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Experimental Educational Interventions for AIDS Prevention among Northern Thai Single Migratory Factory Workers

by

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with

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CONTENTS

Executive Summary vii

1. Background 1
   Epidemiology 1
   Factors Influencing Thai Female Sexuality and Risk of HIV Infection 3
   Theoretical Perspectives on Intervention 5

2. Objectives of the Study 9

3. Study Design 10
   Description of the Study Design 10
   Description of the Sample and Setting 11

4. Methodology: Research and Intervention 18
   Focus Group Discussion and In-Depth Interview Method 19
   The Intervention Process 22
   Survey Methods 33
   Sexual Behavior Research Methods 34

5. Quantitative Research Findings 36
   Quantitative Data Analysis 36
   Quantitative Results 37

6. Qualitative Research Findings 48
   Evaluation of Training 48
   Evaluation of Education Programs 49
   Sexual Behavior Research Results 54
   Sexual Behavior Maps and Cases 63

7. Discussion of Findings 70
   Findings 70
   Utilization of Findings 75

8. Conclusions and Recommendations 77
   Lessons Learned 77
   Recommendations 79

References 83
Appendices 86

About the Women and AIDS Research Program 109
Publications from the Women and AIDS Research Program 110

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This study is dedicated to the many young women throughout Thailand who migrate away from their homes to work in factories with extraordinary perseverance and cheerfulness and who so urgently need to be provided HIV/AIDS prevention programs in an authentic way.

Executive Summary

Background

In Thailand, the Northern region has consistently shown the highest rates of HIV infection. As a result of rural poverty, many young unmarried women come to urban areas in northern Thailand in search of employment. Removed from the protection of their parents and natal villages, no longer bound by traditional norms of prenuptial and male-female conduct, exposed to urban peer culture as well as to insecure and exploitative working conditions, these young women are increasingly vulnerable to HIV infection through unprotected sexual intercourse.

Objectives

The specific objectives of the study were to:

- Determine the knowledge, attitudes, beliefs, behavioral intentions, and behavior related to sex, sexually transmitted diseases, and HIV/AIDS of northern Thai single, never married female adolescents who have migrated to Chiang Mai and work in export-oriented garment factories.

- Compare non-formal educational interventions to discover which are more likely to positively influence adolescents' knowledge, attitudes, beliefs and behavioral intentions in relation to the prevention of HIV/AIDS and other STDs.

Methodology

A quasi-experimental research design utilizing both qualitative and quantitative data collection methods was used to develop the interventions and determine which health education and communication processes were most effective in changing knowledge, attitudes, beliefs, and behavioral intentions of the target population of young women. The sample was 240 young unmarried women between the ages of 14 and 24, educated to Grade 6, who had migrated to Chiang Mai and worked in the export-oriented garment

factories.

The following methodological processes guided the research and intervention phases of the study:

- The formative research process involved conducting focus group discussions and in-depth interviews with the study population. These data collection methods used stories, pictures, short answer and open-ended questions to develop the survey instrument and the interventions.

- The survey process involved administering a questionnaire, pre- and post-intervention, to girls working in five factories who were divided into four groups: control group; materials-only group; materials plus public health promoter group; and materials plus peer educator group.

- The intervention process involved four stages: developing materials; training public health promoters and peer leaders; implementing and monitoring the education programs in the factories; and conducting ongoing and final evaluations.

- The sexual behavior research process involved participant observation and in-depth private interviews with 60 women, 12 men, and key informants to understand and describe the sexual practices of the study population.

Results

This study showed that young single women were sexually active and engaged in a variety of sexual activities, including multiple partnerships and lesbian relationships. The study population reported that they did not use condoms and viewed them as inappropriate in a love relationship. However, they did feel responsible for contraception and used methods other than condoms to avoid pregnancy. Both young men and women expressed a lack of communication on sexual matters with the opposite sex, especially during the early stages of a relationship.

Study findings highlighted that the desire of young women to have fun, to relax, to take advantage of their social and economic freedom, to have friends, and to express their ability to be up-to-date were important contributing factors to premarital sexual activity. Finding a partner who had a good income, who could provide money, a meal or a good time was important for these young women, although none of them said that they

or their friends exchanged sex for money. Among the young women, there was widespread and tacit acceptance of a young man's and a husband's infidelity, and to a lesser extent promiscuity. As some women reported, 'if a young man does not visit prostitutes, I would think he is a homosexual.'

Many of the young women felt only promiscuous women or prostitutes were at risk for HIV infection because in their view, "good" people, both males and females, do not get AIDS. The vast majority viewed the consequences of preventing HIV infection in terms of the potential losses, e.g. loss of the relationship, loss of trust, loss of belief in their or their partner's goodness or virtue, loss of social acceptance of peers, and loss of face. For women, there were potentially negative social and moral consequences to adopting AIDS preventive behaviors which appear to be more significant than the health consequences.

Of the three interventions tested, the most effective means for influencing beliefs and behavioral intentions associated with AIDS prevention among the target group was through the use of peer leaders. The girls enrolled in the peer leader group demonstrated the most significant improvements in both knowledge and in enabling skills. For example, after the intervention, the girls were better able to integrate condoms into their contraceptive vocabulary and to express the need for both males and females to take responsibility for contraception. The peer leader group also showed the largest increase in perceived vulnerability to HIV infection post-intervention, but the smallest degree of fear associated with their perception of risk because, as they indicated, they learned how to protect themselves. When compared to women from the other groups, the women involved in the peer leader group expressed more acceptance and regard for women who prevented AIDS by negotiating with a boyfriend, by talking about AIDS and other STDs, and by asking a boyfriend to use a condom or buying a condom themselves. While peer leaders proved to be not as knowledgeable as health promoters about health related issues and disease, they demonstrated high satisfaction, flexibility, and enthusiasm in their role as educators. Moreover, they expressed more often than the health promoters the desire to reach family and friends from their villages with AIDS prevention information.

One problem with all the face-to face educational sessions was that the young women who might have been at most immediate risk were the ones least likely to attend the group meetings. In both the peer leader and health promoter groups, participants mentioned that their friends who liked to go out at night with boys or who left the factory immediately after work to meet a boyfriend did not want to attend the sessions.

All groups enjoyed and appreciated the educational materials which included a board game called anti-AIDS *simsee*, a romantic novel, and a comic book. The board game which resembles the popular game Monopoly, rewards players with play money if they respond correctly to a set of questions on HIV/AIDS prevention. The romantic novel tells the story of a young woman who migrates to Chiang Mai and falls in love with a young man who is infected with HIV. The novel was written to reflect young women's enjoyment of soap operas and romantic themes and to reach the hearts of young people which previously developed AIDS prevention materials have failed to do. The comic book, which reflects the high value Thai culture places on *sanuk* or humor, tells a story of an invisible flying condom that whispers to young women ways in which to negotiate with a boyfriend about condom use.

Conclusions

This study demonstrated the strength of a highly focussed person-to-person intervention. Peer education was found to be the most effective means of educating young women from the target population and in increasing their perception of risk, improving their communication skills, and in increasing their perception of the options available to them for AIDS prevention. The findings suggest that educational methods and materials which facilitate participation, engage the women on an emotional level, utilize credible sources of information, and respect their privacy are important elements of interventions targeted to young, working women.

Using appropriate methods and interviewers, young, single women will reveal their sexual behavior, attitudes and beliefs. Written surveys and focus group discussions were not appropriate means to find out this kind of information because of the fear of

stigmatization, negative gossip and ostracization. On the written survey, 90 percent of the women stated that they had a boyfriend but none said they were sexually active. In-depth private interviews with a researcher who is a friend, who shows and feels genuine concern for the respondents were more effective in eliciting valid, contextual data on sexual behavior that are useful for program development.

Since this study indicated that young women take responsibility for contraception, condoms need to be promoted at family planning clinics and health facilities as a preferred form of contraception for single women. Condoms need to be brought out of the disease spectrum and more into the family planning or contraceptive spectrum if more young women are to view them as 'women's business.'

To develop effective AIDS prevention programs, it is important to understand both female and male sexual values, beliefs, experiences and interpretations of sexuality. Programs should reflect young women and men's expressed needs to learn about AIDS within a broader context of education about reproductive health and sexuality. Sex education, reproductive health education, and more comprehensive education about STDs need to be integrated with education about AIDS. Such education should target both young women and men before or in the beginnings of sexual experimentation and sexual activities and address changing values. Because so many young people leave school at Grade 6 and have limited health resources once out of school, developmentally appropriate AIDS education should be integrated into the primary school curriculum as well as in work settings and in places where young people enjoy leisure activities.

1. BACKGROUND

Epidemiology

There has been a rapid spread of HIV in Thailand since the first cases of infection were documented in 1986. The epidemiological pattern of the HIV epidemic in Thailand may be characterized as an initial, rapid spread of HIV among injection drug users (IDUs), followed by female commercial sex workers (CSWs), spreading to non-IDU male clients and then to their partners in the general population (Weniger 1991). Estimates range from between 200,000-600,000 Thais now HIV positive with 1,400 becoming infected every day (Maticka-Tyndale 1994). By the year 2000, an estimated two to four million people will be infected in Thailand which has a total population of 55 million (Brinkman 1991; Moreau 1992).

The highest rates of HIV infection occur in the Northern region of Thailand. A sentinel HIV seroprevalence survey conducted in June 1991 found that 63 percent of brothel-based lower-class CSWs and 31 percent of male STD patients in Thailand's Northern provinces were infected. In seroprevalence studies conducted during 1991-92, between 17 and 20 percent of new military conscripts from the North were infected with HIV (C. Beyer personal communication 1993; Weniger 1991).

Thai women are increasingly at risk of HIV infection. The ratio of men to women infected with HIV has decreased dramatically from 17:1 in 1986 to 3.1:1 in 1991 (Pyne 1992). Chiang Mai City, the largest metropolitan area in Northern Thailand, is the city with the highest rate of infection among women. In Chiang Mai, between 44-70 percent of lower class brothel CSWs are infected with HIV (Smith 1990; Weniger 1991). HIV infection does not confine itself to one occupational group such as CSWs and is gradually spreading to women in the general population.

Globally, the prevalence of AIDS can be associated with labor migration and urbanization (de Zalduondo, Msamanga and Chen 1988). As of 1992, the highest number of AIDS cases in Thailand were diagnosed among factory and construction workers (Ford and Saiprasert 1993). Although the majority of these cases have been men, Thai women who migrate to cities to work as factory and construction workers are

also at high risk for HIV infection. Recent research indicates that young single female migrants are four times as likely to engage in sexual intercourse as young single women who live with their families (Ford and Saiprasert 1993).

Female labor migration is most common in Thailand's Northern Provinces, where women have been dominant in market activities for years. Factors such as decreased landholdings, lack of capital for investment, increasing surplus labor, indebtedness, and limited opportunities for non-farm employment have stimulated the migration of young women into urban areas in search of employment (Kaewsaiha and Varavan 1982). The widespread commercialism of Thailand coupled with an enormous disparity in earning possibilities between rural and urban areas creates further motivations for economic migration. In fact, for the ages 10-19 and 30-39, more females than males migrate to Chiang Mai City (Singhanetra-Renard 1987).

In Chiang Mai the nature of female labor force participation varies considerably. Women work for wages in construction, factories, restaurants, stables, or as sales clerks, household domestics, fruit/tea pickers or upland and foothill gardeners. Nearly all women (90 percent) migrate in order to engage in trade, i.e. buying and selling. In skilled work or professional employment young women are outnumbered by young men by two to one and there is little opportunity for women to gain skills which would improve their income (Singhanetra-Renard 1987).

Although income earning possibilities are greater in urban areas, job insecurity within the urban labor market is commonplace for young Thai women. A survey of 27 factories employing young women revealed wages below the minimum, poor and hazardous working conditions, inadequate legal protection, and the lack of opportunity for career advancement (Varavan and Chanyapate 1983). Furthermore, a young woman in a factory or construction job earns between US $28-$100 per month, while a young woman working as a CSW can earn much more. Some argue that a CSW can earn as much as 25 times more than the median level expected from these other occupations (Ford and Koetsawang 1991). Besides lower earnings, the long work days and poor conditions found in factories, such as in some garment factories, may contribute to risk behavior for young women, as they seek out entertainment places for enjoyment and relaxation.

Factors Influencing Female Sexuality and HIV Infection

The role of the Thai unmarried daughter within the Northern Thai family is a major factor driving her mobility and labor market activities. The Northern Thai daughter must fulfill economic obligations to her family and to a lesser extent, her community. These obligations include: a) repayment of parents; b) merit making;[1] and c) economic support of the younger members of the family (Muecke 1992). For many poor rural families remittances from daughters turn into televisions, radios, houses and refrigerators. Daughters become purveyors of the symbols of modern wealth (Phongpaichit 1982). Behind these facades of wealth often stands the Thai daughter, whose critical role is to contribute money for the support of her rural family. These obligations coupled with rural landlessness and impoverishment, particularly in Northern Thailand, are key factors contributing to the migration of Thai adolescent daughters out of rural areas into urban ones, such as Chiang Mai City.

While on the surface it appears that Thai traditions support equity between men and women, particularly in the subsistence economy, deeper contradictions in cultural practices and beliefs indicate marked gender inequity. For example, matrilocal residence was common and inheritance was bilateral, which favored the youngest daughter with the inheritance of her parent's house. Divorce or other modes of marital dissolution also favored women:

> *A wife can tie her husband's clothes in a bundle, toss them out of the door, and bid him leave...If a man wishes to be divorced from his wife, he cannot bid her go, for the property is hers, so he must needs creep away (Curtis 1903 in Mougne 1984).*

On the other hand:

> *Traditional sayings abound with warnings to women to behave in a deferential manner towards their menfolk-lowering the head when passing a man, waiting until he had eaten his fill before eating oneself, never touching a man's head or shoulders, and, in the case of Buddhist monks, never to come into any form of direct physical contact at all (Mougne 1984).*

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[1] In Buddhism, merit making is a means to alleviate suffering, by giving gifts to monks, for example, or by taking care of one's parents.

Majorie Muecke and Khin Thitsa differ in their interpretations of these inconsistencies. Muecke argues that gender inequities, which are most apparent in the sexual service industry, are a means of conserving traditional norms in Thailand, while Khin argues that there is an inherent ambiguity and disparity between the image of Thai women's submissiveness and the reality of her economic contributions:

> *The clear reservation of ecclesiastical position, spiritual wisdom, learning and authority as masculine domains by traditional Buddhism, and the secular specialization of women in trading and marketing activities, have led directly to the anomalous position of the Thai woman today, who is debarred from real authority, while exercising considerable economic influence (Thitsa 1980).*

Both writers attest to the influences of Buddhism. A common interpretation of Buddhist ideology is that women are supposed to, and will, suffer more than men. Women are considered inferior to men in terms of karma (Muecke 1992).

The double standard is further apparent in Thailand's history of polygamy and concubinage. The Law of Three Seals, which dictated rules of behavior and moral values for Thai women, states, "A good woman should not let more than one man gain access to her body." This same law describes three different types of wives that a man may have: a principal wife, minor wife, and slave wife. The Law of Three Seals, though repealed in 1908, was later endorsed in 1979 (Pyne 1992).

More typical is a sexual double standard that supports the tolerance of pre-marital and extra-marital male promiscuity, at the same time it demands pre-marital virginity and marital monogamy from good respectable Thai women. According to Hantrakul, male promiscuity is considered natural and justifies prostitution as a means for fulfilling men's natural sexual needs (Pyne 1992). Thai men generally consider going to CSWs as a man's right to sexual freedom and power, as well as the expected privilege of being a man with money. Conversely, the sexuality of unmarried, good, young women is socially controlled.

While Northern Thai culture is not highly punitive towards the loss of virginity, there is yet an expectation that a good, young woman remains a virgin until co-habitation

provides assurance of a socially recognized marital bond. Traditionally an infringement of this expectation was ritualized in offerings made to *phipunya*, the young woman's ancestral spirits. If a young man and woman had sex prior to a recognized marriage arrangement, the young man had to appease her ancestral spirits by compensating the parents for loss of their daughter's virginity (Mougne 1984; Tanabe 1988).

Although young people's mobility and the loss of traditional marriage and inheritance patterns have led to fewer ritual observances, there are still deep-seated expectations of good women's behavior. Young women must present themselves as virgins, whether they are or not. Young men are socialized to be somewhat irresponsible and mischievous while young women are socialized to be dutiful and obedient (Muecke 1992). The social presentation of being a good woman is expressed in the concept of *riap roy* or politeness, demureness, unexpressed sexuality, and virginal innocence. As Ford and Saiprasert (1993) found in their study of young Bangkok factory workers, a young woman's social worth is inversely related to her sexual availability, making CSWs the least valued among women and virgins the most valued.

There is evidence, particularly in urban areas, of increasing pre-marital sex among young women. At Siriraj Hospital in Bangkok, among the women admitted for medical complications from illegal abortion, a third were single (Koetsawang 1980). At home in a rural area, a young woman is likely to know her partner's background and courtship rules are clear. After migrating, urban values and lifestyles are less familiar to her. Removed from the protection of her parent's village and less bound to traditional norms of prenuptial conduct, factors such as commercialism and an insecure and exploitative labor market contribute to the high risk for HIV and STDs to which young and single Northern Thai migratory women are exposed.

Theoretical Perspectives on Behavior Change Interventions

To date there has been little research on the knowledge, attitudes, and behavior related to risk for AIDS and other STDs among never married Thai female adolescents. Further, no educational interventions have been specifically designed for the

sociocultural, sexual, and psychological needs of this group. There is little information on sexual knowledge and contraceptive practices in general among youths in Thailand (Leslie-Harwit 1989). Most efforts at controlling and preventing the transmission of HIV have been directed at clients of CSWs and to some extent, at CSWs themselves. Recent AIDS publicity and public education campaigns have targeted the military and other buyers of sex, focusing on the promotion of consistent condom use in brothels (Sawaengdee and Isarabhakdi 1990). Little research has been conducted and few educational programs have been directed at young women in the general population (Warden 1990).

Most money for AIDS education, whether governmental or private, has been spent on reaching a mass audience. The content of this education has mainly consisted of warn and inform messages. The effectiveness, however, of generalized education programs in changing sexual behavior is yet unproven (Mann 1992). There is no consistent causal relationship between knowledge of HIV transmission and positive behavioral change.

In the United States, research findings indicate that "....even in an AIDS epicenter, a large proportion of adolescents are not taking the appropriate preventive measures to reduce the risk of HIV infection, ..." and, "adolescents have not changed sexual practices or methods of contraception as a result of the AIDS epidemic" even though these adolescents understand the consequences of high-risk sexual behavior (DiClemente 1989).

Because knowledge is not enough, researchers have sought behavior change theories which support strategies to change beliefs and behavioral norms. A cognitive model of behavior change described in the Theory of Reasoned Action addresses the importance of appropriate beliefs and the influence of subjective norms in changing these beliefs. In essence, interventions must affect beliefs. According to the Theory of Reasoned Action, changing normative beliefs leads to changes in intentions and in corresponding behavior (Fishbein, Middlestadt and Hitchcock 1991). For example, this theory would predict that a person who values the approval of his peers, believes they endorse safer sex, and also believes that safer sex can be enjoyable, would be more likely to engage in safer sex than people who do not have these beliefs (Valdiserri 1989).

