Positive Deviance and Social Change
By Arvind Singhal, Ph.D.

Local wisdom trumps outside expertise when it comes to solving the most intractable problems. Internal change agents can solve such problems as widespread child malnutrition. Arvind Singhal, Ph.D., Samuel Shirley and Edna Holt Marston professor and director, Social Justice Initiative Department of Communication, at the University of Texas at El Paso, explains the power and effectiveness of "positive deviance." The following, a shortened version of a chapter to appear in Advances in the Study of the Diffusion of Innovations: Theory, Methods, and Application, by Arun Vishwanath and George Barnett, focuses on how a team working in Vietnam used the positive deviance approach. They learned what was going right in a community and amplified it—instead of zeroing in on what was going wrong and "fixing" it.

In the seven decades since the publication of the Ryan and Gross (1943) diffusion of hybrid seed corn study in Iowa, social change practitioners based the classic diffusion of innovations paradigm, and its practice, on the following tenets that innovations come from the outside are pushed and promoted by a change agency through expert and knowledgeable change agents who use persuasive communication strategies to plug existing knowledge-attitude-practice (KAP) gaps among the client audience by harnessing the influence of charismatic opinion-leaders, who serve as visible role models of adoption for the non-adopters.

In this essay, we introduce an alternative approach to diffusing innovations—positive deviance (PD). PD turns the classical diffusion paradigm on its head.

We are not suggesting the PD approach substitute for the classical diffusion of innovations paradigm. Rather, we argue that the PD approach provides additional options. We believe that often the wisdom to solve intractable social problems lies within the community. Diffusion in the PD approach is an "inside-out" process, in contrast to the classical dominant framework of "outside-in" diffusion.

The PD approach to diffusing new ideas and practices has been used during the past two decades in more than 40 countries to address a wide variety of intractable and complex social problems, including:

- Solving endemic malnutrition in Vietnam (Zeitlin, Ghassemi, & Mansour, 1990; Stermin J., 2003);
- Decreasing neo-natal and maternal mortality in Pakistan (Stermin, M.,2005);
- Reducing school dropouts in Argentina (Dura & Singhal, 2009);
- Reintegrating returned child soldiers in northern Uganda (Singhal & Dura, 2009);
• Reducing drastically the spread of hospital-acquired infections in U.S. healthcare institutions (Singhal, Buscell, & McCandless, 2009); and
• Addressing many other issues (Pascale & Sterin, 2005; Pascale, Sterin, and Sterin, 2010).

In this essay we describe the PD approach, including its key tenets and principles, by analysing its origins in Vietnam to combat endemic malnutrition. Through the experience of this pioneering application of PD in Vietnam, and drawing upon dozens of others that have followed, we argue for an alternative conceptualisation of diffusion of innovations—one that turns upside down our cherished conceptualisations of expert and outside change agents, the notion of filling KAP gaps, the traditional role of opinion leaders and the like.

**What is Positive Deviance?**
PD is an approach to social change that enables communities to discover the wisdom they already have and then to act on it (Sternin & Choo, 2000; Pascale & Sterin, 2005; Singhal & Dura, 2009).

PD initially gained recognition from the work of Tufts University nutrition professor Marian Zeitlen in the 1980s. Zeitlen focused on why some children in poor communities were better nourished than others (Zeitlin, Ghassemi, & Mansour, 1990). Her work used an assets-based approach, identifying what’s going right in a community and amplifying it, as opposed to focusing on what’s going wrong in a community and fixing it.

Jerry Sternin, a visiting scholar at Tufts University, and his wife, Monique Sternin, built on Zeitlin’s ideas to organise various PD-centred social change interventions around the world. They institutionalised PD as an inside-out diffusion of innovations approach by showing how it could be implemented in a community setting (Papa, Singhal, & Papa, 2006).

**Combating Malnutrition in Vietnam**
In December 1990, the Sternins and their ten-year old son, Sam, arrived in Hanoi to open an office for Save the Children, a U.S.-based NGO. Jerry’s mission: Implement a large-scale program to combat childhood malnutrition in a country where two-thirds of children under the age of five suffered from malnutrition.

The Vietnamese government had learned from experience that results achieved by traditional supplemental feeding programs were not sustainable. When the programs ended, the gains usually tapered off. The Sternins had to come up with an approach that enabled the community, without much outside help, to take control of their nutritional challenges.

But they had to act quickly. A high-ranking official in the Vietnamese Ministry of Foreign Affairs gave the Sternins six months to demonstrate success.

**Crisis or Opportunity**
From years of studying Mandarin, Jerry knew that the Chinese characters for “crisis” were represented by two ideograms: danger and opportunity. Perhaps there was an opportunity to try something new in Vietnam.

\[
\text{機危機} = \text{Danger} + \text{Opportunity}
\]

If old methods of combating malnutrition could not yield quick and sustainable results, the Sternins wondered if positive deviance might hold promise.

