

Reframing the Practice of Social Research¹: Solving Complex Problems by Valuing Positive Deviations

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*We dance round in a ring and suppose,
But the Secret sits in the middle and knows.*

Robert Frost (1942)

Let us begin by invoking a Sufi tale. In one of his hundreds of guises, the mystical Sufi character Nasirudin appears on earth as a smuggler, arriving at the customs checkpoint each day leading a herd of donkeys. The customs inspector would feverishly turn the baskets hanging on the donkeys upside down to check the contents, hoping to nail Nasirudin in an act of wrongdoing. He, however, never found anything of interest, and hence had little choice but to let the smuggler go free.

Years go by, and Nasirudin's legend as a smuggler grew while the inspector grew ever more frustrated. One day, after Nasirudin and the inspector had retired from their respective occupations, their paths crossed. The former inspector pleaded, "Tell me, Nasirudin. What were you smuggling?"

"Donkeys," Nasirudin said.

Nasirudin's donkey story holds important lessons for social, organizational, and behavioral change scholars and practitioners. Often the solutions to highly intractable problems, whether in communities or organizations, stare us in the face, but remain invisible in plain sight. To discover these invisible solutions, we need to reframe (and even flip) our way of thinking, letting go of cherished mindsets, asking questions that have never been asked.

The purpose of the present article is to analyze an approach to solving social problems that is commonly referred to as the Positive Deviance (PD) approach. The PD approach believes that the wisdom to solve social problem is distributed, and often lies with individuals who we are least

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likely to suspect as holders of the solution, flipping thereby the tenets of the normal curve that social scientists especially hold dear. In this article, we discuss the tenets of the PD approach, including its applications in Vietnam in the 1990s to address widespread malnutrition, as also its more recent application in India to design a multimedia intervention on

The Positive Deviance Approach to Solve Complex Social Problems

“Positive Deviance is much more radical than even its practitioners imagine. Radical in the best sense, it is joining a new field of inquiry, which might be called communal transformation.”

Peter Block, renowned organization change scholar and global consultant (in Singhal, Buscell, & Lindberg, 2010, p. vii)

The Positive Deviance (PD) approach is based on the premise that every community has individuals or groups whose uncommon behaviors and strategies enable them to find better solutions to problems than their peers although everyone has access to the same resources and challenges (Pascale, Sternin, & Sternin, 2010; Singhal & Dura, 2009).

Consider a medical doctor who makes rounds on patients in a way that he visits the ones carrying an infectious disease last, and a nurse who uses her “knuckle” (not her fingertips) to press the hospital elevator button. In both cases, these small, non-normative behaviors reduce the risk of

gender equality and small family size. Our analysis raises theoretical implications for questioning conventional social science practices, urging shifts in our conceptions of what constitutes expertise and where it lies, valuing distributed and situated innovativeness, and overcoming analysis-paralysis.

spreading deadly infections, saving patients’ lives (Singhal, Buscell, & Lindberg, 2014). However, such micro-behaviors are ordinarily invisible to others, and especially to expert change agents.

In the above hospital scenario, the medical doctor and the nurse represent “deviants” because their uncommon behaviors are not the norm; they are “positive” deviants because they have found ways to effectively address the problem, while most others have not (Singhal, 2013; Singhal, Buscell, & Lindberg, 2010). The PD approach relies on unearthing the wisdom that lies hidden with ordinary people (or “unusual suspects”) and amplifying it in a process that leads to sustainable organizational and community transformation. Let us illustrate with an example from Vietnam.

Solving Malnutrition in Vietnamⁱⁱ

In 1990, Save the Children U.S. sent Jerry and Monique Sternin to Vietnam to implement a large-scale program to combat childhood malnutrition. With 65% of all Vietnamese children under the age of five malnourished, Vietnamese officials challenged the Sternins to come up with a

sustainable solution, and to show positive results within six months.

Tasked with the impossible, the Sternins wondered if the concept of positive deviance, codified by Tufts University nutrition professor Marian Zeitlin, might hold promise. Zeitlin was investigating why some children in poor households were better nourished than others (Zeitlin et al., 1990). What were they doing that others were not?

Because childhood malnutrition rates were high in Quong Xuong District south of Hanoi, four of its village communities were selected for a nutrition survey. Some 2,000 children under the age of three were weighed and their locations mapped.

The Sternins posed the quintessential *whodunit* PD question: *are there any well-nourished children who come from very, very poor families* (Singhal, Sternin, & Dura, 2009)?

The response: Yes.

Indeed, there were some children from very poor families who were well-nourished.

Those that had managed to avoid malnutrition without access to any special resources represented the positive deviants.

