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# Achieving the 'good life': Why some people want latrines in rural Benin

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#### Abstract

Nearly half the world's population lacks basic sanitation to protect their environment from human fecal contamination. Building a latrine is the first step on the sanitation ladder in developing countries where a majority of the population defecates in open or public areas. Public health programs to improve sanitation have consistently framed promotional messages in terms of fecal—oral disease prevention and largely fail to motivate changes in sanitation behavior. A qualitative consumer study using in-depth interviews with 40 household heads was carried out to explore the decision to install a pit latrine in rural Benin. The motives for installing a latrine are reported and variations across the interviews are examined. The paper asserts that at least one active *drive* (desire for change or dissatisfaction) from among 11 found is needed to motivate latrine adoption. Drives involved prestige, well-being, and situational goals. Health considerations played only a minor role, and had little if anything to do with preventing fecal—oral disease transmission. Drives varied with gender, occupation, life stage, travel experience, education, and wealth, and reflected perceptions of the physical and social geography of the village, linked to availability of open defecation sites, social structure, road access, and urban proximity. The results have broad implications for new messages and strategies to promote sanitation in developing countries.

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#### Introduction

After 25 years of publicly subsidized latrine construction and public health education programs in developing countries, 2.6 billion people still have no suitable means of excreta disposal. This leads to fecal contamination of the environment, gastro-enteric infections and loss of dignity and quality of life. A target to halve the proportion of the world's population without adequate

sanitation by 2015 was included in the Millennium Development Goals (United Nations, 2002). International agencies and sanitation experts have called for new demand-responsive approaches to address the sanitation gap (Cairncross, 1992, 2003; Lafond, 1995; WHO/UNICEF, 2000). If such approaches are to achieve the required growth in coverage rates, it becomes imperative that we understand what generates demand and how to motivate more households to adopt improved sanitation. Such insights into consumer behavior and demand have thus far been lacking in the sanitation and public health literature.

Consumer motivation for acquiring sanitation can be explored from several theoretical viewpoints including

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means-end chains (Reynolds & Gutman, 1988), belief-attitude relations (Fishbein & Ajzen, 1975), the theory of planned behavior (Ajzen, 1985), models of goal-oriented consumer decision-making (Bagozzi & Lee, 1999; Bettman, Johnson, & Payne, 1991; Engel, Blackwell, & Kollat, 1978), and the adoption and diffusion of innovations (Gatignon & Robertson, 1985; Rogers, 1983). The latter is particularly insightful for understanding the spread of new demand for latrines, which are innovations that replace existing defecation and excreta disposal practices for most target households and entail significant opportunity cost with respect to other purchases.

In this study, motives or reasons for latrine adoption are conceptualized as consumer drives: desires for change arising out of dissatisfaction from a perceived difference between a desired or ideal state and one's actual state or situation (Bagozzi & Lee, 1999; Engel et al., 1978). Perceived ideal states associated with acquiring a latrine reflect personal goals and values (individual lifestyle) while actual states are determined by the physical and social environment related to current defecation practices of relevance to these goals and values (Fig. 1). The dissonance between the two states combined with sufficient positive awareness of latrines leads to aroused motivation for a latrine. Active drives are an essential but not sufficient condition for creating demand for sanitation, as opportunity and ability to acquire sanitation, including the resources and transactions needed to translate desire for a latrine into a functioning installation, must also be present.

This paper presents a study of consumer motivation for installing a household latrine in the Republic of Benin, West Africa, using Fig. 1 as a framework to answer the question: who wants sanitation and why? Exploratory in-depth interviews with 40 heads of household were carried out as the first task of a larger study of sanitation demand (Jenkins, 1999). Information was gathered about the motives and barriers of latrine

adoption, and beliefs, attitudes, and experiences related to latrines. The results shed light on the behavior and motives of sanitation consumers in developing countries and point to demand-responsive strategies related to message framing, population targeting, and other marketing approaches to accelerate the adoption of improved sanitation.

## Methods

Study site

The study was carried out in seven villages in the rural areas surrounding the twin towns of Abomey-Bohicon in Zou Department in fall 1995. This region is the heartland of the Fon ethnic group and voodoo religion in Benin, with low income and poor access to social services. The majority of the rural population is engaged in semi-subsistence agriculture, while commerce, skilled crafts and trades, and cottage industries are other important occupations. Migration and travel within Benin and abroad are common among the population, which has undergone significant social change as villages become more physically and economically integrated.

About 5–7% of rural households in Zou Department had installed a latrine by 1995 (UNICEF, 1996). However, adoption rates varied greatly across villages and many had no latrines (Jenkins, 1999). The vast majority of the rural population defecated in the bush. Project-subsidized latrines could be found in a few rare villages, comprising less than 1% of household latrines in the region (Alihouhou, Capo-chichi, & Kanhonou, 1995). With no history of large-scale sanitation programs, the area presented an opportunity to study "natural" forces underlying demand for household latrines and their diffusion free of distortions from external interventions.

