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## **Using Communication Theories in Mine-Risk Education Campaigns: The Case of Vietnam**

Duong Trong Hue

### **Introduction**

Landmines and unexploded ordnances (UXO) are long-term public health problems in both conflict and post-conflict countries. Consequences from landmines and UXO incidents result in deaths, injuries, subsequent disabilities, and other socio-economic burdens from the investments in healthcare resources (Center for Disease Control and Prevention, 1997). In 2005, the total number of landmine and UXO casualties in the world was 7,328, in which 24 percent were killed. Since the end of the Vietnam War in 1975, 38,849 people have been killed in Vietnam alone, and 65,852 have been injured. More than thirty years after the war, Vietnam continues to suffer consequences, with 112 landmine casualties in 2005 (Landmine Monitor Report [LMR], 2006). The United States estimated that they dropped and fired more than 300 millions bombs on Indochina, in addition to over 60 million anti-personnel mines. Even when only one percent of those weapons malfunctioned, there would still be over 3 million of them scattered across the rural areas of the three countries, Vietnam, Laos, and Cambodia. The deadly remnants of war are great obstacles to the majority of population, who still depend on a fragile subsistence agricultural system (McGrath, 2000).

The most effective measure to eliminate the threats of landmine and unexploded ordnances is to remove and safely dispose of them. However, this process is dangerous,



painstaking, and requires enormous resources. Consequently, the mine action community introduced mine-risk education, which is the dissemination of public safety information via mass media and face-to-face training as other ways to reduce casualties.<sup>1</sup>

Although mine-risk education programs are now widely implemented in many countries affected by the problem (LMR, 2006), there is still a doubt concerning the effectiveness of such programs. Field reports of these programs in some countries have focused more on number of program products, while other studies have identified reasons hindering outcomes of mine-risk education programs, such as socio-economic factors (Durham, Gillieatt, & Sisavath, 2005). While the funding for mine action was originally sparse, it now has to compete with even more demanding socio-economic priorities. Some donors of mine-action programs have shown signs of diverting funding into other competing priorities such as HIV prevention, food security, and malaria prevention (Kidd, 2006). Thus, an integrated approach for mine-risk education and mine clearance, ideally implemented together, might become even harder to achieve financially. The feasibility of traditional mine-risk education as a stand-alone model is much more challenging in such situations.

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<sup>1</sup> According to the United Nations, “mine action” means more than removing landmines from the ground. It includes actions ranging from educating people how to protect themselves from danger of landmines to advocating for a mine-free world.



In the long run, it is likely that the funding for mine action will become more competitive and scant. Vosburgh (2006) suggested to integrate a mine-risk education campaign as one element in a program designed to eliminate the threats of the explosive remnants of war as quickly as possible. While the natural end result of mine clearance is unquestionably effective but costly, the effectiveness of mine-risk education programs, though less expensive, remains difficult to measure. Mine-risk education programs in many regions were implemented without data, or not enough data was gathered (Krug, Ikeda, Qualls, Anderson, Rosenberg, & Jackson, 1998). The evaluation requires the accounting of both quantitative and qualitative information and should take into account factors, such as mine clearance and population movements (Desvignes, 2000).

Studies about the effectiveness of mine-risk education have been done in some countries (see, for example, Andersson, Whitaker, & Swaminathan, 1998) in order to understand the effectiveness of mine-risk education programs; however, little has been done in Vietnam besides internal evaluations carried out by field implementers. Thus, further research on mine-risk education programs in Vietnam with holistic and multidisciplinary views will shed more light on mine-action programs in Vietnam. Specifically, I will look at the education campaigns from a strategic communication perspective. Theorists in communication argue that all communication is strategic or goal-oriented, to some degree, whether intentional or not (Kellermann, 1992). My intent is to identify the likely strategies being used and to apply selected communication theories to assess their effectiveness. A close examination of



communication strategies implemented in Vietnam will also help to describe the features of mine-risk education in the case of Vietnam, which might reflect different practices from studies carried out in other countries.

In this study, I will look at the problem from a health communication perspective with a focus on the linkage between the theories of attitude and behavioral change in the health communication field and the application of mine-risk education programs in Vietnam. This research will contribute to the field of risk education, specifically in communication campaigns to save lives and limbs in landmine affected communities. It also helps to shed more light on the real impact of mine-risk education campaigns to the mine-affected population.

The paper is organized as follows. First, I will provide a brief introduction of the mine-risk education programs in Vietnam and their activities. Secondly, I will examine plans and communication strategies that local campaigners applied to the most at-risk groups, and look for common communication patterns in relations to the literature of health communication theories. Finally, I will present a discussion of the findings with interpretations of how theoretical factors might affect the overall effectiveness of mine-risk education programs in Vietnam.

#### *Landmine Problems and Mine-Risk Education*

Landmine and unexploded ordnances have been extensively used in most modern warfare and they can exist for a very long time, even after a war has ended. Landmines first began as a military problem, but now are an ongoing humanitarian problem (Ghali, 1994). McGrath (2000) defined landmines as follows:



Landmines are explosive charges laid in the ground with the object of delaying the advance of the enemy by impairing his morale, destroying his personnel and transport, or interrupting his communication after evacuated terrain has fallen into his hands. (p. 3)

With such designated nature, landmines cannot distinguish between soldiers and civilians. Thus, once a war comes to an end, civilians who have to live and work in landmine contaminated areas will be likely to fall victims to landmine accidents. Another war remnant's threat, unexploded ordnances, is defined by McGrath (2000) as:

Any object containing explosive of any kind which has been deployed and failed to detonate, or has only partly detonated, or such objects which have been abandoned in any condition. (p. 19)

Landmine and unexploded ordnances are often buried underground or lie on the surface and can detonate at the slightest impact of human being. Landmine incidents can be triggered from innocent acts of children who pick up an intriguing-shaped bomblet or who run into a minefield to play, to a farmer accidentally hitting on a projectile with farming tools, to the deliberate acts of people who hunt and attempt to break open war remnants for cash from scrap metals. The explosion causes blast pressure waves and produces fragmentations from the mine components. Dirt, stones, and vegetation therefore penetrate deeply into the human body with high velocity. The consequences of these explosions vary from several forms of superficial injuries to serious dismemberment or death. If the incidents happen in a minefield, rescue efforts are seriously challenged, and victims may die of blood loss (McGrath, 2000).



