in the behavior, and the salience or importance of each of those others to the individual being surveyed could be relevant. For normative expectations and their change over time, the number of others that she believes expect her to comply, the importance of each one of those others to the individual being surveyed, and the individual’s expectations regarding the strength of those others’ expectations of her could be relevant. Simpler measures, however, would likely be both more practical and sufficient for useful measurement results.

To identify and measure social practices it could be useful to know the following:

- What the respondent does
- What the respondent believes others do
- What the respondent believes about what others believe she does

- What the respondent believes she should do
- What the respondent believes others should do
- What the respondent believes about what others believe she should do

Standard survey practice is to identify an individual’s behavior (“What I do,” either self-report or some objective measure) and her attitude (“What I think I should do”). For social proof, and simple diffusion of innovation, what motivates the individual is, “What others do.” For the social convention of driving on the right, I drive right, (What I do), I believe that others do so (What others do), and I believe that they believe me to do so (What others think I do), reciprocal empirical expectations hold the convention in place. For an effective social norm, I believe that enough others are using latrines (What others do), I believe I should use latrines if others do (What I think I should do) and I believe that others think I should use the latrine if they do (What others think I should do).
The Tables below set this out schematically, with Table 1 listing all the various measures, Table 2 listing standard measures of behavior and attitude, and Tables 3-5 listing specific measures relevant to practices with different degrees of social interdependence.

**Table 1: Measures Relevant to Observed Regularities**

<table>
<thead>
<tr>
<th>What Self Believes About:</th>
<th>Self</th>
<th>Others – 1st Order</th>
<th>Others – 2nd Order</th>
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<tbody>
<tr>
<td>Empirical</td>
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<td>Normative</td>
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<tr>
<td>Self</td>
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<td>Others – 1st Order</td>
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<tr>
<td>Others – 2nd Order</td>
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**Table 2: Standard Measure of Behavior and Attitude**

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<tr>
<td>Others – 2nd Order</td>
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**Table 3: Social Proof: Do What Others Do**

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<tr>
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<td>Others – 1st Order</td>
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<tr>
<td>Others – 2nd Order</td>
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**Table 4: Social Convention: Coordinate on Mutual Interest**

<table>
<thead>
<tr>
<th>What Self Believes About:</th>
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<tbody>
<tr>
<td>Empirical</td>
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<tr>
<td>Self</td>
</tr>
<tr>
<td>Others – 1st Order</td>
</tr>
<tr>
<td>Others – 2nd Order</td>
</tr>
</tbody>
</table>

**Table 5: Social Norm**

<table>
<thead>
<tr>
<th>What Self Believes About:</th>
</tr>
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<tbody>
<tr>
<td>Empirical</td>
</tr>
<tr>
<td>Normative</td>
</tr>
<tr>
<td>Self</td>
</tr>
<tr>
<td>Others – 1st Order</td>
</tr>
<tr>
<td>Others – 2nd Order</td>
</tr>
</tbody>
</table>

A simpler but somewhat less informative version of these questions is:
• What do people typically do?
• What do people think it is appropriate to do?

Investigate Counterfactuals to Discern Causality. When people are asked by outsiders why they do something, especially, when asked about a social practice, they often say: that’s the tradition, that’s our custom, that’s how we do things around here. But what matters for compliance with a social norm is not just the believed consequences of what would happen if one were to comply, but especially the believed consequences of what would happen if one were not to comply.

If a social norm is effective and thus all or most comply, then what happens to someone who complies is plain to the observer. However, what would happen to the insider if he were to deviate from a social norm may be clear to the insider, but be much more obscure to the outsider. This is because the more effective the norm is, the less the outsider sees or hears about what happens to occasional deviators. If we only ask why a family marries the daughter at age 12, we would be likely to hear many explanations in the appreciation-of-tradition category. However if we ask what would happen if the family were to delay marriage of the daughter until she reached age 18, a more complete picture emerges.

Someone could answer, “She would marry at an older age, and nothing else,” and if this answer were common, one would tend to the conclusion that there is little social about the practice. Similarly, a response of, “She would suffer materially because there are no education or employment opportunities outside of marriage,” highlights reasons that are not directly related to the behavior or beliefs of others but are more of a political-economic nature. Likewise, a response of, “She might get pregnant and burden our family with an unplanned addition,” indicates a practical family concern, not a social one.

The responses “She would be seen as undesirable, the worst girls are married the latest, we may not find a husband for her,” and, “We would have to pay a higher dowry if she were older,” suggest that the reasons for the practice are social. Both imply an interdependent interest insofar as they relate directly to the behavior or beliefs of others in the group. It is worth noting that with both these reasons, if everyone in the group shifted the behavior – no girls were married before 18 - the objection would no longer apply.