Zeitlen had introduced the notion of positive deviance as she tried to understand why some children in poor households, without access to any special resources, were better nourished than others. What did their parents know? What were they doing that others were not? Perhaps combating malnutrition called for positive deviance’s assets-based approach.
Positive deviance (PD) is an approach to social change that enables communities to discover the wisdom they already have—and then to act on it.

Positive deviance sounded good in theory. But no one, to date, had implemented the construct to actually design a field-based nutrition intervention. Might it work in a community-setting? How? The Sternins had no roadmaps or blueprints to consult. Where to begin?

Childhood malnutrition rates were high in Quong Xuong District in Than Hoa Province, south of Hanoi, where the Sternins set up base. The Ho Chi Minh trail, the major supply route for the Vietcong guerrillas during the Vietnam War era, snaked through Quong Xuong. Consequently, suspicion of Americans was high. The Sternins first task was to build trust with community members. The rest would follow.

After several days of consultation with local officials, four village communities were selected for a nutrition baseline survey. Armed with six weighing scales and bicycles, health volunteers weighed some 2,000 children under the age of three in four villages in a record 3.5 days. They compiled a growth card for each child, with a plot of their age and weight. They found that approximately 64 percent of the children were malnourished.

After completion of the data tally, the Sternins asked:

“Are there any well-nourished children who come from very, very poor families?”

The response: “Yes, yes, there are some children from very, very poor families who are healthy!”
“Yes, yes, there are some children from very, very poor families who are healthy!”

These poor families in Than Hoa that had managed to avoid malnutrition without access to any special resources would represent the positive deviants. “Positive” because they were doing things right, and “deviants” because they engaged in behaviours most others did not.

What behaviours were these PD families engaging in that others were not? To answer this question, community members visited six of the poorest families with well-nourished children in each of the four villages. The Sternins believed that if the community itself discovered the solution, families would be more likely to implement it.
If the community itself discovered the solution, families would be more likely to implement it.

The self-discovery process yielded the following key PD practices among poor households with well-nourished children:

- Family members collected tiny shrimps and crabs from paddy fields adding 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 rich in beta carotene, the miracle vitamin, and other essential micronutrients such as iron and calcium.

Interestingly, these foods were accessible to everyone, but most community members believed they were inappropriate for young children. Further:

- PD mothers were feeding their children three to four times a day, not the customary twice a day;
- PD mothers were actively feeding their children, making sure no food was wasted; and
- PD mothers washed the hands of the children before and after they ate.
When positive deviant practices are made visible, they are immediately actionable because they are accessible to everyone in the community.

**Doing Not Telling**

With the “truth” discovered, the natural disposition was to go out and tell people what to do. Now the “best practices” needed to be diffused so that the non-adopters could adopt them.

Various ideas for “telling” were brainstormed: household visits, attractive posters, educational sessions and others. Many were implemented in the classical diffusion of innovations approach, trying to persuade people to see the relative advantages of best practices. However, results were disappointing. While a few families adopted the best practices, the majority did not.

From their previous experience in other countries, the Sternins knew old habits die hard; new ones, even when they hold obvious advantages, are hard to cultivate. Their experience suggested such best practice innovations almost always engender resistance from people. The Sternins coined a phrase for it—the “natural human immune” response.

As the brainstorming was almost at an end, a sceptical village elder proclaimed, “A thousand hearings isn’t worth one seeing, and a thousand seeing isn’t worth one doing.”
"A thousand hearings isn't worth one seeing, and a thousand seeing isn't worth one doing."

Later, the Sternins discussed the wisdom inherent in the elder’s remark. Could they help design a nutrition program which emphasised “doing” more than “seeing” or “hearing?”

They designed a two-week nutrition program in each of the four intervention villages. Mothers of malnourished children were asked to forage for shrimps, crabs and sweet potato greens. Armed with small nets and containers, mothers waded into the paddy fields picking up tiny shrimps and crabs. The focus was on action, picking up the shrimps, crabs, and shoots from sweet potato fields.

Shrimps and crabs for the taking in Vietnamese rice paddies

In the company of positive deviants, mothers learned how to cook using the foraged ingredients. Again, the emphasis was on “doing.”
The PD approach holds it is easier to act your way into a new way of thinking than to think your way into a new way of acting.

Before the mothers sat down to feed their children, they weighed their children and plotted the data points on their growth chart. They washed their children’s hands and actively fed the children, ensuring no food was wasted. Some mothers noted how their children seemed to eat more in the company of other children. When returning home, mothers were encouraged to break the traditional two-meal-a-day practice into three or four portions.

Such feeding and monitoring continued for two weeks. Mothers could visibly see their children becoming healthier. The scales were tipping! And, the rest is history.
The positive deviance approach is completely immersed in data. Data is collected at every step of the way and openly posted for the community members to monitor progress. Data informs where problems and the solutions lie.

After the pilot project, which lasted two years, malnutrition had decreased by an amazing 85 percent in the communities where the PD approach was implemented. Over the next several years, the PD intervention became a nationwide program in Vietnam, helping more than 2.2 million people, including more than 500,000 children improve their nutritional status (Pascale, Sternin, & Sternin, 2010; Pascale & Sternin, 2005; Singhal, Sternin, & Dura, 2009; Singhal & Dura, 2009).