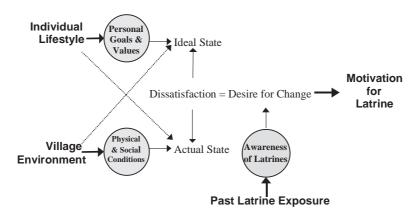


Fig. 1. Model of motivation for latrine adoption in rural Benin.

#### Sample description

Forty household heads in seven villages were interviewed for the study. Informants were selected by purposive convenience sampling to represent latrine adopters and non-adopters in a variety of ages, sexes, and occupations from different sections of villages. Villages were selected for diversity in size, administrative importance, and distance to Abomey-Bohicon. Adopters were selected from a list prepared by the village health worker showing year and type of latrine installed, owner's occupation, age, and sex. Latrines were dry pits either with or without ventilation. Non-adopters were selected from a list of household heads provided by the village chief and health worker covering a variety of ages, sexes, occupations, and areas. In each village, latrine adopters were interviewed first to provide comparative context for interviewing non-adopters. In two villages, with only one or two latrines, no adopters were available. Sampling of individuals and villages proceeded over 2 months until material gathered in new interviews contributed no new information to the range of perspectives already encountered.

The seven villages varied in population from around 400 to over 5000, and in the proportion of non-agricultural households from 22% to 43%. Distance to Abomey-Bohicon ranged from 6 to 24km. Smaller villages tended to be more agricultural, have less infrastructure, low population density, and be farther from a primary (paved) or secondary (maintained dirt) road

Informants consisted of 33 men and seven women. Nineteen of the men and six of the women had installed a latrine (were "adopters"). The high proportion of adopters was deliberate. Of the 15 non-adopters, seven indicated a desire and intention to adopt in the future. Most informants (24) had no formal education. Average age was 51 years at interview and 36 years at adoption. Informants were farmers (10), merchants (8), skilled tradesmen (7; taxi or truck drivers, repairmen, masons, etc.), educated elite (4; holding jobs requiring French literacy, re-selling consumer goods, employed by government, or unemployed), or processing food and other agricultural products as cottage industries.

# In-depth Interviews

A combination of the long interview, a more structured version of the ethnographic interview, and the depth interview, an unstructured method of probing respondents for deeper levels of information, was chosen for this exploratory work (McCracken, 1988; Sommers & Sommers, 1991). Table 1 summarizes the topics covered in the French language interview guide. A hired translator was trained to perform literal translation between the author speaking in French and the interviewee speaking in Fon.

Interview appointments were set up by the local health worker at a time convenient to the interviewee. The introduction and interaction style aimed to give interviewees a collaborative role as informants, and express value for their personal views. Consequently,

Table 1
Topics covered during informant interviews

	Adopters	Non-adopters
Latrine visit, photos, inventory of design and construction History of decision to install and build latrine, any problems or difficulties Reasons for design and construction choices Information sources, influence, help with decision, design, construction, maintenance, etc. Users, usage of latrine, maintenance, repair history Personal latrine experience and exposure histories, including first and subsequent experience Personal and household satisfaction with latrine and why Alternatives available for defecation Qualities of a good and bad place to defecate and why Advantages, disadvantages, problems, importance of latrines; alternatives, both personal and household First and subsequent latrines/adopters in the village, who, why, and impressions Knowledge of and experience with latrines/adopters outside of village How, why present defecation site(s) is (are) chosen, for self and household members Habits and patterns of site use by self and household members Advantages, satisfaction with present site	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Disadvantages, concerns, problems with present site What do neighbors, others in village do and why Ever considered installing a latrine, why, why not Latrine design/style preferences and feasibility	$\checkmark$	\ \ \ \

informants often provided their answers as autobiographical narratives (Mishler, 1986). Specific questions were used to confirm the presence or absence of a belief, attitude, motive, or barrier not spontaneously expressed by the informant, particularly for non-adopters. At the end of the interview, informants were asked to provide their name and basic information about themselves and offered the chance to pose any questions to the researcher. No compensation was given for the interviews, apart from sending back a photo. Interviews lasted one and a half hour to two hours, with some adopter interviews taking longer.

#### Data analysis

Directly after each interview, verbatim expressions and written notes were reviewed, clarified, and expanded together with the translator. A transcript-like report of these notes was prepared with each sub-topic or idea numbered and classified as drive or barrier-related. A socio-demographic profile was included.

The 40 interview reports were analyzed manually to identify motivating drives and factors constraining or facilitating latrine adoption, along with specific beliefs accompanying each. Next a chart was constructed indicating for each informant: (1) presence/absence of each drive and associated beliefs; (2) presence/absence of constraints and/or facilitators in deciding to adopt and installing a latrine; (3) first latrine use experience and evaluation; (4) quantity and quality of subsequent latrine exposures; (5) sex, age, education, occupation at interview; (6) age and occupation at adoption; and (7) general attitudes toward latrines. Lastly, information from this descriptive chart was coded and entered into a database to compute frequencies of drives and examine patterns of variation in motivation.

## Results

Eleven distinct drives for latrine adoption emerged from the analysis and have been grouped into three categories: (1) prestige-related, (2) well-being, and (3) situational. In the following presentation, each drive is described, followed by an examination of differences among the 40 informants. Detailed beliefs and attitudes accompanying each drive are provided in Table 2.