“She might get pregnant and bring shame to the family,” also indicates social motivations, anticipation of negative social sanctions from other group members. “People here would think poorly of us for doing so” demonstrates sensitivity to normative expectations, which would reverse upon shift to a new social norm of marriage at 18. There are also likely combinations of the foregoing motivations.

Since direct questions put the respondent on the spot, indirect questions about what would happen to someone around here who did not comply with norm X could elicit more informative responses. Some individuals and populations may not usefully respond to questions about counterfactuals. An alternative may be to tell a culturally compatible story
about someone who had transgressed a local norm and faced a consequence, and to ask if the same thing would happen here.

**Identify the Reference Network.** The reference network includes everyone who matters to an individual in a certain situation. It could be those with whom one has repeated face-to-face relations, as in a women’s microfinance group. More likely than not it also includes indirect relations, friends of friends so to speak. It could include everyone whom one might encounter in a town. For anyone in Thailand, the reference network for the practice of driving on the left-hand side of the road would include all those whom one would expect to encounter on the roadways of Thailand. It could include fictional characters from stories, live skits, radio dramas or telenovelas (so long as the audience finds them sufficiently relevant in culture and context). As we said above, it could include one’s beloved ancestors, a dead parent, total strangers, or future generations. It could be as small as one’s household, depending on the practice.

The structure of ties in a network, and possibly their strength, shape the course of a change. With the advance of social network analysis, we are able to describe exact social relations among individuals, how the structures of relations vary, how the diffusion of social learning or social influence varies in different structures, what counts as a group, and more. Mackie (2000), for example, found that the spread of FGM/C abandonment in Senegal from village to village was in part catalyzed by overlapping horizons of marriageability between villages.

The simplest and most informal type of network analysis is just asking people who relates to whom with respect to a particular practice. For example, if supporting the organization of a community to shift to a new social norm of universal latrine usage, one can ask people in a village, Who defecates where? and Where does contamination spread? In total sanitation programs those inquiries are usually collaborative and quick.

For more formal research Valente (2010, 41-60) outlines five basic types of network data, and the methods by which they can be collected. The most elementary level, a **simple survey method**, can be utilized within any basic quantitative survey by simply asking with whom respondents have recently interacted, discussed a specific topic, or received some sort of assistance (Valente, 2010).
**Simple survey method for basic reference group information**

A study by USAID Guinea wanted to know the reference group for the FGM/C decision among urban Guineans (CRDH 2008). The study was a simple survey of people in the major cities of Guinea, gathering descriptive data, and it asked whom the respondent consults about more important issues. They found that lower-income individuals lived in ethnically homogeneous neighborhoods, that for more important decisions the respondent was oriented to the rural community of origin and its notables, and they are less exposed to communications media. Higher-income individuals lived in ethnically mixed neighborhoods away from extended families; for more important decisions were oriented to friends, coworkers, media figures, and house of worship; and were much more exposed to media messages. This basic information is relevant to the design of a FGM/C abandonment program.

A more complex method, known as egocentric data collection, involves asking the respondent to enumerate network members, and provide some additional information regarding their attributes. The next level of network data that Valente discusses, sequenced data or partial network data, involves using snowball sampling to follow the network nominations of individuals across a network.

The most complex yet powerful method of utilizing networks is to assess the network in its entirety, what Valente calls census data, or in other contexts is called sociocentric or complete network data (Valente, 2010). This requires much more involved data collection, including greater researcher resources, but can yield quite useful information regarding how people within a certain group are connected, and how those connections relate to the behaviors of interest. An example of sociocentric network data collection would be collecting network information on an entire village in Nepal.

Collecting complete network data, while the most valid means of assessing the social network of a community of people, is time consuming and expensive. It is too costly for most development organizations.

There is a less exact but less expensive method, however, that can be used if one is hoping to identify the most central in the network for the purposes of catalyzing norm change or assessing the progress of norm change. This “friends of friends” method capitalizes on an interesting social phenomenon that has been noted in network research: for any random person chosen from a network, that person’s friends on average will have more friends than the original respondent Feld. 1991); (Christakis and Fowler 2010). This is the logical result of the fact that the people with more friends make up a larger proportion of the overall friends of those in the network.

