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Focus group discussions among the Bai in China to inform a social marketing campaign for sanitation promotion

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ABSTRACT

Local cultural norms, values, beliefs, and practices related to toilet use must be understood before planning household toilet promotion initiatives. Focus group discussions may be used to gain this understanding. This paper (1) reports the methods and results of focus group research used in southwest China among the Bai people group to inform a sanitation marketing campaign; (2) reports the advantages and challenges of a multi-cultural research team in focus group research; and (3) evaluates the usefulness of focus group discussions to inform the campaign.

Key words | focus group discussions, sanitation marketing, social marketing

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INTRODUCTION

It is estimated that 2.5 billion people lack access to improved sanitation (WHO/UNICEF 2013) including about 49 million in China (WHO/UNICEF 2012). Although China has made tremendous strides in improving sanitation coverage over the last 15 years (Zhang et al. 2010), a 2012 World Health Organization/United Nations Children's Fund (WHO/UNICEF) joint report states that rural China still only has 56% improved sanitation coverage. Throughout China, low sanitation coverage is a risk factor for various diseases including schistosomiasis, soil-transmitted helminthes, hepatitis A, cysticercosis, and diarrheal diseases (Schertenleib 2009; Wang et al. 2009; WHO 2010; Liu et al. 2012). In China, 40,000 children a year die from diarrheal diseases (UNICEF/WHO 2009). Yunnan Province in southwest China lags behind eastern provinces, with rural sanitation coverage being only about half of the national average (Water & Sanitation Program 2012).

Located within the Bai Autonomous Region in Yunnan Province, the Bai ethnic minority in rural Eryuan County are known to have a high prevalence of many parasitic diseases including ascariasis, schistosomiasis, and cysticercosis (Steinmann et al. 2007). Open defecation as well as the use of raw sewage as fertilizer play a role in the transmission of all of these diseases. As the Bai also have the cultural tradition of eating raw pork in addition to low sanitation coverage, neurocysticercosis (NCC) and its associated epilepsy manifestation is of particular concern (Ito et al. 2003; Steinmann et al. 2007). Increased sanitary toilet coverage is needed among the Bai to break the cycle of these parasitic diseases.

Any attempt to increase sanitation coverage must begin by understanding local people's beliefs, attitudes, and preferences about household toilets. The importance of this knowledge was demonstrated by the evaluation of a massive government toilet construction program that built over 50,000 toilets in a rural area of Kunming, Yunnan, China (Liu & Yang 2007). Although the toilet design used in this project was scientifically sound and economical, most locals did not like the urine-diverted double-urn toilet design and refused to use them. Since the residents of this area were not consulted before toilet building began, use was found to be as low as 0.2% in some places with most toilets being used as storage facilities (Liu & Yang 2007).

The social marketing of household toilets (sanitation marketing) has been shown to be a sustainable health promotion intervention to increase community coverage of toilets in undeveloped areas around the world because it begins with understanding how the local population views the behavioral options (Jenkins 1999, 2004; Cairncross 2004; Jenkins & Curtis 2005; Jenkins & Sugden 2006). Although sanitation marketing appears to be in wide use, few research studies report the methodologies of gathering and analyzing formative research for the development of a sanitation marketing campaign (Devine 2010). This type of research is essential to any sanitation marketing effort because local cultural norms, values, beliefs, and practices greatly influence the prospects for success.

Although community involvement in sanitation promotion is often encouraged, few studies report the inclusion of locals (people from the same region) in the research team. This case study reports the use of focus group discussions to gather formative research about the beliefs, attitudes, and preferences related to household toilets for a social marketing campaign using a multi-cultural research team. The results, analysis, and application for the social marketing campaign as developed by the multi-cultural team are reported using the heuristic device of the 4 Ps of social marketing (Lefebvre 2013). The advantages and challenges of using a multi-cultural team are also discussed.

RESEARCH SETTING

This sanitation promotion was part of a larger project within the villages with the goal to reduce NCC among the Bai. This project not only examined the prevalence of the disease in humans but also the prevalence of cysticercosis in pigs. The main intervention to reduce the disease was the social marketing of household toilets. During the initial phase of the project, two villages in Eryuan County were selected by the Dali Institute for Parasitic Diseases and project researchers as intervention villages for the household toilet social marketing campaign. The first village had 301 registered households and 1,272 individuals, and the second had 293 registered households and 1,240 individuals. The two villages were about one mile apart and were both over 99% Bai. Two comparison villages >1 hour from the intervention villages were also selected.