# Prestige-related drives

Four different prestige-related or status drives for wanting to install a latrine were identified from the interviews, each containing a strong element of pride and self-expression. The first two presented below were more commonly expressed among informants than the second two.

Affiliate and identify with urban elite (avoiding social embarrassment)

Twelve informants stated a desire for a latrine to avoid shame and embarrassment from having to direct important visitors to the open to defecate. Important visitors were typically friends, business relations, relatives, or in-laws from the urban elite. Having a latrine helps the owner gain these visitors' respect. Sometimes, urban affiliations manifest by latrine ownership raised an owner's status among other informants in the same village.

Express new experiences and a new lifestyle (achieving the "good life")

The desire to install a latrine to "live" a new lifestyle was expressed by 13 informants. These were men who had left the village for several years to find more lucrative work and acquire wealth to marry. Such informants emphasized they had become unaccustomed to defecating in the open as a consequence of using latrines while living outside the village. They referred to latrines as important for a man to feel "good", "settled", or "complete" in his home, to enjoy the comforts of a "good life". Who, some said, can refuse a latrine when it is so obviously better than the bush?

Assure postmortem ancestral status among descendants (leaving a "lasting legacy")

Four informants expressed the importance of leaving a durable physical improvement, such as a latrine, for their descendants' future well-being. Among the Fon, honorable remembrance by one's descendants assures a person's status among the world of the dead (Tingbe-Azalou, 1993). Other lasting legacies (land, a new house, a well, an entry gate) were competing alternatives to latrines mentioned under this drive.

Aspire to Fon royal class status (emulating royal practices)

Three informants stated a desire in installing a latrine for self and family to manifest qualities of Fon royalty, despite not being royalty. It was explained that a Fon king, his sons, and sometimes his wives, should never be seen outside the walls of the palace except for very special occasions. The royal family never defecated in the open, using pits covered with wood boards dug in discreet parts of the palace compound. A household latrine was seen as suggestive of a royal lifestyle. Emulation by commoners of Fon royal customs, dress, and other habits has been underway since the beginning of the last century (Degbelo, 1995).

# Well-being drives

Five of the drives for latrine adoption expressed by informants related to well-being for self and family.

 $Table\ 2$  Beliefs and attitudes associated with drives motivating latrine adoption in rural Benin

Category	Drive	Associated beliefs and attitudes							
Prestige	1. Affiliate/identify with urban elite	<ul> <li>need a latrine for receiving guests unaccustomed to bush when visiting attending ceremonies</li> <li>avoid shame/embarrassment when important visitors have to use bus</li> <li>concern for hospitality, perception of practical difficulties, accidents for visitors using bush</li> <li>avoid damaging intra-village social relations and status from visitor mistakes while defecating</li> </ul>							
	2. Express new experiences and lifestyles	<ul> <li>to achieve the "good life" one must have a latrine</li> <li>latrine is important for a man to feel his home is properly established</li> <li>latrines are so obviously better than bush that once discovered cannot be rejected</li> <li>dissatisfied with bush, habituated to latrines as a consequence of city living experiences, lack of regular contact with bush</li> <li>wanting to transplant amenities of an urban lifestyle to village</li> </ul>							
	3. Elevate postmortem intergenerational status within family/clan	<ul> <li>concern for obligations to/from descendants and future generations</li> <li>concern for postmortem status in context of voodoo ancestor worship</li> <li>latrine is a lasting monument and legacy to your descendants who will be sure to honor and respect your name for as long as it lasts</li> </ul>							
	4. Aspire to Fon royal class status	<ul> <li>desire to imitate habits and customs traditionally exclusive markers of Fon royalty, be recognised as having "royal" style, class</li> <li>deserves or wishes to be treated, respected as royal class</li> <li>avoiding being seen or having to use bush to defecate is a mark of royalty for a man, his sons, wives</li> </ul>							
Well-being	Protect family health & safety from mundane dangers & infectious diseases	<ul> <li>concern for family members getting bit by snakes, scorpions, other dangerous insects in bush</li> <li>avoid accidents when children use bush (i.e. getting lost, encounter feces, using "taboo" spot, stepping on thorns or glass) which involost time, extra expense, and social conflict</li> <li>avoid dangers from robbers, prowlers, and accidents using bush at</li> <li>avoid germ-transmitted diseases like worms, diarrhea, etc. spread feces left in open or by defecating in open</li> <li>avoid germ-transmitted diseases spread by flies to food from feces</li> </ul>							
	2. Convenience & comfort	<ul> <li>avoid long distance needed to reach defecation sites</li> <li>avoid exposure to elements (dew, strong sun, especially rain) going t from sites</li> <li>have reliable, close, easy place to go when ill or aged</li> <li>avoid trouble with neighbors by defecating on their land mistakenly</li> <li>avoid many discomforts of the bush (i.e., scratches, stings, thorns, mu trash, dirtying clothes)</li> <li>perception of decreasing availability of defecation sites within reasonable distance</li> <li>unaccustomed to being in bush, perceived as a disagreeable place to avoided</li> <li>accustomed to using latrines elsewhere</li> </ul>							
	3. Protect personal health & safety from supernatural dangers	<ul> <li>dangerous to look at or smell adult feces</li> <li>fear of supernatural illnesses caused by smelling or seeing others' feces</li> <li>fear of encountering a snake</li> <li>belief that a snake is a sign of impending death in family</li> <li>fear of voodoo sorcery, magic, and dead spirits in the night</li> <li>fear of enemies steeling your faces for sorcery against you</li> </ul>							