Social learning theory is similar to cognitive theory in that both assume that individual perceptions decide what is beneficial and whether the individual can acquire those benefits. Specific concepts in social learning theory are useful for AIDS prevention. For example, the concepts of self-efficacy and learned helplessness have to do with the individual's learned perceptions that one is or is not capable of performing a behavior (Valdiserri 1989). Theories about self-efficacy assume that all behavior and psychological change occurs through personal mastery. Similarly, learned helplessness happens in situations where people believe that they cannot solve problems because they do not have the relevant skills (Maddux 1986). The assumption is that these behaviors are learned and modifiable.

Skill-building experiences and health improvement experiences with people similar to oneself, like one's peers, then can improve self-efficacy and reduce personal perceptions of helplessness. Peer support is needed to sustain safer sex practices over a long period of time. For young people and perhaps for young women in particular, emotional identification with a speaker and with content that is relevant to the youth's experiences is also critical. An Australian study examined condom use among sexually active girls where feelings of powerlessness and a low sense of personal competence was associated with an absence of sexual negotiation. This study found that small group peer discussions, value clarification, and decision-making exercises were appropriate educational methodologies to foster the adoption of safer sex practices among this age group (Rollins 1989).

On the other hand, behavioral change theories that support skill-building exercises do not fully address the difficulties of reaching, for example, teenagers or women. Are we to assume that huge portions of the population lack competence and skills, and once being accomplished in these, they then would be able to prevent HIV/AIDS? And if so, what are the appropriate competencies and how do we know these will work? Are there other dimensions of sexual behavior that are not necessarily competency driven? By focusing on skills, what may be ignored is the interplay of gender and sexuality that repeatedly affects and conditions the ability to perform life-saving HIV/AIDS prevention skills.

Therefore, in designing HIV prevention education interventions, it is important to understand how gender identity, sex socialization, and sexuality may affect sexual behavior. Carol Gilligan's theories on women's moral development illuminate the care perspective. "...care is grounded in the assumption that self and the other are interdependent, an assumption reflected in a view of action as responsive and, therefore, as arising in relationship rather than the view of action as emanating from within the self and, therefore, 'self-governed'" (Gilligan 1987).

Chodorow's theories on sex socialization also lend support to Gilligan's perspective in explaining why concerns with care are more intrinsically female. Chodorow distinguishes between the early childhood experiences of a male self, often defined by position and ascription to those of a female self, more often defined by connections and relationships (Chodorow 1974).

Is the question for women then: Am I able to protect myself or do what is necessary? Or is it: What are the consequences of self-protection or will self-protection work? In other words, acts of prevention may be incompatible and conflictive with a young woman's more fundamental identity as a source of moral goodness, as symbols of familial affiliation, duty and obligation that emanates from a perspective of interdependence. Therefore, factors that inhibit young women from practicing, for example, safer sex may have to do with cultural notions of female morality, distinctions between "good" and "bad" female behavior, the ubiquitous double standard, and the potential personal and social consequences of not meeting up to or being in conflict with that standard. When juxtaposed against the demands of HIV prevention programs, spheres of sexual behavior, of social presentation, prescription, and of intimate acts, are often contradictory and present a unique challenge to HIV/AIDS researchers and practitioners.

Psychosocial aspects of sexual behavior are learned from the environment. AIDS prevention interventions that view sexuality and sexual experience as isolated objectifications such as "put on a condom," "have a condom ready," "say no," etc. may not really reflect the cultural and moral dimensions of and social demands on female sexuality. HIV/AIDS educational interventions that address women's concerns must in a

sense create an environment that supports appropriate behavioral responses, instills the value of a particular competence to the learner and not just the competence itself, and reflects the subjective, social and moral nature of female sexual behavior.

This study focused on learning about young Northern Thai single migratory women's sexual behavior and designing AIDS prevention education that is sensitive to the gender, social, and learning needs of this group. We hope that this study provides insight to educators and researchers as they seek to create, implement, and evaluate programs that are responsive to the predicaments of and possibilities for young Thai women in the face of the AIDS epidemic.

2. Objectives of the Study

The purpose of this study was to:

- Determine the knowledge, attitudes, beliefs, behavioral intentions, and behavior related to sex, sexually transmitted diseases, and HIV/AIDS of northern Thai single, never married female adolescents who have migrated to Chiang Mai and work in export-oriented garment factories.
- Compare non-formal educational interventions to discover which are more likely to positively influence adolescents' knowledge, attitudes, beliefs and behavioral intentions in relation to the prevention of HIV/AIDS and other STDs.

3. Study Design

Description of the Study Design

This study employed two research approaches: 1) qualitative methods of data collection (observation and interviews) in order to explore and explain sexual behavior and to evaluate the educational programs; and 2) a quasi-experimental, pre-test/post-test, non-equivalent, control group design. Random assignment of the factory workers to treatment and control conditions was not appropriate because of the nature of the interventions and because of the living and working conditions of the target group. Instead the treatment and control conditions were assigned to four selected factories.

The four groups were as follows:

Control Group: The Control Group received no educational intervention through this study.

Materials Group: This group received HIV/AIDS prevention education through literature produced by the project.

Health Promoter Group: Participants in this group received the same materials as the Materials Group and non-formal education activities facilitated by health promoters.

Peer Leader Group: This group received the same materials as the Materials Group and non-formal education activities facilitated by trained peer group leaders.

The study hypotheses were:

A. Thai female migratory adolescents comprise a potentially high-risk group for HIV infection due to their lack of knowledge of HIV/AIDS prevention and the socioeconomic constraints and cultural obligations associated with being a rural Northern Thai daughter.

B. Socioeconomic marginality and peer group associations are primary factors influencing behavior associated with the risk of HIV/AIDS among the target group.

C. The most effective mode of influencing beliefs and behavioral intentions associated with the prevention of HIV/AIDS among the target group is through an educational intervention that makes use of peer groups, informal networks, and a peer group leader.

D. A less effective mode of influencing beliefs and behavioral intentions associated with the prevention of HIV/AIDS among the target group is through an external change agent or health promoter.

E. The least effective means for influencing beliefs and behavioral intentions associated with the prevention of HIV/AIDS among the target group is through literature alone.

Variables

The independent variables were four conditions: either control or non-formal health education and communication program interventions.

The dependent variables were AIDS-related knowledge, attitudes, and behavioral intentions, beliefs about social norms, perception of risk, self-efficacy, and self-assertion. (See Appendix V for Variables and Measurement Items.)

Description of the Sample and Setting

The Sample

Data collected from the pre- and post intervention surveys showed that the majority of the target group was single, never married, between the ages of 15 to 24 years, graduated from Grade 6, and from families who lived in the North or Upper North.

More than half of the participants had worked in Chiang Mai for one year or less and about one-fourth had worked for two years in Chiang Mai. On average, a woman remained working at any one factory between two-to-three years, after which some women moved to work at other garment factories, sought other kinds of unskilled labor, or went back to their villages, often to marry.

Most salaries ranged between 1,000-3,999 Baht per month (US $40-$160), with 54 percent earning between 2,000-2,999 Baht per month (US $80-$120). The average wage was between 50-60 Baht per day (US $2) for a 12-13 hour work day. About 63 percent of these participants contributed between 1,000-1,999 Baht (US $40-$80) per month to parents. Almost all of the participants revealed that they controlled their own spending. Nearly all were from low-income agricultural families and about half were from small families with less than three siblings. The demographic data are summarized in Table 1.

Table 1. Characteristics of Respondents: Pre-Intervention and Post-Intervention Surveys

Characteristic	Pre-Intervention (n=252)		Post-intervention (n=206)	
	N	%	N	%
Age				
14	6	2.4	3	1.5
15-19	91	36.1	74	35.9
20-24	112	44.4	95	46.1
25-29	35	13.9	28	13.6
30+	8	3.2	6	2.9
Education				
Up to Grade 4	18	7.2	13	6.3
Grade 6	181	71.8	146	70.9
Grade 9 and higher	52	20.6	46	22.3
NA*	1	0.4	6	0.5
Home Town				
North and Upper North	213	84.5	179	86.9
Lower North	21	8.3	12	5.8
North East	14	5.6	12	5.8
Central	4	1.6	3	1.5
Years in Residence in Chiang Mai				
Up to 1 yr.	136	54.0	109	52.9
2 yrs.	61	24.2	51	24.8
3 yrs.	24	9.5	18	8.7
4 yrs. and more	27	10.7	24	11.7
NA*	4	1.6	4	1.9

Characteristic	Pre-Intervention (n=252)		Post-intervention (n=206)	
Salary				
Less than 1,000	1	0.4	0	0.0
1,000 - 1,999	26	10.3	20	9.7
2,000 - 2,999	136	53.9	110	53.4
3,000 - 3,999	74	29.4	63	30.6
4,000 and higher	9	3.6	7	3.4
NA*	6	2.4	6	2.9
Remittance to parents				
1 - 499	4	3.7	3	3.0
500 - 999	35	32.4	27	28.0
1,000 - 1,999	63	58.3	63	64.9
2,000 and more	6	5.6	4	4.1
Control of Spending				
Myself	244	96.8	198	96.1
Others	5	2.0	5	2.4
NA*	3	1.2	3	1.5
Father's Occupation				
Agriculture	205	81.3	167	81.1
Wage Labor	14	5.6	10	4.9
Seller/Home business	5	2.0	5	2.4
Other	8	3.2	7	3.4
Unemployed	8	3.2	5	2.4
Dead	7	2.8	7	3.4
NA*	5	2.0	5	2.4

Characteristic	Pre-Intervention (n=252)		Post-intervention (n=206)	
Mother's Occupation				
Agriculture	207	82.1	168	81.6
Wage Labor	10	4.0	7	3.4
Seller/Home business	5	2.0	5	2.4
House wife	8	3.1	5	2.4
Other	7	2.8	5	2.4
Unemployed	4	1.6	4	2.0
Dead	6	2.4	7	3.4
NA*	5	2.0	5	2.4
Number of Siblings				
0 - 1	8	3.2	5	2.4
2 - 3	116	46.0	98	47.6
4 - 5	72	28.6	58	28.1
6 - 7	34	13.5	29	14.1
8 and more	22	8.7	16	7.8

*NA = not applicable data or no answer

The Setting

In any one of these factories on any day of the week one could view row after row of young women bent over humming sewing machines or in groups around tables sewing stuffed animals or dolls by hand. In one factory, young women worked on the floor of their dorm room at night doing piece work after the day's work was finished. A few young men in each factory were employed to do jobs that required lifting or heavy work.

The four factories in this study were export-oriented, primarily owned by transnational corporations and employed between 200 to 500 workers. The factories were selected so that working environments (including the management cooperation)

would be similar and the factory workers themselves would be alike in age, level of education, marital status, reasons for migration and past exposure to AIDS prevention programs.

Most of the young women were semi- to unskilled laborers who were paid by the piece or by level of skill. Some of the workers received training at the Lampang Occupational Training Center before being employed in a garment factory. An average work day lasted from 8 am to 10 pm with an hour break for lunch and a half hour break for dinner. The work week often lasted seven days, though some factories provided a day off on Sunday.

Living situations at the four factories varied. In two of the factories women lived inside the factory grounds. One of these factories (Factory IV - Peer Educator Intervention) also had a men's dormitory inside the factory grounds. The other factory (Factory III -Health Promoter Intervention) had rented a former doctor's office and converted it into a dormitory for its employees. These employees were transported to work by a company van. This factory had a women's dormitory both on and off the factory grounds and no men's dormitory. Some workers at both of these factories lived in villages with their families and commuted daily by motorcycle. Usually these workers were married. These two factories were located on the outskirts of Chiang Mai City.

In the other two factories workers lived outside the factory grounds in all female or mixed sex dormitories, as single people or married couples. Some workers lived in villages with their families. Factory management at these factories was little concerned with the living arrangements of employees. A woman's choice for a room depended on her roommate, the amount of rent, availability and whether the dormitory housed all women or both men and women. Most of the women lived within walking distance of the factory. Both of these factories were in the city and one was located in the red-light district of Chiang Mai.

The interventions were assigned to the factories based on accessibility of the workers, space for the intervention activities, and cooperation of the management. Workers at all participating factories volunteered for the intervention activities, in-depth interviews, and the pre- and post surveys. All participants were told that the information they provided

to researchers would be strictly confidential and at no time would their names be associated with the information they gave.

Table 2 summarizes the different components of the study.

Table 2: Summary of Study Design

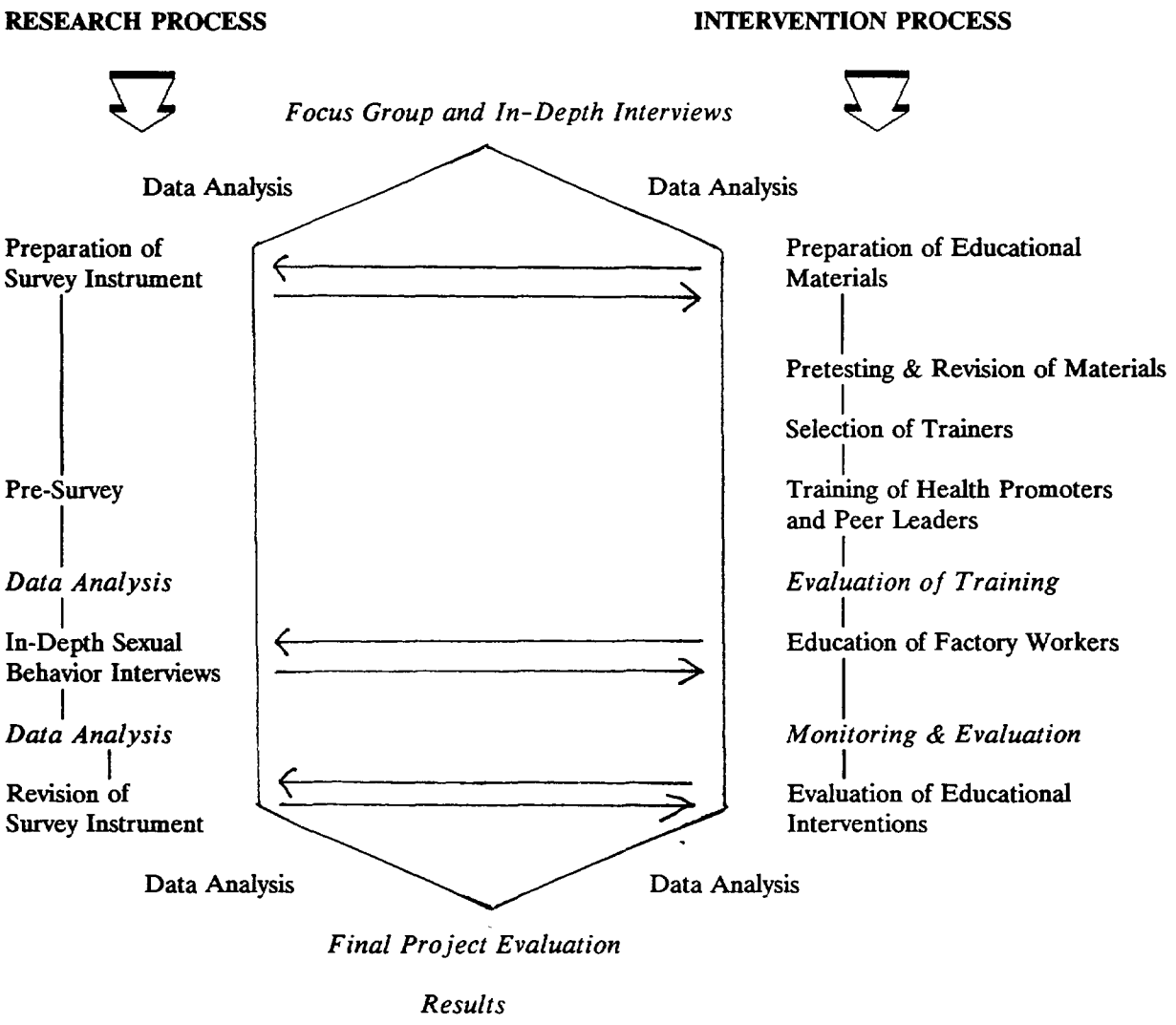
METHODS	HYPOTHESES	SAMPLE	PURPOSE
Focus Group Discussions & In- Depth Interviews	Hypothesis A & B	4 Focus Groups with 16 Women; and 15 In-Depth Interviews with Women Similar to Target Group	Collect Qualitative Data to Inform Research & Intervention Process
Materials Development & Dissemination	Hypothesis E	Young Women in Garment Factories II, III, & IV	Part of Intervention Process
Pre- Intervention Survey	Hypothesis A, C, D & E	Young Women in 4 Garment Factories I, II, III & IV	Collect Quantitative & Qualitative Data for Baseline
On-going Sexual Behavior Research	Hypothesis A & B	45 Young Women and 10 Young Men in Factories III and IV	Collect Qualitative Data on Sexual Behavior to Inform Interventions
Training of Peer Leaders & Health Promoters	Hypothesis C & D	10 Peer Leaders from Factory IV and 9 Health Promoters Who Worked in Factory III	Part of Intervention Process
Implementation of Education Programs in the Factories	Hypothesis C, D & E	Young Women in Factories II, III & IV respectively	Part of Intervention Process
On-Going Evaluation	Hypothesis C, D & E	Young Women in Factories I, II, & IV	Collect Qualitative Data to Evaluate Interventions
Post-Intervention Survey	Hypothesis B, C, D & E	Young Women in Factories I, II, III, & IV	Collect Quantitative & Qualitative Data to Evaluate Interventions

4. Methodology: Research and Intervention

In this section, the data collection methods and the integration of the qualitative findings from the formative research into the design of the educational interventions are described.

The following model summarizes the relationship between the various stages of this study and the integration of the research process with the development and implementation of the educational interventions.

MODEL: INTEGRATION OF RESEARCH AND INTERVENTION



Focus Group Discussion and the In-depth Interview Method

The process of integrating research and intervention in this study began with a series of four focus group discussions, two with eight girls from a local ceramic factory and two with eight restaurant workers and salesgirls. Both groups were similar to the target group in education, age, and marital status. Fifteen two-hour taped individual in-depth interviews were also conducted with women similar to the target group. All individual and group interviews were conducted using stories, pictures, short answer questionnaires, and open-ended questions. For example, participants were asked to complete a given story, or change an ending in a given story if they did not think it was suitable. (See Appendix I for a more detailed description of focus group and individual interview guidelines.)

To illustrate this approach, the following story and picture were presented:

Buah Peun has gotten to know Tong Dee. She thinks she loves him and she thinks he loves her. They have taken walks together. They have talked about their dreams for the future. Buah Peun thinks that someday when they have enough money, they will marry. Buah Peun's parents like Tong Dee as well. One evening they are sitting by the river talking. Tong Dee starts rubbing Buah Peun's arm. Then he hugs her. Buah Peun would like to sleep with Tong Dee. She loves him. What will she do?

The results from the focus group discussions and individual interviews are summarized under the following headings:

- HIV/AIDS
- Condoms
- Sexual Behavior, Responsibility and Assertiveness

HIV/AIDS

Information about HIV/AIDS reportedly came from friends, TV, or the radio. While most of the young women had heard about AIDS, their knowledge was superficial. A common response was: "AIDS is a serious disease and cannot be cured." They were not sure whether one could get AIDS from sharing utensils, toilets, a sewing machine or from mosquitoes. Many said, "I can tell by looking at a person whether that person has AIDS." None of the girls understood the distinction between HIV and AIDS. They explained other STDs by naming a disease, usually gonorrhea. Many of the young women believed that "a person who has AIDS is either a CSW, a drug addict or a person who has sex with CSWs." Some believed that one can get AIDS by going to places where CSWs work. Most believed that if and when they had a boyfriend "he will be a good person" and, therefore, he would not have AIDS or an STD.

