

SCHOOLS FORMATIVE HYGIENE RESEARCH

Prepared by
Le Thi Thanh Xuan, HMU
Duong Khanh Van, NIOEH
Robert Aunger, LSTHM

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List of Abbreviations

HW	Handwashing
HWWS	Handwashing with soap
PSC	Primary school children
IDI	Indepth interview
FGD	Focus Group Discussion
WB	World Bank
MOH	Ministry of Health
UNICEF	United Nations Children's Fund

Executive Summary

The Scaling up Handwashing Behavior Change Project has as one of its central objectives to scale up handwashing among most-at-risk populations in Vietnam, Senegal, Peru and Tanzania. The Scaling up Handwashing project will test whether innovative promotional approaches can generate widespread and sustained increases in handwashing with soap at critical times among the poor and vulnerable. The project aims is to reduce morbidity and mortality in children under five from diarrheal diseases through a strategic communications campaign to promote handwashing with soap (HWWS) among mothers of children under five and through primary school children.

The present study was designed to provide the insights needed to design an effective school-based communication program to promote handwashing with soap at critical moments among children age 6-10 at critical junctures (i.e., after going to the bathroom and before eating).

Objectives

- Understand the school context within which handwashing promotion will take place, including but not limited to social dynamics, the roles and responsibilities of different groups of staff members, the typical school day, and access to water, sanitation and soap.
- Gain insight into the minds and realities of the primary target audience (children aged 6-10) from rural and urban areas with a view to understanding the determinants (opportunity, ability, motivation) of handwashing with soap (HWWS) in this population.
- Understand the role that children might play as behaviour change agents in their communities, and as such convince their families – particularly mothers and younger siblings – to wash hands at least before eating and after using the bathroom.

Methods

The research utilized qualitative methods of data collection in a school context, targeting children in primary school. It was conducted in 6 schools, two in each of three provinces: Phu Tho (in the North), Quang Binh (in the centre) and Tien Giang (in the south). The methods used include:

- In-depth interviews with school principals, teachers, students and their caretakers
- Structured observation of handwashing and latrine facilities in schools and at home
- Novel 'child-friendly' methods for investigating children's beliefs and values (daily diaries, family structure, motivator pictures, role models)

Main findings

1. Child

Knowledge

- Children report the need to HWWS when they have visibly dirty hands, after playing, after eating, before going to bed and before drinking. However, handwashing after going to toilet was commonly mentioned only after prompting.

Attitudes

- Disgust with visibly dirty hands after going to the toilet and the fear/shame/regret associated with having made someone else ill by transmitting germs to them (through the fault of not cleaning dirty hands) are the primary motivators for handwashing among children.

Beliefs

- Children have a clear expectation that HWWS will protect their health by helping them avoid handwashing-related diseases like diarrhea, bellyache, and flu. They know that the cause of diarrhea is bacteria on hands, in dirty water, or food kept a long time. Thus, they understand the relationship between germs and diseases.

Competing priorities

- Common reasons for not HWWS include laziness, forgetfulness, being pressed for time or not wanting to take time for washing, wanting to do pleasurable activities right away (such as play football), not seeing their friends wash their hands or not seeing HWWS as important or necessary, because there is no visible dirt on the hands.

2. Family

Accessibility

- At home, many kinds of soap are available (powder, bath milk, dish-washing liquid, bar soap), but there is a common lack of a proper water container (such as a basin) for handwashing that leads to improper practice such as washing hands in unclean water containers.
- Perfumed soap was a HW facilitator in both at schools and at home.

Social Support

- The influence of children on caregivers is not strong, especially in rural areas, probably due to the image of 'model' children as being docile and submissive. Children thus have a 'small' voice in their family ('bigger' for boys).
- Parents have a strong degree of control over their behavior. Urban mothers have more influence over their children, while rural fathers give more advice to the child. The main role in teaching/educating children belongs to the parent who spends more time at home, but the father is the final decision-maker in educating children.
- Parents also have relaxed attitudes toward handwashing, believing it is only necessary to use soap when hands are visibly dirty or smelly. Hence, although parents tend to actively push their values on children, handwashing is not among these values.

3. School

Accessibility

- At school, HW facilities (including water containers such as basin and water tap or collector) are available and accessible in two of the three provinces. However, no soap or soap placement was observed, implying a challenge of soap management or a consistent supply of soap at school.
- The level of handwashing for primary school children is therefore much lower at school than at home.

Social Support

- School is a friendly environment that children want to go to, as they do not find rules strict and feel safe there. The principal determines school activities and plays directive and supportive roles for teachers. However, teachers tend to mainly focus on primary subjects such as Vietnamese and mathematics and disregard auxiliary subjects such as physical exercise and

the arts, including hygiene content, especially when school takes place all day. Social associations are potential sources for encouraging primary school children (PSC) on hygiene messages at school (pioneers, children unions).

- HWWS is not common practice in the local context as it is perceived by local people not to be necessary. Also, backward local customs (open defecation, drinking unboiled water) affect the development of hygiene behavior in students. In addition, the parents of pupils disregard (coi thuong) the importance of HWWS.
- Hand washing with soap takes low priority at both school and household levels. The level of handwashing for primary school children after defecation at school is lower than at home due to lack of soap and soap holders at all school visited.

4. Society

Social Norms

- HWWS is not a common practice as it is perceived by many people to be unnecessary; many believe that rinsing hands with water only is enough to be clean. Therefore, soap is not believed to be needed for handwashing on most occasions. Also, local customs (open defecation, drinking unboiled water) affect the development of students' hygiene behavior.
- Because HWWS is not a priority among adults, they provide relatively little encouragement or reinforcement for children to HWWS. Children also report not needing to HWWS because they don't observe their peers doing so; they perceive this as a social norm of *not* HWWS. Counteracting this 'non-practice' norm could be difficult.

Media

- Television is the most popular information source for children (through cartoon, games and music shows).
- Doctors, teachers and scientists could act as role models in encouraging children to adopt new hygiene practices, including HWWS.
- Children express a variety of aspirational values – primarily intelligence, creativity, being well-educated, industrious, good-natured and altruistic.
- Children can probably serve as ambassadors for hygiene messages encountered at school by bringing them home.

I. Introduction

1.1. Why Study Handwashing in Vietnam?

More than 10 million children die each year in the developing world from causes that are preventable through good hygiene, nutrition, and medical treatment. Diarrheal and respiratory diseases are the top causes of child mortality (at 67% of the total) and they kill up to 4 million children every year. Handwashing with soap can help to prevent these diseases. Unfortunately, the efforts to date to promote handwashing with soap have been either ineffective, not cost efficient or at a very small scale. Handwashing with soap at critical times (such as post-defecation and prior to preparing food) has been shown to reduce the incidence of diarrhea substantially. However, rates of handwashing with soap at the right times are very low throughout the developing world.

In Vietnam the first national workshop on hygiene education in primary schools was conducted in 1986, and highlighted the importance of School Sanitation and Hygiene (SSH). Then hygiene education was developed in term of curricula and textbooks for primary school children. However, currently there is no longer a specific health education curriculum, because of pressure to concentrate on more academic subjects. Instead, handwashing is incorporated in the curriculum along with many other health messages, including HWWS through curriculum of modules of society-nature (Tu nhien-Xa hoi) for class 1 to 3 and science (Khoa hoc) for older students (Class 4 and class 5). A national strategy of rural water supply and sanitation (RWSS) has existed since 1998 and a national target program (NTP) for RWSS since 2000, with a target of 100% school hygienic sanitation coverage (up from 12%) in rural areas by 2010. Apart from government efforts, there has been support from UNICEF, WHO, international and national NGOs in Vietnam such as Plan International in promoting hygiene behavior among school children.

To date, Vietnam has made continual progress in providing safe water to its rural population and hence it has moved towards the fulfillment of article 24 of Convention on the Rights of the Child, which states that in order for children to reach their highest potential, they must have access to safe water, environmental sanitation and hygiene. However, according to a recent national survey by MOH and UNICEF (2006), the sanitation and hygiene of schools in Vietnam is very poor. For example, 72.7% of schools had latrines, both hygienic and un-hygienic; 5% of them had latrines that were unusable. The main reasons why latrines were not in use was insufficient flush water. In addition, handwashing facilities are not commonly provided: 35.5% of surveyed schools had handwashing areas, but only 29% of surveyed schools had handwashing areas with enough water, and only 4.6% of surveyed schools had soap at the handwashing areas. Besides, the handwashing practice of school children is very poor. Only 4.6% of students washed their hands with soap after urinating and 11.5% of students washed their hands with soap after a stool (MOH, UNICEF 2006). Furthermore, oftentimes the number of latrines, water points and hygiene facilities is not sufficient for the number of students and staff. Even schools where hygiene facilities are accessible and accessibility, the practice of handwashing with soap (HWWS) is still poor. Therefore, an in-depth understanding of motivators and barriers of handwashing among school children is critical for a behavioral change campaign.

1.2. The Situation in Vietnam

Occupying 329,314 square kilometers of Southeast Asia, Vietnam has an estimated population of 84.11 million, 33 percent of whom are children (General Statistical Office, 2006). Despite various difficulties and challenges, recent years have seen remarkable social and economic gains due in large part to sound social-economic development planning, and continued political and security stability.

Over the past five years, the economy has grown rapidly and fairly sustainably. Annual GDP increases have ranged from 7.08 percent in 2002 to 8.17 percent in 2006 (General Statistical Office, 2007). The average annual GDP increase over this period was 7.7 per cent, and 2006 per-capita income was US \$700 (General Statistic Office, 2006). Along with economic development, Vietnam has paid close attention to, and prioritized, the allocation of resources to social development. This twin focus on economic and social development has resulted in many noteworthy improvements to the population's quality of life: the proportion of poor households decreased from 28.4 percent in 2002 to 19 percent in 2006 (General Statistics Office, 2006)– 1.5 million new jobs were created in each of those years – and life expectancy rose from 71 years in 2002 to 71.3 years in 2005. As a result, Vietnam's ranking on the Human Development Index rose from 0.688 in 2002 to 0.704 in 2005; indeed Vietnam now ranks 108th out of 177 countries (Human Development Report 2006). In addition, Vietnam has a high school enrolment rate, at 95% since 1995. The national primary education enrolment rate has increased to 97% in 2007.

These socio-economic development achievements, including improvements in living standards, job creation and poverty reduction, form the underlying conditions that will contribute to the realization of human rights, including the rights of children.

1.3. History of Work in Vietnam on Hygiene

1.3.1. The Water and Sanitation Program

The Water and Sanitation Program (WSP) is an international partnership to help poor people gain sustained access to improved water and sanitation services. Administered by the World Bank with financial support from several bi- and multilateral and private donors, WSP is a decentralized partnership and operates through offices in Africa, East Asia, Latin America and South Asia. A major thrust of the program is to help its clients prepare for and implement actions towards meeting the water and sanitation-related Millennium Development Goals (MDGs). The Program works with partners at the country, regional and international levels, assisting countries to build capacity, reform policies, strengthen institutions and develop human resources. In East Asia, the program currently operates offices in 5 countries – Cambodia, Indonesia, Lao PDR, the Philippines, Vietnam – with the regional office located in Jakarta, Indonesia.

1.3.2. The Scaling up Handwashing Project

In December 2006, the Water and Sanitation Program initiated implementation of the Scaling up Handwashing Behavior Change Project. The project has as one of its central objectives to scale up handwashing among most-at-risk populations in Vietnam, Senegal, Peru and Tanzania. The Scaling up Handwashing project will test whether innovative promotional approaches can generate widespread and sustained increases in handwashing with soap at critical times among the poor and vulnerable.

The project aims to reduce morbidity and mortality in children under five from diarrheal diseases through a strategic communications campaign to promote handwashing with soap (HWWS) among mothers of children under five and through primary school children. In Vietnam, the Department of Preventive Medicine in the Ministry of Health (MOH) is leading the initiative with technical support from WSP and implementation support from the Vietnam Women's Union (WU). A variety of other partners – including private soap companies and INGOs together with the public sector and donor agencies – form a larger Public Private Partnership for handwashing.

The Vietnamese handwashing program will utilize four main channels of communication to transmit HWWS messages: 1) national and regional mass media, 2) community based interpersonal communications through the public sector system (health, education, and community organizations), 3) high impact marketing events through private advertising firms, and 4) public relations and advocacy

aimed at national policy makers. The project will be implemented primarily in Son La, Phu Tho, Hung Yen, Thanh Hoa, Nghe An, Binh Dinh, Ninh Thuan, Tien Giang, Vinh Long and Dong Thap and An Giang.

This study was designed to provide the insights needed to design an effective school-based communication program to promote handwashing with soap among children age 6-10 at critical junctures (after going to the bathroom and before eating).

1.4. Objectives of the Research

The study has three specific objectives:

- Understand the school context within which handwashing promotion will take place, including but not limited to social dynamics, the roles and responsibilities of different groups of staff members, the typical school day, access to water, sanitation and soap.
- Gain insight into the minds and realities of the primary target audience (children aged 6-10) from rural and urban areas with a view to understanding the determinants (opportunity, ability, motivation) of handwashing with soap (HWWS) in this population.
- Understand the role that children might play as behavior change agents in their communities, and as such convince their families – particularly mothers and younger siblings – to wash hands, at least before eating and after using the bathroom.

To achieve these objectives, a small-scale study was undertaken. It is important to note that results from only six schools are presented in this study, and that these schools do not represent a national sample, so significant restraint should be applied when generalizing these results to larger populations, or other circumstances.

II. Theory

It is important for public health interventions to be based on theoretically sound principles of behavior change. This is particularly true in the present case, as the research targets a special population: children. An effective school-based hygiene promotion program centered on children should be based on the best current knowledge of how children function in school environments, and how they differ from adults in psychological terms. As a result, significant attention has been paid to developing a theory appropriate to doing research with children.

2.1. The FOAM-EM framework

Understanding the determinants of behavior can be achieved through use of FOAM, a behavior change framework developed over a number of years by Population Sciences International (PSI), as modified and adapted by the Global Handwashing Programme Scaling Up Project to guide formative research and intervention design (see Figure 1). This approach has its foundations in popular behavior change approaches, including the Health Belief Model, Theory of Reasoned Action and Transtheoretical model.

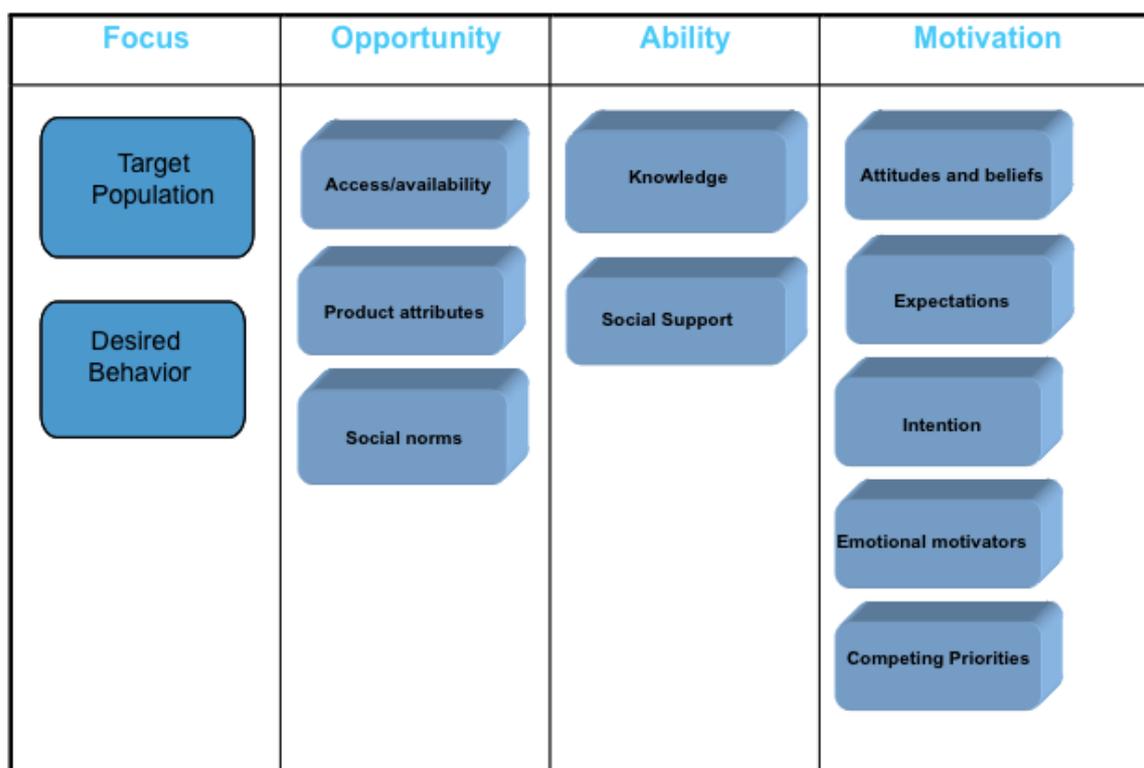


Figure 1: The FOAM Framework

FOAM is an acronym standing for Focus, Opportunity, Ability, and Motivation. Focus refers to the need to identify, in specific functional terms, the desired behavior, and the target populations in which this target behavior is to be promoted. The next three categories are concerned with psychological, structural influences on children (or adults). Opportunity concerns the institutional or structural factors that influence an individual's chance to perform the target behavior; Ability refers to the individual's skills and proficiency to perform the target behavior, and Motivation to the drives, wishes, urges, or desires that influence an individual to perform the target behavior.