Prior to the focus group discussions, a door-to-door survey was conducted in the four study villages. This survey provided researchers with a first-hand view of the different types of local 'toilets' in use. Including only those toilets that met sanitary criteria, the survey found that the study villages had about 25% household toilet coverage.

Toilets not meeting sanitary criteria included those in which raw sewage flowed into very shallow pits (some covered and some not), allowing for easy removal of waste for immediate use as fertilizer. Sometimes, the raw waste from a household toilet flowed directly onto the ground or into a ditch. Other 'toilets' not meeting sanitary criteria were basically buckets placed in concrete-lined slots inside toilet buildings, allowing for easy emptying of waste on gardens or fields. Although a simple deep pit toilet design met sanitary criteria, some were filled to overflowing and were still being used.

Most of the toilets meeting sanitary criteria in the two intervention villages were three-chamber septic tank systems. A system commonly promoted in China, it uses minimal water to flush and has three anaerobic chambers connected by PVC pipes. Anaerobic conditions, the proper placement of PVC pipes as well as time in each chamber ensure that the liquid waste removed from the last chamber is safe for use as fertilizer. Biogas toilets also met sanitary criteria, but were only used by two households in the intervention villages. Another toilet design meeting sanitary criteria was dry, urine-diverted, double-urn toilets.

Subsidies appeared to greatly influence building standards. Door-to-door survey results indicated a significant relationship between toilet subsidies and toilets that met sanitary standards. In the intervention villages, among households claiming to own a 'toilet,' only 6.8% that had not received subsidies had 'toilets' that met sanitary criteria in contrast to 74.6% of households that had received subsidies (67.8% difference; 95% CI = 60.8% - 73.7%).

FOCUS GROUP METHODS

The door-to-door survey collected information about sanitation practices but did not address the reasons for these practices. Focus group research can help researchers understand local beliefs and attitudes before planning a social marketing campaign (Andreasen 1995). Approval from the University of Oklahoma Health Sciences Center Institutional Review Board (IRB) as well as permission from the China National Institute for Parasitic Diseases IRB was obtained for all research activities. All personnel having direct contact with participants received research ethics training before entering the villages.

Recruitment and participation

All focus group discussions were conducted during November and December, 2011. Due to the sensitivity of the subject (toilets), focus groups were gender-specific. Two focus groups from each intervention village (one male and one female in each village) were conducted. Six were in the male focus group and ten were in the female group from one village. In the second village, ten men participated in the focus group discussions and ten participated in the female focus groups. Since saturation was achieved (that is, no new ideas were presented by the fourth focus group), no additional groups were needed. Although the two villages are farming communities with all residents involved in some type of farming, many also had secondary part-time jobs such as shopkeepers or builders. The age and educational characteristics as well as toilet ownership of participants are shown in Table 1.

All focus group discussions were led by the same native Bai speaker. This Bai speaker had a junior high-school level education. Focus group educational material available in Chinese was used to train the Bai facilitator (Krueger & Casey 2009). The focus group questioning route was first piloted in a neighboring city with people of similar backgrounds to those in rural Eryuan County. Each participant signed a consent form before the focus group discussions began. Two tape recorders were used to record the discussions. Each focus group discussion group lasted about 11/2 hours.

Focus group questions were designed to gather information on product, price, place, and promotion. The initial focus group questions inquired about participants' general feelings about toilets and their exposure to different types of household toilets. Participants were then asked their opinions about specific types of toilets. Motivations for building and not building toilets were explored. Besides asking about product preferences, questions about the price and placement of toilets were included. The use and need for human feces for fertilizer was explored, since this would affect toilet design decisions. Other questions involved the availability of local materials and manpower for construction, as well as cultural or religious beliefs and community rules that might affect toilet building. Pictures of a variety of toilet styles and designs were used to assist in discussions.

FOCUS GROUP ANALYSIS

Focus groups discussions were analyzed by a team of two Americans conversant in Mandarin Chinese, two Bai persons, and two Han Chinese. Recordings of focus group discussions (all conducted in Bai) were transcribed and translated into Mandarin Chinese and the translations were then checked by a second Bai speaker for accuracy. For the convenience of the native English speakers, the transcripts were also translated into English. The two Americans were given both English and Mandarin transcripts. Research team discussions were held in Mandarin.