Most of the women could repeat what they had heard in the government campaign against AIDS. The government campaign had presented them with a list of fear-provoking facts. The respondents were aware of the facts, but had not integrated these facts into their everyday lives. For example, if asked a question like "name some sexually transmitted diseases," AIDS was not on their list because AIDS was not defined in the mass campaigns as a sexually transmitted disease. The government campaign may have had a neutralizing rather than a stimulating effect on behavior change. Popular media messages have promoted fear and the belief that only promiscuous people get this disease. Women in the study had very little or no information on how they could prevent AIDS or other STDs nor did they feel they were at risk. But many asked that the researchers provide them with reading materials about HIV/AIDS and other STDs.

The respondents expressed sympathy for a person with AIDS. But when asked

whether someone with AIDS should continue to work in a garment factory, or if they would be willing to share lunch with a garment worker who has AIDS, many expressed doubt and concern. Some said: "A garment worker with AIDS should be isolated, or fired." Others stated: "I will not eat with this worker"; and, "I will eat with her but feel very uncomfortable." Some suggested: "She should be fired because this worker's presence at the factory would make the other workers uncomfortable."

Condoms

Some heard that boys do not like condoms because they feel unnatural, are unenjoyable, or might hurt the girl. Most said: "Contraceptives are the women's responsibility, and condoms are men's business." Condoms are perceived less as a contraceptive and more as a disease preventive method. Overall, condoms are to be used with CSWs. In a so-called love relationship between a girl and boy, condoms are associated with distrust and discomfort. According to one respondent, "If I am worried about my boyfriend having AIDS or other STDs, I would take him to the hospital to be tested" (rather than use condoms).

Sexual Behavior, Responsibility and Assertiveness

Most of the young women estimated that between 70 to 90 percent of young women are sexually active before marriage. Most of them said that this was true of other women, but not themselves. Factory workers commented, "We often have to work a 10 to 12 hour day; we don't have time for boyfriends."

Sometimes during focus group discussions the participants seemed uncomfortable or too shy to talk about AIDS, STDs, and sex. They implied that even though they know about sex, they must pretend among friends, especially men, that they do not know anything, "otherwise people might think badly of us." Many suggested that "if a young woman shows she knows about sex," for example, enough to discuss condoms or ask her boyfriend to wear a condom, "she has had sexual experience" and therefore, risks stigmatization. Peers' opinions are important. Most young women were worried their

behavior would be scrutinized or criticized by peers and that they would suffer from negative gossip.

"Women are responsible for preventing pregnancy" was a common response. But many girls said that most young women do not think about protecting themselves when having sex with a boyfriend for the first time. This is because the situation happens unexpectedly. After that, girls become worried about getting pregnant.

Some stated, "If my boyfriend refused to wear a condom, I would still sleep with him because I love him." Some women felt "I would be embarrassed to buy condoms." A few women mentioned "I could not" or "I would not ask my boyfriend to wear a condom." They did, however, know where condoms could be purchased, but they did not know the price.

The Intervention Process

The four stages of the intervention process were:

- Materials Development
- Development and Implementation of Health Promoter and Peer Leader Training
- Implementation and Monitoring of Education Programs in the Factories
- On-going and Final Evaluations

Materials Development

The content of the educational materials was generated from attitudes, beliefs, and experiences that were mentioned during and/or inferred from the focus group discussions and individual interviews. These were:

1. Condoms are not women's business. Condoms are men's business.
2. Women are not as able to protect themselves against HIV/AIDS and STDs as men.
3. Condoms are not perceived as a contraceptive by women.
4. Condoms are seen as a means of controlling the spread of disease.

5. Women lack information about how they can prevent themselves from getting HIV/AIDS.
6. A young woman who buys a condom or has a condom in her possession risks being perceived as promiscuous or knowing too much about sex.
7. Condoms are something men use with CSWs.
8. Condoms are unnatural.
9. Some women can talk to their boyfriend about condoms but the decision to wear a condom is the man's.
10. A women can prevent HIV/AIDS by observing the boyfriend's body for signs of HIV/AIDS.
11. A women can prevent HIV/AIDS by asking her boyfriend to wash his body.
12. Women (non-CSWs) will not get HIV/AIDS.
13. Women in general will not get HIV/AIDS because their boyfriends will be good. Good people do not get HIV/AIDS.
14. You can tell by looking at someone whether they have HIV/AIDS.
15. Most women have never seen a condom and do not know how to use one.
16. Intrauterine devices can prevent HIV/AIDS.
17. Foreigners, CSWs and bad boys get HIV/AIDS.
18. Mosquitoes, razors, toilets, air conditioners and utensils can transmit HIV/AIDS.
19. One should trust one's boyfriend to have a condom.
20. A factory worker who has AIDS should be fired.
21. Doctors and nurses can tell by looking at someone whether that person has HIV/AIDS.
22. HIV/AIDS can be cured if treated early.
23. HIV/AIDS can be transmitted through saliva.
24. Good girls do not get HIV/AIDS.
25. HIV/AIDS can be prevented by staying away from CSWs and boys who go around with them.

Several factors were considered in choosing appropriate kinds of educational

material. Most of the workers had attended school between four and six years. In addition, researchers observed that young women similar to those in the sample enjoyed leisure time activities which included reading magazines with a romantic content and a "dear Abby"-type format, reading comic books, and watching televised soap opera-type dramas. Thai culture also places a high value on *sanuk* or the idea of fun, humor, and not taking life too seriously (Phillips 1987). These considerations inspired the development of a romantic novel, a manual with "dear Abby"-type letters about AIDS, and a humorous comic book.

Of further consideration and what prompted the writing of *Lamyai*, the romantic novel, is that AIDS education in Thailand had not reached the hearts of young people. There was very little positive emotional content that would appeal to a young woman or, for that matter, a young man; the emotional tone in HIV/AIDS education materials was mainly based on fear.

As planned in the research design, one intervention was a materials-only program, while the others used the materials and face-to-face interactions. Therefore, all materials needed to be both self-guided and suitable for use by a facilitator in a group education situation. The following materials were created: a) A romantic novel that focused on influencing beliefs 1, 2, 3, 4, 9, 13, 19, 24 and 25; b) A humorous comic book that focused on influencing beliefs 1, 2, 5, 6, 7, 10, 14, 15, and 20; c) An interactive manual that focused on the target group's lack of accurate knowledge; and, d) An interactive manual with short *fotonovelas* (short stories with photographs) that addressed women's lack of knowledge about condoms, women's assertiveness and ability to make informed decisions and to negotiate safer sex.

Two examples from the romantic novel, *Lamyai*, and the comic book, *Poo Pi Tak* (Brother Protector Condom), explain how research and intervention were integrated. The novel, *Lamyai*, tells the story of a young woman, Lamyai, who migrates to Chiang Mai, falls in love with a young man, Tong Dee, who is HIV+. Because of Lamyai's innocence, love for Tong Dee and false beliefs, she becomes HIV+ as well. In this excerpt, Lamyai's friend, Buah Pat, talks about her brother and tells Lamyai to talk to

Tong Dee about his past and about wearing a condom:

The day Lamyai decided to go to the clinic she thought of asking Buah Pat about contraceptives. She whispered across the buzzing sewing machines, "Buah Pat, Buah Pat, what do you know about different kinds of contraceptives?"

Buah Pat momentarily stopped working. "So it is true," she thought. "Lamyai is sleeping with someone. Probably Tong Dee."

"I'll talk to you later," Buah Pat replied.

Buah Pat caught up with Lamyai as she was walking home from the factory. "So it is true," Buah Pat said. Her voice sounded agitated. "You are sleeping with Tong Dee. And you are not using a condom. Right?"

"There are other, better ways to stop pregnancy," Lamyai said wondering why Buah Pat was so excited.

"I'm not talking about pregnancy," Buah Pat said somewhat angrily. "I'm talking about AIDS!"

"AIDS, AIDS, that's all you think about. Have you ever seen anyone with AIDS? Tong Dee is a nice person. He doesn't have AIDS!" Lamyai shouted back.

"Yes," Buah Pat said her voice shaking. "I have seen someone with AIDS and he's the nicest person I know. My brother!" And Buah Pat started to cry.

"Your brother!" Lamyai exclaimed. "Oh, Buah, I'm so sorry. I didn't know." Tears welled up in Lamyai's eyes feeling the sorrow of her dear friend.

"It's a terrible disease," Buah Pat sobbed. "For years he had it and he didn't know. It ate away at the inside of his body. Finally his body couldn't fight the disease anymore. He is so sick now—so much in pain. His wife, his poor wife is pregnant. Eight months. The doctor says that the baby might have AIDS too. My brother gave AIDS to his wife. You understand. Don't you? Don't you understand how serious this is?"

Lamyai put her arms around her friend. "I didn't know. I'm so sorry."

Suddenly Buah Pat broke away from Lamyai's embrace. "That's why I talk to you about AIDS. I don't know if you really understand. You can get it from Tong Dee. Do you know his past? Do you know how many different women he has slept with? What if he didn't wear a condom—like he doesn't with you—and one of these women had AIDS? Then he might have AIDS and he might be giving it to you!"

"Do you know his past?" Buah Pat asked again.

"No, I've never asked him. I just assumed..."

"Assumed what? Assumed that he was nice? Nice people get AIDS! Why doesn't he wear a condom?"

"I've never asked him. I don't know," Lamyai said nervously.

"Lamyai, you are a woman, not a child. You must ask him to wear a condom unless you trust him completely. And, I don't think you know him well enough for that."

"How can I ask him that?" Lamyai seemed dazed.

"What kind of a relationship do you want with him? Friend, you said. Maybe husband—eventually. You are his partner. You deserve to be honest with each other—especially if you love each other. If you are keeping silent about this, then you are silent about something that may make the difference between life and death. If you cannot talk with him openly, then he is not a real boyfriend—then he is just playing with you like a toy."

"No! He's not!" Lamyai felt hurt at the thought that Tong Dee didn't love her with the sincerity she felt for him.

"Then you should not be silent. Tell him you want him to wear a condom. Buy condoms! Look here is a pharmacy. Let's go in. I'll buy some for you. You can give them to him—a special gift."

"No, that's too much. I can't do that. I trust him. He'll tell me the truth," Lamyai said with a mixture of fear and exasperation.

"And, let's say he might be infected with AIDS. Let's say he slept with a woman who had AIDS and he didn't wear a condom—will you love him any less?"

"I don't know?" Lamyai sounded frightened now.

"If you are true partners, you must share your lives," Buah Pat said quietly trying to calm Lamyai's sudden terror.

The point of this scene between Buah Pat and Lamyai was to confront the beliefs that good people do not get AIDS, that condoms are not women's concern, and to emphasize the importance of good communication with one's partner.

A common concern expressed in the interviews was that young women do not know how to talk about condoms. The comic book, *Poo Pi Tak* (Brother Protector Condom), tells a humorous story of an invisible flying condom who whispers to young women how to talk to a boyfriend about condoms. In the story the condom, Poo Pi Tak, and his friend, Jon Di, have five chances to help women prevent AIDS in order for the spirit of good health to transform the condom into a person. In this scene the condom is making his first attempt to help a young woman:

But do you have any condoms?
But do you have any condoms?
There's lots of feeling left.
A condom! Sex isn't enjoyable with a condom. I can't feel much— it doesn't feel good.

In this next scene, the condom and Jon Di have been successful in preventing AIDS five times and the spirit of good health transforms Poo Pi Tak into a person.

Besides giving young women ideas about how they could discuss condoms with a partner, another goal of the comic book was to present a humorous approach to an otherwise uncomfortable and unfamiliar topic.

Two problem-solving games were also created. The card game encouraged participants to match problems with solutions while the board-game was a cooperative

and competitive game of chance that tested players' knowledge, reinforcing correct answers by rewarding players with fake money. Finally, in response to requests from peer leaders, a storyboard about sex, reproductive health, and contraception with detailed explanations about STDs was created. Each type of material was pre-tested with a group similar to the target group. Respondents were asked to evaluate the content as well as the format, readability, and graphics in the materials. (See Appendix II for the pretest questionnaires.)

Development and Implementation of Peer Leader and Health Promoter Training

Eight women were recruited from the Public Health Department to be trained as health promoters and 10 women were recruited from one factory to be trained as peer leaders. The health promoters were self-selected. Peer leaders were either selected by peers, self-selected, or were selected by a researcher who had spent time in the factory getting to know the workers. The training took place over a seven week period, once a week for three hours at the Faculty of Education, Chiang Mai University. The health promoters and peer leaders were trained separately because their education, age, marital status, and socioeconomic backgrounds were too dissimilar. The health promoters were college educated, married, between ages 24 and 35 , while the peer leaders were educated to sixth grade, never married, and between ages 16 and 20.

The training of peer leaders and health promoters used a participatory group process and hands-on approach. The overall objectives of the training were to:

- Practice starting and facilitating a discussion using materials prepared for the education program
- Develop curriculum guidelines that participants could follow as health educators in the factory
- Create learning activities in preparation for the education program in the factories
- Learn how to do on-going evaluation of the education program in the factories
- Understand AIDS and the prevention needs of adolescent women

(See Appendix III for a more detailed example of the weekly training design and objectives.)

Health promoters and peer leaders were trained in leading and facilitating discussions. This included:

- How to be an effective facilitator (See Appendix IV)
- How to use pictures to start a discussion
- How to keep a discussion going by asking open and closed questions
- How to use role play to start a discussion
- How to demonstrate condom usage skills (e.g. opening a package, putting on the condom, etc.)

Training sessions integrated the content of the materials with skill-building exercises and activities. For example, all participants read the romantic novel, *Lamyai*, before coming to the training. After answering questions about *Lamyai* and discussing the book's content, trainees were provided with enlarged pictures from *Lamyai*. These pictures were used by the trainees to practice how to use pictures to start a discussion. Episodes in *Lamyai* were used to practice role plays to enhance sexual negotiation skills.

A curriculum guide was developed from questions peer leaders and health promoters generated during the training. Trainees were encouraged to follow this guideline but also to try out their own activities and ideas when they became leaders of their respective education programs.

Once the education programs in the factories began, two training sessions were added. During the third week of the intervention process, a session was devoted to sex education and reproductive health. During the seventh week, the two problem-solving games were introduced and the final certificate ceremony for participants was planned.

Implementation and Monitoring of Education Programs in the Factories

As part of the education programs in the factories, a number of incentives were offered. These were:

- A certificate to women in the factories who attended sessions organized by the peer leaders or health promoters 80 percent of the time
- A certificate and small stipend to all health promoters and peer group leaders

who participated in the program

- Snacks provided for every meeting
- Awards to group members who had the most complete understanding of AIDS and AIDS prevention
- A party at the end of the factory education programs to award the certificates

To promote the AIDS education interventions, researchers went to each factory and, with the manager's support, explained the program to all the workers. A woman who was HIV+ and whose baby was HIV+ spoke to the workers about her situation during this presentation. She also attended one of the training sessions with health promoters and peer leaders. This helped gain commitment to the program and more understanding of a person with AIDS. The managers also appealed to workers to join the programs.

The education programs in the factories were implemented over a two and one half to three month period. Each week the peer leaders selected times and meeting places by consulting their peers and the weekly work schedule. On the other hand, the health promoters had to schedule meetings much more ahead of time. Their scheduling was often based on the health promoters' time constraints without knowledge of the factory schedule or working conditions.

On-going and Final Evaluation

Evaluation activities consisted of:

- An on-going evaluation of health promoter and peer leader training
- Weekly evaluations completed by peer leaders and health promoters at the factories
- Group and individual interviews with peer leaders and health promoters
- Group and individual interviews with participants
- A final short true and false quiz given to all participants prior to the certificate ceremony
- Pre- and post-intervention survey instruments. The post-intervention survey instrument included questions specifically about the various interventions

Health promoters and peer leaders were asked to evaluate each training session. The evaluation form required each health promoter and peer leader to record what they liked and how training could be improved. These assessments took place at weeks three and seven after the education programs in the factories had begun. At these sessions each group of peer leaders and health promoters discussed problems and accomplishments at the factories. Health promoters and peer leaders were requested to write evaluations at the completion of each education session in the factories. These forms were provided so that peer leaders, health promoters and researchers would have a record of participants' experiences. They were also provided in order to help the group leaders reflect on their problems and use the evaluations to improve as they went along.

The evaluation form included the following questions:

1. What experiences or activities did the participants like? Which activities were successfully carried out by members of your group?
2. What topics, opinions and ideas did your group like to discuss?
3. What problems occurred?
4. How will you try to solve these problems the next time?
5. How do you think this program should be improved?

Survey Methods

The pre- and post-intervention survey instruments were developed using information from initial focus group discussions and in-depth individual interviews. The pre-intervention questionnaire included questions about knowledge of AIDS and other STDs, knowledge about transmission of HIV and STDs, condoms, attitudes and beliefs related to AIDS prevention, male and female relationships, sexual negotiation and sexual behavior--topics that would be addressed in the education programs and by the materials.

Researchers met each respondent in private to administer the questionnaire. Prior to the interview, the researcher made an appointment to meet with the respondent. Usually the researcher and respondent met on the factory grounds in the evenings after

work hours. The interviews lasted from one and a half to two hours. Because of the length of the interview and the possible fatigue of the respondent, the researchers often brought refreshments.

Different types of questions were included in the survey instruments. This was done to hold the attention of the respondent and in part to approach the same information through different means. Pictures and stories were used to illustrate a situation prior to asking direct questions.

The questionnaire was pre-tested on individual restaurant and beauty salon workers and one group of factory workers.

Questions were added to the post-intervention survey to evaluate the specific education programs at each factory. (See Appendix VI for the pre-intervention and post-intervention survey instrument.)

Sexual Behavior Research Methods

The aim of question 12 and questions 61-66 in the pre-intervention questionnaire (see Appendix VI) was to determine how many of the young women were currently or had once been sexually active. Approximately 85 percent of the young women stated that they had or had had a boyfriend, but none stated that they had ever had sex. In group discussions they only spoke about what they had heard about other women. The discussions suggested that to admit having sexual feelings or engaging in sexual activity among peers would be considered shameful. Young, never-married women fear negative gossip and a ruined reputation. In another study that engaged young women in a series of focus group discussions about sexual experience, only one woman admitted that she had had intercourse. The other women interpreted this behavior as "mad"--not the sexual behavior itself, but the fact that she admitted it in a group situation (Ford and Saiprasert 1993).

By individually interviewing 45 young women, 10 young men living on the factory grounds, and the watchmen at the factories, researchers found out that some of the women who had responded to the pre-intervention questionnaire were sexually active. As

part of the interview process, one researcher began to spend time in the factories after work hours just getting to know the workers without asking questions about their personal lives. In other words, she became a friend, an older sister, and to some of them, a counselor. Relationships of trust and respect developed. Gradually the respondents began to reveal their sexual experiences. Because of problems with a boyfriend or peers, some of the workers would visit this researcher at night at her dormitory. Gradually the line between researcher, counselor, and friend began to erode. This caused some problems for the researcher since she was genuinely concerned about these young people. What became clear is how much these young women needed the friendship and support that they had found in this older sister-type of relationship.

Female informants who were popular and lived on the factory premises were also used to check the accuracy of some of the findings obtained from the interviews with men and women. The young men's response to being interviewed was sometimes opposite to the young women's. The men tended to want to discuss their sexual experiences and in some cases, probably exaggerated.

The post-intervention instrument was altered so that respondents could answer a short anonymous questionnaire about their sexual behavior. These questionnaires were coded so that researchers could match their responses with results from the private individual interviews. Again all of the respondents either denied sexual activity or did not answer the questions. Based on these experiences, researchers concluded that a written questionnaire administered by a researcher or even filled out anonymously, and focus group discussions are not appropriate methods to investigate the nature and extent to which young, never-married women are sexually active in Thailand.