Within each category are a number of variables designed to measure psychological constructs or environmental factors. For example, within the Opportunity category are concerns with *availability* or *access* – that is, the ease of obtaining the cluster of goods and services needed to exhibit the target behavior (e.g., How difficult is it to gain access to soap and water, or the money to purchase these necessities?). Also included are measures of relevant *attributes* of any products associated with the behavior – that is, the perceived or actual characteristics of goods and services (e.g., is the water clean, the soap appealing?). A third class of variables included in the Opportunity category is *social norms*, or behavioral standards in the community for an individual to follow (e.g., Are most people in the relevant social group washing their hands? Do people who don't wash hands get socially sanctioned in any way?)

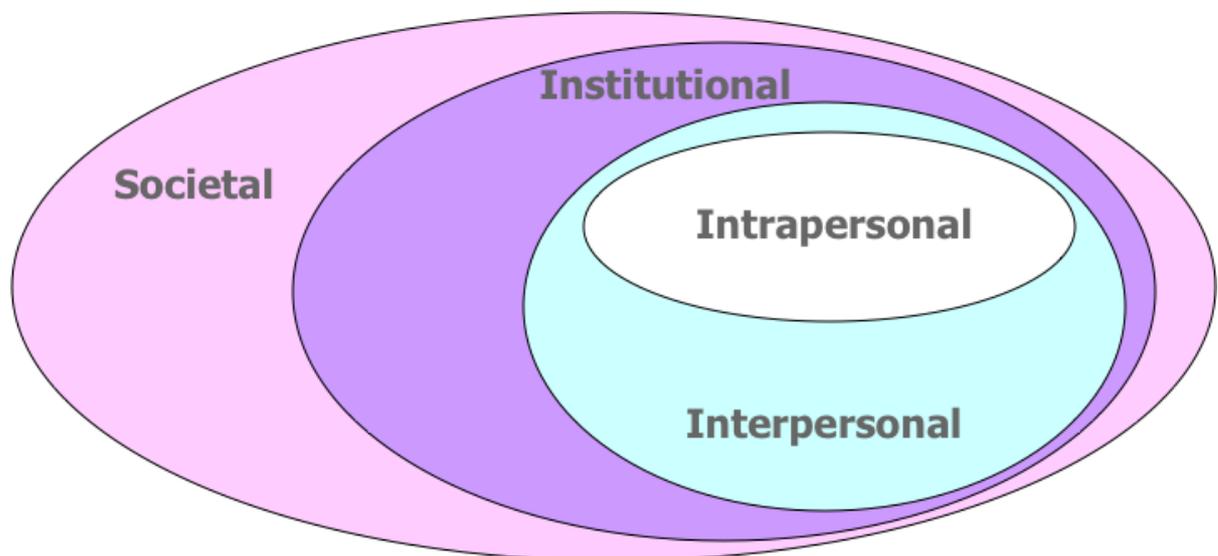
The second category of variables concerns Ability – in particular whether or not members of the target population have the relevant *knowledge* and *support* enabling them to engage in the target behavior. Thus, representative individuals should be measured for their ability to report facts about the utility of handwashing, when it should be practiced, and the consequences of not handwashing (such as getting ill). Desired practices also typically require social support (i.e., physical, emotional, and informational

assistance others can provide for a behavior). Knowing to what extent these kinds of support are present is thus crucial.

Finally, behavior requires Motivation. The behavior won't be practiced without the individual having the appropriate *attitudes* and *beliefs* (i.e., perceptions or mental positions about a product or behavior, including evaluations or assessment of a product or behavior which may or may not be true). For example, is handwashing seen as necessary and effective at improving or maintaining health? Attitudes can be a function of the individual's *expectations* – what they think will happen as a result of performing the desired behavior. Thus, individuals are likely to be worried about perceived *threats* (dangers) associated with performing or not performing the behavior (e.g., How susceptible are they to the illnesses known to result from failure to perform handwashing? How dangerous are these illnesses perceived to be?). These various beliefs and attitudes contribute to the degree to which an individual *intends* to facilitate or perform the target behavior (e.g., how willing are they to pay for soap? Have they made a plan to ensure their children handwash before eating?)

However, FOAM was originally developed initially with adults (mothers in particular) in mind. For the purposes of this study, it has been adapted to deal with this new target population, children, by the Vietnam Handwashing Initiative team (particularly Nguyen Kim Nga and Nguyen Hien Minh) and the Senior Social Marketing Advisor, Jacqueline Devine. This has been achieved in two ways. The first is through the development of new variables which seem to be appropriate from our analysis of the data collected for this study. In particular, the idea of competing priorities, reflecting finding that children are often torn between playing and handwashing, and emotional motivators (eg. disgust, shame, etc.) were also added under the motivation category of determinants.

Figure 2: The Socio-Ecological Model

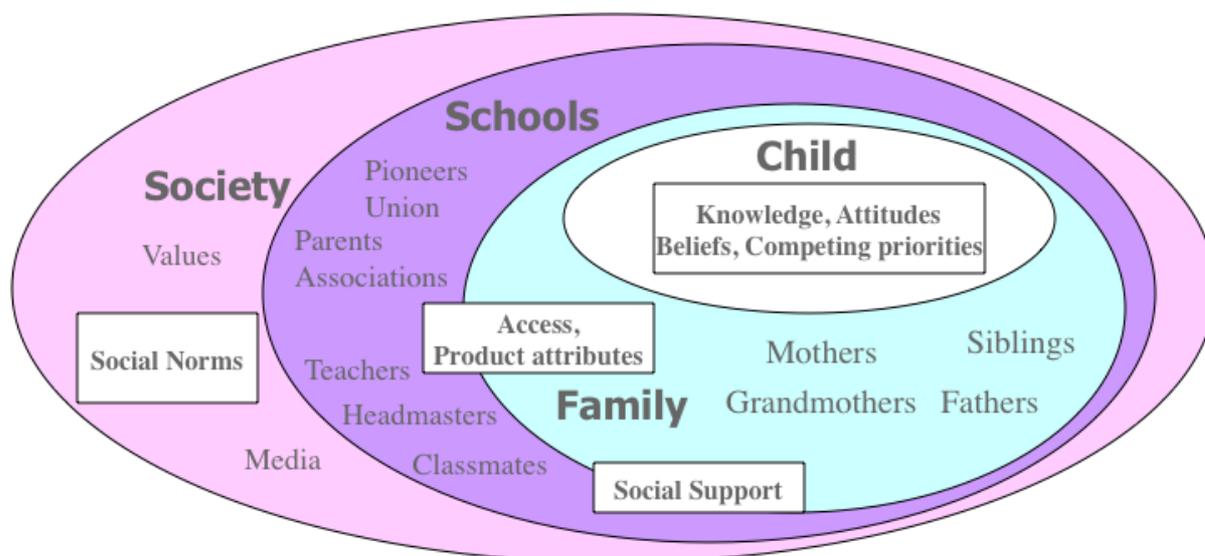


Second, the FOAM framework has been synthesized with the Social Ecological model (Stokols, 1992). The Social Ecological model (Figure 2) focuses on both psychological and environmental determinants, being one of the few behavior change approaches to specify several kinds of environments which might impact on an individual's behavior. In particular, the Social Ecological model considers the social,

institutional, and cultural contexts in which people live. It assumes that the well being of individuals is influenced by multiple facets of their physical and social environments, as well as intrapersonal, or psychological, factors.

In Figure 3, the FOAM variables are placed (in white boxes) within the level of socioecological analysis which is most appropriate. In this way, the perspectives of the two frameworks can be fruitfully combined, drawing on the strengths of both approaches.

Figure 3: The FOAM Ecological Model



Measuring the variables identified by this new framework through formative research should enable handwashing promotion programs to develop interventions that effectively target the motivational and other necessary determinants of behavior which are lacking in the target population.

2.2. Tool Development

In learning about the determinants of childhood behavior, children and their ideas should be taken seriously. (Boocock and Scott, 2005) Childhood, as a unique structural and cultural 'space', must be studied in its own right, independent of the concerns and perspectives of adults. Thus, the contemporary social scientific view of children as constructive social agents requires new methods to probe their world. (Matthews, 2007; Mayall, 2002) These methods must be able to draw out the nature of childhood as a lived experience, while simultaneously taking account of children's psychological abilities to report on this, and account for the power imbalance in child-adult interactions. (Mayall, 1999) In effect, these methods must be sensitive to the ability of children to make their own kind of sense, but their inability to express these in adult terms.

Most sociologists of childhood therefore recommend qualitative methods tailored to the special needs of interacting with children, such as ethnography and other immersive techniques. (Fine, 1988; Christensen, 2000; Green, 2005) Here, however, we go a step further, and develop novel methods which are designed to be child-centered. Although qualitative tools have been used before to study children with respect to their hygiene behaviors (Sidibe, 2007; Steadman-Kenya, 2007; Steadman-

Uganda, 2007) prior research relied heavily on behavior trials and structured observation. These studies had also been done with older children, whereas the target population for this study was students aged 6-10.

For these reasons, novel methods were devised (see Table 1). Pre-testing of candidate methods showed that young children like very much having objects on which to focus their attention, and for interaction to be playful, rather than like a school lesson. To reflect these concerns, the tools developed for this project emphasize a quasi-game-like situation, and the use of drawings or other visual aids to facilitate interaction and to put the focus on objects rather than the adult facilitator.

Table 1: Qualitative Tools used in this study

TOOL	PURPOSE
Hygiene Facilities Observation	To observe the use, quality, number and usability of the school's sanitary and personal hygiene facilities
Role Models	To understand what traits children admire and respect, and how they associate these traits to particular kinds of role models, so that individuals with the most desirable characteristics can be selected as the source of any messages from the handwashing project
Track-the-Message	To understand how information can be transmitted from school to home environments, and thus detail how schools might serve as agents of hygiene promotion in the community-at-large
Daily Diary	To understand the day-to-day activities of children
Motivator Pictures	To understand which motivators are more likely to get children to handwash with soap
Family Structure	To understand the nature of the social relationships within the child's household, which constrains opportunities for handwashing
Belief Interview (Child)	To understand children's beliefs about handwashing; to check if 'seeded' message reached child, and in what form
Caretaker Interview	To understand primary caretakers' economic concerns about handwashing, the support for handwashing at home, and whether the 'seeded' hygiene message reached family members

These methods seek to elucidate the kinds of concerns children have, thus fulfilling the need to identify the psychological determinants of handwashing among school children, as well as to find what kinds of people children admire and their favorite sources of information (so as to assist in the identification of potential spokespeople and messaging channels for handwashing campaigns). Due to their unfamiliarity, each of these tools is described at greater length in Appendix 1. Here, in Table 1, the types of tool are listed, with a description of their overall purpose.

The data collection tools were developed by an international consultant from the London School of Hygiene and Tropical Medicine (Robert Auger), working collaboratively with two local consultants (Le Thi Thanh Xuan and Duong Khanh Van), who also trained to collect data through the use of these tools.

III. Methods

3.1. Sample Selection

3.2.1. School selection

This study purposively selected six primary schools from three provinces among 14 provinces involved in the project. The three selected provinces represented three regions in Vietnam: Phu Tho Province (in the North), Quang Binh Province (in the Centre) and Tien Giang Province (in the South). In each selected province, one urban and one rural area were purposively selected by WB staff and local authorities (Women Union and School staff) based on the following criteria:

- 2 schools in small towns of Dong Hoi City in Quang Binh province, which had new hygiene facilities (toilets) for students funded by the Coastal City Sanitation and Environment Project (WB)
- 2 schools in district area of Phu Tho province (1 peri-urban and 1 in rural area), representative for a typical primary school in the North of Vietnam
- 2 schools in the South of Tien Giang province (1 peri-urban and 1 rural)

The general criteria for all six schools selected were:

- Convenient to contact and organize the data collection
- Willing to participate to the study

The six schools in three provinces which were selected using these criteria are described in Table 2.

Table 2: Selected schools by province

PROVINCE	SCHOOL	LOCATION	NOTES
Phu Tho	Phu Loc Primary School	Nearby central area of Phu Ninh District	
	Phu Ninh Primary School	In rural area of Phu Ninh District	
Quang Binh	Dong Phu Primary School	In the centre of Dong Hoi City	New hygiene facilities (toilets) for students funded by the Coastal City Sanitation and Environment Project
	Hai Dinh Primary School	In the centre of Dong Hoi City	
Tien Giang	Dinh Bo Linh Primary School	In the centre of My Tho City	
	My Hoa Primary School	In rural area of My Tho City	

3.2.2. Individual selection

The age for primary school in Vietnam is from 6 to 11, equivalent to Grades from 1 to 5. The international expert's experience from Uganda and Kenya study (Steadman group, 2007) showed that it was extremely difficult to extract information from younger grades (children under 9 – 10). So, with the consultation of the international consultant and after pretest in one primary school in Hung Yen province, the local consultant team decided to focus mainly on children at older ages within the prescribed range (Grades 4 and 5, i.e. children from 9-10 years old). The younger students (Grades 2 and 3, i.e. children from 7-8 years old) were only invited to participate in the motivator pictures exercise after having a positive result from the pilot in Hung Yen Province with this age group. The matrix of samples used with each tool is reported in Table 3.

Table 3: Sample used for each data collection tool

TOOL	GRADE	NUMBER OF STUDENTS IN EACH GROUP	NUMBER OF GROUPS IN EACH SCHOOL	NUMBER OF SCHOOLS	TOTAL PARTICIPANTS
Students					
Daily Diary	4-5	5	1	6	30
Family Structure	4-5	5	1	6	30
Role Model	4-5	5	1	6	30
Motivator Pictures	4-5	5	1	6	30
	2-3	7	1	6	42
Belief Interview	4-5	1	3	6	18
Handwashing Observation at Home	4-5	1	3	6	18
Track-the-Message	4-5	1	2	6	12
Adults					
Principal Interview	N/A	1	1	6	6
Teacher FGD	N/A	5	1	6	30
Caretaker Interview	N/A	1	2	6	12

a) Sample of students

All children were selected by head teachers; they tended to be the most active or verbal students in the class (although this was not required by the researchers). It seemed that the schools wanted to “show off” their students to the study team.

General requirements were as follows:

- Role Model (Grade 4/5): 1 group of 5 students
- Daily Diary (Grade 4/5): 1 group of 5 students
- Family Structure and Motivator Pictures (Grade 4/5): 1 group of 5 students
- Motivator Pictures (Grade 2/3): 1 group of 7 students
- Belief Interview (Grade 4/5): 3 students

(Among them 2 were selected for Track-the Message)

To reduce difficulties in mobilizing students for the study, 25 students were employed per school in the first 2 provinces (Phu Tho and Quang Binh), i.e. one group of 5 students did 2 exercises. For the last province (Tien Giang), different students were employed for each exercise, so the total number of students interviewed was 30.

b) Sample of adults

Criteria for group selection:

+ *Principal interview:*

The Principal was the first choice for Principal Interview, but if he/she was not available during the school visit, one of the Assistant Principals was substituted.