Apart from physical injuries, the aftermath of landmine accidents is usually psychologically and socially devastating because of the demand on the healthcare system and welfare system (Ghali, 1994). Landmine survivors may segregate themselves from the community as they feel embarrassed about their physical incapacity. Meanwhile, their injuries usually require continuing healthcare such as daily care, surgical treatments, and follow-up rehabilitation. Their incapacitation in mobility requires aiding devices such as crutches, artificial limbs, and wheel chairs. Victims also become a greater financial burdens to their families, who are often already in an economically marginalized situation. Years after military troops withdraw, landmines and unexploded ordnances remaining on the ground are brutal reminders that peace and development are still beyond the horizon for mine affected countries (Ghali, 1994).

Programs to promote mine-risk education began in the 1980s when the United Nations sought funds for a humanitarian response to the landmine problem in Afghanistan (GICHD, 2007). Recently, the number of mine-risk education programs has increased in mine affected countries, and more sophisticated communication approaches have been implemented in the field. For instance, mine-risk education practitioners have changed from teaching people to recognize landmines only to integrating different communication strategies such as face-to-face approaches including community-based, school-based training, and mass media. Most mine affected countries such as Afghanistan, Iraq, Cambodia, and Laos nowadays are using these approaches to target population living in landmine contaminated areas (Landmine



Monitor Report [LMR], 2005). Afghanistan even has a series of BBC radio broadcasts in mine-risk education (Tolliver, 2002).

In Vietnam, James Madison University and the local government launched a joint project to address the lack of awareness and promote safe behaviors for people in Quang Tri Province (Sims, 2000). Five other international humanitarian organizations, in cooperation with local partners, also launched mine-risk education programs in Vietnam using a variety of approaches and strategies including child-to-child programs, community-based initiatives, and mass media (LMR, 2005).

Despite the availability of the strategies, many of the programs have not been evaluated in regards to their effectiveness in decreasing injury (Krug et al., 1998). A few discussions on this field focused on looking at the problem through the socio-economic lens rather than from communication perspectives. For example, Vosburgh (2006) argues that in Vietnam and Laos, the number of landmine victims still increases because of the pressure of poverty. Many people, he argues, are still involved in dangerous activities including searching and disposing of landmines for scrap metal to sell in the market for income. Thus, economic reasons can outweigh the messages from the mine-risk education programs.

#### *Health Communication Theory Application*

As landmines are public health problems, mine-risk education, in essence, is a health communication campaign. Flay and Burton (1990) argued that a “communication campaign is an integrated series of communication activities, using multiple operations and channels, aimed at populations or large target audiences,





usually of long duration, with a clear purpose” (p. 130). In order to be effective, it is essential that health communication campaigns be driven by theory. Theory helps communicators identify and understand seemingly different behaviors and their influences (Lapinski & Witte, 1998). In addition, studies have shown that the use of theory to guide campaign message development results in more effective and efficient outcomes. A sound theoretical framework will provide a substantial basis for practice (Tones & Tilford, 1994). In most of the mine-risk education literature found, mine action practitioners pay more attention to describing and quantifying activities implemented than methodologies applied, especially to a communication theoretical basis. While numbers, in part, are indicator to account for outcomes, they do not totally answer the tough question that has plagued practitioners for years: whether mine-risk education really works (Filipino, 2000).

As the ultimate goal of mine-risk education programs is to promote behavioral change in order to reduce death and injury, it is relevant to examine how the theory of attitude and behavioral change is applied in program design and implementation. While a national landmine casualty surveillance system is still not available in countries such as Vietnam (Well-Dang, 2006), looking at the process of theory application can contribute to the evaluation of program effectiveness.

The literature review shows the linkage between mine risk education and theories of health communication; however, attempts to reveal how this linkage works are very few. This research is a contribution to the field of risk education, specifically in communication campaigns to save lives and limbs in landmine affected



communities. Furthermore, it has implications to demonstrate if mine-risk education has a real expected impact and is worth the investment. I will examine mine-risk education programs that are now implemented in Vietnam by UNICEF and its local partners to determine the gap by seeking to answer two major research questions. The first question is to lay out a general understanding of the theoretical basis on which mine-risk education programs are designed and implemented. Because the knowledge and application of communication theories of the campaign implementers remain to be discovered, this question holds an assumption that the implementers may or may not deliberately choose to apply communication theories. The second question is to demonstrate the implications that the linkage between practice and theory bring into the field of mine-risk education.

RQ1: What theories are used and how are they implemented to guide the campaign?

RQ2: Do theories influence the overall effectiveness of the programs?