5. Quantitative Research Findings

Quantitative Data Analysis

In order to analyze the quantitative data, all of the subjects' responses were recoded and first converted into scores. For the AIDS-related knowledge scale, three different methods of scoring were employed: a) 0 or 1 point for each incorrect or correct response, respectively; and b) 0 to 2 or 0 to 3 points for each response that included two or three significant concepts, respectively. For AIDS-related attitudes, beliefs, and behavioral intentions, a 3-point scale was used. One point was assigned to a response that showed a positive attitude or a desired belief or intention to perform protective behavior. In contrast, a minus one point was assigned to a response that showed a negative direction in attitudes, beliefs, and behavioral intention. Finally, items in each category were simply summed to derive the total composite score for each outcome measure.

Since randomization was not feasible for this study, the reported differences between intervention outcomes could be confounded with the effects of pre-treatment differences and not be attributable to the interventions. In order to control for the potential effects of pre-existing differences, an analysis of covariance, controlling for these initial between-group differences, was calculated to identify and compare the program effects. Results from this analysis are presented and discussed in the next section.

The effects of losing participants during the program, so-called dropout effects, were examined. The characteristics of those who completed the programs were compared with those who did not. The analysis revealed no significant differences in most demographic variables of interest between those who completed the program (n=206) and those who did not (n=46; see Table 1). It can thereby be concluded that dropouts had very few effects on the composition of the target group samples.

Quantitative Results

In this section results of the pre- and post-intervention surveys are discussed. The outcome measures were divided into two components:

- AIDS-related knowledge
- AIDS-related attitudes, beliefs and behavioral intentions.

The statistical summary of changes in AIDS-related knowledge is shown in Table 3 and the remaining data are presented in Table 4.

AIDS-related Knowledge

Table 3 demonstrates that, after adjusting for the covariates, there were statistically significant differences among groups in all areas of AIDS-related knowledge following the educational interventions ($p<.001$ for every category). Results of contrasting groups reveal that the Peer Leader Program was the most effective in producing changes in knowledge, particularly of HIV-preventive methods, knowledge of condom use, and condom-usage skills. For example, despite starting off with lower scores than other groups (except the Materials Program) at the pre-intervention survey ($Mean_{PL}=2.98$ $Mean_{HP}=3.15$; $Mean_{M}=2.77$, $Mean_{C}=4.80$), participants in the Peer Leader Program exhibited a higher level of knowledge on HIV-preventive methods than those in the other programs ($Mean_{Pl}=5.79$ $Mean_{HP}=5.32$; $Mean_{M}=5.58$, $Mean_{C}=4.31$). Similar patterns of change were found in knowledge of the condom as a preventive method and condom-usage skills.

However, no significant differences between participants in the Peer Leader and the Health Promoter Programs were found on general knowledge and misconceptions about AIDS. Both programs were superior to the Materials-Only Program in producing greater change in general knowledge about AIDS, knowledge of condom use, and condom-usage skills.

Table 3. Results of the Analysis of Covariance Comparing the Effects of Treatment and Control Groups on AIDS-Related Knowledge

Outcome Measures	Average Scores								
	Control (N=40)		Materials (N=48)		Health Promoter (N=54)		Peer Leader (N=55)		F-value
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	
General-Knowledge	15.70	16.01	14.75	18.18	16.31	20.66	14.82	20.40	13.60*
Prevention Methods	4.80	4.31	2.77	5.58	3.15	5.32	2.98	5.79	9.77*
Misconceptions @	10.57	10.87	10.00	13.91	8.72	12.86	12.05	14.26	6.00*
Knowledge of the Condom as a Preventive Method	5.92	5.00	5.12	5.98	4.83	6.24	4.93	6.71	9.58*
Condom-Usage	6.20	5.64	5.81	6.66	2.35	7.87	3.09	9.46	37.27*

Post-treatment means were adjusted for the effects of pre-treatment differences
@ lower scores = greater misconceptions about AIDS
* $p < .001$

AIDS knowledge in every category was significantly improved among participants after all interventions, but not for the control group. For example, in response to the question, "What is AIDS?", more participants from the Health Promoter and the Peer Leader Groups were able to give complete answers, covering both the severity of AIDS and routes of transmission, than were participants from the Materials-Only and the Control Group.

In response to the question, "What does AIDS do to someone's body?", participants in the Peer Leader Group were better able to describe consequences to the immune system and mention immune deficiency as compared with other groups who named isolated symptoms. Participants' overall knowledge about AIDS symptoms improved. In contrast, knowledge about the differences in some AIDS symptoms between men and women did not show improvement in all groups.

Both the Peer Leader and Health Promoter Groups showed positive improvement in the belief that AIDS cannot be cured even when early treatment is begun. In addition, participants from these two groups were more likely to give a correct answer about how long a person can live with HIV/AIDS before she/he dies than could participants from the other groups.

All participants in all interventions showed improvement in knowledge about what to tell a friend who tested HIV+ (i.e. where to go to get health services, how to eat well, etc.). However, with regard to communicating with friends about what they had learned from the education programs, participants from the Peer Leader Group gave more detailed and accurate responses than those from other groups, particularly than from the Materials-Only Group.

Knowledge about HIV transmission did not significantly change between the pre- and post-intervention surveys among all groups. Almost all participants in every group at the pre-intervention survey knew that AIDS could be prevented by using condoms and by avoiding sharing needles. But the Peer Leader Group showed significantly better understanding at the end of the intervention as to why women might be at greater risk (physiologically) for HIV infection than men.

AIDS-related Attitudes, Beliefs and Behavioral Intentions

Additional results of the analysis of covariance are presented in Table 4. These reveal that the Health Promoter and the Peer Leader Groups were superior to the Material and the Control Group conditions in stimulating changes in all areas of AIDS-related attitudes, beliefs, and behavioral intentions. For example, at the pre-intervention survey, participants in the Health Promoter and the Peer Leader Groups began with a

lower mean score for questions on normative beliefs about sex ($Mean_{PL}$=-2.25; $Mean_{HP}$=0.00) than those in the Material and the Control Groups ($Mean_M$=0.65; $Mean_C$=1.17). However, after the interventions, those in the Peer Leader and the Health Promoter Groups presented a greater degree of improvement ($Mean_{PL}$=3.49; $Mean_{HP}$=3.05; $Mean_M$=1.43; $Mean_C$=0.01). Similar patterns of improvement were found in the rest of the outcome measures, i.e., perceived susceptibility, attitudes towards protective behaviors, self-efficacy, and intention to perform protective behaviors.

Table 4. Results of the Analysis of Covariance Comparing the Effects of Intervention on Treatment and Control Groups

Outcome Measures	Average Scores								F-value
	Control (N=40)		Material (N=48)		Health Promoter (N=54)		Peer Leader (N=55)		
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	
Perceived susceptibility	-0.72	-2.14	-1.04	-1.63	-0.93	0.03	-0.85	-0.28	3.53*
Attitudes towards protective behaviors	1.40	0.01	0.87	0.59	1.07	2.09	0.18	2.35	13.37**
Normative beliefs	1.17	-0.01	0.65	1.43	0.00	3.05	-2.25	3.49	7.13**
Self-efficacy	2.65	-1.44	-1.56	3.22	0.13	7.57	-2.33	9.52	20.16**
Intention to perform protective behaviors	1.47	-0.17	-0.65	1.22	1.31	3.92	1.14	3.78	31.52**

Post-treatment means were adjusted for the effects of pre-treatment differences.
A minus sign means negative direction of attitudes, beliefs, or behavioral intention; a positive sign means a positive direction.

* $p < .05$

** $p < .001$

Open-ended responses to individual questions about attitudes, beliefs and behavioral intentions are summarized as follows.

Perceived susceptibility

Participants in the Materials-Only Group perceived themselves less vulnerable to AIDS than did the Health Promoter and the Peer Leader Groups but no differences were found between participants in the latter two groups. Common written comments were: "Women might get it from boyfriends or husbands" and "Everyone can get it if they don't protect themselves." As shown in Table 5, after the educational intervention, nearly half of the Peer Leader Group and about one-third of the Health Promoter Group changed their beliefs about whether they were the type to get AIDS. In the Materials-Only Group the number of participants who agreed with the statement that they were not the type to get AIDS increased by about 13 percent.

Reasons given by the Peer Leader Group to explain perceived susceptibility included: "Everyone can get AIDS if she or he doesn't protect against it" and "We can't identify who has AIDS by considering outside appearance." Of those who did not believe that they were susceptible, reasons given were: "I have never been promiscuous," and "I don't have many lovers at the same time," and "We don't have sex with many people."

Perceived boyfriends' vulnerability to AIDS was not significantly different among participants in all of the interventions and the Control Group. Statements like, "We cannot know his past," "AIDS doesn't choose good or bad," and "We cannot judge from his appearance" were common, particularly in the Peer Leader Group.

At the post-intervention survey, more participants reported that their boyfriends were susceptible to AIDS as compared to results from the pre-intervention survey.

Attitudes towards protective behaviors

The Peer Leader and Health Promoter Groups more effectively enhanced participants' attitudes towards protective behaviors than did the Materials-Only Group. There were almost equal increases (about 80 percent) in the Health Promoter and Peer Leader Groups compared to a 52 percent increase in the Materials-Only Group between

pre- and post-test results.

Normative beliefs

The educational interventions produced significantly more positive changes in normative beliefs than did the Control Group. The Health Promoter and the Peer Leader Groups yielded higher positive changes in participants' normative beliefs than did the Materials-Only Group.

There were 56.4 percent and 45 percent increases in the number of participants from the Peer Leader and Health Promoter Groups, respectively, who believed they should not worry about what others might say if they are seen buying a condom, as compared to a three percent increase in the Materials-Only Group. For example, participants replied, "It is good, not shameful to protect oneself"; "AIDS is more fearful"; "If it is not shameful to sleep with a boyfriend, why is it shameful to buy a condom?"; "Women shouldn't care about negative gossip."

From Table 5 there is a trend of an approximately 10 to 20 percent difference in improvement between groups. For example the question, "I would worry that having a condom with me would make my boyfriend think that I expected to have sex" (not agree), there was a 42.1 percent increase in the Peer Leader Group, a 32.6 percent in the Health Promoter, a 24.2 percent in the Materials-Only and a 5.8 percent and 4.8 percent decrease in the Control Group. For the question, "I would be afraid that my boyfriend would think I had a disease if I told him to wear a condom," there was an increase of those who did not agree of 59.7 percent in the Peer Leader Group, 24.7 percent in the Health Promoter Group, 10.3 percent in the Materials-Only Group and a decrease of 42.3 percent in the Control Group.

Self-Assertion, Self-Efficacy and Self-Responsibility

The Peer Leader and Health Promoter Groups showed more positive changes in self-assertion, self-efficacy and self-responsibility than did the Materials-Only and Control Group. Again there is a trend that shows the most positive improvement in the Peer Leader Group followed by the Health Promoter, Materials-Only and Control Group.

For example, in response to the question as to whether one feels comfortable buying a condom, 46.1 percent of the Peer Leader Group showed a positive improvement as compared to 20.4 percent of the Health Promoter Group, 6.6 percent of the Materials-Only Group and a 14.8 percent decrease in the Control Group. Common statements were "I have learned how to prevent it" and "Before this program I was afraid of AIDS, but now I know how to prevent it so I am not so afraid."

The post-intervention survey results indicated that fewer participants in the Peer Leader and Health Promoter Groups believed that women are less able than men to prevent HIV infection. For example, they commented, "Women and men can protect themselves equally." Furthermore, there were more participants in the Peer Leader Group who felt more comfortable talking with their boyfriends about AIDS and other STDs than in either the Health Promoter or Materials-Only Groups.

Intention to perform protective behaviors

The three educational programs yielded positive changes in intent to engage in protective behaviors. The Peer Leader and Health Promoter Groups exhibited more significant increases in participants' intentions than the Materials-Only Group. More participants from the Peer Leader Group than from the Health Promoter and the Materials-Only Groups indicated an intention to buy a condom themselves when needed (71.4 percent, 37.1 percent and 3.4 percent changes between the pre- and post-tests, respectively). Similar to the two previous categories, there is a trend that shows more consistent positive improvement in the Peer Leader Group than the other groups. For example, the question about postponing sex when a boyfriend refuses to wear a condom shows a 63.5 percent increase in the Peer Leader Group, 26.1 percent in the Health Promoter, 44.6 percent in the Materials-Only, and 9.5 percent in the Control Group.

There were 57.9 percent, 28.9 percent and 13.3 percent increases in the number of participants in the Peer Leader, the Health Promoter and Materials-Only Groups respectively who indicated an intention to talk to boyfriends about condoms. Some stated: "It is an ordinary matter," "It is not shameful now; if you don't protect yourself, you are out-of-date," and, "If you love each other, you should help each other." For

those who remained reluctant to talk about condoms, statements were made, such as, "He might think she has many lovers," and "He will think she doesn't trust him."

There was a 63.5 percent increase in the number of participants in the Peer Leader Group who intended to refuse to have sex with a boyfriend who would not use a condom, as compared to a 26.1 percent increase in the Health Promoter Group, a 50.4 percent increase in the Materials-only Group, and a 11.5 percent increase in the Control Group.

Table 5. Attitudes, Beliefs and Intentions Related to AIDS Prevention at Pre- and Post-Intervention Surveys (Percentages): Selections of Questions

	Control	Material	Health Promoter	Peer Leader
Susceptibility of self				
People like me are not the type to get AIDS. (Agree)				
Pre-Intervention	76.1	68.3	85.0	80.3
Post-Intervention	97.5	81.3	48.1	34.5
Are you at risk for AIDS right now? (Agree)				
Pre-Intervention	78.3	81.7	76.7	80.3
Post-Intervention	100.0	85.4	74.1	89.1
Do you think you will be at risk for AIDS in the future? (Agree)				
Pre-Intervention	17.4	21.7	35.0	30.3
Post-Intervention	30.0	62.5	31.5	47.3
Susceptibility of boyfriends				
My boyfriend is or will be a good person, therefore he could not have AIDS. (Agree)				
Pre-Intervention	45.7	46.7	65.0	68.2
Post-Intervention	5.0	10.4	14.8	10.9
A girl, Lamduan, believes that her boyfriend is a very good person. She has also heard from other people that he is a kind, honest person. Is there any reason for Lamduan to believe that her boyfriend could have HIV/AIDS or another STD? (Yes)				

Pre-Intervention	95.9	79.7	70.0	81.7
Post-Intervention	97.5	95.8	90.7	92.7

Susceptibility of Others

People around my age are not likely to get AIDS. (Agree)

Pre-Intervention	13.0	35.0	10.0	4.5
Post-Intervention	0.0	4.2	5.6	1.8

Women in general (not CSWs) will not get AIDS. (Agree)

Pre-Intervention	41.3	56.7	43.3	47.0
Post-Intervention	2.5	2.1	1.9	5.5

Attitudes toward Protective Behaviors

Condoms are not women's business. (Disagree)

Pre-Intervention	19.6	23.7	10.0	9.1
Post-Intervention	80.4	76.3	90.0	90.9

Who should start talking about AIDS and other STDs when boys and girls are lovers? (Both)

Pre-Intervention	69.6	63.3	43.3	24.2
Post-Intervention	40.0	64.6	44.4	67.3

Normative Beliefs

Buah Pat wants to buy a condom, but she is worried what other people might say if they see her buy a condom, or if they hear that she bought a condom. Should she be worried about this? (No)

Pre-Intervention	17.4	22.0	38.3	20.0
Post-Intervention	27.5	25.0	83.3	76.4

Buahpat and Boonsong are in love. They have slept together. Buahpat would like to talk about condoms, but she is afraid what Boonsong will say or what he might think about her. Should she be worried? (No)

Pre-Intervention	84.8	73.3	60.0	47.0
Post-Intervention	92.5	89.6	88.9	90.0

I would worry that having a condom with me would make my boyfriend think that I expected to have sex. (Not agree)

Pre-Intervention	78.3	63.3	56.7	37.9
Post-Intervention	72.5	87.5	83.3	80.0

I would be afraid that my boyfriend would think I had a disease if I told him to wear a condom. (Not agree)

Pre-Intervention	84.8	70.7	38.3	16.7
Post-Intervention	42.5	60.4	63.0	76.4

I would worry that if I asked my boyfriend to wear a condom, he will think that I don't trust him. (Not agree)

Pre-Intervention	43.5	50.0	43.3	22.7
Post-Intervention	40.0	58.3	85.2	74.5

Self-Efficacy, Self-Assertion

Who should decide what kind of contraception a couple uses? (Both men and women)

Pre-Intervention	4.3	6.7	8.6	12.3
Post-Intervention	27.5	54.2	53.7	60.0

Who in a sexual relationship should try to prevent the spread of AIDS and other STDs? (Both men and women)

Pre-Intervention	19.6	13.3	21.7	16.7
Post-Intervention	0.0	6.3	22.2	38.2

Felt comfortable talking with your boyfriend about HIV/AIDS and other STDs

Pre-Intervention	89.1	81.7	76.7	60.6
Post-Intervention	100.0	93.8	92.6	90.9

Felt comfortable buying condoms yourself

Pre-Intervention	34.8	26.7	50.0	30.3
Post-Intervention	20.0	33.3	70.4	76.4

Not embarrassed asking your partner to wear a condom (before marriage)

Pre-Intervention	67.4	56.7	60.0	57.6
Post-Intervention	47.5	66.7	66.7	76.5

Not embarrassed giving your partner a condom to wear

Pre-Intervention	56.5	26.7	40.0	36.4
Post-Intervention	25.0	37.5	64.8	81.8

Felt comfortable refusing sex with your partner refuses to wear a condom

Pre-Intervention	73.9	58.6	84.0	72.3
Post-Intervention	77.5	89.6	98.1	96.4

Not embarrassed refusing to have sex with if your partner refuses to wear a condom

Pre-Intervention	69.6	44.8	72.0	57.4
Post-Intervention	77.5	89.6	98.1	96.4

Who should start talking about AIDS and other STDs when boys and girls are lovers? (Both)

Pre-Intervention	69.6	63.3	43.3	24.2
Post-Intervention	40.0	64.6	44.4	67.3

Buah Pat wants to buy a condom, but she is worried what other people might say if they see her buy a condom, or if they hear that she bought a condom. If you were Buah Pat, would you buy a condom? (Yes, I would)

Pre-Intervention	52.3	18.2	64.9	82.8
Post-Intervention	20.0	29.2	100.0	96.4

Behavioral Intention

You have been going around with one boy for about one month. You think that may be tonight you will sleep together for the first time because the relationship has become quite serious. So, you will go out and buy condoms yourself in case he is not prepared.

Pre-Intervention	52.2	38.3	40.7	16.7
Post-Intervention	30.0	41.7	77.8	87.3

Suppose you are sleeping with your boyfriend. You are worried about sexually transmitted diseases. So, you would talk to him about AIDS, STDs and would ask him to wear a condom.

Pre-Intervention	15.2	38.3	16.7	19.7
Post-Intervention	80.0	85.4	98.1	90.9

Suppose your boyfriend refuses to wear a condom, but you want him to wear one. What would you do? I would say, "Let's not sleep together for awhile."