The authors suggest that this technique can be used to monitor and prevent the spread of undesirable contagions as well as promote the spread of positive new innovations, ideas, and possibly norms. It would involve randomly sampling respondents from the population.
of interest, inquiring about those with whom they are socially connected, and then tracking down those friends to enroll in the research or intervention. These friends could then be queried regarding their normative beliefs and expectations, monitored for their beliefs and attitudes regarding an intervention, and/or exposed to a norm changing intervention.

### Sample Strategies of Investigation

This is a novel inquiry. The sample strategies and surrounding analyses are offered as humble proposals, not as the final word. Both need to be refined in theoretical and practical collaborations with scholars, policy analysts, and field programs.

**Who is the Reference Network?** Understanding the structure of the reference network could identify its more influential members and likely paths of diffusion of persuasion and attitude change throughout the network. For survey and focus group research into the beliefs about others, needed for the more modest goal of identifying social norms and measuring their change, we have two options. First, we can ask a respondent what she believes about other “people who are important to me,” either generally, or with respect to the specific practice. A problem with that strategy is that the researcher does not know how each respondent conceptualizes “people who are important to me,” obscuring comparisons. However, if we were only interested in whether the social norm exists from the point of view of that respondent then the problem would be of lesser importance.

Second, we can ask a respondent what she believes about named individuals or role occupants. A problem with asking the respondent for named individuals is that in some contexts it could severely underestimate the reference network, because only a few individuals stand out but the reference group for a social norm can include not only named individuals, but deceased ancestors, role occupants, fictional characters in popular narratives, and a generalized other. The list of influential role occupants can be supplied by the researcher based on formative research or can be supplied by each respondent.

Fishbein and Ajzen (2010) say that results using the two methods are about the same and that the “people who are important to me” strategy is more streamlined, but other researchers have emphasized to us the importance of anchoring these questions using specific roles or people in the reference group. Pre-testing might help to decide what is best in a given context.

**Reference Group Data: Survey Questions.** Here are some sample questions intended to get at the reference network:

List three issues that are most important to you regarding your children:

List the three people with whom do you most frequently speak about issue 1
List the three people with whom do you most frequently speak about issue 2.
List the three people with whom do you most frequently speak about issue 3.

...
The following questions establish one’s reference group as it specifically relates to the target behavior. This will allow for anchoring of later social norms survey questions.

In order of importance (1 being most important), list the 5 people [or roles] whose opinion you most value. These people can be anyone – for example, they can be living or deceased, and they can be people you know personally or do not know personally.
1. 
2. 
3. 
4. 
5. 

When you make decisions about (target behavior), list the 5 people [or roles] whose opinion you most value (1 being most important). Again, these people can be anyone – for example, they can be living or deceased, and they can be people you know personally or do not know personally.
1. 
2. 
3. 
4. 
5. 

Note that if both sets of questions above are used, their ordering creates a framing effect. Asking about children’s issues first will prime respondents to think about others’ opinion in the context of children’s issues, which may be useful. If not, one could reorder the questions, although the new order would create other framing effects.

Additionally or as an alternative, a researcher can use information from formative research to pre-design a list of the top roles thought to be influential. Then participants can be asked to rank this pre-determined list. While this method may reduce specificity, it may produce more standardized data (rather than different lists of names) and be easier to implement in a more constrained survey environment.

In your group, different people can influence each other’s decisions. In the case of (target behavior), whose opinion matters most? (1 = most important) [determine roles based on input from focus groups, pre-tests, or interviews]

1. Local Religious Leader
2. Mother-in-law
3. TV personalities
4. Doctor
5. Police

Reference Group Data: Focus Groups. Focus group discussions could be fruitful in ascertaining what the reference group is among a specific group of people for a specific
behavior. The discussion questions in the previous section may elicit some of this information. Additional questions would include:

When making decisions about \( \text{[target behavior]} \), whose opinion matters most? Keep in mind that these people can be anyone. For example, they can be living or deceased, and they can be people you know personally or do not know personally.

Who in your group is considered most knowledgeable about \( \text{[target behavior]} \)? This could be an individual or a group of people.

When someone makes a decision about practicing \( \text{[target behavior]} \), will other people in the village find out about the decision? Who?

Do people in your group worry about provoking a certain response if they make an uncommon decision about \( \text{[target behavior]} \)? What is the response, and who is it from?

Such discussions may also disclose that the most apt way to conceive of the reference network with respect to a particular norm is not by name or by role, but by easily distinguishable group: caste members in this area, residents of this village, members of this religious house of worship.

Inquiries into Beliefs About Others. After establishing respondent’s reference group, the survey can proceed to ask questions about the respondent’s first and second order expectations (normative and empirical) with respect to this reference group. These responses will help show whether a social norm exists and to what degree. The following sample questions intended to identify social norms use the phrase \( \text{people important to you} \). However, they can be modified, as we discussed in the prior section on reference network, by substituting role occupants or named individuals.