+ *Teacher group:*

- For teacher focus group discussion: Selected 1 head teacher from each grade in school (i.e. from Grade 1 to 5)
- Willing to participate in the study

+ *Students for group discussion:*

- The defined number students for each group:
 - 5 students per group for older students (Grade 4/5)
 - 7 students per group for younger students (Grade 2/3)
- Grade consideration: Each group of older primary students should include students from both Grade 4 and Grade 5; The group of younger students should include students from both Grade 2 and Grade 3
- Gender balance: Each group should include both male and female students
- Willing to participate in the study

+ *Students for home visit and Track-the-Message:*

- Selected 2 students from the class that delivered the tooth-brushing message given by the researcher to the selected head teacher of Grade 5. Based on the research requirement and time schedule, these 2 students were selected by the head teacher on the following criteria:
 - Both the student and the caretaker were available at the time of visit
 - Willing to participate the study
 - Home location: Easy to access

+ *Caretaker:*

- Must be the caretaker of the child employed for Belief Interview
- Available at the time visit; all of selected caretakers were the mother of the child
- Willing to participate in the study

3.2. Data Analysis

First, a plan for reporting the results from the study were produced based on the study objectives and theoretical framework. Once data was collected, tapes of focus groups and other tool-based sessions

at both home and school were transcribed into Vietnamese and then translated into English. The first step of analysis resulted in tabulated summaries of the outputs from use of each of the different qualitative tools across the country (e.g., tooth-brushing message transmission, role model categories and admired traits, motivator picture summary, family structure summary, belief interview summary and composite daily diary for school-day). This enabled the basic patterns in responses, values and reported practices to emerge. Consistency between methods of elicitation (i.e., tools used) was then determined by ensuring that contradictory information about particular beliefs or practices was not being found. From this basis, a second-level analysis was conducted. In this second step, results from different tools were combined to address issues associated either with the FOAM model, or with other conceptual categories of the report, such as characterizing the child's daily life or motivations to handwash.

Government records and other written sources were also searched and, where relevant, utilized to provide background data about the Vietnamese context and prior history of the national handwash program.

IV. Results

Results will be discussed in terms of the FOAM model variables, organized with respect to the socio-ecological levels within which they fall, beginning with the most proximate determinants of behavior, a child's psychology, and proceeding through the social influences of home, school and society-at-large.

4.1. Child

a) Knowledge

We begin with evidence for the degree of knowledge Vietnamese children show with respect to handwashing. Students (10 male and 8 female in three provinces) were interviewed to measure their ability to report facts about the utility of handwashing, when it should be practiced, and the consequences of not handwashing (such as getting ill). Although there was no practice of HWWS in school, children's knowledge about the critical times for handwashing seems to be high, both among males and females. They have knowledge of both the critical times for HWWS under study here: before eating and after going to the toilet. About half of interviewed students also mentioned other occasions on which they report HWWS, such as when they have visibly dirty hands, after playing, after eating, before going to bed or before drinking. However, handwashing after going to toilet was commonly mentioned only after prompting (although two students in Tien Giang province could not mention HWWS after going to the toilet, even with a prompt).

"I often HWWS after eating, before going to bed and drinking...[also] before eating [with prompt]."

(Male belief interview, 10 year-old, Dinh Bo Linh school, Tien Giang)

"I often HWWS after coming back home from playing with friends in neighbourhood, before eating...and after going to the bathroom [with prompt], but I do not know why."

(Female belief interview, 10 year-old, My Hoa school, Tien Giang)

"It's necessary to wash hands after going to toilet, because hands are dirty and have bacteria under the fingernails. Hand washing helps to make hands clean and remove bacteria."

(Belief interview with female, 10-year-old, Phu Ninh school, Phu Tho)

“We need to wash hands before eating because HWWS will kill all bacteria. We also need to handwash after defecating because of the germs...then these will enter through the mouth to cause bellyache.”

(Belief interview with male, 10-year-old, Hai dinh school, Quang Binh)

b) Beliefs

Beliefs can be concerned with an individual's *expectations* – what they think will happen as a result of performing the desired behavior. We therefore raised the question “What good things can happen if you handwash?” In general, children have a clear expectation that HWWS will protect their health by helping them avoid handwashing-related diseases like diarrhea, bellyache, and flu. They know that the cause of diarrhea is bacteria on hands, in dirty water, or food kept for a long time. Thus, they understand the relationship between germs and diseases.

“If we don't handwash, we may get food poisoning, bellyache, and stomach ache as bacteria enter inside and cause bellyache, vomiting and worms (giun).”

(Male child interview, 10-year-old, Dong Phu school, Tien Giang)

“If we don't handwash, bacteria will enter inside through the food, grow into worms, and make us unhealthy...often sick...and have big belly (laughing).”

(Male child interview, 10-year-old, Dinh Bo Linh school, Quang Binh)

“Because hands would be cleaner if we handwash. Many people don't wash their hands when they eat food kept a long time. This practice causes the flu.”

(Female child interview, 10-year-old, Phu Ninh school, Phu Tho)

This is consistent with a driver towards handwashing being to get rid of disease-causing germs. During the motivator picture exercise (described below), one reason given for HW was dirty hands after going to toilet, to avoid getting disease (Motivator picture exercise with young children group in Quang Binh).

“We should handwash before eating. The meal is very clean, if we don't wash hands, dirty things on our hands will transfer to the food and can affect our health.”

(Male Child Interview, 10-year-old, Phu Ninh school, Phu Tho)

“I went to my motherland for a party, I forgot to wash my hands before eating, then I got a stomach-ache. Washing hands with soap is good for removing germs that are not visible. The good thing from handwashing is avoiding bellyache.”

(Belief interview the male child, 10-year-old, Phu Loc school, Phu Tho)

“It's necessary to wash hands after going to the toilet because hands are dirty and have bacteria under the finger nails. Handwashing helps to make hands clean and remove bacteria.”

(Male child interview, 10-year-old, My Hoa school, Tien Giang)

“HWWS is necessary to protect from germs, stomach ache, intestinal disease and diarrhea.”

(Female child interview, 10-year-old, Dong Phu school, Quang Binh)

c) Attitudes

Affective reasons for children's' hand washing were primarily examined through the insights from the motivator pictures exercise (see Appendix 6 for details). First, to ensure that children understand these potential motivators, they are shown pictorial stories and asked to describe their feelings about them. Table 4 summarizes the favorite "feeling words" associated with each motivator. "Lonely", "sad", and "regretful" were the preferred terms to describe what a child left out of a social group (due to lack of handwashing) will feel. Younger children prefer "ashamed" as well. Second, "smelly", "dirty", and "disgusting" describe the feeling when hands which have been dirtied by going to the toilet are left in that condition. Third, "clean", "happy" and "comfortable" describe the feeling of washing hands after playing sports outside. Finally, "regretful", "sad", "blameful", and "fearful" describe what a child will feel for having given a sibling an illness by not washing hands (the Morality condition).

Table 4: Favorite 'feeling words' for motivators

MOTIVATOR	FAVOURITE 'FEELING WORDS' (IN FREQUENCY ORDER)	
	Urban	Rural
Affiliation (Older)	lonely , sorrowful, sad , regretful , fed up, angry with myself, afraid of getting germs, ashamed, shy, self-pity, solitary	sad , lonely , boring, unhappy, discouraged
Affiliation (Younger)	sad , ashamed , regretful, fed up, lonely, sorrowful, want to play with, verge of tears	sad , ashamed , boring, decide to wash hands, stomachache
Disgust (Older)	disgust , smelly , discomfort, dirty , germs, flies, regretful, sad, shy	smelly , dirty , fecal smell, bad smell, disgust , fretful, uncomfortable
Disgust (Younger)	smelly , germs, dirty hands , disgust , regretful, sad, fed up, ashamed – discomfort – unhygienic – bad smell – want to wash hands immediately – did not dare to play with friends, flies , feel sick	dirty , smelly , uncomfortable , flies , pain in hand, itching, disgust
Comfort (Older)	comfortable , happy , clean , not afraid of germs, no worry, no dirty, self-confident, proud, joyful, smiling, sweet-smelling	clean , comfortable , happy
Comfort (Younger)	clean , happy , good smell , comfortable , no smelly, no germs, joyful , smiling, interesting the feeling for hw: dirty hands (after playing football, in yard, after going to toilet, greasy hands...)	clean , happy , joyful , not dirty, have many friends because having washed hands, don't have stomachache, comfortable , good smell
Morality (Older)	regretful , sad , worry , anxious, fearful, afraid of mother would shout, want to apologize younger sibling, ashamed, questionable, want to wash hand and self-angry	regretful , feel sorry for younger sibling, worry , sad , surprise

Morality (Younger)	regretful, sad, ashamed, lonely, blameful, repentant (hoi loi), fed up, self-blameful (tu trach mang), anxious, fearful, afraid of being beaten by mother	regretful, fearful, sad, boring, feel sorry for the little brother, want to wash hands, blameful (co loi)
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According to older students in interviews, HWWS is necessary when hands are visibly dirty, because no one would play with someone having bacteria on their hands. Some children also felt (in the motivator picture exercise) that no one would want to play with a non-handwasher because his hands were dirty; friends might then be afraid that the dirty things would stick to them. Indeed, the children in Tien Giang suggested that, in order to remind classmates about HWWS, the campaign should be: “You will have many friends to play with if your hands are clean” (“*Tay sach se duoc choi voi cac ban*”).

Another expectation from washing hands is that they will feel better afterwards.

“If we handwash with soap, our hands will be clean, fragrant, good for health and protect our hands from germs.”

(Male child interview, 10-year-old, Hai Dinh school, Quang Binh)

“After handwashing, hands will not be dirty, but more comfortable and happy.”

(Female child interview, 10-year-old, Phu Ninh school, Phu Tho)

Children were also asked to determine which of these motivators they perceive as the most likely to make them want to wash their hands (see Table 5). Affiliation and Comfort were the 3rd and 4th ranked options for both younger and older students. However, there is a difference between age groups in their ranking of the other two motivators. Morality is the strongest motivator for younger students; disgust for older students. For younger students, disgust came second; for older ones, morality. In any case, the children are obviously impressed by the power of disgusting hands (visibly dirty after toilet) and the fear/shame/regret associated with having made someone else ill by the fault of not cleaning dirty hands. These are seen as more significant motivators than wanting to avoid being left out of a social group or the pleasant feeling of having clean hands.

The following table shows that the functional motivators (primarily fear of disease) are stronger than the affective motivators addressed by the motivator picture exercise.

Table 5: Motivator votes

MOTIVATOR (GRADE)	PHU THO		QUANG BINH		TIEN GIANG		FOR ALL
	Phu Loc	Phu Ninh	Dinh Bo Linh	Hai Dinh	My Tho	Dong Phu	
Affiliation (Younger)	4	3	4	3	3	1	3
Affiliation (Older)	4	3	2	3	4	3	3

Disgust (Younger)	1	2	1	2	2	3	2
Disgust (Older)	3	1	1	1	2	1	1
Comfort (Younger)	3	4	3	4	4	4	4
Comfort (Older)	1	4	4	4	3	4	4
Morality (younger)	2	1	2	1	1	2	1
Morality (older)	2	2	3	2	1	2	2

d) Competing priorities

To understand reasons why children might *not* wash their hands, a discriminator task was given to the children to let them tell the story freely (see Appendix 6 for detailed results). For older students in both urban and rural areas, common reasons for not HWWS included laziness, forgetfulness (younger rural children only), being pressed for time or not wanting to take time for washing, wanting to do pleasurable activities right away (such as play football), not seeing their friends wash their hands (rural children only) and not seeing HW as important or necessary, because there is no visible dirt on the hands (see Table 6). Most of these factors can be seen as ‘at the moment’ constraints: the child wants to do other, more fun things, or their hands aren’t visibly dirty, so there is no need to HW. Younger children also reported being afraid of getting wet as an additional reason for not HWWS.

Table 6: Handwash discriminator results

	URBAN	RURAL
HW discriminator (Older)	clean-looking hands, no visible bacteria (clean-smelling hand), subjective (<i>chu quan</i>), disregardful (<i>coi thuong</i>), want to go play immediately, not necessary, laziness, indulge in pleasures, takes time, in hurry and not experiencing diarrhea	laziness, want to go play immediately, don’t see other friends wash their hands, not necessary, did not like to handwash
HW discriminator (younger)	don’t like water, afraid of getting wet, indulge in pleasures (<i>mai choi</i>), in hurry to study or play, afraid of taking time, want to go play immediately	want to go play, want to play football, not a good student, in hurry, don’t see others wash hands, forget

In summary, at a motivational level, whether hands get washed with soap (assuming facilities and materials are available) can be seen as a balance between:

- perceived functional benefits (e.g., avoidance of disease)
- the strength of desire to handwash (e.g., due to disgust at dirty hands), and
- the feeling of laziness or wanting to get on to more ‘fun’ activities.

4.2. Family (Home)

a) Access/Availability at home

- *Soap availability:* In fact, there were many kinds of soap people used for everyday life. The most common types of soap we met in this study included:

Types of soap

Utility

- Bar soap: Washing hands and bathing
- Shower cream/Bath milk: Bathing and washing hands
- Shampoo: Washing hair, sometimes bathing and washing hands
- Washing powder: Washing clothes, sometimes washing hands
- Dish-washing liquid: Washing dishes, sometimes washing hands

- *Water source:* Lack of a proper container (such as stand basin with tap) for water for washing hands leads to improper practice. In many families visited (1/6 in Phu Tho, 5/6 in Tien Giang), the student used a rubber dipper to take water, then put that dipper on the dirty floor of the toilet, then used that dipper to wash his hands. This unhygienic practice seemed to be popular among children (and maybe not only children), especially in rural areas (Table 7).

“Right, it depends on school facilities. Our school facilities are too degraded and lack a lot of demonstration aids. For instant, after giving to student a lecture on washing hands after defecation or urination, the child should rinse their hands below a water tap but it was not available in my school therefore our student could not practice so the lecture is less effective. In our rural community, the majority of people are farmers and therefore do not have handwashing facilities (water tap) and perfumed soap.”

(Teachers’ FGD, Phu Tho)

Table 7: How children handwashed at home (observation)

ITEM	PHU THO	QUANG BINH	TIEN GIANG	TOTAL
Number of observations	6	6	6	18
<i>HW facilities</i>				
- Under running water from tap	2	5	1	8
- Water in stand basin	0	0	0	0
- Water in basin	2	1	0	3
- Water in bucket	1	0	0	1
- Water in dipper	1	0	5	6

Water source				
- Running water	2	6	6	14
- Drilled-well water	2	0	0	2
- Dig-well water	1	0	0	1
- Reused water	1	0	0	1
- Rain water	0	0	0	0
Cleaning agent used				
- Yes	3	5	6	14
- No	3	1	0	4
Types of cleansing agent used				
- Bar soap	2	3	3	8
- Bath milk	0	2	1	3
- Shampoo	1		2	3
Cleansing agents available at home				
- Bar soap	1	4	3	10
- Bath milk	0	4	3	7
- Shampoo	3	5	6	14
- Dish-cleansing liquid	3	5	6	14
- Washing powder	6	5	6	17
Assessment of HW practice				
- Good	2	5	2	9
- Not very good	0	1	2	3
- Poor	2	0	2	4

b) Product attributes: Soap at home

Type of cleansing agents available at home: Many types of soap are available in households. 17 of 18 households visited had at least one kind of soap. The most common kind of soap was washing powder (17/18 households), then shampoo (14/18), dishwashing liquid (14/18) and bar soap (10/18); the least common was bath milk (7/18).

Type of soap used for hand washing at home: As shown in Table 7, 14/18 students used some kind of soap for hand washing. The most common kind used was bar soap (8/14); however 3/14 students used bath milk and 3/14 used shampoo to wash their hands. The reasons given for use of these other soaps included their nice smell, and because they are considered less harmful to skin than other kinds of soap. Dishwashing liquid is also reported to be used for HW, due to its cheaper cost.

“Q: What kind of soap do you use for washing hands every day?

A: Soap... Soap... X-men

Q: Do you like that soap X-men?

A: Yes.

Q: Why?

A: Because I like the X-men smell very much.

Q: What smell is it?

A: A little pungent (“hac hac”)... X-men bar soap is slippery (“tron”)

Q: How about other kinds of soap? Are they slippery?

A: Yes, they are.

Q: You like this smell, do you know any other kind of soap having similar smell?

A: I don't use many kinds of soap... I use soap Co May... Lemon leafs and Mint.”

(Belief Interview, Male, 10 year-old, Phu Loc School, Phu Tho)

“Q: Do you like that kind of soap (shampoo Romano)?

A: Yes, I do.

Q: Why do you like it?

A: Because it has a nice smell... and it's suitable to my hair wash

Q: How is that smell?

A: Not too smelly... its smell is reasonable.”

(Belief Interview, Female, Phu Ninh School, Phu Tho)

“...My daughter's hand skin is dry, so I absolutely forbid her to use bar soap or dishwashing liquid. Children usually like to do housework, but for my daughter only vegetable preparing is allowable. And after each time of preparing vegetables, she has to wash her hands with bath milk, because bath milk is quite soft wash, useable for dry skin...”

(Caretaker Interview, Dong Phu School, Quang Binh)

c) Social Support at home

Most students live in a nuclear family with father, mother and 1 or 2 siblings; a smaller number of students live with an extended family including grandfather and grandmother (sometimes also with aunt and uncle as well). The nature of the child's relationships with these other members of their household was investigated with the Family Structure game (see Table 8).

c1) Parents

Generally, mother and father were reported as the most important influences on children, being the relationship most frequently mentioned (mother [30/130] and father [29/130]). However, parents are equally feared in the family. The reason for this fear is parents also display some violence toward them, such as hitting, shouting, and scolding.