### **Methodology**

Injury prevention campaigns designed to change behavior will need to be guided by certain communication theories, even when practitioners are not fully cognizant that they do so in their campaigns (DePoy, & Gitlin, 1994). As a result, theory application does impact the end results of intervention campaigns. Reviewing and understanding the linkage between theories and practice thus can be beneficial to evaluate a program's effectiveness.



In order to answer the research questions of this study, I used textual analysis to delineate themes from available artifacts provided by the United Nations Children's Fund (UNICEF) in Vietnam. This paper therefore was comprised of descriptions of some basic textual resources gained from UNICEF, and also an explanation of how the texts constructed meanings for deducing theories that implicitly or explicitly underpinned the mine-risk education practices in Vietnam.

### *Textual Artifacts*

In response to the research objectives, I chose the mine-risk education campaign initiated by UNICEF Vietnam as a research sample to represent the current various campaigns operated in Vietnam. UNICEF Vietnam became active in mine action in 2002, and since then has been one of the leading organizations in the country working to raise landmine awareness and to reduce injuries and deaths resulting from postwar landmines and unexploded ordnances. UNICEF initiated its campaigns country-wide but focused mainly in the central provinces of Vietnam, where the government estimated to be the most heavily contaminated site of postwar landmine and unexploded ordnances.

Activities within UNICEF mine-risk education campaigns employed a number of communication strategies through face-to-face trainings, mass media announcements, and community-based approaches. After five years of implementation, UNICEF and its partners have implemented a number of field performances, produced a torrent of educational materials such as brochures, flipcharts, television spots, and have set up many annual communication events. The design and implementation of



mine-risk education activities and products were tailored to local situations to address appropriately targeted high-risk populations. Procedures UNICEF undertakes to initiate a project usually start with original requests from local partners called project proposals, which presents rationale, methodology, activities, and expected outcomes. Thus, proposals, campaign products, and reports were important artifacts containing theoretical frameworks for field practices in UNICEF's mine-risk education campaigns.

UNICEF Vietnam's mine-risk education effort in general was a massive campaign carried out across a vast geographical range of Vietnam. As such, it would be practical to use a sampling for this study. I selected three of UNICEF partners as samples for this study, including the Catholic Relief Service (CRS) working in Quang Tri Province, the Youth Union of Quang Binh Province, and the Children Cultural House of Thua Thien-Hue Province. While the first project carried out in-school teaching activities for children, the second and the third deployed both face-to-face educational activities and mass communication events at communities to target youth and children. Annual activity reports from UNICEF Vietnam were also used for analysis. These documents were accessed with agreement of material release from UNICEF Vietnam.

Although access to UNICEF project materials was guaranteed, available clues for analysis were still inadequate, primarily because its field partners mainly used hard copies for reports. As access to field partners was difficult because most of them operated in disadvantaged and remote areas, I then looked for other relevant resources such as the texts from the Vietnam landmine report, produced by the International



Campaign to Ban Landmines - an NGO working to advocate the banning of landmines world-wide.

### *Thematic Analysis*

In carrying a thematic analysis, I proposed that a careful and systematic interpretation of the texts in the project materials will reveal practices of local practitioners and the basic communication theories that guided their decisions in designing and requesting intervention strategies. Keyton (2006) defined a theme as a conceptualization of an interaction or an event and that researchers can identify themes based on textual data. Owen (1984) identified three criteria for thematic analysis, including recurrence, repetition, and forceful. The first two criteria were presented to find meaning in the text. The third criterion linked to the visible changes in the text under analysis.

Using the three criteria above, I looked for the salient meanings and recurrence of strategies in the texts. Because some texts are in Vietnamese language, I read them in the original language form when I analyzed the data. However, I provided translation into English with the textual parts that I selected to cite in this paper.

First, I examined project proposals of all three campaigns to find common patterns in their orientation for launching the program that might contain latent theoretical perspectives on risk education. Second, I reviewed the final products and activity reports to unearth the assumptions that were embedded in the process of implementation to examine practitioners' concepts of communication in risk education. Finally, by looking at structural project design and implemented activities in the three



sample unit documents, I constructed the common patterns which contained applied communication theories in the form of local initiatives of risk education, either in intentional or unintentional manners. Based on the findings, I also attempted to connect the common strategic communication patterns, which were employed in the mine-risk education campaigns in Vietnam, to related models of health communication theories. Thus, I critically assessed knowledge on risk education to draw conclusions of their relevance and contribution to the overall effectiveness of mine-risk education campaigns.

### **Analysis and Interpretation**

I begin this part of the research paper with brief background descriptions of UNICEF partners along with short summaries of their campaigns. Then, I will delineate communication themes from campaign structure and intervention activities. I will end the paper with a discussion in response to the research questions, including the identification of health communication theories used in the mine-risk education campaigns in Vietnam and the interpretation of research findings towards campaigns' effectiveness.

#### *Catholic Relief Services' Initiative*

Catholic Relief Services (CRS) was founded in 1943 by the Catholic Bishops of the United States to serve World War II survivors in Europe. Since then, CRS has expanded to reach nearly 100 countries in the world including Vietnam (Catholic Relief Services [CRS], 2007). CRS is committed to supporting poor and vulnerable communities in Vietnam to live with dignity, solidarity and justice. In this sense, CRS



is a non-profit organization working with counterparts to achieve its mandates. One of the CRS Vietnam programs promotes mine-risk education for children. The program is implemented by a local counterpart, the Vietnam Ministry of Education and Training, to develop mine-risk education curriculum for primary-aged children in Quang Tri Province. The programs are designed to go far beyond simply telling children not to touch mines, but also to utilize the educational and social system to facilitate discussions and information to generate the adoption of safe behaviors (NGO Resource Center, 2007). After their survey conducted with 250 primary school students, CRS argued that children are the most vulnerable group to landmine accidents. The survey showed that only five percent of students had knowledge about landmine safety (CRS, 2004). Therefore, they decided to target the children by utilizing the current education system to introduce new safety behaviors and trigger adoptions among the target group.