Through a process of community-led self-discovery, it became apparent that the PD families were practicing a few simple behaviors that others were not:

- Family members collected tiny shrimps and crabs from paddy fields and added them to their children's meals.

These foods are rich in protein and minerals.

- Family members added greens of sweet potato plants to their children's meals. These greens are loaded with micronutrients. While these foods were accessible to everyone, most community members believed they were inappropriate for young children.

- PD mothers and caregivers were feeding their children smaller meals three to four times a day, rather than the customary two big meals twice a day; and

- PD mothers and caregivers were actively feeding their children, rather than placing food in front of them, making sure there was no food wasted.

After some trial and error, a two-week nutrition program was designed in each of the four intervention villages. Mothers whose children were malnourished were asked to forage for shrimps, crabs and sweet potato greens. The focus was not on information-transfer, but rather on action, practice and embodied experience.

In the company of positive deviants, non-PD mothers of malnourished children learned how to cook new recipes using the foraged ingredients. These mothers practiced the behaviors that the PD families had discovered on their own.

Before feeding their children, mothers weighed them. No food was wasted as the children were actively fed. Upon returning home, the non-PD mothers were encouraged to feed their children three or four small meals a day instead of the traditional two meals.

Such feeding and monitoring continued throughout the two-week program. Mothers could actually see their children becoming noticeably healthier. The scales were tipping!

Then the project expanded to another 10 adjacent communities. Community members engaged in a process of self-discovering the PD behaviors, as opposed to importing them from neighboring communities. The process of self-discovery was found to be as important as the actual behaviors that were uncovered.

Research showed that malnutrition decreased by an amazing 85 percent in the first 14 PD communities.

The program was scaled up by building a *living university* around these fourteen PD communities. Teams from other communities with high rates of malnutrition spent up to two weeks directly experiencing the essential elements of the PD process. When they returned home, they would implement the PD nutrition program in at least two local communities.

Through this lateral expansion, the PD intervention became a nationwide program in Vietnam, helping over 2.2 million people improve their nutritional status, including over 500,000 children. A later study, conducted by researchers at Emory University, showed successive generations of impoverished Vietnamese children in the program villages were well-nourished (Mackintosh, Marsh, & Schroeder, 2002).

Reframing the Normal Curve in Social Research

The Positive Deviance approach *reframes* our conventional ways of understanding and solving social problems. To illustrate what we mean by reframing, let us first try to unravel the concept of framing.

Gregory Bateson, husband of the noted anthropologist Margaret Mead, was one of the early scholars to write about framing in his book *Steps to an Ecology of Mind*. Bateson (1972) examined how the human mind worked, including how it processed, perceived, and shaped an individual's relationship with other individuals and with what was happening around them. Noted sociologist Erving Goffman (1974) defined *framing* as a schema of interpretation that people utilized to understand and respond to events. For both Bateson and Goffman, framing necessarily involves a process of selective representations, perceptions, and/or interpretations as the frame specifies the boundaries of what falls inside, and what is outside. For instance, an optimist may frame the glass as half-full, a pessimist as half-empty, and a utilitarian may simply drink-up to quench their thirst. The upshot: framing affects the choices one makes, and the outcomes that follow (Kahneman & Tversky, 1984).

So, how does the Positive Deviance approach reframe our cherished understanding of the normal curve distribution? And, what does this reframing mean for the way we understand and solve complex social problems?

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The normal (or Gauss) distribution, signified by the bell curve, is the most important distribution in the social sciences. Symmetrical and clustered around the mean, the curve allows us to specify the number of observations that fall under specific sections (see Figure 1). The normal curve is now routinely used to describe variation in human phenomena such as weight, height, IQ or other health and lifestyle parameters.

Social scientists use the normal curve to make inferences about populations from sample statistics. By paying attention to the mean values and standard deviations with a representative sample, one can predict—with a high degree of

Prof. Arvind Singhal and Dr. Erik Bjurström confidence—the odds of solving a problem.

Normal bell curves, for instance, can tell social change practitioners that most African-American children who grow up in poor inner-city neighborhoods in a single parent household are highly unlikely to finish high school in a timely manner. Or that most Pashtun women living in mountainous communities of Pakistan's Khyber Pakhtunkhwa Province are at high risk for pregnancy-related complications. Or that most poor, uneducated and newly-married women in rural areas of India's Bihar State are highly unlikely to control their use of contraceptives.