Table 1 | Characteristics of focus groups

Focus group	Age (range)	Age (mean)	Educational level	Ownership of toilets meeting sanitary standards
Village 1 male (n = 6)	45-60	48	2 = 100%	40%
Village 1 female (n = 10)	19–44	35	1=50%; 2=40%; 3=10%	55%
Village 2 male (n = 10)	23-66	44	1 = 30%; 2 = 70%	20%
Village 2 female (n = 10)	22-50	34	1 = 70%; 2 = 30%	10%

Each team member analyzing the discussions noted any pertinent statements that related to core marketing mix issues: product, price, place, and promotion. Team members also noted any other focus group comments that they felt would be important to the development of a social marketing campaign. An introduction to the 4 Ps as defined by Andreasen (1995) was provided to each of the people on the team by the lead researcher (MD). Pertinent comments were categorized (into one of the 4 Ps and 'other') by each team member. The team then came together to analyze the transcripts collectively. Comments were discussed in the categories as presented by the team members. Team members then listed the salient themes that emerged in each category. These salient themes were the basis for the design of the social marketing campaign. The following results represent the categorization reached by consensus by the multi-cultural research team.

FOCUS GROUP RESULTS

Product

All four focus groups clearly indicated preference for the 'digestive tanks' toilet. Although the official name for this type of toilet in Chinese includes no reference to 'digestion,' participants use of this term reveals an understanding that a three-chamber toilet actually 'digests' or converts the waste to a product that is sanitary. Also, government endorsement of the three-chamber toilet influenced their preference, because this endorsement was necessary to obtain toilet subsidies.

Three other toilet types referred to in discussions were pit toilets, biogas toilets, and double-urn toilets. Both male and female focus group participants felt that the different types of pit 'toilets' were dangerous and dirty. People were afraid of maggots and some were also afraid of children falling into the toilet holes. Although participants appeared familiar with biogas toilets, only one person in the focus groups mentioned this type of toilet as a possibility.

Residents disliked dry double-urn, urine-diverted toilets. 'No one wants to mess with emptying the urine bottles every few days.' 'Flush is much cleaner.' As the study villages had adequate water available, people believed that a type of flush toilet was possible, whether by simply using a ladle and a bucket of water or a flush apparatus.

From the female focus groups, the most frequent criticism of existing toilets was smell. In contrast, the male focus groups hardly mentioned the problem. Although villagers recognized that a three-chamber toilet did not smell as much as other toilets, researchers had previously noted that most three-chamber toilets in the villages did not have ventilation pipes in the first chamber or water traps in commodes to reduce the smell. Ventilation pipes are specified in the design approved by the government so it is not clear why this feature was missing in most toilets.

Use of human waste as fertilizer also influenced the type of toilet desired by the villagers. According to participants, human waste was not needed for crops since animal waste was sufficient. However, there was no other place but the fields to dispose of human waste. In contrast to their disgust with handling raw human sewage, the safe, easy to retrieve liquid waste from the three-chamber toilet was welcomed by farmers for use on gardens and crops.

In addition to issues related to waste removal and septic tanks, having personal choice in the above-ground toilet structure was important to participants. Focus group participants indicated that most people could only afford very simple toilet buildings. Placement constraints (discussed more below under 'Place') also indicated that a 'one-stylefits-all' approach would not be appropriate.

Price

The main reason given by villagers for not building toilets was price, which included not only monetary expenditures but also human and material resources. Some thought that the government should pay all expenses for the toilet. The price that people were willing to pay to build a toilet varied greatly within and between the groups. Most people were only willing to pay 100-500 yuan (US\$ 15.87-US\$ 79.37) for a toilet, but a few were willing to pay 1,000-2,000 yuan (US\$ 158.73-US\$ 317.46). One man said, 'It does not matter how much it costs if it would solve the current sanitation problem in our villages.'

The male groups discussed the possibility of buying materials together and working together in order to reduce costs. While males indicated that finding manpower and skilled laborers in the village was not a problem, women believed that professional contractors and outside workers were needed to build sanitary toilets. Some emphasized that finding laborers to build toilets might be a problem because most of the young physically fit adults in the villages temporarily leave the villages to find work in urban areas.

A price-related issue discussed in all the groups was financial subsidies. Participants explained that government subsidies were normally given to villagers to help purchase a variety of items including threshing machines, solar electricity units as well as all types of vehicles. Focus group participants mentioned that during a previous governmentsponsored toilet building promotion, many feared they might not actually receive a subsidy and did not participate but later regretted the decision.