“I fear my father the most because he smacks me when I come back home late or he scolds me when I am lazy in studying.”

(Belief Interview, Male, 10 year-old, Phu Ninh School, Phu Tho)

“My mother hits me when I play far from home. Sometimes she scolds me when I do the wrong homework exercises.”

(Belief Interview, Male, 10 year-old, Phu Ninh School, Phu Tho)

“My mother smacks me when I don’t obey her... For example, I refused when she asked me to sweep the house, then she hits me.”

(Belief Interview, female, 10 year-old, Phu Ninh School, Phu Tho)

“I fear my brother... (because) he usually hits me.”

(Belief Interview, female, 10 year-old, Dinh Bo Linh School, Tien Giang)

“My father would smack me if I did not obey him.”

(Belief Interview, Male, 10 year-old, Dong Phu School, Quang Binh)

So parents feature in both positive and negative ways in children’s thinking, indicating their overall significance.

Table 8: Family structure summary report of six schools

FAMILY MEMBER	# PRESENT	% MOST CLOSE	% MOST LIKE	% HELPS MOST	% PLAY WITH MOST	% SPENT MOST TIME WITH	% GIVES MOST THINGS	% GIVES MOST ADVICE	% FEAR MOST
Grandmother	14/30	13%	7%	7%	7%	13%	10%	7%	3%
Grandfather	13/30	7%	0%	0%	0%	3%	3%	7%	3%
Mother	30/30	50%	53%	47%	3%	27%	53%	40%	33%
Father	29/30	13%	17%	30%	10%	10%	23%	47%	33%
Older sibling (same gender)	20/30	7%	7%	13%	47%	30%	0%	0%	7%
Younger sibling (different gender)	18/30	10%	17%	3%	30%	17%	7%	0%	13%
Relative (uncle, aunt)	6/30	0%	0%	0%	3%	0%	3%	0%	7%

Total	30 families	100%	100%	100%	100%	100%	100%	100%	100%
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It is clear that mothers play the widest variety of roles in children's lives:

"My mother is closest to me in my family because she invests more care in me, buys clothes, books and studying instruments."

(Belief Interview, Female, 10-year-old, Phu Loc School, Phu Tho)

"My mother loves me a lot; she gives me everything."

(Belief Interview, Male, 10-year-old, Phu Loc School, Phu Tho)

"My mother was at home, was most close. My father went for work far from home, he came back home only every 2 years."

(Belief Interview, Male, 10 year-old, Dinh Bo Linh School, Tien Giang)

"My mother was the closest to me. Whenever I am wrong, she does not beat me, she only gives me advice. She takes sides with me if my older brother beats me."

(Belief Interview, female, 10 year-old, Dinh Bo Linh School, Tien Giang)

Fathers are reported as giving most advice – that is, they have to be obeyed the most – showing the "power" of this role in the family: the father might not be the person children felt closest to, or played with the most, but he was the one to make final decisions in the family (i.e., the family "backbone").

"My father gave me the most advice: he teaches me to work hard on my studies, to be clean, and brush teeth after meals, in the morning and before going to bed."

(Belief Interview, Male, 10 year-old, Phu Ninh School, Phu Tho)

"My father teaches me to become a good person, to do good things (such as to help people in difficulties), hard working in study."

(Belief Interview, Male, 10 year-old, Phu Ninh School, Phu Tho)

"My father showed me the way to solve difficult exercises and taught me to be polite to people."

(Belief Interview, Male, 10 year-old, Hai Dinh School, Quang Binh)

"My parents advised me in doing home work. If my mother was busy, my father showed me."

(Belief Interview, Male, 10 year-old, Dinh Bo Linh School, Tien Giang)

Figure 1: Comparison of the roles of mother to the child in rural and urban areas

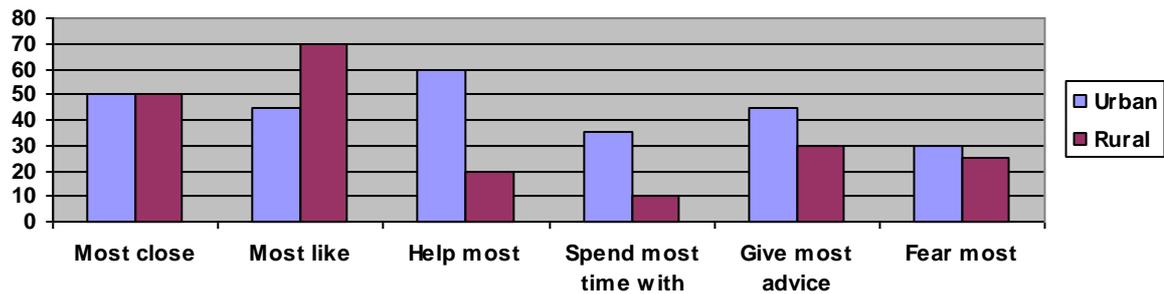
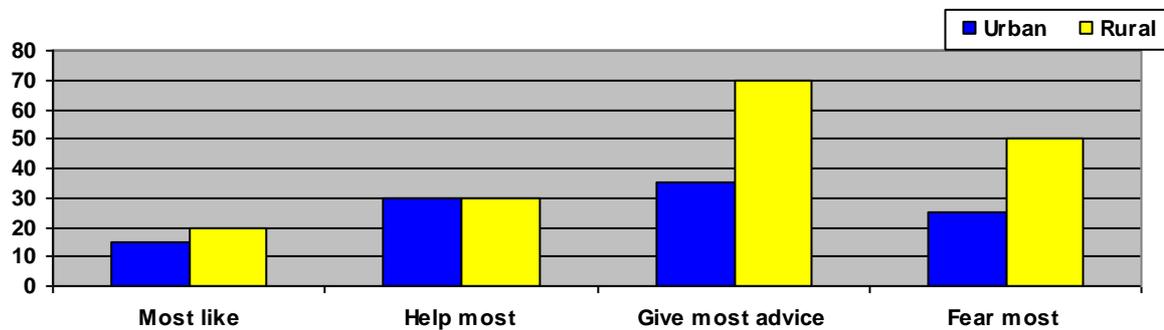


Figure 2: Comparison of the roles of father to the child in rural and urban areas



Note: Sample sizes for each answer in both figures = 15 urban, 15 rural children.

There are significant differences in the roles of mother and father in rural and urban areas (see more details in Appendix 2). Figure 1 shows that mothers in urban areas are more influential overall, being more often reported as helping most (60% vs. 20%), spending most time with (35% vs. 10%) and giving most advice (45% vs. 30%). This probably reflects the tendency that rural mothers are busier with tasks besides child-rearing. However, rural children are more likely to say mothers are most liked (45% vs. 70%), so that even though they are less often around, rural mothers are more appreciated – perhaps in contrast to rural fathers. Rural fathers are more powerful than in urban areas, being reported as giving most advice to the child more often (70% vs. 35%), and being more feared as well (50% vs. 25%) (see Figure 2).

Husband and wife usually exchange ideas and opinions before making decisions together, especially for “big things” such as buying costly equipment or repairing the house/kitchen, although women typically report the husband is the final decision-maker. Children appreciate this by reporting that their fathers have the most power in the family.

“My husband is the decision-maker in my family. Both my husband and I have made decision to buy something, especially big things such as a motorcycle, but he is final decision maker.”

(Caretaker interview, female, 35 year-old, Hai Dinh, Quang Binh).

“Both my husband and I discuss to buy something in my family. Some ‘small things’ such as for studying is mainly bought by me. My husband has to work so he doesn’t

have time to buy such small things. But for buying 'big things', such as upgrading my house, changing new motorcycle or television, we have to discuss together."

(Caretaker interview, female, 40 year-old, My Hoa, Tien Giang)

The primary burden of educating children generally belongs to the parent who spends more time at home. In some families, wives play the key role in teaching children because in most cases, they have more time at home (they usually do *light jobs* such as teaching, farming, or retail seller in local area while husbands have to work far from home or are busier).

“Q: *Who is the most important trainer of habits for Ms. Ly in your household?*

A: *Yes, me (laugh)*

Q: *Why?*

A: *Because her father has to work all day... Her grandmother is too old... so my children are mainly taught by me.*

Q: *Who is the second important one?*

A: *Her father. He often monitors how my children and I do.*

Q: *How does he monitor?*

A: *Yes, in the evening, he asks my children some questions and if they give the wrong answers, he will make correction and ask me to teach them more."*

(Caretaker interview, female, 37 year-old, Phu Ninh, Phu Tho)

"Mostly decided by the mother. We had discussion only when we have to decide which school my daughter should attend or which subjects she needs to learn more etc... Because her father is very busy."

(Caretaker interview, female, 36 year-old, Dong Phu, Quang Binh)

On the other hand, in some other families the husband played the key role because he did not have to go out for work or the children were male. In Vietnamese people's conception, the father has a very strong influence on sons.

“Q: *Who is the most important trainer of habits for your son in your household?*

A: *Mainly his father.*

Q: *Why?*

A: *Because my child is male; therefore the father educates him more easily than me, even I take of care him very much...Yes, his father gives advice more easily. Sometime he shouts, but I do not. As the woman often...I give advice him very gently."*

(Caretaker interview, female, 35 year-old, Phu Ninh, Phu Tho)

However, even when the mother plays the key role in teaching children, the final decision about schooling (such as school or class selection for the child) belongs to the father.

In some cases when both parents were busy at work, grandparents (mostly grandmother) would be the one responsible for nurturing and educating children:

"My husband died eight years ago; since then my mother has taken care of my children. My mother is responsible for all matters related to my children, for hygiene, meals etc. because I have to stay at work 10 hours a day."

(Caretaker Interview, female, My Hoa, Tien Giang)

c2) Siblings

As might be expected, siblings were the family members the children play with the most (older siblings 47% and younger siblings 30%) and spent most time with (older sibling 30%). This was understandable because siblings have more time at home and are of the same generation, so they can easily share hobbies and understandings.

"I usually play with my older sister because other family members do not have time to play with me."

(Belief Interview, Male, 10 year-old, Phu Loc School, Phu Tho)

"I usually play with my older sister because whenever I am sad (nobody to play with), she will play with me... such as the 'hide and seek' game (tro Choi tron tim)."

(Belief Interview, Male, 10 year-old, Phu Ninh School, Phu Tho)

"I play mostly with my younger sibling. When I come back home from school, my sibling plays with me."

(Belief Interview, female, 10 year-old, Dinh Bo Linh School, Tien Giang)

c3) Grandparents

Grandmothers are also important figures, being mentioned as the children's closest relation as often as fathers; they were also mentioned as often as fathers for being the person the child spent most time with, despite only about half of families having a grandmother living in the household. So although secondary, grandmothers, when present, are a powerful presence in their grandchildren's lives as well. (Grandfathers seem to be a much less significant presence.) They are also the least feared.

"I like my grandmother the most because my grandmother loves me."

(Family structure, Female, 10 year-old, Phu Loc School, Phu Tho)

"My grandmother is the one I spend time with the most because she's old... I usually pull out the white hair for her."

(Family structure, Female, 10 year-old, Phu Ninh School, Phu Tho)

"My grandfather is the one I spend time with the most because he's old... Everyday he tells me story."

(Family structure, Female, 10 year-old, Phu Ninh School, Phu Tho)

c4) Children's power

Responses from interviews of children in their homes suggest that children can raise their voice in their family, such as reminding parents of some small error, but that this is more likely in boys than in girls (perhaps reflecting their future role as head of household).

"I told my mother to stop keeping hot water in the refrigerator and she followed me."

(Belief Interview, Male, 10 year-old, Phu Loc School, Phu Tho)

"I asked my father not to make everything untidy."

(Belief Interview, Male, 10 year-old, Phu Loc School, Phu Tho)

"I never told anything to my parents if they were wrong."

(2 Belief interviews, female, 10 year-old, My Hoa School, Tien Giang)

However, parents still have strong control over children: obedience (“*Ngoan ngoan*”) and docility (“*De bao*”) seem to be the most important criteria for a good child both at school and at home, especially for girls.

“No, my daughter is very obedient. She does not show-off. She is very obedient as she obeys us strictly. She always obeys me.”

(Caretaker interview of Female student, Phu Loc, Phu Tho)

“Q: *Let take an example. What happen if you set rules that your child was not allowed to watch the TV after 7 p.m. but she wanted to watch a film at 8 p.m.?*

A: *In my opinion, my children must obey if it is a house rule. For example, its a news program on the TV at 7 p.m.. She rarely watch the News program on the TV.*

Q: *What happen if she wanted to watch a film at 9 p.m.?*

A: *No. That the time for her to study. That is a rule and she must obey.*

Q: *She must obey, right? Should you listen to her opinion or ask her to follow the parents’ rules without any query?*

A: *She must obey if it is a regulation.”*

(Caretaker interview of Female student, Phu Loc, Phu Tho)

“Q: *Do you think it is important to listen to their feedback or complaint when you order they to do something?*

A: *I only listen to some that I consider as right. Yes, I would listen to my child if she is right. If not, I will never listen. I will let her do beneficial things, but not for an unbeneficial one for her study or for her age... For example, I will let her go out to play with her friends on non-school and weekend days but not on school days. Absolutely not.”*

(Caretaker interview, Female student, Phu Ninh, Phu Tho)

“She does not dare... until now she does not dare... She only tell me that I was wrong or having mistake, she just tells to tell, and then she smiles.”

(Caretaker interview, Female student, My Hoa, TIEN GIANG)

“Q: *Is there any regulation you set for your children?*

A: *Yes. For instance, it’s not allowable for her to take her friends to parents’ room. It’s a regulation and I have to tell her.*

Q: *Is there any feedback from her or she follows absolutely?*

A: *She follows absolutely.”*

(Caretaker interview, Female student, Dinh Bo Linh, Quang Binh)

In summary

- Parenting styles in Vietnam can be generally considered as nurturing, but also highly controlling, with rural households being even more likely to be authoritative than urban ones, given the more strict roles of rural fathers. The general sense is that children should be submissive and obedient, especially girls, to family regulations.

- Husband and wife have their own domains of power (women in domestic sphere; men in the economic), although the husband is the final decision-maker (in both rural and urban areas) in most domains.
- The main role in teaching/educating children belongs to the parent who spends more time at home, but father is the final decision-maker in school-related matters.
- Siblings are the persons the child plays with most and spends most time with; children do not fear each other.

4.3. School

a) Access/Availability at school

The schools visited differed considerably in their hygiene facilities (see Table 9). In Quang Binh Province, two schools selected for the study were equipped with new toilets funded by the Coastal City Program. There were 2 toilets (one for males and the other for females) in each school. In each toilet, there were 6 separate latrines and 2 long stand basins with 6 taps for handwashing. There was an additional *long latrine for urination only* in male toilet. All of these toilets were just built and will be handed over to the schools in this October. At the time of the visit, all of these toilets were in good condition: clean (unused), modern (flushing latrine, taps), convenient (just a few steps from the nearest classroom), with concrete walls, roof, and door, appropriate for children (suitable size of latrines, taps, and basins) and water available. There is also a tap in the playing ground. However there was no soap or soap holder in any of the toilets.

In Tien Giang Province, sanitation facilities in the two schools were similar, although one school was urban while the other was rural. In each school, there were separated toilets for teachers and students, with concrete walls, roof, and door. Both of the two sanitation systems were in fairly good condition (because both the two schools started the new school year 2 weeks before the visit): rather clean, not much smell, water available. In particular, there were 5 basins with taps in Dinh Bo Linh rural school and 4 basins with taps in My Hoa urban school for handwashing. Although these stand basins were rather high for students, they were easily accessible (on the front side of the toilet, few steps from the nearest classroom, water available, clean, easy to use). However, again, there were neither soap nor soap holder in any of these facilities.

In Phu Tho Province, the sanitation facilities were very poor in both schools in terms of quality and quantity. There were only 2 latrines for teachers and 2-3 latrines for students, all in very poor condition: except for a couple of latrines for defecation which had a simple roof and door, all the latrines were very dirty, with no roof, no door, no water, and no waste basket. They were also simple: the place for urination was just 2 bricks on which to place feet, and the place for defecation was just a hole with two bricks; all the waste discharged directly to the farm outside. There were no specific places for handwashing: each class uses a small plastic basin for handwashing. Because it was rather far and inconvenient to take water from the school taps to the basin in the class (for example, from the ground to the first floor), the basin was used mostly by teachers. Children usually used water from taps or buckets in the school's playing ground. Like other schools in Quang Binh and Tien Giang, there were no soap and soap holder in either of these schools.

a1) Handwashing facilities

Handwashing facilities in four schools of Quang Binh and Tien Giang are located in or on the front side of the latrine, while in two schools of Phu Tho these are very far from the toilets (in Phu Loc School) or non-present (in Phu Ninh rural School). This led to some pupils forgetting to wash hands, rushing to class immediately after the toilet. Actually, the latrine in Vietnam is perceived as "secondary work" (*cong trinh phu*). Therefore, the latrine is likely to be located very far from functional building of school

or home. It discourages people to use the latrine and wash hands after, including children.