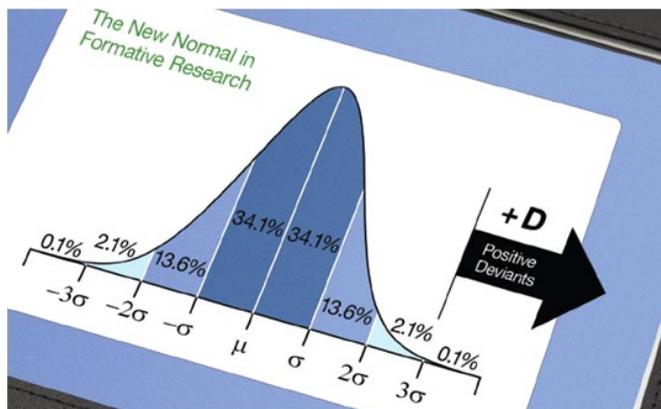


Figure 1. The new normal for social change interventions: focus on learning from the positive deviants 3-plus more standard deviations away from the average.

In other words, social change practitioners can gain insights on the nature and scope of a social problem in a population, including what is normative—i.e. what is the most likely case, scenario or outcome for most of people.

Such data, when collected and analyzed before designing an intervention, can help social change practitioners gauge the

severity of a problem in a community. Actionable intervention strategies can then be employed to plug gaps and deficits.

Unfortunately, our record in solving social problems is highly dismal when normal distributions are used to gauge what ails most of the population.

Nassim Taleb, author of *The Black Swan*, has extensively written about the

pitfalls of overly relying on the bell curve, especially in social spheres. The bell curve glorifies mediocrity, disregarding the promise lurking in large deviations and outliers (Taleb, 2007). By focusing attention on what is most probable, the unusual, the implausible, and the exceptional are routinely ignored.

In contrast, in the positive deviance approach, the identification of the “exceptional” represents a starting point. In PD, the normal and normative are of secondary interest. The seemingly impossible and implausible are of most interest.

In calling for a new normal to solve complex social problems we ask to focus not on what is wrong with most people, but rather what is working with the very few, the exceptional, the positive deviants.

In the Vietnam case discussed above, this new normal was exemplified in the implausible question: *are there malnourished children who come from very, very poor families?*

In the past two decades, this implausible PD question has been asked in over 40 countries to address and solve a large number of intractable social problems: reducing endemic malnutrition; combating child marriage, decreasing neonatal and maternal mortality; reducing goiter and diseases of micronutrient deficiency; reducing hospital-acquired infections in health care; increasing educational success; reducing sex trafficking and reintegrating returned child soldiers; boosting organ transplantation

rates and cancer screenings; increasing mental well-being and psychological resilience; preventing and controlling malaria and chagas; and reducing corruption and extortion.

In the next section, we discuss how the cherished normal curve thinking was reframed and flipped through the PD approach, and how it yielded insights to tackle a highly complex social problem in India.

Finding Hidden Solutions to a Complex Problem in India

In 2012-13, in collaboration with a dozen field researchers, one of the present authors (Singhal) led a formative research inquiry in India to help design a multimedia social change initiative to promote small family size and the status of women, emphasizing delay of first child and spacing between children, countering the preference for male children, and encouraging adoption of contraceptive methods. This multimedia intervention (presently in Season 2 in 2015) centers on a highly-engaging television and radio serial drama titled “*Main Kuch Bhi Kar Saktee Hoon*” (I, a woman, can achieve anything). The television serial in Season 1 (in 2014) was viewed by an estimated 60 million audience members, making it one of the highest rated programs on Doordarshan, the Indian national television network.

In conducting the formative research instead of gathering deficit-based “normative” data, we focused attention on positive outliers and unusual suspects: *Were there individuals, couples, or health*

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workers who had found better family
planning solutions than most of their peers
without access to any extra resources? If
so, what did they do?*

By analyzing archival data and key informant interviews we identified several positive deviants. What were they doing that resulted in highly successful outcomes?

One respondent, a married woman, significantly reduced the risk of pregnancy by closely tracking her menstrual cycle and avoiding sex during the days she was likely to conceive. During these “*na na din*” (or “no, no days”) she employed a variety of excuses to avoid penetrative intercourse. She would tell her husband: “I am keeping a fast for a few days for your health.” On her “*haan haan din*” (“yes, yes days”) she coyly noted: “I go out of my way to please him.”

While most married women in this setting would be unable to negotiate sex, our positive deviant had found a creative, culturally-appropriate way to reduce the risk of pregnancy. After all, how could a husband overrule his wife’s sacred fast—one undertaken for *his* sake!