Place

Most members of the team categorized statements related to 'place' in relationship to the placement of the toilet. Lack of space was given as the second most important reason for not building a toilet. 'You don't have enough space to build a house on, not to mention a toilet.' 'For some, no space is a problem.' The need for creative alternatives to the basic toilet design was clear in order for toilets to fit in small spaces. Participants also explained to researchers the social norms and government regulations related to toilet placement. For instance, the traditional social norm was to place a toilet as far away from one's living quarters as possible. Many said that it was best to have the toilet by the livestock stalls or in the vegetable garden away from sleeping and eating areas. Participants recognized that one should not build a toilet in a place that would adversely affect a neighbor, such as near a neighbor's kitchen. In addition, the group mentioned a local law preventing toilets from being built near ditches.

Promotion

When considering themes related to promotion, it is impossible to completely separate promotion from product, price, and placement. These three 'Ps' all helped inform 'promotion.' Themes heard repeatedly during focus group discussions indicated the motivations for household toilet building, including convenience, privacy, cleanliness, the avoidance of embarrassment, and progress. Unlike the typical promotion in public health programs, neither improved health nor disease prevention was mentioned as a reason for building a toilet by any of the four focus groups.

Convenience was mentioned many times in all focus groups, but especially in the female focus groups. 'It would be quite convenient if we all had our own toilets at home.' 'Some people are used to going to bathroom at five in the morning. You have to get up that early to open the door for them.' Privacy and cleanliness were also especially valued by women.

The avoidance of embarrassment was also identified as a motivation for building a toilet by each focus group. 'If we have loose bowels and we don't have a toilet at home, it is very embarrassing running to other people's houses.' 'When others visit my house it is embarrassing that I don't have a toilet for them to use.' The motivating theme of 'progress' and being modern like the cities was also evident in all focus groups.

IMPLICATIONS FOR INTERVENTIONS

The focus group discussions identified a number of crucial issues that were necessary for the success of the intervention. These issues were organized according to the marketing mix heuristic common in social marketing projects. Again, the implications for the design of the intervention were categorized through a process of consensus by the multi-cultural research team.

Product

As a result of focus group discussions, the three-chamber mini-septic tank system toilet was the product chosen for the social marketing campaign. The tanks were made of brick and mortar covered with cement plaster. Although the use of concrete molds was considered, the different variations of shapes needed (see 'Place' below) resulted in this being impractical. The ratio of the size of the three tanks was 2:1:3, but the actual size of the tanks varied according to the number of people who were expected to use the toilet.

The above-ground structure was left to the choice of each family. To control smell, the building standards for the three-chamber toilet were strictly followed including the use of a ventilation pipe in the first chamber, and most often a water trap was also used. Toilets were designed to be flushed by either using a mini-flush unit or a bucket and ladle. Laminated instructions emphasizing the need to flush and the amount of water to use were posted on the wall of each new toilet.

Price

The use of subsidies is believed by some sanitation promotion experts to never be appropriate in toilet promotion. Others take the approach that subsidies may be used if they do not impede the development of a sustainable marketplace (McConville 2003; Devine & Kullman 2011) or discourage private providers in sanitation marketing (Cairncross 2004). It was clear from the focus group discussion results that a subsidy was very important to residents. As stated previously, the door-to-door survey indicated that subsidies were needed to enforce sanitary criteria. Therefore, a subsidy of 400 yuan (US\$ 63.50) was given to each household by the project and a 600 yuan (US\$ 95) subsidy was given by the government. The amount of these subsidies is estimated to be less than one-third the total cost of most toilets built. Exact costs of toilets were hard to determine due to varying availability of on-hand materials and manpower, as well as the aesthetic features each household was able to choose for their toilet.

Further interviews confirmed that most men in the villages actually did have the skill to build a three-chamber toilet. In view of this, the research team decided that toilets built during this sanitation marketing intervention would be built by local men trained in the proper construction of the three-chamber toilet using only materials available in Eryuan County. Toilet builders were paid by homeowners who were motivated to build due to the availability of a subsidy. In this context, the formative research established that providing a subsidy was essential to stimulate the toiletbuilding market. The training and use of local farmer/ builders and materials bought in Eryuan County ensured that toilet building would be sustainable because the project succeeded in building local capacity and increasing local demand for sanitary toilets.