• fear of enemies stealing your feces for sorcery against you

Table 2 (continued)

Category	Drive	Associated beliefs and attitudes								
		<ul> <li>perception that feces sorcery is practised in area</li> <li>perception that you are envied or threatened by enemies</li> </ul>								
	4. Cleanliness	<ul> <li>perceived overload or excessive amount of human feces surrounding house, or at habitual defecation sites</li> <li>difficulty finding a place to defecate free of feces</li> <li>smell of feces along paths, in yard</li> <li>areas around house used by large family group, by lots of client-visitors</li> <li>no pigs or dogs to clean up feces</li> <li>perceived presence of too many flies attracted to feces around the place</li> <li>desire for greater order, control over home environment and its members</li> </ul>								
	5. Visual, social, or informational privacy	<ul> <li>difficulty finding defecation sites with visual privacy, especially for women</li> <li>avoid being observed going off to defecate in bush</li> <li>perception of separateness or outsider feelings in relation to village social structure and composition, (i.e., kin, clan, language, tribe, lifestyle)</li> <li>desire to restrict access to information about self and family, limit contact with neighbors, villagers</li> <li>uncomfortable mingling</li> <li>desire for privacy about possessions, activities, wives, etc.</li> <li>perception of increasing numbers of strangers/outsiders in village</li> <li>perception of increased anonymity and competition in village</li> </ul>								
Situational	1. Ease restricted mobility	<ul> <li>difficulty walking, squatting, defecating in bush from physical impairment from old age or long-term illness</li> <li>desire permanent solution for voodoo participants to defecate whe confined to convent grounds</li> <li>perceived inherited obligation to maintain convent grounds and heremonies</li> </ul>								
	2. Increase rental income	<ul> <li>desire to increase rental income by providing access to latrine</li> <li>renters demand a latrine, willing to pay extra rent</li> </ul>								

These included desires for two very different types of health and safety, convenience and comfort, cleanliness, and privacy. As with prestige drives, well-being drives are described in order of frequency. Notable is the fact that preventing fecal—oral transmission of diseases (the classic health education approach to latrine promotion) was hardly mentioned in this context.

Family health and safety (mundane dangers and infectious diseases)

Expressed by 13 informants, this drive involved avoiding environmental hazards, especially for family members:

 bites by poisonous snakes or scorpions, especially when recently experienced near a habitual defectaion site;

- robbery, assault and other physical hazards at night;
- harm to children defecating in the bush from accidents (i.e., injuries, mischief, exposure to others' feces, using an unacceptable spot, and getting lost in the bush), and leading to lost time and expense (going to the health center, paying for treatment, etc.) and possible conflicts with neighbors; and
- intestinal worms, foot worms (jiggers), diarrhea, cholera, tuberculosis, and other diseases believed to be spread by feces smelt and seen in the open and by flies contaminating household food.

Informants who spoke of these family safety issues and disease concerns expressed a more active attitude toward managing the home environment than those in the third well-being drive, voicing highly personal concerns about supernatural hazards below.

#### Convenience and comfort

Convenience and comfort, another major well-being drive for latrine adoption, was mentioned by 12 informants. Informants raised problems with the physical and social environment and desires to:

- avoid the long walk to open defecation sites;
- avoid exposure to the elements and discomfort from getting scratched or stung, stepping on thorns or in mud, dirtying one's clothes;
- avoid trouble with village neighbors by mistakenly defecating on their land; and
- have a reliable and close place to go when aged or ill.

For most informants, these needs arose from decreasing availability of "good" defecation sites within a reasonable distance of home. "Good" according to informants meant clean, visually private, safe and socially appropriate. Others had become accustomed to using latrines, and unaccustomed to the fields or bush.

# Personal protection from supernatural threats

Another health and safety drive for latrine adoption was expressed by eight informants in terms of protection from various supernatural dangers. They valued installing a latrine as personal protection from the following threats, reflecting Fon beliefs (Degbelo, 1995):

- encountering a snake while defecting as a sign of impending death in the family;
- theft of one's feces, bodily parings and other items of personal vulnerability by enemies for witchcraft;
- smelling or seeing feces of others, which can induce physical and mental illnesses through bad social relations; and
- encountering supernatural forces or ancestral spirits at night.

People who felt that leaving their feces in the open, accessible to enemies, was personally dangerous were thought to have more power and wealth to lose than others. In Benin, envy, distrust, and competition engender perceptions of danger from witchcraft and supernatural agents (Ngokwey, 1994).