Primary school students are considered the most vulnerable to UXO/LM [unexploded ordnance/landmine], however [*sic*] prior to the CRS pilot program, no programs existed that aimed to increase children's understanding of safety practices when living with UXO/LM. Neither formal nor extra-curricula education has covered landmine safety in communities heavily affected by the remnants of war. (CRS, 2004, p. 4)

The program's overall goal was "UXO/LM impact mitigate, awareness and education contribute to the reduction in number of landmine accidents [*sic*]" (CRS, 2004). CRS (2004) described its specific objectives as follows:



Primary school children have the skills to practice and effectively disseminate UXO/LM safety. . . . Province and District Education Department institutionalize UXO/LM curriculum in primary schools. . . . Community groups mobilized to raise awareness and mitigate the dangers and impact of UXO/LM. (pp. 5-6)

The CRS intervention program was developed based on local needs assessment and successful piloting (CRS, 2004). They carried out a survey in one district of Quang Tri Province to learn about knowledge, awareness, and practices of both adults and children to decide on a target group. They also built this project based on a “three-year partnership with national education specialists” (CRS). Program activities include the development of training manuals, in-school curriculum, community advocacy, and long-term local capacity building.

#### *Quang Binh Youth Union’s Campaign On Mine-Risk Education*

In Vietnam, the Youth Union is a social mass organization working to promote and support young people. It has a wide network from the central level to communal levels. Quang Binh is a province in central Vietnam and its Youth Union is active in social-economic activities for young people in its locality. It has experienced some advocacy programs in partnerships with other civil health campaigns such as family planning, anti-smoking, and voluntary works in remote communities (Vietnam Youth Union, 2007). The Quang Binh Youth Union has its own communication channels including the monthly organizational news publication and active members working at





community levels. It became involved in mine-risk education in the recent years on small-scale intervention basis (Quang Binh Youth Union [QBYU], 2006).

Quang Binh Youth Union targets the youth and children in their mine-risk education campaign through “written articles, photos, publications, and peer children activities to disseminate information on the danger of landmines and ways to avoid accidents” (QBYU, 2006, p. 1). It paid particular attention to children peer group activities:

Using mass medium channels in the form of news publication and interpersonal communication activities through child-to-child activities in 15 highly landmine contaminated communities to generate adoption of safe behaviors. (QBYU, 2006, p. 10)

In addition, the campaign also targets the perceived most difficult group, the scrap metal collectors, by providing them both with safety messages to alter behaviors and, at the same time, with vocational consultants to engage them in recommended behaviors (QBYU, 2006). This initiative was indeed a part of a comprehensive campaign for the young scrap metal collectors, and was well reasoned in their proposal:

Due to poverty and the lack of income generation alternatives, many young people are engaging in hunting and disposing explosive remnants of war for scrap metal. The majorities of them are not aware of landmine danger and thus can easily cause serious accidents to themselves and community members. Thus, investment in organizing vocational



alternatives is necessary to practically facilitate the safety messages. (p.

7)

The Quang Binh Youth Union program was developed based on its two-year pilot experience in small-scale mine risk education programs. All of its intervention activities are to focus on the goal of raising awareness of landmine dangers and promoting the adoption of new safety behaviors (QBYU, 2006).

*The Children Cultural House of Thua Thien Hue Province*

The Children Cultural House (CCH) is a social organization focusing on promoting children's lives and their social study skills in Thua Thien Hue province, Vietnam. The CCH formed coalition with other social advocacy groups to focus on children rights and activities. Usually, their counterparts are the local television and radio station, the education department, and the community children centers (Thua Thien Hue Cultural Children House [CCH], 2006).

Similar to the other two programs, the CCH also specifically targets the children in their mine-risk education campaign. Its goal is to "provide safety information so that children can be aware of the potential landmine danger in their living environment and learn how to take safety action" (CCH, 2006). CCH integrates mass media and interpersonal means in its campaign strategy. Mass media include documentary film, television spots, radio messages, and distribution of communication leaflets.

Interpersonal activities are training for trainers and mobile children art performances to disseminate mine-risk education messages in remote and contaminated communities.

Children art performances are theatrical performances incorporating plays, skits,



folksongs, traditional dances with themes that attempt to raise the children audiences' awareness of the danger of landmines, and are composed and staged by children themselves. Usually, these activities also include children landmine victims as performers.

Apart from the mine awareness messages, the CCH concentrates on providing information about what people should do in case of encountering landmines:

The campaign uses mass media to reflect the danger and consequences of landmine as well as introduces new safe behaviors to children. Mass media programs will also emphasize essential information about authorized institutions to which children and their family members can report landmine problems. (CCH, 2006, p. 2)

The CCH campaign built on the experience from their pilot mine-risk education program in the last two years. The key to success for CCH's campaign, as set out in their proposal to UNICEF, is to capture the interest of its audience, with the combination of both mass media channels and interpersonal communication activities.