Are we measuring the abandonment of a harmful social norm or the adoption of a beneficial social norm? It varies by context. In some instances the emphasis is on abandoning the harmful social norm, and the beneficial new norm would be simply the continued monitoring and sanctioning of the norm’s abandonment, perhaps as in the abandonment of FGM/C. In other instances, we would be interested in the abandonment of a harmful social norm, for example a norm of using corporal punishment to discipline children, and the adoption of a beneficial one, say a norm of not using violence. The new norm is not merely the negation of the existing norm and requires the establishment of a new set of practices.

Finally, the harmful practice could be a population regularity and not a social norm. Suppose a group does not use soap, but not using soap is not a matter regulated by social expectations. Here the emphasis is on adopting a beneficial new norm of proper soap usage. Or, when there is an existing beneficial norm, there may be program interest in strengthening it further. In our sample questions we use the general phrase “target behavior.” In a particular application one would substitute either the “harmful behavior”
or the “beneficial behavior.” If necessary in the context, one could separately ask the series of questions with respect to each.

**Caveats.** While the questions we propose are straightforward and possible to integrate into standard surveys, they pose challenges as well. Chief among them is ensuring that the target behavior has the same meaning to all respondents.

There are also unresolved issues with the questions pertaining to normative beliefs. When asking someone what he thinks he should do, it is not clear whether the question is about what he should do normatively (to fulfill a social obligation or to please others), about what he should do prudentially (for his own benefit), or both. The same ambiguity exists in the remaining questions that are intended to tap normative attitudes, (what others think one should do, and what one thinks others should do). In their current formulations, all the “should” questions could elicit responses about prudential attitudes, confounding the measure. This potential for confusion may also arise when translating questions into other languages. We need to test alternative formulations to see how problems might arise and how to solve them; and in any new setting pretesting would be desirable.

Additionally, there is the challenge in the measurement of counterfactual beliefs. Respondents may not understand or provide accurate information in response to hypothetical or counterfactual questions (what would happen if one did not do the target behavior). This could be particularly acute in situations where the current behavior is so common that its target alternative is rarely observed (not cutting a girl in a community where 94% of women are cut, for example). Respondents in such situations may have a hard time imagining what such a situation would be like.

**Survey Questions.**

**Measures Relevant to Observed Regularities**

<table>
<thead>
<tr>
<th>What Self Believes About:</th>
<th>Self</th>
<th>Others – 1st Order</th>
<th>Others – 2nd Order</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Normative</strong></td>
<td>2. What I think I should do</td>
<td>6. What I think others should do</td>
<td>4. What others think I should do</td>
</tr>
</tbody>
</table>

The first two questions are about the individual’s behavior and attitude.

1. Do you [do target behavior]?
   - □ Yes, always   □ Yes, more than half the time   □ Yes, about half the time
   - □ Yes, less than half the time   □ No

2. Do you think you should [do target behavior]?
The next questions elicit empirical and normative expectations, crucial to identification of a social norm. In questions 3a, 4a, 5a, and 6a we ask about beliefs concerning the proportion of the population holding a normative attitude and its strength, the most important information we need to know.

3a. How many of the people important to you (do target behavior)?
   - All of them
   - More than half of them
   - About half of them
   - Less than half of them
   - None of them

4a. According to the people important to you, should you (do target behavior)?
   - Yes, definitely
   - Yes, probably
   - Maybe
   - No, probably not
   - No, definitely not

5a. How many people important to you think you (do target behavior)?
   - All of them
   - More than half of them
   - About half of them
   - Less than half of them
   - None of them

6a. Do you think the people important to you should (do target behavior)?
   - Yes, definitely
   - Yes, probably
   - Maybe
   - No, probably not
   - No, definitely not

In some applications, there may also be a research interest in expectations about the frequency of the behavior, as in questions 3b, 4b, 5b, and 6b.