## Cleanliness

Five informants wanted a latrine to improve cleanliness and order in the home environment. They perceived an *overload* of human feces in the household's immediate surroundings and at defecation sites, due to increasingly dense house construction or to intensified cultivation around the village. Feces, especially adults', were considered very dirty especially when they were still recognizable. Informants believed that smelling or

seeing them could cause physical or psychological illness. Some informants spoke of cleanliness in terms of family pride, an inherited trait, or order in the home environment and family.

# Privacy (visual, social, or informational)

Having a latrine to avoid going out in public to defecate was important to four informants for a combination of three reasons: *visual* screening, *social* comfort, and restricting access to personal *information*.

Firstly, it was important for some people to avoid being seen uncovered or defecating, especially women by the opposite sex and by people not of the same family or clan. To gain visual privacy when no latrine was available, not surprisingly, informants described going farther away or choosing a time of day or night when fewer people were about.

Secondly, a person who felt separate or different (due to clan, ethnicity, values or lifestyle) from the dominant village social structure might seek *social* privacy by using a latrine. One such informant was a woman of different ethnicity transplanted to the village for marriage. Other "outsiders" might include government workers and other non-native residents.

Thirdly, a desire for *informational* privacy was expressed by informants who sought to restrict access to personal information about their wealth, resources and even physical presence. Not going out to defecate limits opportunities for neighbors to gather information about one's self, family, and activities. Informants referred to increased discretion, wealth differences, and a greater presence of "outsiders", even in the context of their relatives.

# Situational drives

Informants stated two other reasons for latrine installation: restricted mobility in a family member, and to increase rental income.

# Restricted mobility

The two situations mentioned by five informants were: a family member with old age, infirmity or illness; and voodoo ceremonies that confine participants indoors for extended periods.

## Rental income

Rural landlords who rented housing (a small, but important group of early latrine adopters) could nearly double rental income by providing access to a latrine. Five informants expressed this drive. For example, one landlord could recover the capital cost of a latrine in 3–4 years from rent on two units, charging the standard premium for access to a latrine (US \$3 per month on a base rent of US \$5/month in 1995). The rural rental market consisted almost entirely of government

employees (administrators, school teachers, extension agents, medical personnel, etc.) posted there. Rental units usually adjoined the landlord's home and the latrine was shared by both households.

## Drive frequencies

Table 3 shows the frequency of the 11 drives expressed by different categories of informant. The first column suggests that latrine installation in the study area is strongly motivated by prestige (subtotal = 24) and wellbeing (subtotal = 27). Six informants, all non-adopters, expressed none of the 11 drives for latrine installation. When carefully probed, they admitted no intention to install a latrine in the future, despite sometimes holding neutral or positive attitudes toward latrines.

The first set of categories in Table 3 (gender, education, occupation, and travel experience) capture some of the notable lifestyle differences revealed by the interviews. The remaining categories include village environment and adopter status. While numbers are too small to draw firm conclusions, a number of patterns are visible and worth exploring.

## Influence of lifestyle and village environment on drives

Biographies and socio-economic profiles of informants mentioning the four prestige-oriented drives suggested gender, age, occupation, migration and travel, social linkages, and wealth as discriminating lifestyle factors for these drives. Well-being drives for cleanliness, family health and safety, protection from supernatural threats, convenience and comfort, and privacy are constructed from individual perceptions of the physical and social environment in relation to open defecation. Population density, land pressures, increased social differentiation, crime, and economic diversification emerged from the interviews as potentially important village conditions underlying well-being drives for latrine adoption.

#### Gender

All 24 informants expressing a prestige drive were male. Females were spread across all other drives, with a higher fraction (nearly half) than males expressing the drives for convenience and comfort, and privacy. Females were unique in expressing social privacy and some specifics of convenience and comfort (i.e., avoiding dew, branches, mud, and soiled clothes). Visual privacy, for which a gender difference might be expected, was not explicitly mentioned by any women informants. Some men implied they were responding to female concerns for safety, with particular mention of crime and some supernatural threats. Conversely, the danger of enemies stealing one's feces for sorcery was stated only by men.

Age and household structure (life stage)

Adopters who expressed desires for self-expression and lifestyle differentiation in wanting to install a latrine were generally younger, both at adoption (average age 32.9, n=8) and at interview (average age 46.4) than other adopters (average of 39.3 at adoption n=17) and other informants (average of 53.5 at interview, n=30,2 missing data). A number of these younger fathers also expressed drives for cleanliness and family health and safety in the context of concerns for raising children. In contrast, informants motivated by intergenerational prestige and royal status were older (aged 58–77) with grown children than other informants.

## Education

Distinctions in motivation based on education were less clearly visible except in the absence of certain drives. None of the informants with more than 6 years of education expressed the personal protection from supernatural threats or cleanliness drive, reflecting a tendency for formal education to replace traditional beliefs about illness and disease with western notions. Informants with no formal education were spread across all drives, but more likely to feel no drives for latrines.

# Occupation

Four primary occupational categories linked to motivational differences were distinguished among the informants. In later phases of this study covering a broader area in rural Benin, occupation was found to correlate with education and income, and underlie other lifestyle dimensions (Jenkins, 1999).