Even though HW facilities were functional in four schools in Quang Binh and Tien Giang, these are considered to be an inappropriate design for younger students (Class 1).

“Class 1 students are too small; they’ve just moved from kindergarden. Some of them cannot reach the water collector; the latrine is not child-friendly for this group.”

(Teacher interview, Dinh Bo Linh School, Tien Giang)

At present, HW facilities (including water container such as basin) are available in four schools visited in Quang Binh and Tien Giang but are not prioritized at two schools in Phu Tho province. Provision of such facilities is ranked after school construction and adequate teaching equipment there. For example, in Phu Ninh Primary School in a rural area of Phu Tho province, there was a Plan-supported school construction program without a latrine system or HW facility. The head teacher often handwashed by collecting water from the dig-well into a plastic basin at each classroom with an iron stand for all day. Children rarely washed in this plastic basin.

In conclusion, apart from the availability of HW hardware facilities at schools, the location and the appropriate design for children still need consideration to motivate children to handwash.

a1.2) Water supply

Two schools in Phu Tho province do not have a consistent water supply, while in Quang Binh and Tien Giang water is regularly available. Both schools visited in Phu Tho province rely on their water supply from well, whose source is not trusted. So 2 of 3 districts had good water supplies in schools.

Table 9: School sanitation facilities

Province →	Phu Tho		Quang Binh		Tien Giang	
Item ↓	Phu Loc	Phu Ninh	Dong Phu	Hai Dinh	Dinh Bo Linh	My Hoa
Location	Nearby central	Rural	Urban	Urban	Urban	Rural
Number of student	501	545	1020	350	575	337
Number of teacher	38 (3M)	32 (2M)	38 (F)	20 (F)	25 (3M)	14 (3M)
Number of WC for student	9 stands for urination + 3 places for defecation (shared with teachers)	2 for urination (1 for M + 1 for F) + 2 for defecation (1 for M + 1 for F)	- 12 defecation latrines (6 for M + 6 for F) - 1 long latrine for M urination <i>(Newly built, not in use at the time data collected)</i>	- 12 defecation latrines (6 for M + 6 for F) - 1 long latrine for M urination <i>(New built, not in use at the time data collected)</i>	- 4 defecation latrines (2 for M + 2 for F) - 1 long latrine for M urination	- 2 defecation latrines (1 for M + 1 for F) - 3 places for F urination long latrine for M urination
Number of WC for staff	2 for urination (1 for M + 1 for F)	2 for urination (1 for M + 1 for F)	2 (1 for M + 1 for F) + 1 urination latrine for males	2 (1 for M + 1 for F) + 1 urination latrine for M	2 (1 for M + 1 for F)	2 (1 for males + 1 for females)
Number of tap for teacher HW	3 possible place for hand wash (in front of 3 WC)	No (using a stand + plastic basin in each class)	2	2 taps + stands in WC but no water (using a stand + plastic basin in each class)	5 taps + long stand available (shared with students)	4 taps + stand available (shared with students)
Number of tap for student HW	2 (no water)	No	12 (6 for M + 6 for F)	- 12 (6 for M + 6 for F) in new WC - 1 tap in the playing ground	5	4
Number of stand for HW	No	No	4 long stands (2 for M + 2 for F)	4 long stands (2 for M + 2 for F)	1 long stand with 5 taps	4 single stands
Soap available in school	No	No	No	No	No	No

* Notes: M = Male; F = Female

a2) Lack of soap

Parents perceive soap to be catered for in school budget allocations. Since they believe primary education to be provided freely, asking for contributions from them would be a challenge.

“We have poor parents; if you tell them to buy something, only a quarter of them will comply, the rest will think that it is a way teachers have devised to get money from them.”
(Teachers’ FGD, Phu Ninh School, Phu Tho)

On the other hand, school staff frequently mentioned limitations of their budgets. Because all the schools involved in this study were financed by the government, all activities mainly depended on the government’s budget. Some schools sought funds from other sources such as from the local authority, social organizations, or NGOs. Both schools in Phu Tho Province said that they had no budget for building a new WC or handwash basins, although they found it to be very important.

The situation was the same for buying any kind of soap. Schools did not have a sufficient budget from the government or any organization for buying soap and could not mobilize resources from the parents because of the regulation of the Ministry of Education and Training.

“We always tell them [to HWWS] in home-science, but in the real sense we do not practice it...Our school does not have water and soap that encourages the students.”
(Head Teacher Interview, Phu Ninh School, Phu Tho)

The teachers also mentioned that HW cannot be common practice without soap:

“If the children do not get soap this practice will easily die.”
(Teachers’ Group Discussion, Hai Dinh school, Quang Binh)

Thus, in summary, in schools the major challenges are:

- Maintaining a consistent supply of water (in one district)
- Obtaining a consistent supply of soap (source of budget for buying soap)
- Managing soap (to assure that soap is used in a proper manner: at the right time (before eating and after going to toilet); in the right place (available in toilet or/and kitchen); in the right manner (used for washing hands, not for playing or taking back home)
- Maintaining a high level of interest in the new behavior until it becomes habitual

b) Social support at school

b1) School organizational structure

A typical organizational framework of a primary school in Vietnam includes:

- A management board, including the Principal and two or three Vice-principals
- Teachers, organized into groups of specialized teachers or groups of subject teachers (e.g., nine subjects divided into 3 groups of subjects: Social Science, Natural Science and Arts)
- Unions, including Labor Union and Ho Chi Minh Pioneers’ Organization (with one teacher advisor)
- Administration staff

- Other staff (e.g., guard, cleaner)

The principal is the final authority for all management and decision-making in school, while vice-principals support the principal in managing school activities and ensuring the quality of education (see Appendix 3 for details of number of staff of each visited school).

A primary school includes 5 grades, from Class 1 to Class 5, teaching children from 6 to 11 years old. Depending on the size of school, each primary school could have 20 – 25 classes with 30 – 35 students in each class (see Appendix 3). Each class has one head teacher. In each class, there is a class monitor, and 1–3 vice monitors. All the students in the class are divided into study teams/groups (“to”). There are about 4-5 teams/groups in a class. Each team/group has a team leader and a team leader assistant to supervise the team/group’s activities. The monitor and leaders are usually selected by the head teacher. It seems that there were no standard criteria for selecting monitors and team/group leaders. It totally depends on the head teacher. But, usually, the monitor is the student who is best at studying, in morality, and being active. The monitor is usually a “model” to other students in the class. The monitor and team leaders can help the teacher to regulate the class.

“Q: *Were the students involved in setting school regulations or were they totally set up by the teachers?*

A: *All the school... by making recommendation... such as “Obedient”, “Docile”...*

Q: *That regulation was followed by students or recommended by students?*

A: *Recommended.*

Q: *How did you students recommend school regulations?*

A: *We elected a class monitor and team leaders, then they made recommendations for regulation.*

Q: *What happened when their recommendation was wrong?*

A: *The teacher would correct it or elect another student.*

Q: *Would the monitor consult the teacher before presenting his/her recommendation?*

A: *Yes.”*

(Belief Interview, Male, 10 year-old, Hai Dinh School, Quang Binh)

“In my new class, the students had only been going to school for two weeks... They had a lot of private talk in the class; some of them talked all the time. At the beginning, I applied similar measures to other teachers, such as educating, telling stories, making promises etc... But just last week, I gave a notebook to each team leader and assigned them to write the name of students talking privately in the class. By the end of the week I organized games for all the class, except for those having their names in the notebooks.”

(Teachers; FGD, Dinh Bo Linh School, Tien Giang)

b2) Social organizations

There are also *social associations* for primary school students called the “Ho Chi Minh Pioneers’ Organization” (“*Doi Thieu nien Tien phong Ho Chi Minh*”) for children from Grade 3 and “Ho Chi Minh Children’s Organization” (“*Doi Nhi Dong Ho Chi Minh*”) for children from Grade 1. There was a designated person in school (usually a full-time staff member) responsible for the Pioneers’ Organization activities –

called “*Tong Phu trach Doi*” (the General Manager of Ho Chi Minh Pioneers' Organization). These organizations gathered “qualified students” who are good at both studying and ethics/morality.

A: The school has a Pioneers detachment with a General Manager responsible for its activities. What is his responsibility? He ensures that they [the members of The Pioneers' Organization] will be educated on ethics and morality in order to help the school...Each head teacher is responsible for a Group of Pioneers' Organization members in each class... The main task of Pioneers' Organization members is to run the Pioneers' Organization activities supporting the school. For example, they are core agents in educating ethics and morality in the school.

Q: Criteria to become a member of the Ho Chi Minh Pioneers' Organization?

A: Good in studying and good morality.

Q: What is the role of the Ho Chi Minh Pioneers' Organization?

A: The Ho Chi Minh Pioneers' Organization members have a schedule for activities. The contents of activities are introduced by the General Manager... These contents follow the guidelines and action plan from the upper level of the Pioneers' Organization. The main task is to encourage the students to study well. Besides, they help each other (peer-support) in study, making plans to help those students having difficulties (in study).”

(Principal Interview, Dinh Bo Linh School, Tien Giang)

Besides, there is a Red Flag Team or Red Star Team (“*Doi Co Do*” or “*Doi Sao Do*”) in each school. This organization includes 2-3 students selected from each older class who are good in studying and morality. The main tasks of the Red Flag Team are helping the school to regulate the students' activities such as getting to school on time, and keeping the school clean (e.g. emptying out the rubbish).

“Q: So, what is your mission when you are a member of the Red Flag Team?

A: We assign a Red Flag Team member to go to each class, giving marks for that class on getting to school on time, ... to empty out the rubbish...”

(Belief Interview, Male, 10 year-old, My Hoa School, Tien Giang)

Students seem to be very interested in and proud of being a Red Flag Team member because this organization employed students good in both studying and morality.

“Q: So, do you like to be a member of the Red Flag Team?

A: Yes, I like it.

Q: Why do you like it?

A: Because it only employs those who are good at studying.

Q: Ah, so, are you good at studying?

A: Yes.

Q: How many students in your class are selected to be the Red Flag Team members?

A: 3 students.”

(Belief Interview, Male, 10 year-old, My Hoa School, Tien Giang)

As a recommendation from teachers, the Red Flag Team can take a role in monitoring the use of soap for handwashing in school.

“Q: Could I summarize all your opinions about soap use and monitoring in school? The team/group leader will collect money (for buying soap for handwashing) from students and give it to the head teacher. The head teacher will give this money to the health care staff in the school to buy soap and give soap to the school guard. The school guard will check and fill soap in toilets...”

A: And the Red Flag Team will go to check and monitor the soap used by students.

Q: In your opinion, is that feasible?

A: Yes, it is feasible.”

(Teachers’ FGD, My Hoa School. Tien Giang”)

b3) Role of the Principal and the Managing Board of the school

The main role of the principal in primary school includes directing, managing, supervising and being responsible for school activities and connecting with local authorities and vertical education systems. The principal is the most powerful person in the school.

“I always take my task seriously, and consider the fulfilment of assigned work by higher level is most priority. I always complete the developed or assigned plan.”

(Principal interview, Phu Loc School, Phu Tho)

“We made good advice for local authorities to get their support in upgrading school facilities and teaching aids. Our management board is a model, enthusiastic and serious to complete the monthly plan.”

(Principal interview, Phu Ninh School, Phu Tho)

The vice-principal supports the principal in managing school activities. The principal will assign tasks for each teacher (e.g. to assign a class or a subject to a teacher) with consultation of the School Management Board.

“The point of view here is that when we have to make any decision, that decision must be approved by the School Management Board. In that meeting, we have to invite the Vice-Principal and the President of the Labour Union to come, discuss issues, and have a final decision; it is not decided only by myself. Although the final decision belongs to the Principal, we don’t want to use the Principal’s power to deny others.”

(Principal Interview, Dinh Bo Linh School, Tien Giang)

This assignment is based on the school’s needs, the Principal’s assessment, and the teacher’s aspirations and ability as well. If there is a conflict between the principal’s assignment and the teacher’s aspiration, the principal will have an open discussion with the teacher, listening and exchanging ideas aimed at reaching an agreement acceptable to both. This constitutes a good approach to promote teachers’ ability as well as to keep their mind on their work.

“Although we assigned tasks for teachers already this school year, we still asked teachers about their aspirations. Perhaps they taught Natural Science subjects before but now we asked them to register with me if they wish teach other subjects, so that we could

consider and rearrange responsibilities. We discuss with teachers like that every school year. And all the information was open in order to keep it democratic – not decided by us only.”

(Principal interview, Dinh Bo Linh, TIEN GIANG)

“Q: Who make the task assignments and based on what?

A: In general, the task assignment was given out after the School Managing Board’s discussion.

Q: Discussion with teachers?

A: No, discussion between the Board’s members; then they assigned to us teachers. And to make that assignment, the Managing Board had learned about and knew very well each teacher’s working ability... both strong and weak points of each teacher considering the strong points of teachers to assign suitable tasks to their ability.

Q: Was it based on any other thing?

A: On teacher’s family situation, teacher’s characteristics... For example, if the teacher had small children, illness, diseases etc. she would be given some priority.”

(Teachers FGD, Phu Loc School, Phu Tho)

Thus, although the school has a top-down power structure, teachers are invited to help determine aspects of their roles and responsibilities.

b4) Role of teachers

Teachers are responsible for what they teach to children; they prepare and give lectures which contain material of their own choice. In primary school, because students are very young (from 6-11 years old), the teacher, especially teachers of Grade 1, teach all topics, not only knowledge from books, but also life skills as well.

“Q: Who is responsible for lecture contents?

A: Teachers are totally responsible for it.

Q: Are teachers free to choose teaching methods?

A: They are free to choose teaching methods... based on the typical methods of that subject. For example, Mathematics has some methods such as teaching new lessons or applying conversation, making suggestion... Teaching by groups or playing roles...They (teachers) have rights to choose.”

(Principal Interview, Phu Loc, PHU THO)

“I introduced hygiene in the class. Sometimes I taught them about hygiene when I was giving lessons because it happened all the time. For example, at the beginning of the new school year, my students said “I want to urinate”, “I want to shit” etc. I had to teach them “You should say “I want to go to the toilet”, you should not say those “ugly words”, it’s not nice, even if it’s correct. Or some students wore dirty shirts or had dirty hands. I asked them to put their hands stretched on the tables, I pointed out dirty marks and taught them to use a piece of old cloth to sweep those dirty marks. I taught them immediately, not waiting until the hygiene lesson. Most of the teachers reminded their

students immediately and frequently, about sweeping class, the way to dress, keeping hands clean – we reminded them whenever we saw problems, in whatever class.”

(Teachers FGD, Dinh Bo Linh School, Tien Giang)

At the time of visit, the two schools in Phu Tho (Phu Loc School and Phu Ninh School) was still applying the old scheme (i.e. one teacher covered all or almost all 9 subjects in a grade), while the selected schools in Quang Binh (Dong Phu School and Hai Dinh School) and in Tien Giang (Dinh Bo Linh School and My Hoa School) were applying, or in transition to applying, the new teaching scheme (i.e. each teacher is responsible for one or two subjects). Teachers seem to be overloaded with teaching duties, especially in schools applying the old teaching scheme. The teachers' workload was not only from lecturing in the class, but mainly from preparation for lectures. It was even worse if the school applied the full-day schooling scheme when the teacher had to stay all day in school and had only few hours in the evening at home to prepare lectures for the next day. This was detrimental to the curriculum because the teacher would focus only on core subjects such as Vietnamese and Mathematics and disregard auxiliary subjects such as Physical Exercise and Arts.

“My teachers are over-burdened with work. The number of teachers in our school is just enough for half-a-day scheme while in order to ensure the quality of students we had to campaign their parents to join the full-day scheme, so that we are overloaded with technical work, and preparation for lectures.”

(Principal interview, Phu Loc School, Phu Tho)

“Q: Have teachers got enough time for preparation of all lesson plans and teach all the lessons as described in the content of teaching program?”

A: We do if we apply subject-specialized scheme. Before, the teacher had more time (focused) on main subjects, while other subjects (“sub-subjects”) such as physical exercise, music, painting... were based on the teacher’s ability... It’s not that the teacher cuts time (of these sub-subjects) for doing private things but they used that time for teaching more on Maths or Vietnamese. But now we apply the subject-specialized scheme, so that each teacher has only 40 minutes for a lesson; after that time she/he has to go out for another lecture.”