We also met a health worker who employed certain uncommon practices that yielded high rates of male vasectomy. When he organized vasectomy camps in rural areas, several men who previously had agreed to a vasectomy, either did not show up on the appointed day, or hesitated to be the first to undergo the procedure. Their dilly-dallying negatively impacted other participants’ motivations, and many

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assembled men would dissipate to the chagrin of camp organizers.

To overcome this problem, our health worker arranged for a few men, who were highly-convinced vasectomy seekers, to stride up—in open view of other men—and demand that they be the first to undergo the procedure. Post-procedure, they were purposely urged to stride out with “*mustaid chaal*” (the walk of a stallion), boasting about the ease and painless nature of the vasectomy. Such purposive planning and orchestration of vasectomy prospects by the health worker delivered significantly better vasectomy completion rates, in comparison to his peers.

While most health workers would shrug their shoulders when vasectomy prospects walked away, the PD health worker had hit upon an effective practice: present other men in full view of others as social proof!

We also crossed paths with a staff nurse in the OB/GYN unit at a large public hospital in New Delhi who was far more effective in convincing her clients to adopt an intra-uterine device (IUD) as a birth control method than most of her peersⁱⁱⁱ i.e. a positive deviant in her lot (Anand et al., 2015). “Positive” because she provides her clients an opportunity to gain some control over their biology, and “deviant” because what she does is not a normative practice.

The staff nurse’s accomplishment is even more commendable given her clients – mostly Muslim women from low socio-economic class — represent one of the toughest groups to be persuaded for the

adoption of any form of birth control. On average, Muslim women of low SES in India bear more children than women of other groups, and are socialized to believe that in their cultural-religious traditions “if they close the doorway to producing children, than Allah will even deny them their last prayers.” Translation: There could be no bigger sin committed than the adoption of any form of contraception.

What PD practices did the staff nurse engage in that yielded effective outcomes?

First, she begins the conversation about adopting a Copper-T, a common form of IUD, only when the women come in for their check-ups late in the third trimester of their pregnancy. This is the time that pregnant women feel “most pregnant,” get tired easily, and find difficulty in juggling their current pregnancy alongside taking care of their children. Timing-wise, the client women are more likely to be receptive to entertaining such a conversation.

Second, she emphasizes that adopting an IUD is like “tying a rubber-band in one’s hair.” The rubber-band keeps the hair tight and secured, and can be removed any time. Women readily grasp this rubber-band analogy as they are quite used to tying and untying their hair, several times, on a daily basis.

Third, if such conversations still do not yield a voluntary adoption, than the staff nurse may recruit others for multi-modal persuasion. For instance, the lady doctor on the unit, who is deeply respected and represents an aspirational role model for the clients, may say something like “I have

been on an IUD many times in order to space my children.” Her words carry weight among the clients. They feel that “If she can do it, or has done it, we can too?”

The staff nurse may additionally persuade by noting especially during or after labor: “Do you really want to experience this kind of pain within a year?” She knows that if a woman returns home after her delivery, it is very hard, if not impossible, to bring her back for an IUD insertion.

The timing of this message is critical: “Before a woman leaves the hospital, an IUD must be in place,” the nurse notes. A potential adopter must know that they have the full support and the encouragement of the medical team to exert their agency. Many comply.

What is noteworthy about the fasting strategy of the married woman during her “no no days”, the purposive social proof “stallion-walk” practice of the health worker, and the persuasive strategy of the staff nurse is that they all represent exceptional, non-normal actions. These practices were discovered because we actively sought to reframe the cherished assumptions and premise of the normal curve, focusing instead on finding the statistical outliers, the positive deviants.

Implications for Reframing the Practice of Social Research

By challenging the “holy grail” of the normal curve, the PD approach questions the dominant standpoint of conventional social science frameworks. It opens the doorway to question the social scientific

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obsession with framing problems as deductive hypotheses, and the established practice of making inferences based on probabilistic distributions such as the normal curve.

Further, the PD approach raises several other important theoretical questions about the nature and practice of social science research, including shifts in our notions of where knowledge (and expertise) resides, about distributed and situated innovativeness, and the value of overcoming analysis-paralysis through simple local actions (van Knippenberg et al, 2015). We group these questions under a few headings:

Expertise, Bounded Rationality, and Inattentional Blindness

How can Nasirudin's donkeys be so hidden from plain view? Part of the answer lies in the bounded rationality of human minds (March & Simon, 1958). The expert's problem-solving frame bounded in a certain rationality (Schön, 1983), selectively processes what is meaningful and relevant (see Alvesson & Sköldbberg, 2009; Czarniawska, 2004), and hence suffers from inattentional blindness (Mack & Rock, 1998). The expert's frame manifests as "trained incapacity" making invisible the solutions that already exist, akin to Nasiruddin's donkeys.