#### *Mine-Risk Education Campaigns and Local Know-How*

The Vietnam War ended about thirty years ago and mine-risk education has only been introduced to Vietnam by UNICEF for five years (UNICEF, 2006). Because local people have had to live with landmines and other remnants of war for such a long time, their knowledge and behaviors have depended on their own experiences and myths. There are implications of unsafe behaviors, which were developed overtime but paradoxically considered to be safe by local people. For example, the survey conducted



by UNICEF in Quang Tri province, Vietnam, indicated that 33.5 percent of landmine casualties reported seeing the explosive devices before their accidents, and 88 percent of them went on to touch or pick up the mines (UNICEF, 2006). UNICEF's studies also showed that nearly a half of people who saw landmines did not know what to do with them.

When a landmine incident takes place, the common assumption usually is that the victim is unaware of the potential landmine threats. Nevertheless, some researchers and practitioners denied this common assumption. They presented five concrete groups of risk-takers in landmine contaminated communities (GICHD, 2004). The five groups include: (1) the unaware, or a person who does not know about the danger of mines or UXO; (2) the uninformed, or a person who knows about mines but does not know about safe behaviors; (3) the misinformed, or a person who is given the wrong information about safe behaviors or wrongly believes he or she knows all about mines; (4) the reckless, or a person who knows about mine-safe behaviors but ignores them; and (5) the intentional, or a person who has no other option (GICHD). In other words, the fact that local people frequently encounter post-war landmines has produced different types of attitude and behavior, which can greatly challenge mine-risk education programs for behavior change.

Thus, most behaviors introduced in UNICEF partners' campaigns would be new to local people and require community adoption. The campaigners had to face challenges of designing their campaigns and messages that have never been introduced nor systematically reinforced before. As a result, they had to carry out an experimental



phase on a small-scale audience before expanding to full campaigns. The landmine safety practices resulting from these campaigns could then be perceived as new to the target groups in Vietnam. In light of this guiding context, I found salient communication themes in the texts from the local practitioners based on the structural organization of programs, strategy designing, and the media used for communication. The themes include respectively economic advantage and compatibility of socio-cultural values, engagement of opinion leaders and peer groups, and the application of more than one medium of communication.

#### *Economic Advantage and Compatibility of Socio-Cultural Values*

One of the characteristics of the UNICEF campaign is that UNICEF does not directly carry out the campaign. Although this situation might be due to the insufficient internal capacity of UNICEF, it is an advantage to build communication campaigns in a sustainable way with existing resources. The role of local actors as front-line contacts is essential in impacting and maintaining new practices (Craeff, Elder, & Booth, 1993). The existing network of the youth union, the children cultural house, and the availability of CRS programs are valuable resources to reduce considerable administrative and operational expenses. Thus, the cooperation to set up the campaigns between UNICEF and the Vietnamese counterparts were achieved both at a micro and macro level (UNICEF, 2006). The funding of UNICEF could then be utilized for operation without administrative cost, as seen in the budget planning from local practitioners that is attached to their project proposals. The results were that mass media including leaflets produced by CCH, publications issued by Quang Binh Youth



Union, and especially school textbooks produced by CRS were all free of charge to the target audience. Quang Binh Youth Union stated clearly that the target groups in its campaign could get access to the materials through direct distribution by its youth union members at public areas such as the community halls or youth stations. In addition, children and local community members also received information freely through television, radio, and integrated safety roving art performances. In this perspective, the economic advantage of communication means was taken into account by field implementers to tailor the economic situation of local communities. The expected result was obviously beneficial because target groups would be more likely to access free information about new behaviors.

Practitioners faced tough situations when it came to the strategy for mainstreaming the safety messages to the youth group who work as scrap metal collectors. This target group, being pressured by economic necessities, felt the new behaviors and the changes to their current activities would not be economically advantageous, unless they have perceived better alternatives. The Youth Union recognized this problem and put it specifically in their proposal that, “in addition to raising their awareness to the danger of landmines, the campaign will also provide information and consultancies on vocational opportunities so as to facilitate the group, change their job, and prevent mine accidents” (QBYU, 2006, p. 6). In this sense, the campaign planners understand the barriers to perform the recommended behaviors of the target group and set out strategies to deal with them.



Activities scheduled by UNICEF partners revealed a common strategy of learning or testing the socio-cultural reactions of a community towards mine-risk education campaign activities and messages. Before the actual launching of activities, they organized certain events to gather ideas from local people regarding landmine problems, the intervention plans, and communication materials. The event could be a workshop, as in the case of the two provincial mass organizations, or a baseline survey to “define knowledge and practices” and to “begin the process of fostering changes” as in the CRS program (CRS, 2004). Participants in the events are “community representatives, parents, teachers, students, and the wider community” as outlined in the CRS proposal or “children, educators, reporters, community members” as estimated in the CCH proposal (CCH, 2006). Results were that curricula, communication materials, and messages built upon feedback from different groups in affected communities, assured the suitability of socio-cultural themes in the interventions. For example, the CCH produced television and radio spots based on initiatives of local people by organizing a script writing competition. UNICEF’s 2007 report clearly emphasized this adaptation of the campaigns towards local suitability in terms of socio-cultural aspects:

A number of UXO/mine risk education materials (e.g., leaflets, brochures, booklets, posters, etc.) were developed, printed, and placed in schools, health centres and other community-based centres in affected provinces. Materials were developed and revised in cooperation with other government entities and NGOs to ensure consistency of messages and avoid overlaps, and with inputs from affected communities. For



example, both governmental and non-governmental organizations engaged in MRE came to a workshop to share their MRE products and messages. As a result, participants came to an agreement on the core messages in MRE for children and adults (e.g. a commonly agreed message for children was “to keep away from UXO/mines and report to adults such as teachers, parents or/and representatives of local authorities”). (p. 8)

Strong engagement of different stakeholders and especially the community members in the mine-risk education programs in the planning and implementing process implies that campaign implementers were aware of the integration and compatibility of socio-cultural values in their interventions. As community members, including the target-group representatives, participated in designing campaigns, they would increase the chance of orienting the campaign into the local culture. The opportunity that target groups would adopt the innovation thus became more feasible.