Pre-Intervention	63.0	45.0	68.3	29.2
Post-Intervention	72.5	89.6	94.4	92.7

Buah Pat wants to buy a condom, but she is worried what other people might say if they see her buy a condom, or if they hear that she bought a condom. If you were Buah Pat, would you buy a condom? (Yes, I would)

Pre-Intervention	52.3	18.2	64.9	82.8
Post-Intervention	20.0	29.2	100.0	96.4

6. Qualitative Research Findings

In this section, results from three areas of qualitative research are summarized:

- Evaluation of Peer Leader and Health Promoter Training
- Evaluation of the Education Programs
- Sexual Behavior Research Results

Evaluation of Peer Leader and Health Promoter Training

Peer leaders were more positive than health promoters about the training component. Responses by peer leaders included the following: "We've learned more about AIDS"; "We've increased our self-confidence;" "We feel more comfortable to express our opinions and to talk with friends about AIDS." "This training makes us brave to perform and express our opinions." Only one peer leader, at the end, said that she was worried that she would be too shy to start discussions.

The peer leaders were more enthusiastic about their participation in the training activities, especially in role plays, than the health promoters who seemed more concerned about materials and wanted to spend more time on planning the curriculum. The health promoters were more worried about getting things right than the peer leaders. The health promoters requested additional materials to show to the workers, like pictures of people with AIDS, rather than specific information.

While both groups were generally concerned about engaging the interest of the factory workers, the health promoters were more concerned about gaining the participants' trust. Peer leaders were worried about gaining cooperation saying, "if they don't cooperate, the leaders will have the feeling of hopelessness." Health promoters expressed a view that was perhaps a reflection of their age: "The group members' boyfriends might suspect their girlfriends of having sexual experience if they participate in this program." The health promoters talked about shyness of the participants while the peer leaders were more concerned about finding the time to conduct the activities.

At the beginning and end of the training, researchers asked the participants to write a

job description to make sure that they understood their role in the education programs. The health promoters' description was more a game plan while the peer leaders description was more a specific and personal explanation of how they would fulfill their role as a leader. For example, one health promoter wrote, "do time plan, prepare materials, form the group, run activities" while one peer leader wrote, "invite friends to learn about AIDS, tell friends what we learned in training, tell friends about the seriousness of AIDS and prevention, have something to eat to make the activities more enjoyable, show pictures and do role plays with friends." (See Appendix VII for more detailed results of the training evaluations.)

Evaluation of the Education Programs

The education programs in the factories were evaluated on a weekly basis in two ways: a) forms were filled out by the peer leaders, and b) taped interviews were conducted with the participants. Generally peer leaders were much more positive about the program and filled out the evaluation forms more extensively than the health promoters.

The following questions and comments were the results of these on-going evaluations.

1. What are some good points of the activities? In what activities was your group successful? The health promoters commented more about specific materials such as posters and pictures: "We liked having pictures to use as discussion starters." The peer leaders on the other hand commented more about the spirit of their group and the activities: "it's enjoyable"; "everyone cooperates well"; "We help each other to answer the questions." "We talked together about why some people don't like to wear condoms." "We never had activities like this. They made us feel happy and good. We liked the role play and the condom demonstration." "The timing was good for gaining cooperation." Participants commented, "We liked the activities. Everyone wants to ask questions and argue about what is correct and incorrect."

2. What topics, opinions or ideas did your group like to discuss? The health promoters commented about topics or about ways of using materials, such as talking "about the pictures," and "about family planning, STDs and AIDS." More often the peer leaders mentioned the content of a discussion. For example, "About *Lamyai* and her problems and why she didn't protect herself"; and, "about how to talk to boys and what to say if they refuse to wear a condom"; "about women's sexual organs and changes in women's bodies." "Before this we knew nothing about AIDS prevention; now we know and fear AIDS more than before. If we have sex we feel we have to talk to our boyfriends. We feel more comfortable to talk and to ask." And, "In the beginning we felt shy. Now we can talk about AIDS. Now we feel more comfortable to ask a boyfriend to wear a condom and we think the boyfriend will understand and accept our asking."

3. What problems occurred? The health promoters had problems with the overall attendance of the participants stating: "Participants are absent. Some do not concentrate." Peer leaders mentioned having problems with participants coming late to the sessions. Both had problems with shyness and boredom among some members. "In the beginning some were too shy to talk." "Some people just come for the snack." "Sometimes the activities were boring."

4. How will you try to solve these problems next time? The health promoters suggested ways to motivate the participants by giving out rewards while the peer leaders thought up solutions that were under their control within the factory environment like, "I will tell them to come 10 to 15 minutes earlier before the activities start." "I will comfort my friends not to be shy and ask them to try to perform in a role play." "I will tell more jokes and interesting stories." "I'll ask more people individually for comments." The health promoters solutions had more to do with adding more content. For example, "I will give more information about statistics of AIDS patients"; "I will show more pictures of organs to explain the immune system."

5. How should this program be improved? The health promoters saw lack of motivation of the participants as a key problem and the need for a more systematic teacher-like approach; "there should be rewards and a manual to motivate participants." The peer leaders were less critical of the program and saw the program's problems more as their problems; for example, "we will try harder;" "I will do better next time."

From the interviews conducted with participants, it was found that the young women in the materials-only intervention read fewer of the materials compared to the other participants in the person-to-person interventions. However, most of the girls read *Lamyai*. "We love *Lamyai* because we feel it is realistic, like it really is in this factory." The ones who read more than *Lamyai*, seemed to have read all the other books as well. The participants who read all the books may have been young women who like to read or spend more leisure time reading. When asked what they had learned from the materials , most commented on how to use condoms, both the male and female condom. "We learned this from the pictures in Manual II."

Participants in the person-to-person interventions gave more detailed suggestions about how to communicate with a partner and more detailed responses about HIV prevention. When asked about what suggestions they might give to other girls in other factories about the activities or the materials, the girls from the materials-only factory suggested: "Other girls should gain knowledge by reading books"; while the girls from the peer education factory commented most about the activities and the games. Many in this group made reference to how they felt since participating in the educational intervention: "In the past I was afraid of AIDS, but now I understand it and I know how to protect myself;" or, "Now I know how to be more careful," or, "I am eager to know more and I follow the news about it now;" or "I used to think it was far away from me, but now I learned it isn't and I have to protect myself." "Before if we had sex, we would not know what to do. Now we have more confidence to tell our boyfriend."

Another comment from women in both the peer education and health promoter interventions was that the certificate they received in the final ceremony provided them

with recognition, credibility and less fear of stigmatization if they wanted to talk about AIDS prevention. They said, "The certificate will help us to talk to a boyfriend about AIDS.' By showing him the certificate, they said, "We will be able to talk about condoms and AIDS without being blamed and suspected." By showing this certificate to friends and family, "We can talk without feeling shame."

For additional findings on the interventions, see Table 6 and Appendix VII (results of interviews with peer leaders, health promoters, and intervention participants).

Table 6: FACTORS AFFECTING INTERVENTION OUTCOMES

VARIABLES	HINDERING FACTORS	CONTRIBUTING FACTORS	OUTCOMES
FACTORY ADOLESCENT CULTURE	Typical 11-12 Hour Work Days	Dormitory Living Style Outside & Inside Factories Facilitated Transmission of Information	
HEALTH PROMOTERS	Some Lack of Enthusiasm, Married, Not Continuous Presence in Factory, Lack of Sensitivity to Work Schedules of Workers, Used to Lecturing Clients, Generational & Educational	More Knowledge & Understanding About AIDS, Other STDs & Sex, Some Tried Creative Methods to Gain Participation	Adopted Some Ideas, Activities & Materials to Use in Their Jobs
PEER EDUCATORS	Potential for Misusing Privilege & Showing Preference to Friends, Initial Lack of Confidence	Continuous Presence at Factory, Friendships, Knowledge of Work Schedule & Use of Peer Pressure to Get Women to Join the Group, High Motivation	Increased Confidence & Acceptance Among Peers
MATERIALS	Not Enough Time to Read, at First some Shyness over Explicit Pictures when in Groups	Enthusiasm over Romantic Novel, Comic Book, Sex Education & Games, High Motivation to Read, Felt Materials Relevant to Them	Some Reproduced, Adapted and Expanded for Use with Other Groups
PEER EDUCATION PROGRAM	Some Women lived in Dorms Outside the Factory and Rarely Participated in Activities	Participants Helped Each Other to Understand the Materials & to Lead Discussions	Increased Confidence of Participants, Girls Have Talked to Friends & Family, Some Have Tried to Teach Boys Outside the Factory, Feeling that They Can Protect Themselves in the Future
HEALTH PROMOTER EDUCATION PROGRAM	Some Workers only Participated at the Beginning & Then Felt Bored & Lazy about Joining, Some Avoided the Activities, Some Small Group Activities Not Used by the Promoters	Used Pictures of People to Scare Participants, Used Lottery to Encourage Attendance	Some Workers Said They Could Have Learned the Materials Without Health Promoters

Sexual Behavior Research Results

Information on sexual attitudes and behavior was primarily derived from private interviews with female and male factory workers, key informants, group interviews, observation, and reported studies on Northern Thai culture. The following is a summary of these findings.

Northern Thai culture, a matrilineal and matrilocal culture, is not a highly restrictive and punitive culture regarding premarital sexual activity or divorce initiated by women. According to one respondent: "My parents will not be upset if I sleep with a man who wants to marry me." The divorced women who were interviewed made statements like "I didn't love him;" or, "He often came home without money or with only a little money, so we divorced"; or, "He liked to go to prostitutes so I divorced him." Nor are unmarried daughters highly protected from situations where they might meet a young man. A young woman is expected to contribute to the economic support of her family by joining the productive labor force or acquiring off-farm employment. Young women at the factory commented, "My parents felt I was old enough to take care of myself," in reference to their migration to Chiang Mai to work in a garment factory.

Marriage as their grandmothers and mothers knew it is changing. As one respondent commented: "Nowadays, women often follow their husband after marriage to live in another place so the land can be given to other daughters or sons rather than to the youngest daughter." Nevertheless, parental approval of a potential marriage partner is still valued and acknowledged. "I did not love my husband, but my parents asked me to marry him." "He is good and responsible because he told me he would take me to visit his parents and he did as he said." "If he comes to see my parents to ask to let him marry me, they might say no. My mother said she will let me have my own family when I am 19 or 20 years old."

Informal marriage arrangements which are relatively common in the village are a socially, though not always a legally recognized marriage arrangement. "We had sex together so I had to tell my parents. After this, there was an informal wedding ceremony." More recently in the cities young people practice a living arrangement called

aap which essentially means secretly living together without parental approval.

The socially acknowledged loss of virginity prior to marriage or due to a relationship that ends in divorce or separation is a loss of reputation for both the family and the young woman involved. Many of the respondents explained that loss of virginity can bring loss of face to oneself and one's family: "people will gossip and say a girl is easy;" "women will be blamed"; "this is a shame and people will say I am bad"; "this is wrong according to our customs." This loss of face describes a situation where people gossip, or say bad things and therefore create social discomfort and stigmatization for the girl and her family.

Loss of virginity and, indirectly, the control of land and female labor was formally given ritual expressions of appeasement to ancestral spirits. When asked about their beliefs on this, one respondent said: "My parents believe in this, but I don't think anything of it. My father said that if his daughters behaved wrongly (e.g. became pregnant before marriage) it would make the spirits lose face." Another commented: "My mother usually makes a ceremony to respect the spirits of my grandparents. If we (the daughters) do anything in a bad way, the spirits will make our relatives sick. My parents believe this, but I don't." Anthropological accounts explain that the daughter's behavior symbolizes the moral goodness of a family and her social losses result in the offender (usually a male) having to compensate these losses by appeasing the spirits and the offended family; otherwise, parents or relatives could become sick. As parents lose social control, belief in ancestral spirits diminishes as well. Gray (1990) writes, succinctly, "As long as the mothers do not know, neither will the spirits."

In contemporary Thailand, conflicts emerge from a girl's attempt to manifest the social presentation of a good Thai daughter while being an adolescent in a commercial, consumer-oriented, urban, and often peer-controlled environment. Conflicts develop between wanting to try new things, wanting to be modern, and the necessity of maintaining a Victorian-like shell. This shell can be most aptly described in the concept of *riap roy* (see page 5).

From this part of an interview with R., 15 years old, a young woman from a rural village family, and the interviewer's notes which follow, one can sense R.'s conflicts and

confusion about sexual norms, attitudes, and behavior:

I began to study at Maetha School which is far from home so I had to stay with my grandmother in town at that time. I always came back home on holidays. My elder sister studied there too. She finished M. 3 but for me, Prathom 6. My parents refused to let me study further because my grandparents had moved to Chiang Rai so I had no place to stay and no relatives living around the town. Only two of my classmates in Prathom 6 continued to study and both are boys. At the present time, some of my girlfriends are married and some have children. Another reason that my parents didn't allow me to continue studying was that some of my friends had to leave school after a few months of study since they became pregnant, so my parents didn't want me to study more.

When I finished Prathom 6, at the age of 12, I stayed at home and helped my parents work for about one year. After that, I was contacted by the headman of the village on behalf of the Occupational Practice Center at Lampang to study there because teachers at the Center guaranteed them that I would be safe and free from contact with boys. I started to study there when I was 13. My mother lived there with me for about two weeks at first. If relatives visited us at the Center, they were very strict, asking to see the men's I.D. cards to see if they were really brothers.

After I finished the courses at the Center, I went to work here. Parents agreed with letting me work here because the Center insisted that this factory was good. My parents still worry about my contact with boyfriends even though they try to think that I am grown up enough to take care of myself. They trust me, too. Since working here, my mother has visited me four-five times. When she comes here, she stays at the dormitory with my friends in the factory.

Since I finished Prathom 6, I have had no close boyfriends because my parents always keep me in their eyes. But when I came to work here, I got two close boyfriends: L. and T. I often go out with them. For other boys, I only talk or greet them. Even then I go out to buy things with them and come back to my dormitory at 8 pm. These boys say I have slept with them. I think that some boys are bad to talk with friends that they have sex with their girlfriend even if it is nothing. I think such boys only boast and show off that they are adept with girls.

I kept in touch with L. for about four months, but I have never had sex with him. We are only close friends. L. likes to show that he has several girlfriends. When he first came to work here, he had a girlfriend, B. I think that they have slept together because I have seen that they went out together at night and came back in the morning. Later L. flirted with many girls and B. saw this happen many times. That made Ba sad and she was so angry that they had a quarrel. After that, she stopped having relations with him. L. didn't pay attention. He still goes on flirting with many girls. Moreover, he enjoys talking to his friends that he has slept with those

girls. Two of these girls are A. and E. At present L. is getting along with M. They are not shy about revealing that they have had sexual relations. One day I saw that L. bought some family planning pills. He didn't wrap them up. I teased him that he bought them for M. He didn't answer but smiled. Recently, I have seen that B. still talks to and teases L. as normal. At this time B. has turned to keep in touch with 'Toms' (lesbians who act out the male role). For A., who people said had sex with L. like me, she says that she has never had a serious relationship with any boy; she doesn't care about anybody talking about her.

When I heard people say I had sexual relations with L., I felt uncomfortable and tired of everything. That made me want to resign from work here and move. My friends tried to comfort me and insisted that I continue working here.

I have been going with T. for five months. He is a sewing-machine fixer. He talks to me so frequently that I think he is interested in me. He is 17. He shares a dormitory with another friend who works in the factory. To has a motorcycle and so does his friend. This one, who shares the dorm with T., has a girlfriend. She stops working at 9 pm. He will come back to the dorm after 2 am. Whenever there are ceremonies for ordination, he will pick her up and go out with T. and me.

It is possible this relationship with T. will stop. If we stop this relationship, that's because I have changed my mind. If, for example, I meet a boy who is better than him. Now I think I am still too young and so do my parents. If T. goes to see my parents to ask to let him marry me, they might say "no." My mother has said that she will let me have my own family when I am 19 or 20.

Once T. went to my home but we went with another girlfriend. So there were no remarks that we were lovers. My parents liked T.. They said that he was gentle, but still young. T. has talked about proposing and that he will ask his parents and talk about marriage when I am 17 years old.

If we had sex, we must control birth. We must consult each other because we are not ready. My parents would be angry if they knew this. For birth control, I think condoms are what we will use. It's impossible to take family planning pills because if I take them, my friends may see them and then they would spread news from mouth to mouth. For condoms, men usually prepare for them.

Everyone does not want to talk about this because it will be from mouth to mouth and parents might know. And in some cases, they might try to stop the relationship after they have sex together.

Notes from the interviewer: According to information derived from observation and interviews with boys and key informants, R. has had close relationships with a

number of boys in the factory, including L. This boy and others said they have slept with R. R. goes out with T. now and seldom stays at the dormitory at night. Her friends said that she prevents pregnancy by using condoms and knows all the clinics in the community where abortions are performed. They also said she can determine the kinds of family planning pills by looking at the outside of the package. During the interview with R. she swung between openly saying anything that came to mind to guarded answers where she appeared afraid to be wholly honest.

Findings from the study indicate that young people believe in romantic love, and have sex for love. According to a number of the young women: "Having sex together before marriage is possible because of the seriousness of a relationship especially when going out alone, two by two." "Sometimes couples sit hugging and huddled together in front of the factory; after their relationship becomes more serious they may make love in the boys' dorm." "Being lovers is a tie of the heart's feelings more than having sex." One young man said: "If boys and girls have true love for each other, virginity is not important;" "The most important thing is that she is *riap roy* and that we love each other." "A boy may take a girl out four or five times and after that it is an ordinary matter for those who love each other to have sex together, or at least that's what they believe."

Juxtaposed to this is the concept of *wy fie* or flammable. This concept describes a young women who is easy, easily aroused, or does not hesitate to go out alone with a boy. Going out with different boys as a couple or having a group of boys who come to see you regularly is a sign of being *wy fie*. One respondent stated: "Boys persuade their friends to flirt with these girls in the factory; moreover none of these boys are disappointed in love." "After being visited one or two times, the girls always accept the boys' invitation to go out with them. And when going out together, the girls are likely to reach for the boys and always sit so close to them as well."

Being too easy can also mean losing one's bargaining power. A number of young women commented that sleeping with a boy too quickly could mean "he'll lose interest," or "after they have sex, he will find someone else." Young women who are too easy are also described as 'enjoying sex' or that they 'love too much' or 'love too easily'. Descriptions of young women who experience sexual pleasure and, in some

circumstances, approach boys seem to be relatively new, urban expressions of female adolescent behavior. As one young man stated: "These days young women seem to enjoy sex more than young men."

Increasingly young women who leave their natal villages for life in urban Thailand, are exposed to people, particularly adolescents, with lifestyles known previously only from watching television in their villages. "Here," the watchman lamented, "they do everything their friends do. If parents saw what goes on here, they would be so sad." Young men commented that maybe only 20 percent of the women in the factories were virgins and that by age 14 or 15 many girls had already had their first boyfriend. The young men and watchmen blamed this on the entertainment places, social change, and peer culture. "When they came here at first, they were good and neat. But after seeing their friends' behavior, they try doing just like them." Working in the factory, peer culture, and the opportunities to meet new friends become very meaningful to these young people. Despite the grueling factory work, young women spoke of the fun of living in the city, having so many friends, and not being lonely at the factories. This time was a chance for many of them to try new things. Respondents explained: "Everyone in the dorm goes to the Bio (disco). If they don't go they would be considered out-of-date. If there is a birthday party, we will all go there. Some have no experience in going out." "Many girls have boyfriends here but none of them think about getting married." "If I marry now, I will have to worry about my husband. I enjoy my freedom here." "I have a boyfriend here to cure my loneliness."

According to the young women, often a boy will initiate a meeting through eye contact. "Sometimes he shows his sexy eyes to me when listening to love songs at the factory." If the girl responds, he will take that as a cue that she is interested. Boys commented, "if a girl makes eye contact with me, this is a signal of interest." Another way is through teasing. Sometimes the girls will tease the boys from a distance, when they are in a large group or the boys will tease the girls. It is the girl who decides if she will accept his individual attention.