Place

Due to the complexity of satisfying the needs of each household, we decided that toilets would be placed where homeowners preferred if that placement met sanitary criteria and was not a problem to a neighbor. The placement of toilets proved to be a key issue in acceptance of household toilets. As explained during focus group discussions, many wanted their toilet away from living areas. An outside 'expert' with many years of experience working in the area of environmental development believed such placement of toilets to be impractical. During the beginning stages of toilet promotion, her effort to convince some homeowners of a 'better way' resulted in decreased interest in building household toilets. Interest in household toilets increased markedly when locals understood that toilets could be placed according to household desires. This situation was a perfect example of the potential damage the 'expert view' can have on a social marketing project (Kotler & Lee 2008).

Consequently, many toilets were built in creative locations. Several toilets were placed in small areas between pressed dirt buildings in household courtyards. These tanks were built above ground, since digging below ground might collapse the pressed dirt buildings. Other toilets were placed in former cattle stalls. Most were placed in structures away from the family's living quarters, but some were placed in structures attached to a house. A few households built three-chamber septic tanks outside of new homes, and indoor toilets flushed into the tanks.

Promotion

Based on the formative research, promotion for the intervention included building four demonstration toilets, a public kick-off event, brochures, posters, and baseball caps with the project logo. Since health was not a motivation for toilet building, disease prevention was not part of the promotion used in the sanitation marketing campaign. However, psychographic themes that emerged from the focus discussions including convenience, group

cleanliness, the avoidance of embarrassment, and progress were used in promotional materials. These themes were also emphasized at a public kick-off event and door-todoor promotion of toilets. As the research team was involved in the villages doing work related to cysticercosis including drawing blood from pigs, providing CT scans and physical assessments for NCC, conducting door-todoor surveys and participatory rural assessments, relationships were built between the individuals in the community and the researchers. These relationships were helpful as researchers visited homes emphasizing privacy, cleanliness, the avoidance of embarrassment, and progress as toilets were promoted.

Before the official 'kick-off' event of the campaign, four three-chamber demonstration toilets were built (two in each village). In each village, one nicer toilet and one simpler toilet were built. In addition, two were creatively adapted to fit in small spaces since focus group discussions revealed that space to build a toilet was a concern. Owners of these demonstration toilets agreed to open them for inspection by other members of the community.

A public kick-off event was held on June 9th, 2012 to formally mark the beginning of household toilet promotion. The event was held at the elementary school shared by both villages. The opening exercises were attended by officials from many government departments expressing their support of the project. A small fair with games and prizes followed the opening exercises.

Brochures (see Figures 1 and 2) were designed with many pictures because some residents were functionally illiterate. Since subsidies were a major motivating factor to building a toilet, both the brochures and marketing posters showed pictures of those households that built demonstration toilets actually receiving their subsidies. The brochures also promoted the perceived benefits of a toilet that were identified during focus



Figure 1 | First section of the promotional brochure. This section of the brochure gave a basic explanation of the three-chamber mini septic tank system including diagrams.



Figure 2 | Last section of the promotional brochure. This section of the brochure showed actual photos of three-chamber toilets and also showed local residents receiving subsidies.

group discussions and explained the process of toilet building.

Using a local project building supervisor from one of the study villages proved to be a strategic decision to help promote toilets. This builder was well-known and trusted in the area and was aware of local resources as well as the preferences of the villagers. He was also able to creatively alter the basic design while maintaining the essential sanitary criteria of the three-chamber toilet. We often heard from villagers, 'well, if he is going to help, then of course I want a toilet.' This local builder was not involved in the actual physical building of most toilets but in the design, planning, inspection as well as the training of local builders. He was also available for locals to consult with before and during the building process to assure that toilets met sanitary criteria. The government recognized his expertise, and government subsidies were given in accordance with his inspection and assurance that the toilet met sanitary standards. The building supervisor was paid for each toilet built, giving him an incentive to encourage his neighbors to build household toilets.

EVALUATION

The focus group discussions were useful in the development of all aspects of the social marketing campaign. Decisions regarding product, price, place, and promotion were based on the findings discovered during the focus group discussions, as well as additional formative research activities such as participant observation, rapid ethnographic assessment, and the door-to-door survey. The accuracy of information was evaluated by triangulation (Niglas 2000). That is, information from the focus groups was either reinforced or challenged by comparing the information with data from the door-to-door survey, rapid ethnographic assessment, direct observation, and monitoring data gathered during the actual social marketing campaign. Although most information obtained during the focus group discussions was shown to be accurate and useful, team members believed, after many months of working in the villages, that participants had minimized their monetary resources in an effort to increase the subsidies that might be given to them. In particular, many people were willing to invest more in toilet building than previously indicated during the focus group discussions.