(Principal interview, Dinh Bo Linh School, Tien Giang)

Teachers are also responsible for contacting the children's parents in order to collaborate in educating children.

“Teachers take very good care of my child. They take care them in terms of studying time, discipline....or manage not to allow private talk, and educate them not to imitate unhealthy lifestyles ... I just tell the truth. I educated two my children and... I feel no problem with school.”

(Caretaker interview of male student, Phu Tho)

Teachers see themselves as good models from whom students can learn new behaviors.

“I have one more idea that to educate personality for students, teachers themselves should be good practitioner for children to imitate.”

(Teacher interview, Dinh Bo Linh School, Tien Giang)

School administrators are primarily concerned to establish a school's good reputation for having good students, responsible and well-qualified teachers, and receiving many awards for both student and teachers at different levels (district and provincial). School staff expect to have good students with good study results and good personalities. Obedience and diligent studying are the most important norms, according to principals and teachers. Exam results are the greatest concern of teachers. They expect good students with good results and a respectful personality. A student having a good code of conduct is defined by teachers as someone who obeys their teacher, parents and fulfils all tasks as a student.

According to teachers, the children's voice is important to be heard, but they don't expect children to come up with novel ideas. For that, they need to have the facilitation of adults. Competition and rewards (e.g., praising good performance) are the most successful ways of educating children.

"Some general school activities are implemented but primary school children find it hard to give new ideas. They need suggestions from us."

(Teacher interview, Dinh Bo Linh School, Tien Giang)

"I like students to raise their hands actively to answer my questions. I do not like passive listening. I often raise problems to get their feedback -- what is right and wrong -- then other classmates give their comments before I reach a conclusion. That's my child-centered teaching method; it does not matter if the children say something wrong".

(Teacher interview, Hai Dinh School, Quang Binh)

"Yes, we should listen to the students. For example, they may raise a question to the teacher that could not be answered by their classmates. If the teacher does not listen to them, we could not be their teacher. They will be sad if we do not answer their question".

(Teacher interview, Dinh Bo Linh School, Tien Giang)

Teachers also see primary school children as young and immature, so they need more attention and special means of education.

"Of course, we should educate students in a 'light' way because they are very innocent, quick to act and react immediately, not like other secondary and high school students as unspoken".

(Teachers' FGD, My Hoa school, Tien Giang)

"Primary school students will be discouraged immediately if we criticize them. Therefore, we should praise them in many ways".

(Teacher interview, My Hoa School, Tien Giang)

b5) School-Family Connection: Roles of the Parents Association

The connection between school and family in educating children was considered very important – by both teachers and parents. From both points of view, the school and the family should collaborate closely in order to get the best result in education. In all the schools, there was a "Parents Association" for each class, involved with all the parents of students. The Parents Association, through its representatives, plays a role as a bridge between the school/class and the parents. The representatives include selected parents

from the Parents Association meeting every year who usually are active, enthusiastic and caring of the children. In many cases, the Parents Association participated in school activities, especially in “logistic” things in schools which required the contribution from parents. In such cases, the Parents Representatives work with the school Management Board or the head teacher to make a plan and call for all the parents’ contribution.

“The Parents Association supports school events such as Art performance, Sport Contests... The parents support the students. Besides, in cases of budget limitation, the school mobilizes mothers (parents) who are enthusiastic and in a good economic position to support the school. In general, it works on voluntary basis, not with any force... We want our children to have a good study environment.”

(Caretaker Interview, The President of the Parents Association in Dong Phu School, Quang Binh)

“Q: Do you participate in the Parents Association?”

A: I have been the President of the Parents Association from when my child was in Grade 1 to Grade 4.

Q: How frequently does the Parents Association meet? What is the role of the Parents Association and the school?”

A: The Parents Association meets once a year to make plans for the school year... At the beginning of the school year, they select Representatives, to consult all the parents to make plans.

Q: As the President of the Parents Association, do you meet with teachers frequently? And about what?”

A: As a Representative, I meet the teacher frequently. The main subject of meeting usually is the quality of study, making special plans to train good students and to help weak students to become better.... And discussion on activities to improve, to promote, and to collaborate between the school and parents aiming at a better movement of study and extra activities.

Q: How much do parents contribute to all these activities?”

A: It depends on the parents’ opinion. In many cases we contribute on a voluntary basis for a fund for students such as buying presents for good students, for art performance, etc. The contribution from the Parents Association in this school is just for the students themselves, not for teachers. The contribution was very little for teachers.

Q: How much do parents contribute for a year, on average?”

A: It depends on each class. For example, it is VND 80,000 for Grade 1, VND 120,000 for Grade 4... It depends on the cost because the number of students in this school is small.

Q: What else is this contribution for?”

A: The Parents Association use part of this fund to buy computers, air conditioners, to make the roof for the toilet to keep children dry when they go to the toilet, to buy more fans and tables and chair for computers... from that fund. Last year we bought computers and air conditioners.”

(Caretaker Interview, the President of the Parents Association of Hai Dinh School, Quang Binh)

On one hand, the Parents Representatives transfer the school opinion, action plan etc. to all the parents. On the other hand, the Parent Representatives also transfer parents' opinion on school activities.

- “Q: What is your role in the Parent Representatives?
A: I disseminate information which I learned from the School Parent Representatives meeting to other parents (of students in my daughter's class)
Q: What else?
A: I participate the School Parent representatives and then I have responsibility to inform the other parents
Q: Do the Parents Association have any role in such things as the children's activities in school? Such as the way a certain teacher teaches in the class?
A: Yes. For example, a teacher who punished our children... If the parents are unsatisfied with that manner, they can give me some complaints. As a representative in the meeting I will raise a complaint about that... The parents' opinion must be heard...
(Caretaker Interview, My Hoa School, Tien Giang)”

Most of the schools visited complained that they had no budget for buying soap and improving hygiene/sanitation facilities. In that situation, the Parents Association, in one of six visited schools, called for a contribution from all the parents for buying soap and sanitation facilities such as basins for use in school.

- “Q: *Is there any soap for children to wash their hands?*
A: *Soap is prepared by each class.*
Q: *Where is that soap from?*
A: *In the Parents Meeting at the beginning of the school year, the parents contributed some money serving their children activities in the class such as buying basin and soap.*
Q: *Who bought the soap?*
A: *The Parents Association in each class.*
Q: *Is there 1 bar soap in each class? And it is kept in each class after use?*
A: *Yes.*
Q: *Who uses that soap? Teachers or students?*
A: *Both teachers and students.*”
(Teachers' FGD, Dong Phu School, Quang Binh)

b6) Curricular and extra-curricular hygiene activities

There is no hygiene promotional intervention currently in the schools studied. The school children are being mainly educated through the standard curriculum or some extra-curricular activities like responding to the annual Water, Environmental Sanitation Week. The children are equipped with knowledge of personal hygiene, including washing hair and face, tooth brushing, nail grooming, bathing and handwashing. However, although teachers emphasize the importance of HWWS, they do not have HW facilities for demonstration, resulting in low effectiveness (Teacher interview, Phu Tho province).

“We do not have a practice section for students on HWWS; we just remind them to wash their hands before eating during weekly class review hour (giờ sinh hoạt).”
(Principal Interview, TIEN GIANG)

“For example, we remind them during the flag salute (chao co) and extra-curriculum activities. Apart from this, we do not have any measures to educate them on personal hygiene. The student would perform just mainly from their equipped awareness.”

(Principal Interview, TIEN GIANG)

“If I had money, I would allocate some for HW basins, and training manuals for teachers on how to wash hands.”

(Principal Interview, TIEN GIANG)

Children are also educated in hygiene through participation in the Red Star peer group (sao do). However, the incorporation of HWWS content into this group’s activities varied in each school visited. Nevertheless, this group could be a potentially regular source for encouraging student handwashing.

“It is regulated that we have to clean the latrine after urination or using the latrine for defecation. Some students do, while others do not. The teacher will punish if any student breaks this rule. The Sao do group gives scores for each class after checking hygiene (empty out of the rubbish) but they do not score for water the latrine after urination”

(Belief interview, male, 10-year-old, My Tho school, Tien Giang)

“My school has specific regulation such as each class is on duty per week, one group of each class per week, wearing the uniform, not fighting. The students participate to give marks on some things such as being late, emptying the garbage, wearing dirty clothes and hair... If hands is dirty, they would subtract marks for it.”

(Belief interview, female, 10-year-old, Hai Dinh school, Quang Binh)

The most obvious support for children to wash hands in school is lecturing. Schools try to teach children some hygiene behaviors (mainly personal hygiene, including handwashing) through lectures and pictures, although there is no demonstration due to lack of teaching and practicing facilities.

“Q: How are the children taught on handwashing?”

A: The subject on Natural-Social grade 1-2-3 and the subject on Sciences grade 4-5 all educate on the behavior of washing hands after going to toilet and before eating, way to wash hands.

Q: How is the way to wash hands?”

A: Washing under tap and with soap.

Q: How do teachers teach the children about that?”

A: To give some pictures.

Q: Picture of what?”

A: Some students wash their hands after going to toilet while others don’t. After that the students will point out what behavior is right and what is wrong. Then the teacher will give conclusion on what behavior is right with explanation of the reason and effects (of that behavior).

(Principal Interview, Phu Ninh School, Phu Tho)

“In fact, this school usually educates children on hygiene behaviors... To educate children to have hygienic awareness when going to toilet, that help the school is always clean, to have handwashing

after going to toilet... We teach children through lecturing; there are topics on hygiene in the curriculum such as what is a hygienic toilet, how to use the toilet appropriately, how to wash hands after going to toilet... Moreover, each teacher will teach their children more because this seems simple but will be harmful to children's health if they are not well educated on this."

(Teacher FGD, Dong Phu School, Quang Binh)

Besides, children are educated on personal hygiene (including handwashing) through extra-curricular activities like weekly campaigns for clean water, even if these activities are very few.

"(Children learn) through lectures and practicals... They can learn through social activities. For example, children clean the school or through propaganda such as propaganda in the salute the flag or through school campaigns such as the campaign on water and sanitation."

(Teacher FGD, Phu Ninh School, Phu Tho)

Not only lecturing and educating through social activities in school, teachers encourage children to practice personal hygiene (including handwashing) by reminding and monitoring. Child-to-child monitoring seems to be a particularly effective approach.

"We check on personal hygiene, such as to check once a week, the monitor go to check or each team/group check each other... to see whether hands and finger nails are clean, whether finger nails are long or finger nails are dirty, whether the students hair is clean, or whether the students having bad smell... If yes, the student will be instructed on the way to bath... It means that we usually check and supervise like that"

(Teachers' FGD, Phu Loc School, Phu Tho)

"Q: Do you mean that the teacher has to give instruction when teaching them?"

A: Yes. We have to give instruction, to remind and to check frequently

Q: Have to check?"

A: Have to remind and check frequently"

(Teachers' FGD, Dong Phu School, Quang Binh)

"A: Who student knows will volunteer; who do not know will be taught. If the students at grade 1, the teacher will give instruction on the way to use toilet, the way to use flush. They have to wash their hands after going to toilet... i.e. we do first then the children to follow... Some student goes to toilet and tells the teacher that some other student doesn't wash his/her hands after going to toilet.

Q: What do you do in that situation?"

A: (I will) remind them to wash their hands.

Q: Will they wash then?"

A: I make sure that they will.

Q: Do children tell the teacher about that frequently?"

A: Yes. Because we teachers can't check all the students so we let children pay attention and remind each other.

Q: Is that approach successful?"

A: *In general, it is successful."*

(Teachers' FGD, Dong Phu School, Quang Binh)

c) Children's and parent's perspectives on school

According to children, school is a friendly environment to be in. Children do not participate in the regulation of their school or class directly, but they do not find rules or teacher behavior to be too strict. They tend to like or admire their teachers; they also like a teacher who is humorous, tender, and devoted. In general, children like to go to school as they want to meet their classmates, and play games.

"In my school, classmates are very happy and cohesive. We often go playing games like "Find and Out or tron tim", "bit mat bat de". I am not afraid of any classmate!"

(Belief interview, Male, 10-year-old, Hai Dinh school, Quang Binh)

"I love my teacher because she is very friendly. My classmates are very friendly together and happy. If there is any unhappy child, we would all share with her!"

(Belief interview, female, 10-year-old, Phu Ninh school, Phu Tho)

Thus, in general, children find their schools to be positively rewarding environments.

School is also highly appreciated by parents (although sometimes parents are afraid of saying negative things against teachers, who are seen as socially valued).

"I feel secure about the school because the teacher not only gives knowledge to my child but also educates them about good codes of conduct, while being open to the parent. Many students were advised and cared for by the teacher during lunch at a full-day schooling scheme."

(Caretaker interview, Hai Dinh School, Quang Binh)

Under the family planning policy, the number of children in a family has been reduced ("Each couple have only 1 or 2 children"). Having fewer children, parents would pay more attention on them, including with respect to their hygiene.

"General speaking, the family now does not have many children, so when they are sent to school, they have are not dirty and ragged as in the past. The parent also picks up their children from school. Very few parents are not concerned if their children's study is poor. All school-goers now wear clean clothes; they might get dirty due to playing in the yard, but not much because teacher's remind them. Now living conditions are better...."

(Teachers' Group Discussion, Phu Loc School, Phu Tho)

However, parents also rely on schooling, especially in rural areas. They believe their children learn everything at school.

"The teacher teaches students to be obedient and to aim at good exam results. I gave my child' birth but I have to work all day, therefore I rely on the teacher. I only ask my child about how she is studying after working; everything else belongs to the teacher."

(Caretaker of male student's interview, Quang Binh)

In conclusion, children feel happy and safe in school; a high degree of order is maintained. There is a strong emphasis on good marks and obedient behavior. Children take studying very seriously, and there are numerous structures to support the school's educational mission, such as the management board, teacher groups, student groups, and the Parents Association. Community satisfaction with schools seems to be high, although the reverse is not always true: school staff can be disgruntled with the degree of parental support as back-up for their educational efforts.

4.4. Society

The most general sphere of influence over children is society at large. In this domain, we include the influence of social norms on behavior, and access to various media. The tools used in this section also help answer the question, addressed by the third objective of the current study, of whether children can serve as hygiene change agents, by demonstrating how well children can convey hygiene messages from school to home environments.

a) Social norms

HWWS is not common practice among caregivers in Vietnam. According to a KAP survey in five communes in the Cuu Long Delta in 2003 prior to an AusAid-supported project, less than 3% of mothers reported the use of soap for handwashing after the toilet (AusAid, 2003). The household observations conducted for the present study were consistent with this low rate. No households had soap placed in such a way as to be easily usable for handwashing, and mothers said they used soap only when hands were visibly dirty or smelly, such as after coming back from the field or work, or after playing in yard. They did mention handwashing after the toilet or before eating but without soap and did not mention soap use after cleaning up children.

In this study, caregivers believed that rinsing hands with water only is enough to be clean. Therefore, soap is not believed to be needed for handwashing on most occasions. This finding is consistent with a recent WB survey (2007) with the main result that mothers of children under 5 believe that handwashing with water alone is enough to clean hands. In addition, according to that survey, handwashing with soap takes too much time. Some participants simply forget to wash their hands with soap.

Because HWWS is not a priority among adults, they provide relatively little encouragement or reinforcement for children to HWWS. Mothers report that both parents consider personal hygiene important in improving children's health, with the husband supposed to enforce this message, and the mother as the person to ensure that children practice hygiene behavior through direct reinforcement. However, because adults believe that HWWS is not necessary unless hands are visibly dirty, children are only reminded to handwash with soap if their hands are visibly dirty (e.g., after playing in the yard or coming back from the school). Having dirty hands is perceived as "*black color on hands*" or "*feeling slippery and could not clean with water only*".

"My children wash their hands if they are dirty; if not, I have to remind them verbally."

(Caretaker interview of male student, female, 52 years-old, Phu Tho)

"My husband is more concerned with hygiene; he provides more information than me [to my son], but I am the person directly reminding him about hygiene behavior such as washing face and brushing teeth in the morning."

(Caretaker interview of female student, female, 49 years-old, Phu Tho)

As a result, parents can disregard (*coi thuong*) the importance of HWWS:

“It is extremely difficult. Sometimes we propose to get financial contributions from the parents of pupils for buying soap, but they said that they do not need soap for handwash at their home. They added that they just used soap for washing clothes only; they washed hands in the field after farming activities and up to now, they still haven’t died because of not HWWS!”