3b. On average, how often does a person important to you (do target behavior)?
   - Always
   - More than half the time
   - About half the time
   - Less than half the time
   - Never

4b. If people important to you think you should (do target behavior), on average how often do they think you should (do target behavior)?
   - Always
   - More than half the time
   - About half the time
   - Less than half the time
   - Never

5b. On average, people important to you think you should (do target behavior) with what regularity?
   - Always
   - More than half the time
   - About half the time
   - Less than half the time
   - Never

6b. With what regularity do you think the people important to you should (do target behavior)?
   - Always
   - More than half the time
   - About half the time
   - Less than half the time
   - Never
For investigation of social norms, a response of “Don’t know” is fundamentally different from one of “No response” and should be coded differently by enumerators. For the sake of simplicity, these options are not listed in the following sample questions, but should be included as survey response options. For our purposes, a genuine Don’t Know response can sometimes be important to the analysis. If an individual does an action, and doesn’t know whether others do it or whether others think he should do it, then there is likely little social influence on the individual with respect to that action. This is different from a “No response” answer where the respondent simply does not want to answer the question, perhaps out of insecurity, fear, or a reluctance to discuss a taboo topic.

**Using the Data.** How would we use these data to assess a social norm’s strength and prevalence? Suppose we ask about action X with respect to reference group Y. An individual answers:

<table>
<thead>
<tr>
<th></th>
<th>Self</th>
<th>Others – 1st Order</th>
<th>Others – 2nd Order</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>More than half the time</em></td>
<td><em>Less than half of them</em></td>
<td><em>Don’t Know</em></td>
</tr>
<tr>
<td><strong>Normative</strong></td>
<td>2. What I think I should do</td>
<td>6. What I think others should do</td>
<td>4. What others think I should do</td>
</tr>
<tr>
<td></td>
<td><em>Probably</em></td>
<td><em>Maybe</em></td>
<td><em>Probably not</em></td>
</tr>
</tbody>
</table>

For this individual, the action is an independent one, there is little to nothing social about it.

Suppose an individual gives these answers:

<table>
<thead>
<tr>
<th></th>
<th>Self</th>
<th>Others – 1st Order</th>
<th>Others – 2nd Order</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>More than half the time</em></td>
<td><em>All of them</em></td>
<td><em>All of them</em></td>
</tr>
<tr>
<td><strong>Normative</strong></td>
<td>2. What I think I should do</td>
<td>6. What I think others should do</td>
<td>4. What others think I should do</td>
</tr>
<tr>
<td></td>
<td><em>Definitely not</em></td>
<td><em>Probably not</em></td>
<td><em>Yes, definitely</em></td>
</tr>
</tbody>
</table>

Here, the individual’s action is conditioned by a social norm. She does the action more than half the time but thinks she shouldn’t do it at all. Everyone else does the action, they all think the respondent does it, and they all think she should do it. We can infer that in the absence of social expectations, the individual would not do the action.

A crucial feature of Bicchieri’s definition of social norm is that an individual have a conditional preference to comply with empirical expectations, normative expectations, or both. We have not discussed this condition, assuming that most people of interest in our cases do possess such conditional preferences. But they need not. Suppose an individual who does not care much about what others do or think he should do, in a reference network with a strong social norm. He would respond as follows:
Now, let’s aggregate answers for a population of 100 at time $T1$. We’ll score Always, All of Them, and Definitely as 4; No, Definitely Not, and None of them as 0; and take the mean of the responses.

A social norm is strongly in place.

Suppose now there is an effective program in place and the population starts believing the practice is inappropriate. However, the practice is highly interdependent in nature. At time $T2$ during the engagement we find this pattern of responses.

Most individuals in the population do the action, think others do it, and think that others think they do it. Most individuals, however, think that one should not do the action, and think that others should not. But many believe that others still think they should do it. This is a vulnerable social norm ready to collapse if a coordinated abandonment is organized. The typical person in the population believes others think he should do the action, when in fact they do not.

As we have seen, with a one-way dependent practice change in individual behavior typically trails changing attitudes in the population. But with a strongly interdependent practice, individual attitudes can cumulatively change with little accompanying change in
collective behavior until enough people in the population are ready to make a change. Investment in continuing activity without behavioral result could be a program concern. The measures described above enable program managers to detect changes in empirical and normative expectations. These indicate progress and predict eventual behavior change. Thus, to monitor change in social norms, it may be important to ask fewer questions at shorter intervals.13

Fishbein and Ajzen (2010) employ a similar line of questions using a 7-point Likert scale or slider. It is included here in case that question format is more useful in a specific context. It may also be suitable in situations where question space is limited. This slider format can be adapted to all of the questions above, recognizing however that its use may introduce challenges for comparing intermediate responses among respondents.