The young women described how their meetings with young men occur. "There are some bars near the dorm where many boys like sitting and drinking. And when they see

the girls walk past, they tease them." On some occasions the girls start teasing the boys if they are handsome. The result is that "These boys will ask to see the girls at the dorm and they wait for the girls everyday." "At first they sit talking there, but after their relationship becomes serious, they will go outside," e.g. to the movies, or to the boy's house. "In the rural areas during the time of working in the fields or festivals, young men and young women had chances to meet each other."

According to informants, the Poi Luange Festival is a typical place to meet a potential boyfriend. The girls who meet these boys tend to have serial rather than multiple partners. Other girls who are considered easy will pick up men at a disco or bar. The girls who go to the discos regularly do not usually do overtime work. A friend's house is another place to meet, as is the adult education school. "The workers who used to attend the adult education school are always visited by boy classmates and then they become lovers." "Most girls have boyfriends who come from the same place where they live, but some start relationships after they come to work here." "Chiang Mai Cultural Center is a good place to meet."

On what basis is a girl's choice of a boyfriend made? The women said that this depends on his ability to pay for her when they go out, how handsome he is and whether he is a potential marriage partner. "There might be the chance to become a wife if the relationship is serious." "If I ask for something, like money, he will give it to me." "I liked him because he took me out and paid for me." Young women were concerned as well about the character of a boyfriend as well as his appearance. They wanted a boyfriend who was neat and gentle. "Everyone thinks my boyfriend is good because when we quarrel they can only hear my voice."

Young women take responsibility for preventing pregnancy, but condoms are not acceptable in a boyfriend/girlfriend type relationship. Usually birth control pills or injections are preferred. According to the respondents, "Women are not concerned about protecting themselves against anything but pregnancy." Nevertheless, there is a problem of girls becoming pregnant and many of the girls interviewed knew where abortions were performed and their cost.

Lack of condom use sometimes had to do with the unplanned romantic nature of first

sexual encounters. As some young women commented: "When the boys come to see the girls and the girls accept the invitation every time, that means these girls are interested in those boys, too. And if the boys want the girl to sleep with them, they may not use condoms because they cannot be sure when they will sleep together." "If they have a chance to have sex with the girls, they will do so immediately, e.g. when they ask the girls to visit their houses and there is no one there, they do not prepare or think of this (condoms) before." "If you know in advance that you're going to sleep with someone, you'd take the pill." (for example if you knew you would be married in the future). Or, often the male rejected using a condom sometimes asserting his goodness and the inherent trust that should exist in a 'love' relationship. "It is difficult to get a man to use one—I don't think people use them very often—not on a regular basis." "Condoms are not used; her boyfriend says that they are like husband and wife and he has no diseases, so it's not necessary to use it."

According to a male factory worker, "If a girl carried a condom in her purse, I would think she was very bad. If she asks me to wear a condom, I tell her there is nothing to worry about; I am a good boy." One young woman commented: "We are all going to die," to a question about whether she or her friends feared AIDS because they did not use condoms. The risk of HIV infection for young women and the belief that young women can protect themselves by using condoms has not be accepted by public health establishments or the factory management. For example, according to one female factory workers, "the factory provides family planning pills but no condoms are sold."

Infidelity for men was tolerated. Most feared that after marriage their husband would take a second wife. They feared this more than their husbands going to CSWs. Some young women said that if their boyfriend had another girlfriend, they would break off the relationship. The boys said they would not marry a young woman who had too many boyfriends. Both the women and men disapproved of promiscuity for the opposite sex though male promiscuity was more expected.

Two of the women who participated in in-depth interviews had divorced their husbands because they had become infected with an STD from them. One of the women had given birth to a child who suffered a birth defect due to an STD. During the

education program, a number of women asked about white discharge or 'white menstruation'. They wanted to know what it was and if it was an STD.

According to the male respondents, most boys have had sex by the time they are 15, often with a CSW. All of the boys interviewed either had multiple partners simultaneously or had had serial sexual relationships. None were virgins; none went from virginity to monogamy with the expectation of marriage. None said they used condoms with their girlfriends, although some stated that, since AIDS, CSWs now prepared condoms for them. The young men described typical behavior in the following way: "Immediately after getting their salary, male workers go out, drink alcohol and visit CSWs." All 22 boys in one factory had had girlfriends in that factory, sometimes in addition to a wife at home. One young man stated that he chose to live at the factory even though his parent's house was close to the factory so that he would have easy access to many girls. A few admitted that they were bisexual and had a girlfriend (one had four), and/or a wife, and a boyfriend unknown to the other partners.

Young men described themselves in the following ways. "I enjoy sleeping with different girls. I have had relationships with seven girls since coming to the factory. I have no tie with them after I have sex with them. I never wear condoms because these girls are not promiscuous." "I take them out for three-to-four times and then take them to Doi Suthep (a local mountain and forest preserve) or a hotel for sex. I don't stop flirting with other girls so after that the girls I sleep with remain silent. Some of them ask me not to have sex with them, but I comfort them and say I love them and intend to marry them. After that, every girl lets me sleep with her. After I have sex with a girl, I stay far away and remain silent." "After a girl accepts my invitation, she's ready to have something with me."

One young man, the assistant to the manager, had as many as four partners at the same time working in the same factory. The women appeared to be in love with him and he managed to take care of them with varying degrees of attentiveness. Another young man said: "I sleep with N. because I pity her. I have sex with one girl at my house. I never visited CSWs. I learned about sex from my father who taught me how to have sexual intercourse with girls."

Besides having sex with men, it was found that some young women were having sexual experiences with other females. While it was not the initial intent of this study to research the lesbian community, it became clear that there were active lesbian couples and relationships at all the factories. During each presentation to all the workers, there were always questions about lesbians and AIDS. Two of the peer leaders were *Toms*. The word, *Tom*, refers to a woman who dresses like a man and acts out the male role sexually and socially. A *Dee* is a lesbian who dresses like a woman and acts out the female role. Some of the *Dees* were bisexual, but the *Toms* were homosexual.

Sexual Behavior Maps and Cases

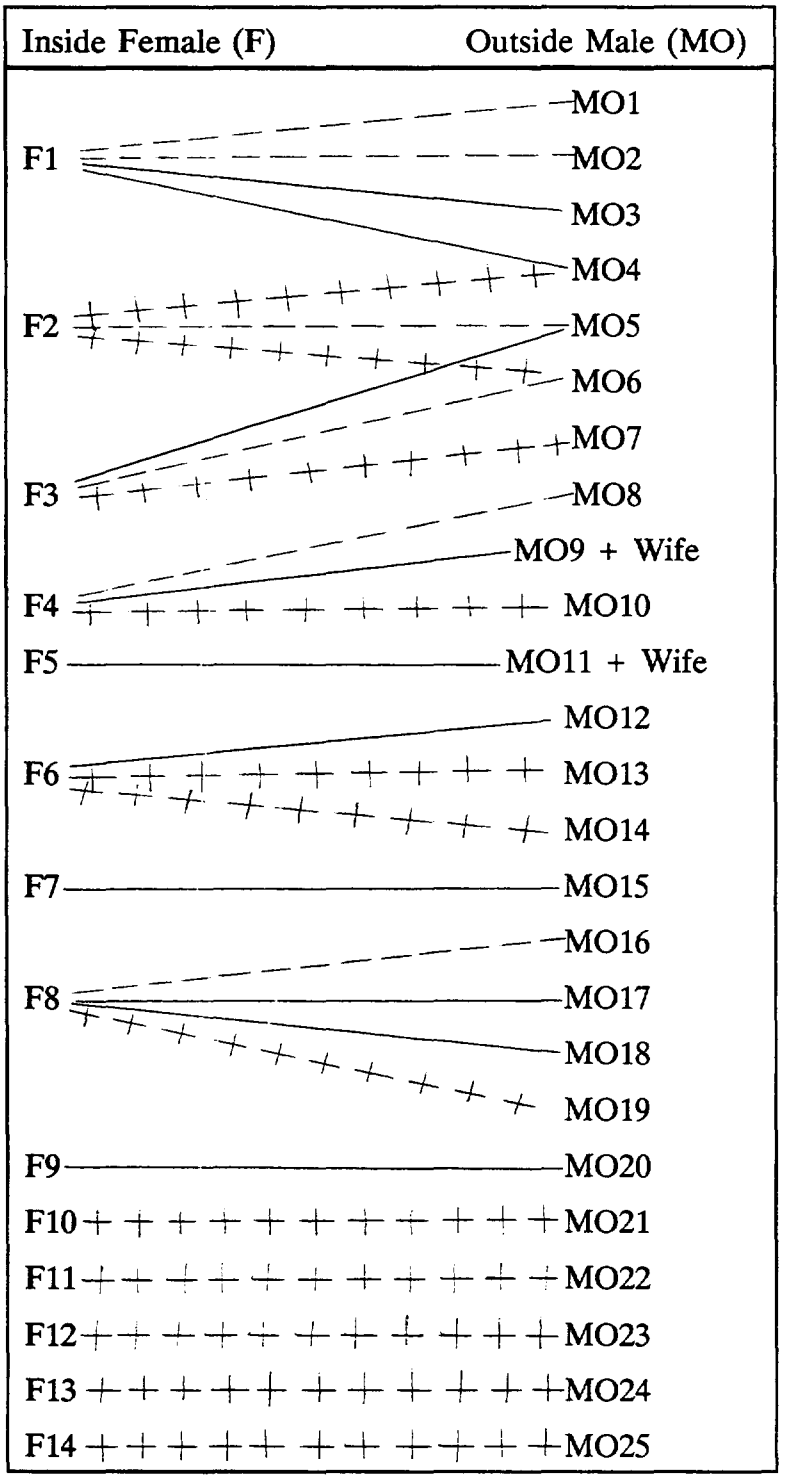
The following sexual networking maps and case studies illustrate reported examples of sexual activity at Factories III and IV. These maps and cases were derived from interviews with young women workers, a female informant, and young men who worked at the factories. At Factory III there is a women's dormitory inside and outside the factory and no men live inside the factory grounds. Factory IV has a men's dormitory inside the factory grounds.

Readers should be aware that researchers did not attempt to determine the amount or frequency of sexual activity of the target population. Nevertheless, there appears to be a wide range of behaviors, from women who have never had a boyfriend, women who have boyfriends but do not have sex with them, to women who have multiple and/or serial sexual partners.

Sexual Behavior Map: Factory III

Factory conditions and population: This factory employed approximately 200 workers, about 185 young women and 15 young men. The average age of these workers was 18 years. About 50 women lived in a dormitory in the factory. No men lived inside the factory. About 20 women lived in a dormitory outside the factory. The rest of the women lived at their homes or in villages nearby. None of the respondents in this case reported that they used condoms.

Factory III: Health Promoter Education Program



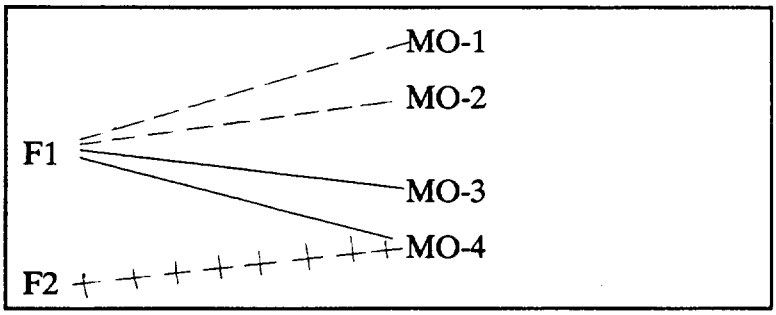
KEY

---: Past Boyfriend
(had sexual relations)

___: Current Boyfriend
(having sexual relations)

+ + +: Current Boyfriend
(not having sexual relations)

Factory III: Sexual Behavior Map, Case 1



Explanation of Case 1:

- F1: Married MO-1; MO-1 died; had sex with MO-2 at bus stop at night to save money; now has sex with MO-3 and MO-4.

- F2: Friend of F1; now angry at F1 because F1 has had sex with MO-4; she does not have sex with MO-4 though she considers him her boyfriend.

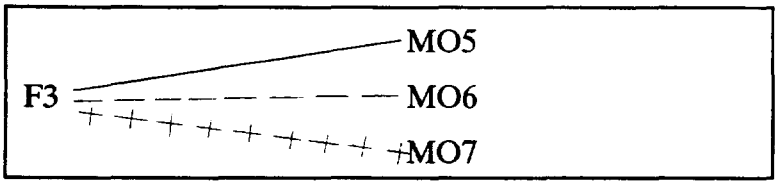
- MO-1: Marrried to F1; died after two years of marriage to F1

- MO-2: Had sex with F1 at bus stop near the factory when they were drunk.

- MO-3: Has sex with F1 and with a woman he has lived with for two years; now his parents have persuaded him to marry her; says he will marry her soon; MO-3 and MO-4 are friends and visit F3 and F2 together.

- MO-4: Boyfriend of F2 but no sex yet; has sex with F1.

Factory III: Sexual Behavior Map, Case 2:



Explanation of Case 2:

- F3: She used to have sex with MO-6 at the same time as she was having sex with MO-5; likes MO-5 because he visits her once a week and they go out to a restaurant, disco, and motel; says she likes boys who take her out. Goes out with MO7, but not having sex.

- MO-5: He met F3 at nonformal education classes; he visits F3 once a week and takes her to a restaurant, disco and motel.

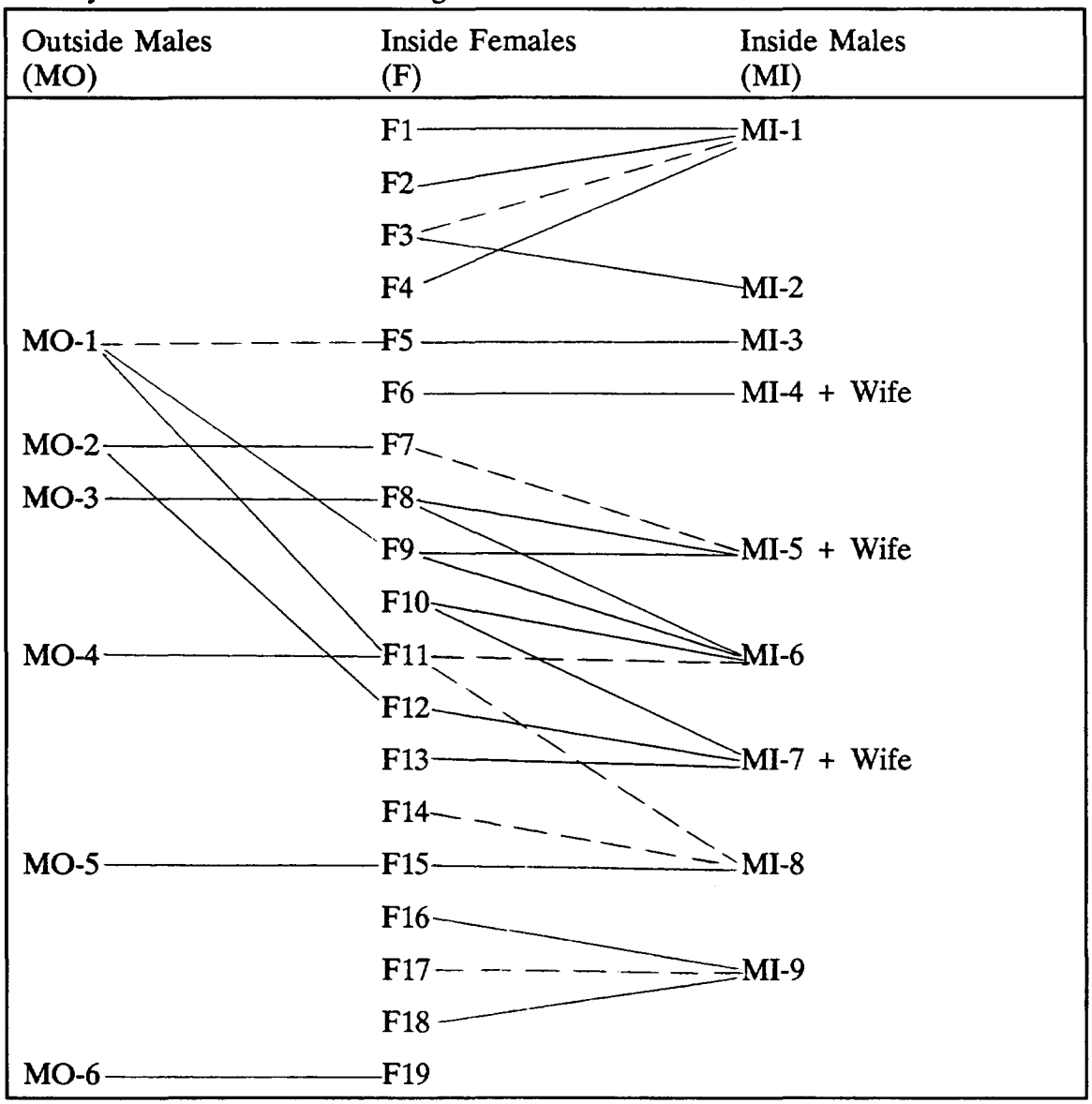
- MO-6: Used to come to see F3 everyday; met F3 on a bus going home; took her for dinner, disco and then to motel; after four months found F3 with MO-5 and then broke off the relationship with her.

- MO-7: Visits F3 and takes her out; has not had sex with her yet.

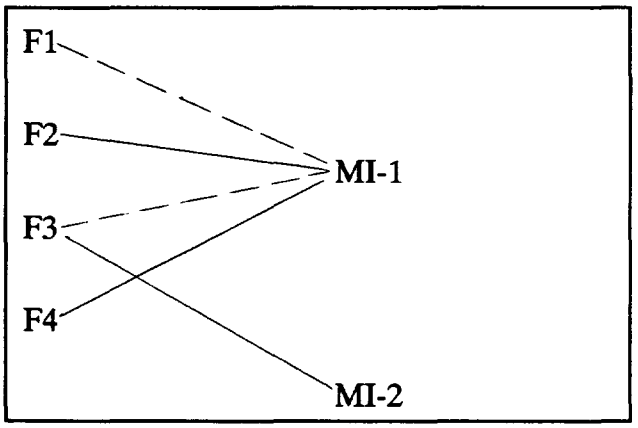
Sexual Behavior Map: Factory IV

Factory conditions and population: This factory employed approximately 300 workers, about 280 young women and 20 young men. The average age of these workers was about 18 years. About 215 workers lived in dormitories in the factory and about 85 workers lived in dormitories or homes outside the factory. Fifteen males lived in a dormitory room inside the factory. The majority of the workers were single and had completed six years of primary school. None of the respondents reported that they used condoms with girlfriends or boyfriends. Some of the male respondents said they had used condoms with CSWs.

Factory IV: Peer Education Program



Factory IV: Sexual Behavior Map, Case 1:



Explanation of case 1:

- F1 had sex before starting factory work; had sexual relationship after beginning work in the factory with MI-1 for one year; MI-1 began a sexual relationship with F2 while sleeping with F1; F1 has health problems.

- F2 had a sexual relationship before factory work and told her parents about her relationship with MI-1; slept with MI-1 in boys dormitory before and after marriage to MI-1; F2 has currently moved out of the boys dorm and is sleeping in the girl's dorm. Her husband (MI-1) is sleeping in the boy's dorm with F4.