(Principal interview, Hai Dinh School, Quang Binh)

Generally, interviews with caretakers suggest there is considerable social support for HW, but little emphasis on HWWS. Caretakers reinforce the formation of habitual handwashing before meals and after toilet through

- verbal reminders
- active enforcement
- serving as a good role model for the behavior
- making children notice TV messages about germs and handwashing

Of course, the low rates of actual handwashing belie these reports to a considerable degree. Handwashing with soap is therefore practised more at home than in school despite the fact that children spend most of their active hours in school compared to the home environment, especially where school takes place all day long (as in Tien Giang province). Lack of soap is the main reason for not HWWS at school.

Also, certain customs (open defecation, drinking unboiled water) reduce the likelihood of hygienic behavior in students:

“Students have the bad habit of open defecation in the field, so using school latrines is new behavior for them.”

(Teacher interview, My Tho school, Tien Giang)

“Many people think it is not necessary to HWWS. If my child had this practice, then he would practice at school, but many other children would not because their mothers don’t have this thought. These children do not practice HWWS at home so of course they will not do so at school. In my view, this is the main reason HWWS is not a common habit (thoi quen) among children.”

(Caretaker interview, My Tho school, Tien Giang)

“Many local people simply think that because they are living in a rural area, working mainly in agriculture, then HWWS is not necessary.”

(Caretaker interview, My Tho, Tien Giang)

“I think that it [HWWS] relates to local norms, particularly some backward customs that affect students. Drinking unboiled water is one example. After coming back home from school, students often drink water from the tank (unboiled) from a very early stage. It then becomes their habit gradually. So it is extremely difficult to change because it is a local habit.”

(Principal interview, Hai Dinh School, Quang Binh)

The accumulated effect of relatively poor facilities (especially in schools), a lack of reinforcement and relatively low prioritization by parents, and cultural practices which inhibit practice is the observed low rates of handwashing with soap in Vietnamese children. The children themselves perceive this as a social norm of *not* HWWS. For example, in the motivator pictures exercise, children argue they don't need to HWWS because no one else in their peer group is doing it, so they needn't either. Counteracting this 'no-practice' norm will be difficult.

b) Media

Especially for rural children, but also for urban ones, everyday contact with the world at large comes through exposure to media of various kinds. This section addresses various aspects of this exposure, and how it might be managed to increase HWWS. First, the question of how media contacts might best be fit into the daily activities of Vietnamese children is illuminated by looking at how they spend their time. Second, reported exposure, and preferences for media channels and content, are examined, based on interview data. Third, whether schools can effectively serve as a central focus for the dissemination of hygiene messages to homes is examined through a small-scale information transmission experiment. Finally, the potential of various kinds of adults to serve as role models is investigated using the role model game. Together these different exercises produce a rich picture of the roles of media and aspirations in potential hygiene promotion activities with children.

b1) Daily life of a Vietnamese school child

To determine the best times and places at which media or other efforts to 'touch' children in their daily lives by public health messages, an analysis was undertaken of children's daily activities, via a diary exercise. This exercise showed that, during school days, morning activities focus on personal hygiene (face-wash and toothbrushing), doing homework, playing and helping in light household chores (e.g. washing dishes, vegetable preparation). At mid-day, most students return home (partly because hygiene facilities are dirty or unavailable at school.) They bathe, watch TV, read stories, do homework, or assist with housework (cook, look after younger siblings). In the evening, they tend to have a bath, eat dinner, do homework, play or watch TV and go to bed.

For a boarding school or schools applying a full-day teaching scheme (Phu Loc, Dong Phu in Quang Binh and Hai Dinh, Dinh Bo Linh in Tien Giang), students spend most of their time in school and report all of their activities as occurring at school: studying in class, playing with classmates on school playing ground, or even having lunch and taking a siesta at school – like boarding students in Dinh Bo Linh or Hai Dinh School (Quang Binh). The games they commonly play in school include *tron tim* (Hide and Catch), *bit mat bat de* (Blind-man's-buff), *nhay day* (Skipping rope), *choi bi* (Play marbles) or *duoi nhau* (Pursue).

The rural student wakes up and goes to bed earlier than urban ones (Table 10). During leisure time, more rural children are involved in household chores than urban children, where television and playing are more prevalent. Most rural children are engaged in outdoor games, compared to urban children who have more indoor games. (See Appendix 4 for more details of what children do daily in urban and rural areas.)

Table 10: Summary of daily diary of school children in one peri-urban and one rural school in Tien Giang province

COMMON ACTIVITIES		
HOUR	DONG PHU (URBAN SCHOOL)	MY HOA (RURAL SCHOOL)
6:00 – 7:00	Wake up (at 6.30 AM), personal hygiene practices (face wash, tooth brush), have breakfast	Wake up (at 6 AM), wash face, brush teeth, physical exercise, change clothes, breakfast
7:00 – 8:00	Study in class	Go to school, review lesson before in-class time
8:00 – 9:00	In class and break (8.50-9.15)	In class (sentence and word practice, composition, physical exercise, math modules), break time (at 8.45 AM)
09:00 – 10:00	Break and study in class	Break (cont.) and study in-class
10:00 – 11:00	Study in class, watch TV OR prepare for lunch (rice cook)	In-class time (sentence and word practice and math modules)
11:00 – 12:00	Have lunch, watch TV	Bath, play with younger sibling, watch film on TV (<i>Tru gian diet ac, Tham tu Gattgets, Batokmen, Hoa sinh hung, Chiec ly than</i>), preparation for lunch, have lunch at home
12:00 – 13:00	Watch TV OR take a nap	Support in wash dishes, do home exercises, watch film and TV (<i>tru gian diet ac, kinh van hoa</i>)
13:00 – 14:00	Study in class (from 13.30)	Watch TV
14:00 – 15:00	Study in class	Go to school and study in class
15:00 – 16:00	Break and study in class	In-class time and break at 3.10 PM to 3.25 PM
16:00 – 17:00	Have a bath, play (fly a kite), cook	In-class time (arts module) and back home at 4.30 PM
17:00 – 18:00	Have a bath, hair wash, cook and have dinner	Watch film (<i>Hong Hai Nhi, Thien Dia Huu Tinh</i>), play with younger sibling, private lesson (English class), take a rest.
18:00 – 19:00	Have dinner, watch TV	Have dinner, read story (<i>Chien si hanh tinh, ngoai hanh tinh dai chien, Doremon</i>), take care of younger sibling (feed), private lesson (e.g. informatics), do home exercise
19:00 – 20:00	Study at home, preparation for next day homework	Do home exercise and prepare for next school day
20:00 – 21:00	Study at home, preparation for next day homework	Take a rest, do home exercise

21:00 – 22:00	Watch TV	Sleep
22:00 – 06:00	Prepare for bed, sleep	Sleep

During weekends, children are likely to stay at home to play games with their siblings or neighbourhood friends, or do homework in daytime.

These diaries suggest that children’s lives in Vietnam revolve almost exclusively around home and school; interaction with the world-at-large is largely through TV. Rural children have less of this exposure, spending more time on home-based activity.

b2) Channels

After playing with friends in schools, all the school children investigated like watching television, during both school and non-school days. Television is the source for information most frequently mentioned by children. Some students can choose the channel they like to watch if their house has two televisions; otherwise, they cannot. Belief interviews and daily diary data suggest that children’s favorite programs are, first, films (cartoons), second children playing games, and third contemporary music shows (Table 11). Children see cartoons as intelligent, humorous, good, joyful, and loveable. The most popular channels are VTV 3 (entertainment programs) and VTV 17 (cartoon programs).

The results from belief interviews and daily diary exercises with children group show that all school children like watching television, during both school and non-school days. They particularly like programs featuring childhood games (*Hugo*), cartoons (*Tom and Jerry*, *Dong Du Ky*, *12 animal designations*, *A small girl*, *A pursuit on the road*). The most popular time to watch TV on school days is from 11 to 12 a.m., 17 to 19 p.m., and 20 to 21 p.m. (after studying). On the weekends, the afternoon is the popular time, at 14 to 16 p.m.

“I like watching television. I like many channels but my favourite one is animated film as there are a lot of actors who are very good in films. Girls are likely more interested in cartoon than boys. Boys like action films, Superman films as fighting is really attractive.”
(Male child interview, 10-year-old, Phu Loc School, Phu Tho)

“I often watch TV at 6-6.30 AM (when I am going to school, watching news), at 11-11.30 or 6-7 PM for watching films (Đong du ky, Co gai xau xi). I like VTV 3 channel as there are many music games with good songs, joyful participants. I like watching cartoons because they are colourful, with many new actors.”
(Female child interview, 10-year-old, Hai Dinh school, Quang Binh)

“I often watch television in leisure time, such as 2 to 4 PM or 5 to 6 PM. I like watching cartoons (12 animal designations, a small girl).”
(Male child interview, 10-year-old, Dong Phu school, Tien Giang)

Table 11: Summary of favorite TV shows of the children

SCHOOL	STUDENT 1	STUDENT 2	STUDENT 3
Rural school (My Hoa)	I like watching superman cartoon (as he is so good), Tom and Jerry (with an intelligent rat), Thanh Long films (good and humorous)	I like watching cartoon (Mimo, Bob and friends because make me laugh). I like HTV 7 (feature films)	I like watching cartoons such as Tom and Jerry because of happiness (vui), a small squirrel because of its lovability, Dream house (as good and for the poor)
Urban school (Dong Phu)	I like watching cartoon (12 animal designation, a small girl)	I like watching cartoons such as <i>Doremon</i> , Bot Rabbit, A pursuit on the road	I like watching cartoons

After TV shows, the children like reading comic strips or fairy tales. *Doremon* is the most frequently mentioned comic strip the children mentioned. Intelligence, talent, well-educated and sorcery powers are the most common reason children prefer this character.

"I like reading comic strip like Doremon as he is able to do a lot of sorceries."
(Belief Interview, Male, 10-years old, Hai Dinh School, Quang Binh)

"I like reading Doremon or Snow White stories." *(Belief Interview, Female, Tien Giang)*

They do not often listen to music but they like singers. Children like well-known singers that they admire based on both looks and vocal qualities

"I like to listen to modern music. I like Dan Truong singer as he is both good-looking and a good singer."

(Belief Interview, Male, 10-years old, Phu Ninh school, Phu Tho)

"I like Hong Nhung, My Tam singers as they are good-looking (xinh). I don't like to listen to music. I rarely read stories."

(Belief Interview, Female, 10-years old, Phu Loc school, Phu Tho)

"I like Bao Thy and Nhat Kim Anh singers as they are both good singers and good-looking." *(Belief Interview, Female, 10-years old, Phu Ninh school, Phu Tho)*

"I like Ly Hai singer as he is a good singer."

(Belief interview, Male, 10-years old, My Hoa School, Tien Giang)

"I like Dam Vinh Hung singer most as he is a good singer and good-looking."

(Belief interview, Male, 10-years old, Dong Phu School, Tien Giang)

"I like Xuan Mai as she has a good voice and is lovely."

(Belief interview, female, Dinh Bo Linh School, Quang Binh)

These are consistent with the results from teacher interviews. According to teachers, the most effective way to communicate to school children is through television.

“A: Television is the quickest way to communicate school children, not so effective through book or newspapers.

Q: What is the most important channel for children or do you know which channel they like or do children tell you about it?

A: Yes, during our lectures, when we ask them about their preference, almost of them mentioned that they like watching cartoon. More than half of my twenty students like that. We would like to emphasize the most effective way to communicate them is visibly equipment. If only verbally, they would not pay attention and of course, they would like it more if visual aids are used.”

(Teachers’ Group Discussion, Phu Tho)

The child’s involvement with the world-at-large is thus primarily through television, with urban children having more time to spend in this activity than rural children (see daily activities, discussed above).

b3) Schools as the target environment for hygiene messages

To determine whether school children can be used to convey hygiene messages from the school to home environment, a small experiment was carried out. A tooth-brushing message was given to one head teacher of class 5 in each school by the local consultant; the teacher was then asked to communicate the message exactly as written to children in their class that same day. The message was *“Dentists now recommend that people brush their teeth at least twice a day, especially before going to bed, to keep your mouth healthy. Each time you brush, you should also keep brushing for two minutes. It is also important to use a fluoride toothpaste. Please tell those at home this news about toothbrushing being good for your health”*. Facts about tooth-brushing were also given to the head teacher in case of questions. The teacher could choose the way to impart the message (i.e., the teacher played middle role in transmission of the message). Then three students of this class and their mothers were visited at their home the following day to see if the caretaker had received the message, and if so, in what form (see Appendix 1 for further details).

Table 12 shows the results of this message-tracking exercise, as reported by the children and caregivers. Unfortunately, school-to-home transfer was not as great as hoped. This ineffectiveness is at least partly due to several methodological faults in the experimental design. First, the message about brushing teeth twice a day was not striking or memorable because many Vietnamese families already know they are supposed to brush their teeth twice a day. Second, children would often report a more salient and exciting fact they learned at school: that there would be visitors coming to their home the next day to interview them and their parents. This message was more reliably conveyed to caretakers than the tooth-brushing message itself, which was crowded out by this important social information. Future attempts to use this method should attempt to circumvent these methodological flaws.

Nevertheless, more than half the children could remember the message was about brushing teeth when asked about it at home, and fully one third of caretakers knew a message about tooth-brushing had been delivered at school the previous day (with prompting).

Children reported telling their caretakers about their teacher’s message.

“I told everybody in my family when I was at home. I told my mother that ‘You have to brush your teeth more carefully’, because I want my mother’s teeth bright.”

(Male belief interview, 10-year-old, Dinh Bo Linh School, Tien Giang)

“I told my mother, but did not remember exactly what I said. I told her in order to make everybody protect their teeth.”

(Female belief interview, 10-year-old, Dong Phu school, Quang Binh)

However, none of caretakers reported any segment of the message without a prompt (with one exception). With prompting, caretakers reported more detailed information about what they had been told by their child. The pattern of which segments of the message were recalled is consistent with expectation (and hence reinforces the idea that in fact caretakers did learn of this message from their child bringing it home from school). Most often remembered is the basic topic of the message: tooth-brushing (33%). More detailed information, such as the fact that toothbrushing should be practiced twice a day (8%) and especially before bed (18%) was less frequently recalled. “Before bed” is possibly remembered better than twice a day because it is a novel time of day for some in which to brush teeth. The least mentioned segment concerns the fact that dentists recommend use of fluoride toothpaste. The reason is likely to be that fluoride is not easy to remember, being a technical term.

Both children and their caregivers in urban areas reported more than their compatriots in rural areas (see Appendix 8 for details). For example, 33% of children could mention “twice a day” after prompting in urban area, while only 6% remembered this fact in rural areas. For example, one mother of a male student in an urban school of Quang Binh province could recall the need to brush teeth twice a day and especially before bedtime, while none of mothers of students in rural area could recall any details. This result implies that rural children have less influence on their parents than urban ones, probably because their power within the family is lower (per earlier discussion), or that rural parents are less concerned with academic matters.

Table 12: Tooth-brushing Message Transmission Summary (n=18)

MESSAGE SEGMENT	% CHILD REPORT NO PROMPT	% CHILD REPORT WITH PROMPT	% CARE-TAKER REPORT NO PROMPT	% CARE-TAKER REPORT WITH PROMPT
‘Dentists recommend’	11%	33%	0%	0%

'Brush teeth'	28%	56%	8%	33%
'Twice a day'	28%	39%	8%	8%
'Especially before bed'	22%	50%	8%	17%
'Two minutes of brushing'	11%	50%	0%	0%
'Fluoride toothpaste'	17%	11%	0%	0%
'Good for health'	17%	11%	0%	0%
'Tell parents'	11%	39%	0%	0%

Children sometimes reported the message to those who do not practice toothbrushing daily, with the obvious intent to promote the practice in that individual. Such cases tended to focus on someone with less power in the family.

"I told my younger sister [4-5 years old] because she usually forgets (tooth brushing)."
(Male belief interview, 10-year-old, Dinh Bo Linh school, Tien Giang)

"I did not tell parents because they brush their teeth every day. I did not tell my older brother because I was afraid that he would shout at me."
(Male belief interview, 10-year-old, Dinh Bo Linh, Tien Giang)

This reflection of power differentials between siblings supports the claim above that tendencies to report the message are also due to power differentials between children and adults: children who don't expect to be listened to don't venture to mention the message in the first place; they are probably acutely attuned to how much power they have in the family and only exert it where and when it might be effective, and of advantage to themselves.

Other children simply did not pass on the message.

"I forgot to tell my family." *(Female child interview, 10-year-old, Phu Ninh, PHU THO)*

The short time-frame of this study cannot answer the question of whether the information which makes its way from school to home then moves out into the community at large, which would obviously also be of considerable interest to public health workers. However, given the suggestion that transmission depends on the child's perceived power to effect change in others, we can expect that the likelihood of transmission into the community will be a function of how powerful children (or those they tell within their household) perceive themselves to be outside the family.