Most people who are important to me

do:____:____:____:____:____:____:____: do not

(practice target behavior)

Most people who are important to me think

I should:____:____:____:____:____:____:____: I should not

(practice target behavior)

Matching Games. Human subjects experiments sometimes uses rewards to incentivize more careful thought about others' empirical or normative expectations (Burks and Krupka, 2010). These kinds of “matching games” could be beneficial in situations where:

- Small rewards for accuracy would not have negative consequences (for the survey, for the program, or for the group’s greater social dynamics)
- It is thought (perhaps based on pre-testing) that responses about others’ behaviors will be inaccurate if not carefully thought through
- It is thought that respondents will be unlikely to give careful thought to the question without incentives

In a matching game, the average response of “what do you think someone does/should do” is compared to individual responses regarding “what do most people think I should do.” Those people whose responses to the second question most closely match the average response receive a reward. This can be applied to empirical or normative expectations. In each of the following two examples (the first empirical, the second normative), the first question is used to establish the mean, while the second question (directly relevant to social norms measurement) is what is rewarded for accuracy.

Note: With adequate sampling techniques, responses for the surveyed group should be representative of responses for the group as a whole. However, it is true that the matching game rewards respondents for providing the answer closest to the average answer for the

~

13 The idea of fewer questions at shorter intervals in norms-change measurement is due to Eddy Malesky, Associate Professor of Political Science, University of California, San Diego.
sample group, because the average answer for the population as a whole remains unknown. To ensure both precision and accuracy of responses, one would 1) take steps to ensure that the sample is representative of the full group, and 2) clearly define the group in question to respondents.

For empirical expectations:

[For respondents for whom the behavior is relevant]
Do you (do target behavior)?
- Yes, always
- Yes, more than half the time
- Yes, about half the time
- Yes, less than half the time
- No

How often on average does a person [for whom the behavior is relevant] practice (target behavior)?
- Always
- More than half the time
- About half the time
- Less than half the time
- Never

⇒ Match the average of first question responses to individuals’ second question responses

For normative expectations:

Should a person (do target behavior)?
- Yes, definitely
- Yes, probably
- No, probably not
- No, definitely not
- Unsure
- It doesn’t matter to me

[For respondents for whom the behavior is relevant]
According to most other people important to you, should you (do target behavior)?
- Yes, definitely
- Yes, probably
- No, probably not
- No, definitely not
- Unsure
- It doesn’t matter to them

⇒ Match the average of first question responses to individuals’ second question responses

The matching game would either sample a sub-group ahead of time for reward distribution immediately after correct responses, or it could sample everyone during the same survey with rewards distributed afterwards to respondents whose answers are found to come closest to the mean.

Note: A possible drawback is that the truth-telling incentive for all questions in this section may be weak if there is an program under way that covers the group. People may respond as they expect enumerators to want them to respond, whether that is the true answer or not. This issue applies as well to the matching games: a first respondent may predict that a second respondent would answer not truthfully, but rather in the way that the program wishes the typical respondent would answer.
**Simplest Strategies.** Here are some simple strategies of inquiry.

For integration into a quick Knowledge-Attitude-Practice survey, one could ask questions like these:

1. Is (target behavior) typical among your group?
2. Is (target behavior) appropriate among your group?
3. What do people say are the advantages of (target behavior)?
4. What do people say are the disadvantages of (target behavior)?

If someone answers Yes to to #1, the typicality question, but No to #2, the appropriateness question, that means that the person believes there is a population regularity, social proof, or social convention. To determine which, the researcher would consider the reasons offered by the respondent in answers to questions #3 and #4 – advantages and disadvantages.

If someone answers Yes to #1, the typicality question, and Yes to #2, the appropriateness question, that means the person believes there is a social norm. To check further whether it is a social norm, the researcher would consider the reasons offered in answers to questions in #3 and #4.

5. Do others still do (target behavior)? Why?
6. Have others stopped doing (target behavior)? Why?

Questions #5 and #6 are simple ways to determine if a behavior that had been previously identified to be a social norm has changed as a result of program interventions. Between 2006 and 2008, UNICEF commissioned quantitative-qualitative surveys to measure abandonment of harmful practices, especially FGM/C, in four community-conversation programs in Ethiopia. There are two measurement lessons from the effort. First, respondents almost uniformly said that they had changed their own behavior as desired by the program and a new law, but were more candid about whether others in the group had stopped or not. Second, simply asking whether practice continues or has stopped was as informative as more complex question strategies.

In larger, longer surveys offering structured lists of possible reasons for continuing or discontinuing a practice, include social acceptance (or where appropriate, social rejection) as one of the reasons.

**More Focus Group Strategies.** Focus groups provide a valuable complement to individual-oriented survey questions. While unable to show changes or central tendencies with statistical significance, focus groups are a rich source of qualitative information and cultural or programmatic detail.
Focus groups can be effectively employed to gather background information that will inform survey or project design. They can also be used as a monitoring or evaluation tool itself to gauge attitudes and practices – and how they change over the course of the engagement.