- F3 had a sexual relationship with MI-1 in the factory. MI-1 broke off the relationship and F3 then started a sexual relationship with M-2. F3 may have had gonorrhea while she was sleeping with MI-1.

- F4 was a virgin when she began factory work; she is now MI-1's girlfriend and sleeps with him in the boys dorm though he is officially married to F2; MI-1 has taken her to motels and to a local mountain park for sexual encounters. She may be engaged in indirect prostitution.

- MI-1 goes to CSWs frequently; sometimes uses condoms with CSWs; has had sexual relationships with at least four girls in the factory -- F1, F2, F3, and F4. He does not use condoms with girlfriends in the factory; he has had sexual relationships with more than one girl in the factory at the same time; for example, he is now married to F2 (due to parental pressure from both her and his parents) but has moved her out of the boys dorm and now sleeps primarily with F4; had a relationship with F1 and F2 at the same time; is an assistant to the factory manager and seems to wield social authority among the males in the factory as well.

- MI-2: Now boyfriend of F3; lives in the same dormitory room with MI-1; seems to have a monogamous relationship with F3 now, though has gone to CSWs in the past; does not use a condom with his present girlfriend.

7. Discussion of Findings

Research Findings

In this section the findings are discussed in relation to the original hypotheses, which were the following:

A. Northern Thai female migratory adolescents are a potentially a high risk group for HIV infection due to their lack of knowledge associated with the prevention of HIV/AIDS, socioeconomic constraints and cultural obligations associated with being a Northern rural Thai daughter.

B. Socioeconomic marginality and peer group associations are primary factors influencing behavior associated with HIV/AIDS among the target group.

C. The most effective means for influencing beliefs and behavioral intentions associated with the prevention of HIV/AIDS among the target group is through educational interventions that make use of peer groups, informal networks and the peer group leader.

D. The less effective means of influencing beliefs and behavioral intentions, associated with the prevention of AIDS among the target group is through an external change agent or health promoter.

E. The least effective means for influencing beliefs and behavioral intentions, associated with the prevention of AIDS among the target group is through literature or media.

Referring to hypotheses A and B, this study found that many young single women were sexually active and that the urban peer culture is highly influential in changing young people's sexual behavior and norms. This study found considerable variation in the nature of women's sexual relationships and that condom use between girlfriends and boyfriends was essentially ignored.

Quantitative data from a recent survey suggested that over 90 percent of young Thai women were virgins prior to marriage (Weniger 1991). In a different study, focus group discussions were found to be an inappropriate method to fully reveal the nature and extent of single women's sexual activity (Ford and Saiprasert 1993). This study found that the most effective research tools for describing the nature of young women's sexual

activities were private, in-depth interviews conducted by researchers who had developed genuine friendship and demonstrated continuous involvement with the target population, complemented by the use of peer informants. Young men were far more willing than young women to talk candidly about their sexual behavior. But because they had a tendency to exaggerate, researchers had to cross-check their responses to verify the honesty of their reports.

Hypotheses A and B state that young women's vulnerability is related to their socioeconomic status and the economic demands that Northern Thai culture places on unmarried daughters. The results of this study confirmed that cultural and familial pressure to remain a virgin or at least to have a good reputation while giving monetary support to one's family represent major demands on the rural adolescent living in urban Thailand. These pressures, coupled with the desire of these young women to have fun, to have friends and be modern, and to take advantage of their social and economic freedoms were important contributing factors to their risk of acquiring HIV infection. Women often expressed how much they liked meeting new people, having friends at the factory, and spending their money as they pleased. What was most evident was the strength and importance of their new peer associations.

While Northern Thai sexual tolerance may contribute to social ambivalence and some degree of acceptance of premarital sexual activity (if it is with the 'right' person), the social behavior of young men and women in the factory setting would not be acceptable in a village setting. From interviews it was learned that young people feel that public physical displays of affection between women and men are not acceptable nor is living together without an informal marriage ceremony. Certainly romance and falling in love are important in both urban and village settings and takes up a good deal of a girl's thinking and conversation. But sexual experimentation is not socially acceptable for young unmarried women.

Socioeconomic status plays a part in a girl's choice of a boyfriend. Finding a partner who has a good income, who can give her money, a meal, or a good time is important, although none of the young women interviewed said she or her friends exchange sex for money. One young women said that her mother had specifically instructed her to find a

boyfriend who has money. Equally important factors are a boy's character, his generosity, his gentleness, and his looks. A crippled young man at one factory said that he could not find a girlfriend and would probably not get married because of his physical handicap. Many of the respondents mentioned a boy's good looks as an important criterion in their selection of boyfriends.

Hypotheses C, D, and E are supported by the survey results and evaluations of the peer leader and health promoter training and the educational programs in the factories. While no significant differences between the Peer Leader and the Health Promoter Groups were found on general knowledge and misconceptions about HIV/AIDS, the Peer Leader Group was the most effective in producing changes in all other areas followed by the Health Promoter, the Materials-Only, and finally by the Control Group. The Peer Leader Group showed the most positive improvements in the areas of attitudes toward condoms and condom skills. The Peer Leader Group, for example, was more likely to add condoms to their contraceptive vocabulary and to express the need for both males and females to take responsibility for contraception.

There are a number of possible explanations for the improvements demonstrated by the Control Group. First, the impact of the government AIDS campaign on factory workers may have improved scores. Second, the interviewer and the interview process may have prompted appropriate responses. And finally, factory management at the Control Group factory may have provided HIV/AIDS education to the workers during the time that the interventions at the other factories took place.

According to evaluation results, peer group leaders demonstrated high satisfaction, flexibility, enthusiasm, and willingness to participate in the program. They also demonstrated significant improvements over time in their ability to lead a group and in their levels of self-confidence. On the other hand, compared to the health promoters, the peer leaders were not as knowledgeable about health-related issues and disease. Therefore, they were not as able to describe, for example, symptoms of an AIDS patient or thoroughly answer questions on reproductive health topics or contraception. One must take into account, as the AIDS literature firmly supports, that knowledge alone does not cause behavior change. Improvement in enabling skills, intentionality, and self-

confidence may have much more to do with behavior change for HIV/AIDS prevention than knowledge alone (Sepulveda, Fineberg and Mann 1993).

The Peer Leader Group expressed more perceived vulnerability but also less fear because as some stated: "I am not as afraid because I know how to prevent it." This is an interesting outcome. Mass campaigns have promoted a generalized fear that some researchers believe has diminished rather than reinforced preventive behavior. Findings from the pre-intervention survey showed that young women had absorbed these general messages and believed that AIDS was a disease of promiscuous people (defined as people who have more than one partner at the same time). Furthermore, while they feared the disease, it also seemed rather remote and out of their control, similar to the fear of being bitten by a poisonous snake. At the post-intervention survey, the Peer Leader, the Health Promoter and the Materials-Only Groups in that order, felt increasing vulnerability but experienced decreased fear of the disease. This increased perception of risk was illustrated by such statements as: "Even if he is a good boy, who knows what he has done," or "Men will not tell their past behavior," therefore, "we must protect ourselves."

An interesting finding from the Peer Leader Group was the extent of their social concern. Participants in this group said they would like to give this education and the materials to family and friends in their village. Many expressed the confidence to go out and teach others, such as family, friends and other women. But, "If we tried to teach men, they would blame us." This interest in educating others was voiced much less by members of the Health Promoter Group.

One factor that may have contributed to expressions of social concern and the influence of peer associations was the factory living arrangements. Young women who live in dormitories within the factory compound and with workers who only work in that factory may be more involved in each others lives than women who do not live and work in the same place. For example, when respondents were asked what they would think about a young woman they saw buying a condom, many commented in the pre-intervention survey, "It is none of my business." But in the factories where only employees from the same factory shared the on-site dormitories, such as was the case

with the Peer Leader Group, workers were more likely to comment, "She is promiscuous"; "a bad girl"; or "she sleeps with her boyfriend." However, on the post-intervention survey, these workers were more likely to comment, "She is protecting herself"; "she is up-to-date" while most of the women who lived in dormitories outside the factory grounds continued to say, "it is none of my business."

Of the face-to-face interventions, the peer education program was the most cost-effective. Both the public health promoters and the peer leaders were given a stipend to attend training and lead the education programs in the factories. But the health promoters required a higher stipend because of their status, education, and age. Beyond this cost, the actual programs in the factories were carried out at low cost. The only recurring cost was for snacks during the group education meetings.

The managers of the factories supported all the education programs because they did not interfere with work time. But the peer education program was most compatible for the workers and with factory life. The peer leaders could arrange the time, place, and length of time for each meeting depending on the work schedule for that week, availability of rooms, and mood of the workers.

One problem arising in all the education programs was that the young women likely to have the highest HIV risk behavior were the ones least likely to attend. In both the Peer Leader and Health Promoter Groups participants mentioned that their friends who liked to go out at night with boys or who left the factory immediately after work to meet a boyfriend did not want to join the education programs. The Peer Leader Group participants said, "We tried to get them to join, but we could not force them." In the Health Promoter Group young women shared one dormitory outside the factory grounds. In this dormitory it was reported that all new recruits to the factory were taken to a disco where many were exposed for the first time to a modern sexually seductive environment. At this same dormitory the health promoters had the greatest difficulty in facilitating the education program. Most of the girls stopped attending. The speed with which the facilitators were discredited may have been due to their lack of sensitivity, their lack of skills or to the influence of the peer culture in this dormitory.

All groups read and appreciated the materials. The Materials-Only Group tended to

read the romantic novel, *Lamyai*, more than some of the other materials. With a facilitator present, most of the participants read the materials and asked for more. Interestingly, the researchers were told at the onset of the study that the target population does not like to read.

Utilization of Findings

During the course of this study researchers had the opportunity to discuss preliminary findings with a number of other researchers, health educators, and media representatives. A local newspaper serialized the story of *Lamyai* after the project was over. A large NGO that worked with factories in the North which employed a total of 5000 workers duplicated the peer education strategy using the methods and materials from this study. An NGO based in Bangkok has modeled their program with male Bangkok factory workers after this project, utilizing its materials and methods. The social science research and development department of a well-respected university in Bangkok planned to reprint *Lamyai* with a description of how this material was developed. Two well-established newspapers in Thailand printed stories about this study and some of the outcomes. Researchers from this project gave presentations to a number of NGOs and AIDS researchers in Northern Thailand on the peer education approach and how this project integrated research and intervention. One of the researchers gave a number of talks to university faculty and NGOs about methods used to conduct the sexual behavior research component.

A conference entitled "Women and AIDS" was held in Chiang Mai in August 1992 at which research findings from this and other studies were presented. This was the first time HIV/AIDS researchers and practitioners in Thailand gathered for a conference specifically on women and AIDS. Most of the participants were health workers from government-sponsored AIDS programs, a few university faculty, and NGO representatives. The participants felt that this conference gave them the opportunity to meet people working in the same field and to discuss current cross-cutting research and interventions. Participants expressed strong support for a follow-up conference and

developed a list of topics they would like to see covered in future meetings about women and AIDS.

8. Conclusions and Recommendations

Lessons Learned

1. Peer education was the most effective means of educating young women because peer education improved young women's belief in their abilities to protect themselves, self-efficacy, communication skills, social concern, and commitment to AIDS prevention more than the other educational interventions tested. Peer education was also the most cost-effective and compatible with factory life.

2. HIV/AIDS education for young women can have an impact on their perceived ability to prevent AIDS if the education and materials facilitate participation, engage the women on an emotional level, utilize credible sources of information, and respect their privacy. To be effective, educational efforts should focus on sex education, reproductive health and STDs in addition to HIV/AIDS.

3. Research and education can and should be integrated when designing a targeted intervention. In Thailand, for the most part, HIV/AIDS education has not been targeted to specific populations. One obstacle to the successful targeting of specific populations has been the lack of integration of research and intervention. Findings from sexual behavior research often cannot be applied to interventions because research results are often too general or too unwieldy to lead to targeted interventions or the target population has not been sufficiently researched prior to the development of the intervention. Moreover, interventionists alone often cannot synthesize research results appropriately and the outcome is sometimes "old wine in new bottles" or the same messages and strategies with different packaging.

4. In-depth individual interviews can be utilized in sexual behavior research with single young women to reveal aspects of their sexual activity. This study demonstrated that, with appropriate research methods young single women will discuss their sexual behavior, attitudes, and beliefs. In the Thai context, a written survey instrument and

group discussions are not appropriate means to find out this kind of information. Furthermore, it is essential that the sexual behavior researcher establish rapport and sincerely befriend the young women. The researcher must be non-judgmental and accepting of young people's behavior. And finally, researchers noted that the workers were grateful for the genuine commitment on the part of project personnel to provide education on sex and on STDs and AIDS, and for this reason may have been more forthcoming about their sexual activities.

5. This study revealed that young single migratory women are at risk for HIV infection and other STDs because they are sexually active and indulge in a range of sexual experiences from multiple male partners to lesbian relationships. Significantly, their behavior is coupled with a very high prevalence of HIV/STDs in this region of Thailand and, for the most part, women in the target population do not use condoms. They view condoms as inappropriate in a love relationship.

6. Young women view their inability to prevent AIDS in terms of the potential losses, e.g. loss of the relationship, loss of trust, loss of belief in their own or their partner's virtue, loss of social acceptance by peers, and loss of face. For women there are potentially negative social and moral consequences to adopting AIDS prevention behaviors which may influence their sexual behavior more significantly than the threatened health consequences of acquiring STDs or HIV.

7. There is widespread acceptance of men's rights to engage in premarital and extra-marital sex and, to a lesser extent, the right to have multiple partners. As some women reported, "If a young man does not visit CSWs, I would think he is a homosexual." In the post-intervention survey a question was added to determine whether young women felt that they have more ability to prevent AIDS before or after marriage. Almost all respondents said: "I will have more ability to prevent AIDS before marriage." "If I planned to marry, I would take my boyfriend to get a blood test." After marriage, most felt their chances of prevention were very low.

Many men do frequent brothels, pay directly for sex, have multiple partners, and use condoms erratically.

8. The young women in the target group requested sex education, reproductive health education and more thorough education about STDs. Researchers found from their questions and comments that their knowledge of sexuality and reproductive health was poor. The addition of these topics to the AIDS education program significantly contributed to the women's growth in knowledge and personal skills.

9. The urban adolescent peer culture has become one of the most important influences on adolescent sexual behavior, values and norms. Interviews and discussions with the target group revealed how the experience of migration, being with peers in the factory setting, and the pressure to be modern influenced their behavior. Having fun and doing what your friends were doing assumed new and different meanings in the urban compared to the rural setting.

10. Both young women and men expressed a need to understand AIDS, other STDs, and their own sexuality. Both young men and women revealed a lack of communication with the opposite sex especially in the early stages of a relationship. There was a willingness and openness in their desire to know and to understand more. In terms of AIDS prevention, this flexibility could extend to influencing sexual habits before they are formed.

Recommendations

These findings suggest the following program and policy recommendations:

1. Emphasis should be placed on interventions that specifically target young women and young men prior to or at the period of time that sexual experimentation begins. Education that gives high priority to young people could do much to stem the current

tide of the AIDS epidemic.

2. Interventions should integrate research and education by including an initial stage of data collection and on-going research during the intervention program. In this way researchers and educators can learn more from each other about sexual behavior and about how to design, implement and improve an educational intervention.

3. Materials should address the target group's specific learning, social and gender needs rather than try to reach a mass audience. Materials should address young people's emotional and relational needs as well as their need to be modern and acceptable to their peers.

4. Fear messages should be replaced with positive information and education that promotes what people can do to help each other and to change their behavior.

5. Women's sexual needs are often superseded by their need to establish and maintain relationships. Young men, on the other hand, need to develop a greater sense of their social and relational responsibilities. Very little in HIV/AIDS education challenges current social norms, or the assumptions of natural male and female sexual behavior. Meeting these challenges may do more to sustain safer sexual practices that exhorting people to change isolated sexual acts.

6. In order to reach young people, research and education efforts need to gain greater insight into female and male sexual experiences, interpretations of and beliefs about sex, and expressions and interpretations of gender roles and sexuality in particular settings. Women in this study often commented that "women who enjoy sex" need to use condoms. The Women and AIDS Conference participants suggested that the sexual double standards be challenged more openly. More information is needed not only about young people's sexual experiences but also how they interpret these experiences.

7. Sex education, contraceptive education, reproductive health education and detailed education about STDs in addition to HIV/AIDS must be provided to young people before they leave school. Because many Thai young people leave school at Grade 6 and because there are very limited health resources for people outside the school system, gender and age-specific sex education, STD/AIDS education, and reproductive health education should be integrated into the elementary school curriculum. Health education should be provided in factories or at places where young people work, live, and participate in leisure activities.

8. Condoms need to be promoted by health policy makers and health educators at family planning clinics and other health facilities as a preferred form of contraception for single young women. Condoms need to be brought out of the disease spectrum and more into the family planning or contraceptive spectrum if more young women are to view them as "women's business."

9. Women as women need to be put on the AIDS prevention agenda. To date, the main targets of HIV/AIDS prevention education efforts have been CSWs and their clients. Women, regardless of their occupation, age , or marital status, need to be addressed by informal and formal women's groups, activists, advocates, health policy makers, NGOs, researchers, and educators. The results of this study suggest that one reason for the lack of success of AIDS prevention efforts may be their failure to reach women. At one point in the Peer Leader Group intervention, the young women refused to go out with their boyfriends if their boyfriends continued to go to CSWs (or *pai thiew*, meaning to go out and play around). According to the boys, this worked, albeit temporarily. Although a follow-up study has not been done, this incident suggests that women may have some leverage in controlling the spread of HIV which has not been utilized or acknowledged by prevention efforts.

10. Peer education programs need to be developed and implemented for both young women and young men. This study demonstrated the strengths of urban peer

adolescent culture and how useful peer educators can be in influencing their friends' beliefs, attitudes, knowledge, and enabling skills in relation to the prevention of AIDS and other STDs. Peer education needs to be promoted and studied, especially where adolescent lifestyles are deeply affected by a changing peer culture and where living or working conditions could support peer education interventions.

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Appendices

Appendix I: Focus Group and Individual Interview Guidelines

The first meeting with each focus group took approximately 2½ hours; the second meeting about 2 hours. The following is a brief description of focus group activities:
(First meeting)

The primary objectives of the first meeting were to determine what these young women knew about AIDS, what they knew about behavioral risks related to AIDS and STDs and what they thought about young women's sexual behavior.

After the introductions, we gave each girl a short written questionnaire and asked her to interview the girl next to her asking:

a. What do you think AIDS is?
b. Who can get AIDS?
c. In what ways can people get AIDS?
d. How can we know who has AIDS?

After these interviews, each girl explained to the others what her friend had said.

For the next activity each girl was given small pieces of paper and asked to write on each piece an example of high risk behavior for getting AIDS. She then separated this pile from the next activity which was to do the same for low risk behavior for AIDS and then the same for behavior that she was unsure about.

Following this each girl put her pieces of paper on a large chart which had three categories: High Risk, Low Risk and Not Sure.

After the girls added their papers, we discussed their answers.

We told the girls a story with pictures in two parts. The first part was about an older sister, Sripun, who went to Chiang Mai. When she comes back to the village, Sripun hears that her younger sister has been going around with a man who has been a construction worker in Chiang Mai. The story goes on to describe a situation where the older sister feels she should say something to warn the younger sister. We asked the girls what should Sripun say?

The second half of the story shows a picture of Sripun talking to her younger sister

saying, "If you sleep with Maduah, ask him to wear a condom. Most men never tell you who they've slept with before." We asked the girls if this was an appropriate comment or not and if not, what they thought the sister might say.