Using the 4 Ps as the framework throughout the social marketing process (including the focus group discussion outline, data analysis, intervention design, and application to the social marketing campaign) was a simple framework that facilitated local involvement in the process, but it had several limitations. First, although the utility and meaning of the 4 Ps is a subject of ongoing debate within the social marketing literature, the multi-cultural team members categorized some of the 4 P data differently than generally accepted in sanitation marketing. Second, more research is needed to understand how use of the 4 Ps compares to other approaches to sanitation marketing such as RANAS, IBM-WASH, or SaniFOAM. This research should include attention to the reproducibility and sustainability of the process by locals.

The utility of focus group discussions to inform the social marketing campaign was evaluated by examining the success of the social marketing campaign. Eight-five household toilets were built in the two intervention villages during a tenmonth period when building was possible because of the rainy season or agricultural cycles. Project success was evaluated by comparing the results of this social marketing campaign to a conventional government promotion effort done in the two comparison villages. In the government promotion, outside builders rather than locals were contracted to build toilets. Residents could choose either the disliked dry urine-diverted toilet or a three-chamber toilet, either of which were built according to a single design. Toilet building was somewhat faster in the comparison villages. Although those toilets were more highly subsidized than those in the intervention villages and therefore much cheaper, a postintervention survey revealed that satisfaction was much lower. Based on data collected in a post-intervention household survey in all four villages, 42% of the families whose toilets were built by the outside builders in the two comparison villages had family members who refused to use their new

toilets. In comparison, no family member with a new toilet built as a part of the social marketing campaign refused to use their new toilet.

DISCUSSION

Focus group discussions were effective in providing the insights into the psychographics needed to develop a successful sanitation marketing campaign among the Bai in two villages in Eryuan County, Yunnan, China. The use of focus groups in research was a new concept in the two study villages. Although outsiders entering their community, asking questions, and recording answers was received with varying degrees of acceptance, most focus group participants seemed glad for the opportunity to express their opinions.

Focus group discussions provided insights to design the social marketing campaign. However, the use of these discussions alone would have been insufficient to design the campaign. Information from the door-to-door survey, rapid ethnographic assessment, general observation, and also key informant interviews was also necessary. In addition, through triangulation, these other research methods were also used to evaluate the accuracy of focus group discussion results.

While focus group research involves 'outsiders' getting information from 'insiders,' this research included researchers with varying degrees of 'outsiderness.' This arrangement was valuable and added different perspectives, but was not without challenges. The team struggled to find value in both insider and outsider perspectives as they worked together to analyze focus group results and develop this social marketing campaign. Without a doubt, the insiders offered the benefits of access and rapport. Without insider information, researchers could not have appropriately entered the villages to work. The Bai team members were insiders both ethnically and linguistically, but they were not from the study villages.

The Han Chinese team members provided an inside perspective relating to the dominant Chinese culture and the current government political situation, but they were not Bai. However, as Hodkinson (2005) warns, insiders must utilize a careful reflexive research approach to prevent their identification with the culture from affecting research results. Some ideas from the American team members that were flippantly dismissed as culturally inappropriate by Han Chinese and Bai members of the team (such as various kick-off activities) were found, after closer scrutiny, to be possible and were ultimately well-accepted by the two local villages.

Although one might think that the information of the insider on the team may be more valuable, as Tinker & Armstrong (2008) argue, observations of an outsider can actually be quite beneficial. The outsider's positions can 'provide a valuable sense of distance, which can allow a researcher an insight into other people's social world' (Tinker & Armstrong 2008, p. 58). Consequently, while at times challenging, the use of a multi-cultural team to analyze focus group discussions added depth to the results.

Focus group discussions were effective in informing this sanitation marketing campaign among the Bai in rural China. Focus groups provided the deeper information about the beliefs, attitudes, and preferences of villagers towards toilets. These qualitative data identified the important issues that the project needed to address including subsidies, placement and features of the toilet, and the psychographics about sanitary toilets that would resonate with villagers. It also revealed that health concerns and disease prevention were not motivations for sanitary toilet construction and use. Although more research is needed, this case study demonstrates not only the usefulness of focus group discussions but also some of the advantages and challenges of using a multi-cultural team approach in conducting these discussions and in designing and implementing the social marketing campaign.

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