In conclusion, some methodological problems (lack of novel message; confusion with home visit) may have inhibited transmission. However, it is likely that the image of 'model' children as docile and submissive also inhibits the ability of children to serve as active promoters of hygiene messages and practices in Vietnamese society.

b4) Potential spokespeople as role models

To determine what kinds of people children admire and what sort of people they hope to grow up to be themselves, they were asked to identify their favorite role models and the reasons for their admiration (see Appendix 1 for a description of this tool).

In terms of role models, Table 13 shows that doctors were by some margin the most admired category of role model, followed by teachers and scientists, then policemen (popular with boys) and engineers. All of these top role models (with the possible exception of policemen) require a good education, which may explain why education is so highly valued by Vietnamese culture currently. Several other traits were attributed to more than one of these roles, including being good-natured/friendly, tender/altruistic/caring/patient, creative/innovative and hardworking. These clusters of traits are of considerable interest. The first two clusters can be glossed as 'sociability'; they are about being a good person, able to work well in society, and empathetic of others – all of which are traits that a collectivistic/egalitarian society like Vietnam would be expected to value. Rural children seemed to especially value a tender/caring/loving quality in their favorite role models (i.e., teachers, doctors), so in smaller societies, the ability to get along with others is even more valued.

Most of these same traits came up when looked at independently of role models (i.e., when considered abstractly by children without reference to particular kinds of role models; see Appendix 7 for details). In this case, the most popular traits were intelligence, creativity and adventurousness, all of which were mentioned as characteristics of a top role model. Intelligence in particular achieved many votes in both urban and rural schools – it seems to be a major cultural value in Vietnamese society, perhaps because it is linked to achieving the most valued jobs. Another group of traits received slightly fewer votes: well-educated, active, caring/kind-hearted, stylish and being admired by everyone. Only urban children mentioned being stylish or admired by all, perhaps indicating their greater concern with, and experience of, the wider world outside the family and local community. Being wealthy was not valued in and of itself, at least by this young group of children (although the top role model, being a doctor, was associated with being rich, which may implicitly account for doctors being the absolute favorite role model). Being admired is also valued, but not being famous per se, perhaps because the 'cult of stardom' has not yet struck these children (or Vietnamese society in general). In any case, such a cult would contradict the egalitarian ethos of Vietnamese society. In effect, the children seem to be saying that it is very desirable to have the respect of others, but not to be seen as better than them – either in terms of wealth or fame. (Of course, intelligence can set an individual apart, but it is an inherited trait, rather than one acquired through a focus on oneself.)

A third cluster of traits is associated with the most popular role models: creativity, or being innovative, and adventurousness. These traits seem to contradict the leveling tendency of the other traits, since they seem to require individuals to stand out from, and to some extent, go against or set one-self apart from, others. In practice, Vietnamese children are commonly educated to follow teachers' guidance, rather than being creative or innovative, except for those studious students from whom different solutions are highly encouraged. Practical problem-solving is also admired, so children's ability to be creative can be a positive deviation from the norm which does not inspire a leveling tendency.

The fourth primary trait associated with favorite role models is industriousness. These young children

already recognize that no one gets ahead without hard work, and many have already begun to work hard in their current 'job', going to school.

Each of the top role models is also linked to other characteristics: doctors are good at giving treatment; teachers are good at conveying knowledge; scientists are famous and proficient; policemen are strong, brave and strict. These tend to be job-specific skills which are not valued in general terms like the ones already discussed. Other admired occupations include singers, astronauts, tour guides and architects, each of which (except astronauts) has specific admired skills as well (e.g., speaking a foreign language, good at drawing or singing).

Finally, the children's four favorite responses to the question "What do you want to be when grown up?" were doctor, teacher, scientist and policeman (in that order) (see Table 13). Thus, the children seek to become themselves the kind of people they most admire when they grow up. They want to be a person with intelligence, admired by all and well-educated. This finding is a true reflection of a child's' personality since at their age, they are seeking recognition, identity and acceptability.

In conclusion, children tend not to prefer frivolous role models such as film stars or sports figures, suggesting that, even at this young age, they have already imbibed the cultural values of hard work and a respectable career with high social value.

Table 13: Result of the role models exercise

CATEGORY	WHY ADMIRABLE (IN FREQUENCY ORDER)	EXAMPLES (INDIVIDUALS)	# OF MOST ADMIRABLE VOTES
Doctor	nurturing, active and polite, respectable, rich, cure/treatment, treatment for the poor, good-natured, well-educated, patient, love children, friendly, altruistic and well-groomed	Ms. Lan, Ms. Heng and Mr. Khang	17
Teacher	knowledge-givers, friendly, well-educated, clever, clear teaching, modest, good-natured, talented, tender, funny, caring, looking after, teaching very well, funny, kind-hearted, moral, altruistic, creative, hardworking, adventurous, honest, loveable	Ms. Hang, Ms. Hoa, Ms. Ha Mrs. Dai, Mrs. Son, Mrs. Yen, Mrs. Yen	8
Scientist	creative, hard-working, innovative, industrious, intelligent, patient, famous, proficient, tender, caring		8
Policeman	healthy, patient and strong, good kungfu, brave, rich, kind-hearted, healthy, intelligent, helpful, well-educated, strict, serious	Mr. Kien	7
Engineer	intelligent, rich, talented, healthy, successful, creative, build nice houses		6

Singer	admired by all, talented, good voice, stylish, good-looking, rich, majestic fashionable, famous, self-confident, funny, travel, joyful, beautiful, well-known, strong personality, creative, active, compose a nice song	Mr. Hoang Hai, Hong Nhung, Bao Thy, Kim Nhat Anh, Dan Truong, Dam Vinh Hung, Ly Hai, Xuan Mai, Tong Gia Vi	4
Tour guide	good at foreign language, well-educated, friendly, travelling, good looking, active, rich, fashionable, intelligent, good kungfu, healthy, hardworking, majestic, humorous, well-educated, intelligent		4
Astronaut	well-educated, intelligent, talented, active, creative, healthy, strong		3
Architect	proficient, good at drawing, polite, intelligent, patient, hardworking		3
Artist (painting)	talented, famous, rich, well-educated, creative, good at drawing, active		2
Movie star	famous, make people satisfied, admired by all		2
Worker	hard-working, industrious, laborious, diligent, active, creative, patient, patient, strong	Mr. Quang Mother	2
Professor	successful, admired by all, high social status, polite, well-educated, talented		1
Dressmakers	creative, hard-working, patient, clever, active	Ms. Hoai	1
Fashionable clothes saleswoman (only in PhuLoc)	fashionable, rich, good-looking, clever, active, hard-working	Ms. Huong	1
Sport star	talented, strong, active, healthy, enduring, concentrating, hard-working, brisk		1
Director	majestic (<i>oai</i>), magnanimous (<i>hao hung</i>), fashionable, serious, powerful, rich	[boy's father]	1

Parents	sweet, kind-hearted, hard-working, loving, caring	mother, father	1
Pilot	adventurous, brave, talented, skilful, concentrating, patient, hardworking, strong, majestic, brisk		1
Politician	straightforward, incorruptible, serious, majestic		1
Coach	healthy, talented, leadership, solidarity, brave, well-known, strict		1
Film star	neat, good act (urban TG)		1
Journalist	[could not give traits (urban TG)]		1
Farmer	industrious, laborious, diligent	Mr. Tien (his uncle)	0

V. Conclusions

5.1. Child

Knowledge

- Children report the need to HWWS when they have visibly dirty hands, after playing, after eating, before going to bed and before drinking. However, handwashing after going to toilet was commonly mentioned only after prompting.

Attitudes

- Disgust with visibly dirty hands after going to the toilet and the fear/shame/regret associated with having made someone else ill by transmitting germs to them (through the fault of not cleaning dirty hands) are the primary motivators for handwashing among children.

Beliefs

- Children have a clear expectation that HWWS will protect their health by helping them avoid handwashing-related diseases like diarrhea, bellyache, and flu. They know that the cause of diarrhea is bacteria on hands, in dirty water, or food kept for a long time. Thus, they understand the relationship between germs and diseases.

Competing priorities

- Common reasons for not HWWS include laziness, forgetfulness, being pressed for time or not wanting to take time for washing, wanting to do pleasurable activities right away (such as play football), not seeing their friends wash their hands or not seeing HW as important or necessary, because there is no visible dirt on the hands.

5.2. Family

Accessibility

- At home, many kinds of soap are available (powder, bath milk, dish-washing liquid, bar soap), but there is a common lack of a proper water container (such as a basin) for handwashing that leads to improper practice (such as washing hands in an unclean water container).
- Perfumed soap was a HW facilitator in both at schools and at home.

Social Support

- The influence of children on caregivers is not strong, especially in rural areas, probably due to the image of 'model' children as being docile and submissive. Children thus have a 'small' voice in their family ('bigger' for boys).
- Parents have a strong degree of control over their behavior. Urban mothers have more influence over their children, while rural fathers give more advice to the child. The main role in teaching/educating children belongs to the parent who spends more time at home, but the father is the final decision-maker in educating children.
- Parents also have relaxed attitudes toward handwashing, believing it is only necessary to use soap when hands are visibly dirty or smelly. Hence, although parents tend to actively push their values on children, handwashing is not among these values.

5.3. School

Accessibility

- At school, HW facilities (including water containers such as basin and water tap or collector) are available and accessible in two of the three provinces. However, no soap or soap placement was observed, implying a challenge of soap management or a consistent supply of soap at school.
- The level of handwashing for primary school children is therefore much lower at school than at home.

Social Support

- School is a friendly environment that children want to go to, as they do not find rules strict and feel safe there. The principal determines school activities and plays directive and supportive roles for teachers. However, teachers tend to mainly focus on primary subjects such as Vietnamese and mathematics and disregard auxiliary subjects such as physical exercise and the arts, including hygiene content, especially when school takes place all day. Social associations are potential sources for encouraging primary school children (PSC) on hygiene messages at school (pioneers, children unions).
- HWWS is not common practice in the local context as it is perceived by local people not to be necessary. Also, backward local customs (open defecation, drinking unboiled water) affect the development of hygiene behavior in students. In addition, the parents of pupils disregard (coi thuong) the importance of HWWS.

- Hand washing with soap takes low priority at both school and household levels. The level of handwashing for primary school children after defecation at school is lower than at home due to lack of soap and soap holders at all school visited.

5.4. Society

Social Norms

- HWWS is not a common practice as it is perceived by many people to be unnecessary; many believe that rinsing hands with water only is enough to be clean. Therefore, soap is not believed to be needed for handwashing on most occasions. Also, local customs (open defecation, drinking unboiled water) affect the development of students' hygiene behavior.
- Because HWWS is not a priority among adults, they provide relatively little encouragement or reinforcement for children to HWWS. Children also report not needing to HWWS because they don't observe their peers doing so; they perceive this as a social norm of *not* HWWS. Counteracting this 'non-practice' norm could be difficult.

Media

- Television is the most popular information source for children (through cartoon, games and music shows).
- Doctors, teachers and scientists could act as role models in encouraging children to adopt new hygiene practices, including HWWS.
- Children express a variety of aspirational values – primarily intelligence, creativity, being well-educated, industrious, good-natured and altruistic.
- Children can probably serve as ambassadors for hygiene messages encountered at school by bringing them home.

VI. Recommendations

6.1. For handwash programs

- The campaign should adopt an integrated approach to involving the Ministry of Education, teachers and parents. This will ensure that HW facilities and soap are incorporated in the school budgets or a provision is made where the parents can be encouraged to contribute. Parents should support the behavior at home.
- The HWWS campaign should not work in isolation; it should be integrated into efforts to reinforce hygiene in school and existing related programs such as the week of Water and Environmental Sanitation annually.
- School and home are both positive environments that should be synchronized to communicate similar messages to children; they currently represent contradictory environments for HW practice.

- Peers can exert pressure and regulate the behavior of others as members of children’s groups at school (e.g., through groups such as Red Star or Sao do, Peer Union, Ho Chi Minh and Children Union), which could relieve some pressure on adults to be role models.
- Parents and teachers play clear roles in hygiene education, which needs to be considered when engaging in project design.
- Siblings are the people children most play with, so there is an opportunity for horizontal transmission of messages, perhaps using play as a mechanism (e.g., board games for home use).
- The project should consider a reward system for teachers in charge of school-based aspects of any campaign; this incentive need not necessarily be monetary.
- The communication program should be based on aspirational messages to connect with kids and use peer group education. The functional benefits of HWWS should be more focused during educating children to adopt this behavior.
- If mass media is an option, campaigns should focus on TV (not radio or newspapers), selecting time zones likely to reach children between 11 to 12 a.m. (lunch break from school), 17 to 19 p.m., or 20 to 21 p.m., privileging channels showing cartoons, games or contemporary music shows.
- Soap used in school should be perfumed and colored.
- For long-term effects, the campaign should seek to influence the design of sanitation facilities which are conveniently located (near the latrines as well as in the playground) and accessible to small children.

Table 14: Specific focus for communication on HWWS, based on main findings

MAIN FINDINGS	SUGGESTION FOR COMMUNICATION STRATEGY
<i>1. Knowledge</i>	
Only half of students mentioned HWWS after going to toilet, with prompt	Knowledge of the need to HWWS after going to toilet must be increased
Both mother and father have great influence, but mother more in urban areas and father more in rural ones	Target both mother and father but more mother in urban areas and father in rural ones
<i>2. Motivation</i>	
Nothing happens if we do not wash hands before eating	Emphasize the consequences of non-HWWS
Disgust and morality are the strongest motivators of HWWS among children	Emphasize disgust and moral obligations in communications; a clean-looking hand and lack of smell is not enough
It is fun to wash hands daily, particularly before eating	Need to counter the idea that HWWS is not fun
<i>3. Competing priorities</i>	
It takes time to HWWS;	Messages suggested by children:

Children don't see any difference between peers who are handwashers and those who are non-handwashers	1. Not take time to wash hands, shouldn't you wash hands due to indulge in pleasures (Rua tay rat la mau, dung nen ham choi ma khong rua tay) 2. You will have many friends to play with if your hands are clean (tay sach se duoc choi voi cac ban)
Children want to go play immediately	HW facilities should be located in playground

6.2. Methodological recommendations

Table 15: Recommendation for future use of data collection methods

TOOLS	EFFECTIVENESS	RECOMMENDATION
Daily diary	Good in individual exercise, it takes about 15 minutes	Prepare enough separate seats for children The length of time should be no more than one hour, including warming up Group work on how to make agreement needs to be more guided. Let children draw the clock; it is more exciting.
Role models	The most difficult tool; did not go as well as expected due to taking too much time (at about 1.5 hours then the children lose their concentration) Children were excited to vote It is clear that the children answered differently for two questions "who you admire most" and "who would you like to be when you grow up"	Should consider about role model, select one part only, whether we should interview both the person the child admire only OR the kind they want to be when grow up Alternatively, we should reduce number of the traits mentioned by children (not allow them to list feely but restrict three for each category only!) for each part then it will reduce the time for this exercise.
Motivator pictures	Pre-printed pictures were good Children were excited to tell the story	Will take at least 45 minutes, but not longer Let children tell the story in order to get their concentration Ask them to close their eyes to vote in order to avoid peer's influence
Family structure	Children were very excited to draw	Again, duration for this exercise should be

	the structure; it went very well	no longer than 45-60 minutes Getting the concentration of all children while one child reports is necessary due to children might be neglected if they are not asked Extended family should be used in case the children mentioned other family members who are not living in their family.
<i>General recommendation</i>		
Participants	5 children per each, both sexes Most students were selected by head teacher to ensure the children could communicate as expected	Each exercise should consist of 4 children to reduce the time of interview (except for voting exercise) Should not combine one group for two different tools to avoid the loss of consensus of the children The eligible criteria should be written and sent to school with pre-visit contacts
Location	Some schools prepared well as they used the classroom for the interview	The classroom is the best environment for the interview as the children feel less changed with new-comers (researcher) The location should also be written for preparation in advance with pre-visit contacts to confirm
Home visit	Strong support from local supporters to visit home, including school staff	The criteria for selecting home visits should be formalised and sent to schools with the pre-visit contact The child selected for the belief interview at home should not be the same as those who participated in group interviews in school, especially family structure and motivator picture exercises (which affected to the answers of children)
Time	Even if the study is conducted during summer-time, some schools where having summer-studying classes and so could arrange these studies as well It was possible to work weekends in	The school study should be conducted in both summer time and school-year in order to get an annual picture Working on weekends needs to be confirmed from school authorities in

	some schools	advance
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