Born out of necessity, this pioneering PD experience in Vietnam, turned the fundamental tenets of the classical diffusion of innovations framework on its head

<table>
<thead>
<tr>
<th>Diffusion of Innovations Approach</th>
<th>Positive Deviance Approach</th>
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<tbody>
<tr>
<td>Solutions reside outside</td>
<td>Solutions exist within the community</td>
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<tr>
<td>Change agentry as pushing solutions</td>
<td>Community self-discovers solutions</td>
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<tr>
<td>Seeking adopter buy-in</td>
<td>Seeking community ownership</td>
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<td>Emphasizing innovation attributes (relative advantage, compatibility, non-complexity, trial-ability and observe-ability)</td>
<td>The solution, by definition, delivers better outcomes (relatively advantageous), is compatible, non-complex (as people with no special resources have adopted). Further, the PD behaviours are trial-able (already being practiced) and their results are observable. Now.</td>
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<tr>
<td>Expert change agents give advice</td>
<td>Change agents relinquish expertise, listen and facilitate</td>
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<td>Focused on plugging deficits</td>
<td>Focused on identifying and amplifying assets</td>
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<td>Moves from problem-solving to solution identification</td>
<td>Moves from solution-identification to problem-solving</td>
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<td>Adopters are persuaded</td>
<td>Adopters learn by doing</td>
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<td>Susceptible to adopter resistance on account of exogenous solution</td>
<td>Open to self-replication on account of endogenous wisdom</td>
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<td>Valourises charismatic opinion leadership</td>
<td>Valourises behaviours of ordinary people</td>
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<td>Involves lengthy diffusion planning</td>
<td>Can begin now as solution resides in the now</td>
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<td>Needs a heavy investment of resources for dissemination</td>
<td>Needs limited resources as someone is practicing those behaviours against all odds</td>
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Source: Draws upon Pascale & Sternin (2005), Singhal and Dura (2009), and Singhal, Sternin, and Dura, 2009.

In the two decades following the Vietnam initiative, the PD approach has been applied in a variety of contexts, to address a wide variety of intractable social problems, with highly effective outcomes (Pascale, Sternin, & Sternin, 2010; Singhal & Dura, 2009; and see www.positivedeviance.org). A growing body of literature validates the alternative perspective of inside-out diffusion as noted by the attributes of the PD approach in the above table.

Conclusions

The classical diffusion paradigm has been criticised for reifying expert-driven, top-down approaches to address problems and thus, by default, overlooking, and rejecting local solutions (Papa, Singhal, & Papa, 2006; Singhal & Dearing, 2006; Singhal & Dura, 2009).
Diffusion of innovation experts now increasingly believe and acknowledge the value of local expertise and indigenous wisdom in finding culturally-appropriate solutions to community problems. One such inside-out approach to innovation diffusion is exemplified by the positive deviance approach.

The PD approach believes that innovations (or solutions) that are generated locally are more likely to be owned by the potential adopters. When adopters are externally persuaded to buy into the vision of an outside-expert, they tend to demonstrate inertia and resistance, much like the Iowa farmers in the Ryan and Gross (1943) study who, for an average of about 10 years, resisted the adoption of hybrid seed corn.

The PD approach questions the traditional role of outside expertise, believing that the wisdom to solve problems lies inside. While change experts usually make a living discerning community deficits, and then implementing outside solutions to change them, in the PD approach, the role of experts is framed differently. The expert’s role is to: help the community find the positive deviants; identify their uncommon but effective practices; and design a community intervention to make them visible and actionable.

In the PD approach, change is led by internal change agents who, with access to no special resources, present the social behavioural proof to their peers. If they can do it, others can too. As the PD behaviours are already in practice, the solutions can be implemented without delay or access to outside resources. Further, the benefits can be sustained, since the solution resides locally.

Perhaps most importantly, the PD approach turns the dominant “transmission-centred” innovation-decision framework on its head. As opposed to the notion that increased knowledge changes attitudes and attitudinal changes change practice; PD believes in changing practice. PD believes that people change when that change is distilled from concrete action steps.

Endnotes
1 The author thanks the Positive Deviance Initiative at Tufts University, and particularly PD and diffusion practitioners and scholars with whom we have had the privilege of dialoguing with during the past several years including Monique Sternin, the late Jerry Sternin and the late Everett M. Rogers; colleagues interested in the science of complexity such as Curt Lindberg, Henri Lipmanowicz, Prucia Buscell and Keith McCandless; and University of Texas El Paso colleagues Lucia Dura, Bobby Gutierrez, and others.

2 This pioneering Vietnam story draws upon numerous conversations and audio-taped interviews with both Monique and the late Jerry Sternin, and partially from a co-authored case study (Singhal, Sternin, and Dura, 2009).

3 A positive deviance inquiry focuses on eliminating those client behaviours from the strategy mix that are true but useless (TBU). TBU is a sieve through which a facilitator passes the uncommon qualities of positive deviants to ensure that the identified practices can be practiced by everyone.

References


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