Half of the ten *subsistence-based farmers* expressed no drives for latrines, and farmers made up six of the eight latrine rejecters. Extensive time spent in the bush made farmers accustomed to open defecation and sometimes appreciative of its fertilizing benefits. With few linkages to the urban elite and little need for new symbols of self-expression, they were least likely to see value in a latrine except in old age and illness.

Merchants expressed the drive to affiliate with urban elite more frequently than any other occupational group. Their strong occupational ties with urban society made latrines an important affiliation status symbol and necessary feature of hospitality. Merchants also demonstrated the highest rate (50%) of convenience and comfort drives.

New skilled tradesmen, working in small enterprises or self-employed, emerged from the interviews as an occupational group with particularly strong drives for latrine adoption. All seven informants in this group, compared to only 19% of informants with other occupations, indicated a drive to express new experiences and lifestyle in wanting to install a latrine.

Most of the *educated* often salaried *elite* came from rural villages and retired there, building a modern-style

Table 3 Frequency<sup>a</sup> of drives expressed by informants

Drive	Overall	Gender		Education (years)		Occupations new			Experience of travel occupational			Village environment		Adopter status		
		Men	Women	0	≥6	Merchants	Trades	Farmers	Youth	or Social	None	Small Off- road	Large On- road	Yes	Intender <sup>c</sup>	No
Affiliate w/ urban elite	12 <sup>b</sup>	12	_	7	2	5	1	2	8	7	4	4	8	8	2	2
Express new experiences & lifestyle	13	13	_	6	4	_	7	2	10	8	2	5	8	8	3	2
Intergenerational status & legacy	4	4	_	2	1	1	_	1	3	_	1	2	2	2	2	_
Aspire to royalty	3	3	_	3	_	1	_	1	2	1	1	_	3	3	_	_
Family health & safety		12	1	4	4	4	3	1	10	5	2	3	10	8	4	1
	12	9	3	6	3	4	1	1	10	6	1	3	9	8	4	_
Protection from supernatural threats	8	7	1	7	_	2	1	2	3	2	3	4	4	6	1	1
Cleanliness	5	4	1	4	_	1	_	_	4	1	1	1	4	5	_	_
Privacy	4	1	3	3	_	1	1	_	2	2	_	2	2	4	_	_
Restricted mobility	5	4	1	4	1	_	_	2	1	1	3	_	5	5	_	_
Increase rental income	5	3	2	3	2	_	2	_	3	3	1	_	5	5	_	_
No drive expressed	6	5	1	6	_	_	_	5	1	1	4	5	1	_	_	6
Number of informants	40	33	7	24	8	8	7	10	24	15 <sup>d</sup>	11	15	25	25	7	8

<sup>&</sup>lt;sup>a</sup>Some informants expressed several motives for wanting a latrine.

<sup>b</sup>Number of informants in column expressing drive.

<sup>c</sup>"Intenders" are non-adopters who have made a decision and have a plan to install a latrine in the future.

<sup>d</sup>Some individuals have both youth migration and occupational/social travel.

home with a latrine. In addition, a small group of educated, unemployed youth who tended to avoid manual labor, had strong lifestyle expression, family health and safety, and convenience and comfort drives for latrines, influenced by their modern orientation and formal education (see education; Table 3).

# Experience of travel

Two travel patterns were apparent among informants: migration during youth or young adulthood, and occupational or social travel in settled adulthood. Informants who spoke of a drive to express new experiences and lifestyle, family health and safety, or convenience and comfort had nearly all (10 out of 12 or 13) experienced migration to an urban center in search of work, trade apprenticeships, or for secondary education in their youth. Occupational or social travel after youth migration seemed to reinforce these motivations. Informants whose activities involved extensive contact with the urban world (e.g. merchants), consistently expressed the affiliation prestige drive.

### Wealth and income

A rough assessment of housing quality and consumer possessions, seen or reported in the interviews, indicated that those mentioning cost as a barrier to adoption tended to be poor. Pure subsistence farmers were generally poorer than non-farmers. One subsistence farmer perceived cost as so excessive relative to his means that a latrine was an acquisition inconceivable in his lifetime and incompatible with his lifestyle. Poverty seemed to stifle prestige drives for latrines, while wealthier individuals could afford and might need the material symbols of status. High cost or lack of savings for many adopters caused years of delay, from the decision to adopt to the start of construction, and from the start of construction to completion, to amass enough cash.

Physical and social geography of the village environment

The decreasing permanent or seasonal availability of good defecation sites around the home and village was mentioned by informants in the context of the cleanliness, convenience and comfort, and family health and safety drives. On the other hand, several aspects of a village's social character were implicated in drives for personal protection from supernatural threats, family health and safety, and social and informational privacy. Greater village size, occupational diversity, regional integration, proximity to major roads and the urban center, and infrastructure development, lead to processes that reduce the availability of good open defecation sites, increase levels of crime and exposure to outsiders, generate new needs for privacy, and produce feelings of anonymity.