#### *Engagement of Opinion Leaders and Peer Groups*

Local practitioners understood that to get their message to survive in the communities and transmitted through layers of community members, they needed to have the support and engagement of the opinion leaders. Opinion leaders are influential members in communities that guide norms and opinions (Aldoory & Bonzo, 2005). In the UNICEF campaigns, local implementers designed programs with profound community involvement. Interpersonal networks were set up as a basis for information diffusion. In the CRS program, 600 teachers and 150 community members, including





members representing women, youth, veterans, farmer associations, local health experts, Red Cross, and community representatives, were invited to participate in the program. These individuals play important roles in social orientation of attitude and behavior. They are essential resources that can facilitate the motivation of new initiatives. Their influential reputations and positions are key to the adoption of new behaviors through interpersonal relationships with community members and target groups. Similarly, the other two mass organizations also formulated coalitions between them, community members, and the mass media representatives to cooperate, share, and produce safety messages. Therefore, the campaigns in general have created a mechanism of interrelated units in joint-landmine problem solving to accomplish a common goal, which is defined by Lapinski and Witte (1998) as a social system. The representatives mentioned above, based on their ability to get first access to newly introduced knowledge and behaviors, were likely to adopt the recommended behaviors. Thus, they became innovators in the adopter categories. Teachers in the CRS project would provide the messages containing new behaviors to school children. The children would pass on the new behaviors to their parents, who would then influence their neighbors and other community members. In the CRS program, for instance, the second adopters are estimated to be 15,000 school children (CRS, 2004). This diffusion process received continuous support from opinion leaders in the communities.

Another diffusion process, also applied in these campaigns, was the use of peer groups. Child-to-child education was a popularly selected method of the mine-risk



education practitioners. Research has indicated that child-to-child activities, if performed well, could bring effective results. Filippino (2000) stated that:

The approach requires children to participate in developing and designing activities, and in defining and suggesting solutions to the context-specific problems they face. Further, child-to-child is neither bound by time or by the limits of the classroom. It is not simply kids teaching kids. True, child-to-child, performed as the designers of the methodology intended, is a great asset. (¶ 25)

The use of the child-to-child method is popular in art performances with integration of mine-risk education messages carried out by the Quang Binh Youth Union and the CCH. Performances ranged from a painting contest to roving stage performances with mine safety themes. Here, the campaign implementers engaged children groups to perform arts to impact their peers. The results of these activities were captured in the UNICEF 2007 report:

MRE mobile communication teams with members selected from different schools and universities in Thua Thien Hue, Thanh Hoa, Nghe An, Ha Tinh, Quang Tri and Kon Tum provinces were trained and gave performances including dramas, dances and songs on MRE topics to various target groups including the general public and children in remote and disadvantaged areas seriously affected by UXO/mines. These performances were organized on weekly and monthly bases.... Each



performance reached an average of 500-1,000 who were both adults and children. (p. 5)

Beside the permeation from children to children and from children to their parents as in the CRS strategy, another advantage of peer groups was that it helped increase the perceived vulnerability to be in the same situation as peers. In one of the play scripts of local campaigners, three children were cast in roles as blind and crippled landmine victims to talk about their experience when they were required to be met and testified by a local Diety. This strategy of mine-risk education dissemination served to emphasize the severity of landmine threats and the probability that similar accidents could happen to children. Yet, the script also provided situations and advice where children could avoid landmine incidents and perform safe behaviors. For example, the script described how the Diety advised the children when they saw a mine along the road. This tactic focused on the ability to perform a recommended beneficial response of the message receivers, who were children in this case. In other words, local campaigners have somehow utilized the fear appeal with self-efficacy component in risk communication. Lapinski and Witte (1998) commented that most health education campaigners either unintentionally or intentionally raise concern or fear in target groups simply because their campaigns focus on a health risk.

#### *Application of more than one mass media*

Local campaigners in the UNICEF project used both interpersonal and mass media as communication channels to spread the message from one group to another. CRS program employed mainly face-to-face interactions via respective figures such as



teachers and community representatives to convey the promoted behaviors. Meanwhile, the other two mass organizations used both face-to-face and mass media-based channels. They implemented the face-to-face activities with supplemental emphasis from mass media messages (Figure 1). In remote and disadvantaged communities where there might not be television and radio coverage, these organizations used leaflets and publications to reach the target groups.

The campaigners strongly focused on peer education groups due to the characteristics of the children who easily imitate examples of their peers. Therefore, it can be said that campaigners have studied and selected channels to suit their socio-economic conditions with regards to the receptiveness of the target groups. UNICEF's report commented that "all of these multi-media awareness campaigns have contributed to better awareness of local communities about UXO/mine risks and preventive measures in highly affected areas of Quang Binh and Thua Thien Hue provinces" (UNICEF, 2007, p. 8). The following paragraph, extracted from UNICEF's 2007 report, provided a long list of mine-risk education media products, which substantiated the application of more than one mass media channels by local campaigners:

One TV reportage/feature report, seven radio messages, and eight articles were developed and broadcasted on provincial and district radios and televisions in Quang Binh and Thua Thien Hue provinces. In addition, members of youth unions in Quang Binh and Quang Tri received mine risk education (MRE) through their monthly newsletters for their better awareness and communication with other young people.