One of the follies of expertise, especially in social sciences, is its fondness to favor complex, analytical answers. Czarniawska (2004) calls for humility among experts, arguing that the relative failure of social sciences to adequately predict human behavior could be viewed

Prof. Arvind Singhal and Dr. Erik Bjurström as its greatest achievement, for it bestows faith in the central role of human agency. That is to say, ordinary people facing high odds are perfectly capable of generating intelligible solutions. Experts can only "see" them by asking uncommon questions such as the ones that emanate from a PD frame.

Practice Turn, Situated Innovativeness, and Social Proof

While scholars are notorious for employing an expert frame to focus on decontextualized problems and then to communicate decontextualized solutions to practitioners, the PD approach with its focus on practical problem-solving is in line with the "practice turn" in social science (Knorr Cetina, Schatzki & von Savigny, 2000). This practice turn seeks to reconcile conventional and universal practices of science with empirical evidence of human agency and situated innovativeness. Simply put, this practice turn represents a move away from being obsessed with *scientific proof*, i.e. evidenced-based practice and valuing *social proof*, i.e. practice-based evidence.

While the field of economics has insisted on the individual rationality of actors and social theory has emphasized the role of societal structure in determining individual behavior, the practice turn in theory tries to strike a balance between the two, emphasizing the importance of context, and the possibility for individuals within that context, to make a difference through their agency and innovativeness (Schatzki, 2005). That is, within the bounds of any given context, rational and

self-reflective innovativeness is possible and plausible—as evidenced by the PD experience.

A core insight from the PD world is that this situated and innovative problem-solving does not happen widely. As individuals take part in overlapping networks of different practices, the source of practice variations may represent simple mutations of practice, or a mere coincidence that through action and self-reflection generates novelty.

Hence, the challenge is how to *identify* and *spread* this process of distributed innovativeness.

We have shown that by asking improbable questions such as “*What is working for a group of individuals against all odds?*” one can find positive outliers i.e. pinpoint where innovativeness is both distributed and situated.

But how can such innovative practices, once identified, be spread in everyday life as well as in social scientific practice. As the PD experience shows, having the information on “what is working” is not enough. Instead, this unearthed knowledge needs to be leveraged and activated through contextualized mobilization. The PD approach involves a process of community-led discovery of simple solutions to complex problems, and then for the community members to “act their way into a new way of thinking.” From a research perspective, it is not just a matter of reframing the normal curve, but of doing science in new ways – including active interaction with members of the communities.

Action over Analysis

The PD approach not only questions traditional ways of conducting social science, but also provides concrete solutions and answers, suggesting that an obsession with analysis may not always be a rational response. Our experience with the PD approach to solving complex problems suggests that in environments characterized by complexity, simple *actions* may make more sense than *analysis*. That is, researchers must actively guard against analysis-paralysis.

Herbert Simon likened bounded rationality with a pair of scissors with the mind representing one blade and the structure of the environment the other. The challenge: how to bring the two together so the scissor could cut (Gigerenzer, 2008). By reframing questions and through embodied action, simple solutions could be uncovered through the PD approach that would not be possible with complex, acontextual analysis. As Gigerenzer (2008, p. 89) noted in his refrain to social scientists: “[T]he player’s goal is not to predict the landing point, but to be where the ball lands.”

In a similar vein, when a nurse uses her knuckle instead of fingertips to press the elevator button to limit the spread of infections in a U.S. hospital, or a Vietnamese mother adds the shoots of sweet potato to her child’s meal, such habits do not necessitate profound insights into bacteriology or nutrition. Instead, the efficiency of the solutions lies in their quality of simplicity, which additionally makes it contextually salient. Importantly,

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the simple action demonstrates the intelligibility of a small meaningful practice variation that engenders big effects.

We believe that there exists plenty of room to question and reframe our cherished theoretical assumptions about how individuals, organizations, and societies operate. Our understanding of

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what constitutes knowledge, and what represents the rational path to spur micro, meso, or macro-level changes can benefit from flips and shifts (van Knippenberg et al, 2015). The PD approach is one path of scholarship that speaks loudly and cogently to the practice-turn in social science. It deserves more careful attention, exploration, and study.

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Endnotes

ⁱThe present article draws upon Singhal (2013) and Singhal, Buscell, and Lindberg (2010; 2014).

ⁱⁱ The Vietnam positive deviance case is well documented in Singhal, Dura, and Sternin (2009); Pascale, Sternin, and Sternin (2010).

ⁱⁱⁱ This case draws upon Anand et al. (2015)