To explore the influence of village environment on latrine motivation, the seven sample villages were grouped into four *small off-road* villages (predominantly agricultural, less dense, politically un-integrated, and with little infrastructure) and three large on-road villages. Table 3 shows that family health and safety, convenience and comfort, and cleanliness drives were more frequently expressed in large on-road compared to small off-road villages, supporting the hypothesis that village environment stimulates the formation of these important well-being drives for latrine adoption. Onethird of informants living in small off-road villages had no drives for latrines, compared to only one out of 25 informants living in large on-road villages. The frequencies also suggest the hypothesis that personal protection from supernatural threats, privacy (dominated in the interviews by social and informational aspects), and prestige drives are largely independent of village environment, as distinguished here, and rather conditioned by lifestyle differences.

# Adopters and intenders vs. non-adopters

With equal frequency, the four most common motivations for latrine acquisition among adopters were urban affiliation, new lifestyle expression, family health and safety, and convenience and comfort. Other frequently expressed adopter motivations included personal protection from supernatural threats, cleanliness, and rental income. While adopters' motivations reflected both benefits anticipated at adoption and experienced benefits, intenders' reflected only anticipated benefits, The most frequent drives of intenders were family health and safety and convenience and comfort, followed closely by new lifestyle expression. Intenders had 2.3 drives, on average, comparable in motivational intensity to adopters averaging 2.5 drives. Both contrast with rejecters, averaging 0.6 drives.

#### Discussion

The results establish a perception emerging from earlier work that sanitation consumers often have motives which have little or nothing to do with health protection or a healthier environment, and much more to do with prestige (Cotton, Franceys, Pickford, & Saywell, 1995; Elmendorf, 1980; Goodhart, 1988; Murthy, Goswami, Narayanan, & Amar, 1990; Perrett, 1983). In rural Benin, prestige or status conferred by latrine ownership comes from their symbolic ability to display an owner's affiliation with the urban world, to express modern views about home comfort and new values related to time and money gained outside the village, and to emulate some of the privilege, wealth, and status of old royalty.

Women have less room for expression of social class separate from their husbands and families in rural Benin (Jenkins, 1999), so it is perhaps unsurprising that prestige drives for a latrine were mostly felt by men. On the other hand, women were motivated more by convenience and comfort and privacy. Older male household heads were more concerned with leaving a legacy and younger ones motivated to express new experiences and a new lifestyle ("the good life"), illustrating a culturally universal phenomenon that as life stage progresses, the focus of needs shifts from hedonic (self-pleasing) goals and material accumulation to preoccupation with intergenerational ties (Erikson, 1959; Wallendorf & Arnould, 1988; Wells & Guber, 1966).

Consumer goods, household possessions, and housing style are highly efficient instruments of unspoken social communication in all cultures (Arnould, 1989; Douglas & Isherwood, 1978; McCracken, 1986; Wilks, 1989). If one accepts latrines as the imported culturally exotic housing innovation that they pose in most target communities, it becomes important to understand the peculiar cultural meanings of latrine ownership that evolve as part of the process of their adoption and diffusion into a new culture or community (Arnould, 1989; Rogers, 1983). Paying attention to lifestyle differences, for example those related to gender, occupation, age, wealth and travel, are important dimension to consider in undertaking such a study.

Migration, travel and formal education were important routes of exposure to modern ideas about sanitation and influenced drives for family health and safety and convenience and comfort. Knowledge of infectious diseases, ideas about flies and feces, and becoming unaccustomed to open defecation were always attributed by informants to their urban experiences, schooling, or personal contacts outside the village. Some young men who had traveled abroad casually discarded or even belittled the importance of supernatural phenomena related to personal health and safety.

Choosing latrines means changing defecation practices which tend to be strongly culturally conditioned. Ndonko (1993) found that traditional defecation practices of two distinct ethnic groups in Cameroon were strictly spatially organized according to a rich set of culturally rules, social norms, and taboos, reflecting unique interactions of the physical environment with the traditional livelihood strategies of each group. Douglas (1966) argues that a culturally universal notion of dirt as matter out of place underlies the linkages made by many pre-industrialized (pre-germ theory) cultures of feces and defecation with danger, defilement, taboo, and pollution. These, in turn, achieve social cohesion by deterring social transgressions and enforcing mutual obligations. Desires for a latrine for greater personal protection from supernatural threats, especially from enemies stealing one's feces, seeing a snake while defecating, and spirits at night, are examples of culturally conditioned beliefs and values shaping motivation for a latrine in unexpected ways unique to Benin. On the other hand, illness and disease risks from feces were attributed to the bad smell and repulsive appearance of excreta, similar to beliefs about miasmas in 19th century Europe and North America (Corbin, 1996; Tarr, McCurley, McMichael, & Yosie, 1984). More recently, Curtis and Biran (2001) have argued that a near universal human disgust of feces, and one might add, of its smell, may reflect ancient biological predispositions to avoid potential sources of diseases.

Imposed from the outside by government agents, latrines tended to be rejected by the Cameroonian communities studied by Ndonko because they upset the ordered traditional patterns of defecation behavior. In contrast, in this study in Benin, installed latrines were being willingly chosen by adopters over traditional practices, reflecting a process in which culturally bound definitions of a "good" and "bad" place to defecate are evolving under the influence of changing lifestyles and physical environments. Cultural views of human feces and norms of defection in daily life are acknowledged to exist by most sanitation development managers but rarely explored or understood so that they can be adapted, rather than ignored, to promote desires for home sanitation grounded in a given cultural context.