Questions are designed to stimulate discussion on the key belief or behavior without biasing or unintentionally restricting responses. Examples of questions found to work well (Shell-Duncan, 2012) are as follows:

Some people in this group (do target behavior). What are some of the advantages of this practice?
(for oneself, for one's child, for the community, etc.)

What are some of the disadvantages of this same practice?
(for oneself, for one's child, for the community, etc.)

The questions are asked about the old (perhaps harmful) practice, and then repeated about the new (perhaps beneficial) practice.

**Identifying Social Norms in Conversations.** We report the results of one qualitative study (Cislaghi, Gillespie, and Mackie 2010), to show that reference to social norms is quite identifiable in response to open-ended questions, and indeed in everyday conversation if one is alert to what to listen for. The researchers studied the content of human rights education sessions that are part of the West African NGO Tostan's Community Empowerment Program, and the content of post-session interviews. They found that the phrase “everyone agrees” occurred with regularity, and that about 80% of the time the phrase flags social norms.

Bicchieri’s (2006) definition of a social norm, which includes conditional preference for compliance in some reference network, empirical expectations about what others do, and normative expectations about what others think one should do, involving either belief in legitimacy or belief in the possibility of sanction, proves apt.

A statement of “everyone agrees” is associated with statements about what other people do (empirical expectations) and what other people think should be done (normative expectations). In our terminology, it indicates a belief that enough people in the relevant reference hold such expectations. A stark change in gender norms among participants in a Tostan class can be seen between Session 3 and Session 13. In Session 3 “everyone agrees” that women work in the domestic sphere and that is at should be, and in Session 13 everyone agrees that women should be treated equally and women can do anything a man can do. The Tostan conversations were most vivid about skits held in class; to replicate that catalyst one might present culturally appropriate vignettes.

Note that for the sake of identifying a social norm, what is most important to know is the second-order normative expectation (“What I believe others think I should do”). The
first-order normative expectation ("What I think others should do") is less important to know (the respondent may be the only one to think so, others don’t know what she thinks, and so on). Strictly speaking, the phrase “everyone agrees” includes both one’s first-order expectation and one’s second-order expectation, but it is because it includes the second-order expectation that it gives us the information we need.

- Empirical Expectation: “If there is work to be done everyone comes and does something, if everyone has to pitch in money for a cause everyone does, and if there is a gathering everyone leaves what they are doing and attends.”

- Normative Expectation: “My community supported me in taking this class. If you live with others you should support and encourage each other.” The use of the impersonal pronoun may refer to what the respondent thinks others should do (first-order normative), and it may refer to what the respondent believes the typical person in the community thinks one should (second-order normative).

- Positive Sanction for Compliance: “The men talked about how important it is for a person to work as a group and get to know people because you will need other people’s help all the time. You may want to build a house, or fence your yard, or get help cultivating your farm and you need people’s help with these kinds of things....”

- Enough Others in the Reference Network (I believe that enough others do and believe one should do): “....All the men agreed with this.”

Tostan’s education program goes through the basic human rights. The pedagogy includes skits where small groups rehearse and present about a village human rights issue. Although people are not accustomed to originating abstract moral principles, on specific issues in social context, participants are quite familiar, or rapidly become familiar, with what considerations apply. For example, participants act out a quarrel in which a man says that a woman is not doing enough work in the house, and she counters him. When asked what was most memorable about the session, respondents frequently mention one of the skits. After Session 3, a participant from Village C recalling a memorable skit, reports:

- “Another woman said her job is to cook and clean and she accepts that. Everyone agreed because that is what women do.”
  
  o Her role is to cook and clean, and she accepts that expectation of others as legitimate (normative expectation). Everyone agrees (enough others in the reference network). That is what women do (empirical expectation).

- “One woman said her job was to have babies and nurture. We all agreed with what she said because everyone appreciated how she accepted what she was in life.”
  
  o All agreed (beliefs about others). She accepts (normative expectations of others are legitimate) and everyone (enough others in the reference network) appreciates that (would positively sanction).
Ten sessions later, after Session 13, a participant from Village A reports, recalling a memorable skit:

- “One woman said it is important for women to work hard and strive to do anything a man can do. The whole class agrees with this.” And a man thinks it memorable that, “One woman said, the best thing for a man to do is treat his women equally. Everyone agrees with this.”
  - Important, best thing (normative expectation, legitimate, positively sanctionable). The whole class agrees, everyone agrees (enough others in the reference network).