36,000 leaflets were designed, printed and distributed to targeted communities in Thua Thien Hue and Quang Tri provinces to improve their awareness of UXO/mine risks. A child-to-child MRE training manual was also developed to allow project facilitators to learn more about the theories, tools and skills for child-to-child MRE. (p. 5)

Evidently, the UNICEF mine-risk education campaigns planned and implemented by local partners have integrated both face-to-face and mass media-based channels via a social support system created by the campaigns with regards to the characteristics of the audience.

In sum, there are common patterns of using injury prevention tactics in designing and implementing mine-risk education campaigns by UNICEF's local partners in Vietnam, as portrayed in the analysis. The campaigners constructed communication programs to access mine-affected communities with similar patterns. They designed programs that focus on economic advantages and the compatibility of socio-cultural values, engagement of opinion leaders and peer groups, and the application of more than one communication channels. The combination of these patterns as a whole allows interpretations of certain types of communication theory found in the concepts of local campaigners. The most relevant ones are the theory of diffusion of innovations, the health belief model, and the fear appeals model as discussed in the next section.

## **Discussion**



The results of this study indicate that mine-risk education campaigns in Vietnam under UNICEF's national mine action project embrace health communication theories. The findings also reveal that there is more than one theory somehow integrated in a campaign with different level of utilization. Though this paper has used only three campaigns as a sample, the sample is considered to be representative because all campaign implementers in Vietnam either fall into mass organizations or non-governmental organizations. Thus, the results have implications for wider significance to UNICEF's overall project in terms of contributions to the effectiveness of mine-risk education.

My first research question related to whether the design and development of mine-risk education campaigns contain a theoretical basis. The answer is positive. I found at least one element of each of the three health communication theories in the data presentation and analysis. While the mine-risk education practitioners did not overtly refer to any health communication theories in their strategies intentionally used or not, salient theoretical themes in planning and strategies were evident in their campaigns. The themes were shared by all practitioners with little differences. They are: economic advantages and the compatibility of socio-cultural values, engagement of opinion leaders and peer groups, and the application of more than one communication channels.

I found in the campaigns that practitioners integrated their planning with community and social associations' representatives and, at the same time, used this basis to form a social alliance towards their campaigns. Campaigners either carried out



workshops or needs assessments including focus groups to tailor the programs into local cultural contexts. For example, the roving child-to-child mine-risk education performance were based largely on traditional dances, songs, and drama, which are easily accepted and transmitted in the communities, to pass on the messages. In addition, the campaigns formed social networks comprised of respectable figures in communities to be the innovators. As attitudes and behaviors introduced in mine-risk education are new to local people's practices, they need to be adopted over time and started with the groups that are most likely to engage and impact other adopters. In this sense, it seemed that the local practitioners highly appreciated the role of the first adopters of new behaviors by employing opinion leaders and peer groups. In Vietnam, traditional social structure has long consisted of a hierarchy of village chiefs and teachers. It was thus more likely that target groups of mine-risk education campaigns would adopt new recommended behaviors if community opinion leaders were pioneers in the adoption and facilitation.

In addition to creating a favorable social network, mine-risk education practitioners also used other tactics to transfer new ideas. By implementing the child-to-child strategy, for instance, campaigners have created homophilous cases, and it becomes more effective when the sender and the potential adopter, or from one child to another, are similar in the level of knowledge regarding the innovation (Lapinski & Witte, 1998). Practitioners also utilized both interpersonal and mass media channels to disburse the messages. The way they structured their campaigns could be interpreted as how the mass media was used to reinforce the effectiveness and efficiency of the



interpersonal channel. The practitioners also used the communication strategies including the promotion of economic advantages for the scrap metal collectors; a low complexity of messages; and previous experiments of campaigns on a small scale (UNICEF, 2007). To summarize, the strategies described above enhanced the probability of the adoption of new behaviors in landmine injury prevention. In other words, the principles of the theory of diffusion of innovation were found in local mine-risk education campaigns.

I found components of other health communication theories separately in other activities of the campaign. For example, both components of the fear appeal model and the health belief model were found in the script played by the child-to-child mine-risk education art performance teams in the CCH' s campaign, in the CRS text books, and in the painting contest of the Quang Binh Youth Union. However, these theoretical models were used in a more spontaneous way with little evidence of a campaigners' awareness of such theories. As a result, only components of these models were elicited as being present in the campaigns. For example, the communication approach used by the campaigners seeks to alert children on the danger of landmines and also provides them with information on responsible agencies dealing with landmine problems. Yet, the message does not mention how the children contact the agencies, and if they had to make phone calls, who would pay for them? In a way, risk education messages, such as the ones in the mine-risk education drama, contain perceived susceptibility, perceived severity, and perceived benefit, but not perceived barriers to performing the recommended response. In this case, the barrier to perform the action might be the





ambiguity in finding out how to contact the responsible agencies, or the financial cost involved in making phone calls on a landmine threat emergency. In sum, there was evidence of available local know-how to deal with injury prevention campaigns, which contained theoretical communication elements.