# Conceptualizing drives and their determinants

The main motivations for latrine adoption, among adopters and intenders, in contrast with rejecters, comprised two prestige drives: to affiliate with the urban elite, and to express new experiences and lifestyle, and two well-being drives: family health and safety, and convenience and comfort. Drives capture the ultimate purposes of consumers' intention to acquire sanitation and are generated by the gaps between ideal and actual states. Those states are formed by the influences of individual lifestyles and environments (Fig. 1).

Conceptualizing motivation in terms of *drives* captures the notion of internal tension, which propels an individual to seek solutions. It also provides a framework for inquiry grounded in a consumer's perception of the personal benefits and value offered by a new behavior relative to his or her current situation. Finally, it suggests that drives can be stimulated externally with new information or experiences that alter perceptions of the adequacy of an individual's actual state (e.g., defecating in the open), or highlight the desirability of an ideal state (e.g., having a home latrine), in terms of the lifestyle goals and values felt by a target group of consumers. By creating or widening the perceptual gap in consumers' minds, search for a solution is motivated.

Lifestyles capture an individual's overall pattern of activities involving work (captured in part by occupation), family, and leisure. Lifestyles, and the personal goals and values they embody, are not easily changed in the short or mid-term by advertising or promotion; nor can a village's environment. Thus, for some combinations of lifestyle and environment, it may be very difficult to arouse drives for latrines, for example, among subsistence farmers in small-off road villages in this study. When lifestyle and/or environment are favorable, drive arousal should be possible through promotion that raises awareness of the gap between 'ideal' and 'actual'.

Aroused drives of sufficient intensity should lead to consumer desires to acquire a latrine, and in turn, to increased demand as long as barriers do not suppress the expression of these desires in the market place. Thirteen barriers to adoption were identified in the interviews and confirmed in subsequent work (Jenkins, 1999). The main ones included high actual or believed cost; lack of credit; unavailable or complex technical inputs; poor latrine operation and performance (especially safety and smell); unsuitable soil; and extended family interaction problems. The subsequent research indicates that if any of these barriers is perceived as sufficiently permanent, consumers will choose an alternative to latrines (including doing nothing), despite aroused drives for latrines.

# Marketing for sanitation programs

New approaches to promoting demand for sanitation in developing countries emerge from the drive arousal model and new understanding of latrine motivation in rural Benin. Marketing techniques, creative message development, and awareness-raising campaigns are potentially fruitful avenues to consider for interventions to stimulate demand for improved sanitation. Drawing from the conceptual framework and findings of this study, the following six recommendations are suggested as hypotheses for testing in the development of marketing approaches for sanitation:

- Advertising campaigns should associate latrines (or other sanitation solutions) with positive values (e.g., prestige, modernity, convenience, family safety, cleanliness, privacy, good health and good social relations) likely to appeal to existing motives for improved sanitation in the population. They should focus attention on the specific inadequacies of present sanitation conditions as perceived by target groups.
- 2. The use of scientific explanations of disease transmission to promote latrines should be avoided. These explanations do not motivate adoption and are

- largely filtered out or misunderstood. Instead, carefully crafted messages about good health in its widest sense that resonate with traditional cultural beliefs about the links between defecation, feces, and ill health offer a more promising approach for public health campaigns promoting good sanitation behaviors. This broad notion of keeping healthy would include, for example, beliefs in this study about protection from various supernatural threats, avoiding the smell and sight of feces, and freedom from accidents and injuries.
- 3. Improving latrine designs to enhance attributes important to drive satisfaction could increase their desirability over competing alternatives and lead to broader choices for consumers. In this study, varied symbolic functions of latrine ownership associated with each of the four prestige-related drives translate into preferences for quite different latrine attributes and features. Consumer-oriented development of designs (e.g., using focus groups, panel testing, workshops, and product trials) is most likely to produce products that satisfy potential demand by assuring that offered latrine styles satisfy the range of consumer reasons for installation.
- 4. Given the competing alternatives for many of the drives motivating latrine adoption in rural Benin (often housing-related improvements such as a rainwater cistern, cement floors, plush salon furniture, painted room walls, etc. (Jenkins, 1999)), bundling the promotion of latrines with other highly desired housing improvements may be an effective way to raise the image of latrines. For example, latrines could be linked to highly desired housing improvements in publicity or advertising campaigns as well as in the delivery of services and information to support construction.
- 5. Recognizing that different lifestyles and village environments give rise to different drives or dissatisfactions, a single set of strategies to arouse drives is unlikely to work effectively across all segments of the population. Key market segments for sanitation promotion based on motivational differences in this study were gender, occupation, travel experience, age, and village type.
- 6. Certain population groups may be very unlikely to adopt latrines, no matter how much promotion is done, and should therefore not be targeted. Subsistence farmers with no experience of travel in small isolated off-road villages are unlikely to be dissatisfied with open defecation conditions, or to want latrines for their symbolic value. Initially, limited program resources might best be targeted at village types and lifestyle groups with potential for drive arousal, for example, in rural Benin at villages near large towns or on main roads, or at non-agricultural households.

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