These reports suggest a pronounced change in gender role expectations among class participants (although a change among the class is not sufficient, initially, to shift expectations in the village beyond).

The Tostan CEP also supports participants’ aspirations to become public actors, and helps them learn ways to do so effectively. Preparing and performing skits are part of that learning. These remarks follow Sessions 13 and 14. Over time we see that people go from concern with personal and family bad habits to concern also with community bad habits (social norms).

- A woman resolves to stop her own bad habits: “I have talked about all the habits I have had and I will stop those habits from this day forward.”

- Another woman talks about working to end our bad habits: “We talked about our good and bad habits and solutions to our bad habits. We are learning the best way to live our lives and be honest, healthy, and happy”

They also go from acting alone to change those bad habits, to acting together to do so. Notice the commitments to sanction others, and the indication of a social norm among class members to bring about norm reform in the larger community.

- A man says: “My role in the village is to be honest and if I see someone doing bad things I will tell them to stop.”

- A man says that we will do the same: “We are not afraid to tell people the truth, if they do something that is good we will say so and if they do something wrong we will tell them also.”

- Everyone in the class expects that others should work to promote abandonment of bad habits, an emerging social norm: “N said the women should work hard and work together and if they had any bad habits drop them. Everyone agrees with what he said.”

**Questions About Sensitive Topics.** Some issues, behaviors or attitudes are too sensitive to discuss. It can therefore be a challenge to pose questions regarding the respondent’s
engagement in the behavior or even her attitude with respect to the behavior. It may be equally challenging to pose questions on the beliefs of others with respect to the sensitive behavior, which we need to ascertain to analyze the presence of a social norm. The reader is likely aware of general guidance on this problem. Although it is beyond the scope of this paper to describe them here, we note that there are several methods to overcome this problem. One is the randomized response technique, familiar to many and originally developed by Warner (1965). Another is the less familiar, but perhaps more useful, unmatched count technique, which is useful in situations where respondents are willing to share information about sensitive behaviors if they can do so anonymously (Blair and Imai 2012).

Strategies Under Development. The authors are exploring ways to probe people’s responses to moral norms, social norms, and legal norms. In contexts where multiple systems of regulation apply, it is important to know how they do, how they might conflict, and how they might reinforce each other.

This approach is inspired by Antanas Mockus and the NGO he founded in Colombia, Corpovisionarios. Corpovisionarios has administered a Citizen Culture Survey since 2001. The survey has been repeatedly applied, adapted, and refined; and strategies of inference from the data richly developed. The authors have inspected the survey, which is proprietary data.

What we report here is the simplest way to explore the harmonization of moral, social, and legal norms, inspired by Mockus’ scheme. These questions can be administered before, during, and after an engagement, to track changes. We ask about respondents’ own reasons for action or inaction as well as their beliefs about others’ motivations.

A problem with direct questions about motivations for one’s behavior is that they can yield vague or inaccurate results. If field testing suggests that respondents have a difficult time answering the following fairly direct questions about motivation, an alternative approach such as focus groups may be preferable.

Do you (do target behavior)? [yes/no]

Please identify the top three reasons why you [do/do not] (do target behavior)? Rank responses 1-3 with 1 being the most important.

- Respect for the law
- Fear of legal penalties
- Good conscience
- Bad conscience
- Esteem of others or their acceptance
- Disesteem of others or their rejection

Do most (people important to you) in your group (do target behavior)? [yes/no]
Please identify the top three reasons why they [do/do not] \textit{(do target behavior)}? Rank responses 1-3 with 1 being the most important.

- Respect for the law
- Fear of legal penalties
- Good conscience
- Bad conscience
- Esteem of others or their acceptance
- Disesteem of others or their rejection

Next, narrative-based and image-based approaches offer more robust ways of understanding the complexities of a situation. They also allow individuals to ground themselves and their responses in a specific situation, even if it is one that may not occur frequently in every-day life. As long as these methods accurately convey the situation intended (to be assessed in a pre-test phase), they can improve accuracy of responses without needing to use abstract hypothetical or counterfactual survey questions. Such methods can also provide the basis for semi-structured interviews or focus groups, which will elucidate complementary qualitative data on the frequency of a current or new behavior, its acceptability, and any associated positive or negative social sanctions.

\textbf{IV. Conclusion}

The Project will continue to revise and improve this document, with UNICEF headquarters and field personnel involved in policy or program about the organization’s current monitoring and evaluation practices. It will further identify opportunities in currently collected data to identify social norms and measure norms change, and will propose new methods compatible with current practices. As the Project continues, it would experiment with differing methods in specific field circumstances.


**Works Cited**