As for the second research question, I found that the existence of the health communication theories components in the UNICEF's project have both positive and negative effects on the results of the campaigns. Four major positive factors were identified. First, practitioners focused on interpersonal efforts with opinion leaders and peer groups rather than mass media. Research has shown that the former method increase motivation to comply with recommended behavior changes more so than the latter (Aldoory & Bonzo, 2005). Meanwhile, the fact that two out of three campaigns incorporate both channels of communication is likely to increase the receptiveness of the target audience (Aldoory & Bonzo). Second, practitioners' creation of a favorable social environment is advantageous for fostering the adoption of new behaviors. The engagement of opinion leaders and appropriate community members and associations in developing campaigns and implemented activities is essential for innovation ownership and the acceptability due to participation and socio-cultural adaptability. Third, mine-risk education campaigns were also developed based on pilot tests, which indicated previous successful trialability. Practitioners stated in their proposals that their previous pilot programs were successful in raising people's awareness of the danger of landmines. This factor enhances the probability of behavior adoption (Aldoory & Bonzo). Finally, at the macro level, the UNICEF's partnership with local



partners helps to reduce the financial cost thanks to the existing local social institutions.

At the micro level, local campaigns designed activities to disseminate safety information with cost efficiency and benefits by mobilizing their available network and community coalitions. This factor also resulted in behavior adoption (Aldoory & Bonzo).

Simultaneously, I found negative factors in the campaign planning and implementation with regards to the theoretical bases. First, awareness of the campaigners to intentionally apply health communication theories remained to be seen. There was no evidence showing that the mine-risk education campaign practitioners purposefully proposed their initiatives based on certain grounded communication theories. As UNICEF's mine-risk education report in 2007 commented, project counterparts were only able to design mine-risk education activities recently. Thus, it would be doubtful that the local campaigns were driven on a theoretical basis by design. Second, communication theories elicited in local campaigns were only present in elements without evidence of the entire models' application. For instance, the findings from the activity content in the one of the mine-risk education campaigns indicated that the application of the health belief model, whether intentionally or unintentionally, was not likely to achieve expected outcomes due to the lack of some essential components. Finally, it could be concluded from the institutional background of the local campaigners that they were mostly experienced with other social advocacy areas more than risk education. Therefore, the risk education towards landmines might be assimilated to other general social campaigns without specific concerns to the



distinction of the risk education area. Practitioners could then be falsely confident in their previous experience without turning to communication research and theories when designing a campaign. This shortcoming might be detrimental to the effectiveness of mine-risk education campaigns in Vietnam.

Despite UNICEF's claim that the campaigns were successful with quantified results of events and products, the absence of a landmine victim surveillance system makes it harder to evaluate final results (UNICEF, 2007). Pitfalls of failing to use proper communication theories would increase negative views about the effectiveness of mine-risk education as well as skepticism of donors and practitioners, while bolstering the rationale of people promoting mine-clearance as the only practical solution. Absence, inadequacy, or disorganization of a full theoretical basis in developing mine-risk education campaigns can seriously affect the results of mine-risk education campaigns. Flay and Burton (1990) argued that the application of theory is one of the necessities of an effective health campaign. Lapinski and Witte (1998) emphasized the practical imperative to use entire communication theory models. Because the campaigns reviewed here did not apply the communication theories entirely, I believe it would be difficult for mine-risk education campaigns in Vietnam to achieve complete expected effectiveness, as well as to keep the issue of the mine action agenda a funding priority.

### *Theoretical Implications*

Preventing landmine-related injuries and disabilities is generally considered a public health concern. Risk education as a strategy of prevention is currently employed



in countries such as Vietnam. The effectiveness of such strategy has been central to arguments among mine action stakeholders. However, a theoretical basis, as one of the elements that places significant impacts on the effectiveness of mine-risk education campaigns, has not been fully recognized and utilized. In this research paper, I contribute to filling in the gap between mine-risk education and health communication theories. Given the fact that mine-risk education is a distinct domain of risk communication, there are implications for communication researchers and practitioners to study and determine the most effective health communication theory models. For example, I found the theory of diffusion of innovations to be the most relevant in the practitioners' campaign in Vietnam. The results also put forward the implications for the need to seek possible potential risk communication theories that best suit local situations other than the conventional ones.

### *Practical Implications*

The practical implications of this research are obvious and beneficial to mine-risk education planners. As demonstrated in the analysis, although certain results could be achieved in mine-risk education campaigns that are based mainly on local know-how, the entire expected outcomes might be seriously jeopardized. Outcomes quantified by numbers in activity reports cannot alone be accountable for behavioral change (Filipino, 2000). Utilizing theories in planning and developing mine-risk education campaigns thus can guide the practitioners to systematic and efficient steps of effective dissemination of information to individuals and communities. Through evidence from this paper, I strongly recommend mine-risk education practitioners to



turn to communication theories when planning their campaigns. When organizing practitioners' training for the UNICEF Vietnam mine-risk education project, UNICEF should consider introducing appropriate previously-tested communication theory models and tailor them to available local know-how. Such efforts must take into account the socio-economic characteristics of locality, which include but are not limited to the type of media, traits of audience, timeline, and social institution and system. Similarly, landmine safety messages and innovations must also be designed from a communication theoretical perspective.

#### *Future Directions*

Judging the effectiveness of large scale and life saving-related campaigns, such as the mine-risk education campaigns in Vietnam, is not an easy task, especially without the landmine victim surveillance system in place. This research paper is more of an explanation of past events, which looks mainly at the process of planning and developing mine-risk education campaigns while focusing on theory application. Because I examine the campaigns' plan and structure through textual artifacts without the availability of additional field data, certain related research issues remain to be investigated. For example, some associated questions have not been fully reviewed or verified such as determining whether practitioners were aware of the communication theories. I also did not consider the investigation of mine-risk education message design process, which were obviously theoretical, concept-based in nature and played an important role towards the adoption of safe behaviors. As a result, in further in-depth empirical work, researchers could consider working on expanding these initial findings,



validating a broader framework of theory application, as well as bringing to life important implications in the field of mine-risk education.



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