(Second Meeting)

The primary objectives of this second meeting were to determine what these young women knew and thought about sexual behavior among young women and about female assertiveness in a sexual relationship. Because during the last meeting, the young women responded so favorably to the stories, we wrote a story in four parts and drew large pictures to go along with the stories. The young women were asked to respond in pairs and then report to the larger group how they would answer questions at the end of each story.

Focus Group Stories:

Story 1. Buah Peun is 18 years old. Tong Dee is 22. Buah Peun notices that Tong Dee always says hello to her when she passes him on her way to the market. Once when she was walking home from the market, he offered her a ride on his motorcycle. He said that he wanted to help her carry her load. She wants to show him she likes him even though she refused the ride. Her friends have told her he is a very good person. What can she do?

Story 2. Buah Peun and Tong Dee have hugged each other. Buah Peun has felt very excited when he rubs her body. But Buah Peun feels she does not know very much about sex. She does not know very much about what to do or how to do it. Who should she talk to? How can she learn about sex? What might this person tell her?

Story 3. Buah Peun has slept with Tong Dee. They have not used any contraceptive. Buah Peun has heard about AIDS and STDs on the radio. Buah Peun has tried to ask Tong Dee about his past but she has not found out much. She is sitting next to Tong Dee and they start to make love. She would like him to wear a condom. She would also like him to tell her about his past. What should she say? What should she do? If he agrees? If he doesn't agree? What should she do if he is undecided?

Individual Interview Guidelines:

Age_____ Education_____Time/Date of Interview_____

Place of Interview_____

Preliminary questions:

How long have you lived in Chiang Mai?
Why did you come to Chiang Mai?
What is your job here?
What are your father's, mother's jobs?
How many brothers and sisters do you have? What number are you in your family?
Who decided for you to come to Chiang Mai?
How do you spend your money? Is that your decision? If not, who makes that decision?

Questions about boyfriends:

How do you decide about friendship?
How do you decide about a boyfriend?
What qualities does a boy look for in a girlfriend?
What qualities does a girl look for in a boyfriend?
If a boyfriend is good, how does that affect a girl's well-being?
If a boyfriend is bad, how can that affect a girl's well-being?

Questions about young women and health:

Can people catch sicknesses caused by other people? For example...
Are women more or less likely or the same—to get sickness than men? Why?
Are women more or less likely to get sickness from other people?
What sicknesses might women get that men do not get?
And, what sicknesses might men get that women do not get?
Are there things that women do that might cause them to get sicknesses that men do not get? Like what?

Questions about sexual behavior, disease and women:

Can sexual behavior or sex make people healthier? How?
Can sexual behavior or sex cause sickness in people? in women? For example...
What diseases that you know about are transmitted through having sex?
Can you tell by looking at someone whether they have any of these diseases? How?

Questions about AIDS and STDs:

What is AIDS?
What are STDs?
Who gets these diseases?
Why do some people get these diseases, others not?
How can you tell if someone has AIDS?
How can AIDS be prevented?
If a woman gets AIDS, or STDs, what would you think about her? What would you

feel about her?
If a women gets AIDS, what would you suggest she do to help herself?
Do you think you are at risk for AIDS or STDs now? Why?
Do you think you have been at risk for AIDS or STDs in the past? Why?
Do you think you will be at risk for AIDS or STDs in the future? Why?
If a women fears a man may have AIDS or STDs, what can she do?
If she wants to sleep with him, what can she do?

Questions About Sexuality:

How would you describe a good sexual relationship between a man and a women?
In a sexual relationship between a man and a woman, who decides what contraception they will use?
Do you think men and women like sex the same—or one more than the other? Why?
What things can a girl do to let a boy know what she wants in a relationship?
If you or your friend are sleeping with a man and he insists on wearing a condom, what would you or your friend think?
If he insisted on not wearing a condom, what would you or your friend think?
How old are girls and boys in the village/ in the city when they start sleeping together?
How do you know when a girl and boy are sleeping together?
Besides things a girl can do to show a boy what she wants, what are things she cannot do?
What decisions do girls and boys make together? What decisions do girls and boys make separately if they are girlfriend and boyfriend?
If you love someone, is it natural to sleep with him?
Does marriage change a relationship between a girl and a boy? How?

Questions About Young People Today:

What things have changed your life? Changed how you think or do something?
Do you think girls and boys behave differently than their parents towards each other? How?
Do you think girls and boys today behave differently towards each other than they did in the past? How?
How did these changes come about?

Questions About What Influences Health Knowledge and Sexual Behavior:

Who in your life do you talk about sex with?
What influences people's sexual behavior?
What or who has influenced your sexual behavior?
Where did you learn about AIDS and STDs?
What could influence women's sexual behavior so that they protect themselves from AIDS and STDs?

Appendix II: Pretest Questionnaires for Comic Book and Novel

Pretest Questionnaire for *Jon Di and Poo Pi Tak*

1. Did you like this comic book? (Check one)
   ( ) very much ( ) somewhat ( ) not very much
   Other comments_____
2. What did you learn from this comic book?
3. Do you think this comic book can help women assert themselves to prevent AIDS? If so, how? If not, why not?
4. In general to women assert themselves in a relationship with a boyfriend? How?
5. In what ways did the women in the comic book assert themselves to prevent AIDS?
6. Which way seemed to you to be the most practical?
7. If you saw this book at a store or on a shelf would you buy it or pick it up to read it? Why yes? Why no?
8. Do you think you will give this book to a friend to read? Why yes? Why no?
9. How would you improve this book?

Pretest Questionnaire for *Lamyai*:

1. Did you like this novel?
   ( ) yes, very much ( ) somewhat ( ) no, not very much
   Other comments_____
2. Could what happened to Lamyai happen to a friend of yours or other women in society? Why yes? Why no?
3. Do the pictures look like people you know? Why yes? Why no?
4. Is Lamyai a good person? Why yes? Why no?
5. Is Tong Dee a good person? Why yes? Why no?
6. Why didn't Lamyai follow Buah Pat's suggestions?
7. What influences or factors made Lamyai susceptible to AIDS?
8. How could Lamyai have prevented herself from getting AIDS?
9. Can you tell by looking at someone whether that person has AIDS?
10. What did you learn from this book?
11. If you saw this book at a store or on a shelf, would you pick up this book and read it or buy it? Why yes? Why no?
12. Will you share this book with your friends? Why yes? Why no?
13. After you read this book, how did you feel?
    ( ) The same as before
    ( ) More confused
    ( ) Gained more knowledge
    ( ) More ability to prevent AIDS
    ( ) More afraid of AIDS
    Other Comments:_____
14. Did you find any parts difficult to read? What were they?
15. How would you improve this book?

Appendix III: Example of Training Schedule and Guide for Health Promoters and Peer Leaders

DAY 1 WORKSHOP: AIDS PREVENTION EDUCATION HELPER TRAINING

TOPICS: INTRODUCING THE AIDS EDUCATION PROJECT FOR WOMEN AND YOUR ROLE AS A HELPER
WHEN: JUNE 28, 1992
WHERE: FACULTY OF EDUCATION, CHIANG MAI UNIVERSITY

WHY ARE WE DOING THIS?	HOW MUCH TIME?	HOW WILL WE DO IT? (ACTIVITIES)	WITH WHAT MATERIALS?	WHO WILL HELP?	DO YOU HAVE COMMENTS?
1. To introduce ourselves	15 Min.	Helpers will tell something about themselves		Everyone	
2. To introduce the AIDS Prevention Education Program for Women	30 Min.	Mini-lecture and question	Newsprint Marker Tape	Bupa	
3. To learn about your role helper	45 Min.	Role plays and discussion	Observation and Helper Description Forms	Bupa, Kathy, Suwanee, Wattana	
BREAK	15 Min.				
4. To write your job description as a helper	30 Min.	Small group discussion	Job Description Forms	Suwanee	
5. To share ideas about problems, worries and expectations	30 Min.	Brainstorm and discussion	Newsprint and markers	Wattana	
6. To plan for Training Day 2	15 Min.	Large group discussion			

DAY 2 WORKSHOP: AIDS PREVENTION EDUCATION HELPER TRAINING

TOPICS: DEVELOPING A PARTICIPATORY AIDS EDUCATION PROGRAM FOR WOMEN
WHEN: JULY 5, 1992
WHERE: FACULTY OF EDUCATION, CHIANG MAI UNIVERSITY

WHY ARE WE DOING THIS?	HOW MUCH TIME?	HOW WILL WE DO IT? (ACTIVITIES)	WITH WHAT MATERIALS?	WHO WILL HELP?	DO YOU HAVE COMMENTS?
1. To identify communica-tion problems related to AIDS prevention for women	1 Hour	Small group discussion, Report out, Problem tree	*Lamyai*, Newsprint, markers & tape, notecards	Bupa, Suwanee, Wattana, Kathy	
BREAK	15 Min.				
2. To match problems with activities & materials	1 1/2 hours	Small group discussion, & role plays	Notecards, newsprint, markers	Bupa, Suwanee, Wattana, Kathy	
3. To demonstrate a program plan	30 Min.	Mini-lecture & questions	Program planning guide	Bupa & Kathy	
4. To evaluate Day 2 & plan for	30 Min.	Large group discussion		Bupa, Kathy, Wattana	

Appendix IV: How to be a Good AIDS Education Helper

You can be an effective AIDS education helper by practicing to do the following:

1. BY STARTING A GROUP DISCUSSION

   This means starting your group talking together about a idea or some ideas that interest them. For example, you, as the AIDS Education Helper, can start discussion by showing a picture and asking her group what they think about this picture, or by telling a story or by remembering something they read about and would like to talk about.

2. BY LISTENING AND OBSERVING WHAT PEOPLE IN YOUR GROUP ARE SAYING OR WHAT THEY ARE NOT SAYING

   This means listening and watching what people in your group are saying and doing so that you can help them participate in the group.For example, you, as the AIDS Education Helper, should listen carefully to what people in your group are saying and also observe those people in your group who may not want to participate.

3. BY HELPING PEOPLE IN YOUR GROUP SHARE THEIR IDEAS AND FEELINGS

   This means helping people in your group exchange or share how they think and how they feel. For example, you, as the AIDS Education Helper, should help shy people speak, or make sure everyone has a chance to express their ideas or feelings. You should help people listen to what others are saying and make sure that people feel comfortable expressing their ideas without fear of being made fun of.

4. BY PRAISING AND ENCOURAGING PEOPLE IN YOUR GROUP TO SPEAK AND DISCUSS THEIR IDEAS AND FEELINGS

   This means helping people by complimenting them and expressing pleasure when they participate in discussion. For example, you, as the AIDS Education Helper, should compliment people who share their ideas, or who ask questions. You should never criticize anyone in the group for expressing their ideas or feelings or for asking questions.

5. BY SUPPORT QUESTIONING PEOPLE IN YOUR GROUP

   This means helping people think about and say something about what other people in the group have said. For example, you, as the AIDS Education Helper, can ask someone in the group to say how she thinks or feels about what someone else has already said. This encourages people to share their questions, their ideas and their

6. BY SUMMARIZING THE MAIN IDEAS THAT PEOPLE IN YOUR GROUP DISCUSSED

   This means helping people think about the most important ideas that people express during the group discussion. For example, you, as the AIDS Education Helper, can help people think about what was said by summarizing the discussion and asking new questions. Sometimes many ideas are expressed and the group starts to feel lost. Then, you, as the AIDS Education Helper, can summarize what people have said and lead them to a different or new topic for discussion.

7. BY PREPARING PEOPLE IN YOUR GROUP FOR THE NEXT MEETING

   This means helping people think about what was discussed in the meeting today and to think about what they would like to discuss next time. For example, you, as the AIDS Education Helper, can summarize the most important ideas that were discussed at the current meeting. Then you can ask people in your group what they would like to discuss next time. Or, you can offer suggestions about the topic to be discussed at the next meeting.

Appendix V: Summary of Variables and Measurement Items

Variables	Measurement Items
Demographic and Personal Data	1,2,3,4,5,6,7,8
Knowledge	
General Knowledge	10,14,16,20,21,22,23,24,25,27, 40,41,42,43,57,59
Preventive Methods	28a,28b,29a,29b
HIV/AIDS Misconceptions	17 (13 different items)
Condoms and Contraception	30,34,35,36,37,38
Condom Usage	51.1 to 51.12
Attitude toward People with HIV	44,45
Health Beliefs	
Susceptibility of self	11f,11g,12a,12b,12c
Susceptibility of boyfriend	13a,33
Susceptibility of others	11b,11c,11d,13c,13d
Attitude toward protective behaviors	13b,50,53,55a
Normative Beliefs	55a,56,60c,60d,60e
Self-Efficacy, Self-Assertion	13e,31,32,48a to 48e,53,55b
Behavioral Intention	46,47,49,55

Appendix VI Pre-intervention Questionnaire

(Materials are listed in parentheses)

Time of Interview_____Date of Interview_____

Place of Interview_____

1. Age of Respondent
2. Education of Respondent
3. Where are you from?
4. How long have you lived in Chiangmai City?
5. What are your mother's occupation, your father's occupation?
6. How many sisters and brothers do you have?
7. How do you spend your earnings?
8. Who decides how you spend your earnings?
9. Have you heard or read about AIDS or STDs?
   Where have you heard or read about AIDS or STDs?
   (If the respondent has had any previous training, please note the type and place.)
10. (Story and Picture 1) This is Sripun. She is wondering about AIDS and STDs. She is trying to remember what she has heard about AIDS and STDs. What do you know about AIDS that you could tell her? What do you know about STDs?
11. Which of the following do you agree with or disagree with?
    A. AIDS is not as serious as many people think.
    B. People around my age are not likely to get AIDS.
    C. Nowadays, everyone can get AIDS.
    D. Men who go to CSWs or gay men are the most likely to get AIDS.
    E. Whether I get AIDS or not depends on my karma.
    F. People, like me, are not the type to get AIDS.
    G. Even if I don't protect myself, there is practically no chance I can get AIDS.
12. Have you ever been at risk for AIDS in the past? Why?
    Or, why not? Are you at risk for AIDS right now? Why?
    Or, why not? Do you think you will be at risk for AIDS in the future? Why or why not?
13. Which of the following do you agree with or disagree with?
    A. My boyfriend is or will be a good person, therefore he could not have AIDS.
    B. Condoms are not women's business.
    C. Women in general (not CSWs) will not get AIDS.
    D. Women who are very careful about who they choose for a boyfriend will not get AIDS.

E. Women in general (not CSWs) are not as able to prevent themselves from getting AIDS as men are.
F. I trust my ability to be able to tell if a possible boyfriend has AIDS or STDs.

14. What does AIDS do to someone's body? (How does it change someone's body? or What does it do once it gets inside someone's body?)

15. (Picture 2) Can you tell by looking at someone whether that person has AIDS? If yes, of these people, which one(s) might have AIDS? How do you know?

16. How do people get AIDS?

17. (Cards and Categories) Can you put the following picture cards under the appropriate headings: High Risk, Low Risk and Unsure of whether these things or behaviors can transmit AIDS.

Cards with Pictures:

mosquito	eating together	shaking hands
hypodermic needle	telephone	kissing
sewing machine	toilet	comb/brush
toothbrush	shaving	sex
sharing clothes		

18. (Picture 2) Of these people, who can get AIDS? Why?
Of these people, who is the most likely to get AIDS? Why?

19. (Picture 3) In what places are people likely to get AIDS? Why?

20. If a man has AIDS and a woman does not or if a woman has AIDS and the man does not, who is more likely to get AIDS, a man or a woman? Why?

21. Once the disease AIDS gets into someone's body, how long does it take before that person gets sick?

22. What are symptoms for AIDS?

23. Are the symptoms for AIDS different for men and women? How?

24. Once AIDS gets into someone's body, how long does it take before that person can give AIDS to someone else?

25. Can AIDS be cured?
If yes, how? and/or how many percent can be cured?
If no, how long can a person live with AIDS before he/she dies?

26. (Picture 4) Of these, what body fluids transmit disease?

27. (Picture 4) Of these, what body fluids transmit AIDS?

28. How can women prevent AIDS? And how about men?

29. How can men prevent STDs? And how about women?

30. Describe different kinds of contraception you know about.

31. Who should decide what kind of contraception to use? Or, who should control the

contraception a couple uses? And, why?

32. Who in a sexual relationship should try to prevent the spread of AIDS and other STDs? How?

33. (Story and Picture 5) A girl, Lamduan, believes that her boyfriend is a very good person. She has also heard from other people that he is a kind, honest person. Is there any reason for Lamduan to believe that her boyfriend could have AIDS or another STD?

34. Have you heard of a condom? If yes, what is a condom used for?

35. How does the condom do this? (If the respondent answered prevent pregnancy, ask how does the condom prevent pregnancy, or if the respondent answered prevent AIDS or prevent disease, again ask how does the condom prevent disease?)

36. Where would you buy a condom?

37. How much does a condom cost?

38. How often can you or any person use one condom?

39. Have you heard or read about the female condom?
    If yes, what do you know about the female condom?

40. If you wanted to find out if you had AIDS, what would you do?

41. Where would you go to find out if you had AIDS?

42. Name three things you would tell a friend who tested positive for AIDS.

43. How would you help a friend who had or thought she had a sexually transmitted disease?

44. (Picture 6) A girl, Buah Kam, in the textile factory where you work has AIDS. She left work once because she started becoming sick or developing symptoms for AIDS. She is feeling better now and wants to keep working at the factory.
    Please choose the statements below that you agree with.
    a. She should be fired because her illness (AIDS) will upset the other workers.
    b. She should be able to work but she should be separated from the other workers.
    c. She should be able to continue with the other workers as normal.
    d. She should be fired because the other workers might get AIDS from her.
    e. She should be able to work but the manager should provide her with a separate toilet and separate lunch facilities.
    f. Are there any other statements you would like to add?

45. (Picture 7) A girl in the textile factory where you work has AIDS. While you are eating lunch, she walks up to your table. She has some Tom Yam that she wants to share with you.
    What would you do? Please choose the statements below that you agree with.
    a. I'd say that I have an appointment with my friends and that I have to leave.
    b. I would share her Tom Yam like normal.

c. I would say, "Thank you. Maybe next time."
d. I would take one taste and feel very uncomfortable.
e. I would refuse to taste it.
f. Are there other statements you would like to add?

46. You have been going around with one boy for about one month. You think that maybe tonight you will sleep together for the first time because the relationship has become quite serious. What would you do? Choose one.
    a. You will go out and buy condoms yourself in case he is not prepared.
    b. You will not go out and buy condoms because if someone saw you buying them, he/she would think badly of you.
    c. You will trust that this boy will have condoms.
    d. You will not go out and buy condoms because you don't know where or how to buy them.
    e. You will ask a friend to buy condoms for you.
    f. What else do you think you might do?

47. Suppose you are sleeping with your boyfriend. You are worried about sexually transmitted diseases. Please choose the statements below that you agree with.
    a. I would not talk to him about AIDS, STDs and condoms because he might think I've had too much sexual experience.
    b. I would not talk to him about AIDS, STDs or condoms because I trust him and I love him.
    c. There is nothing I can do.
    d. I would talk to him about AIDS, STDs and condoms and I would ask him to wear a condom.
    e. I would talk to him about AIDS, STDs and condoms, but I would let him decide what he wants to do without my interference.
    f. Are there other statements you would like to add?

48. How do you feel about the following: (Circle one for each question)
    a. Talking with your boyfriend about AIDS and other STDs?

Comfortable	Not Sure	Uncomfortable
Not Embarrassed	Not Sure	Embarrassed

    b. Buying condoms yourself?

Comfortable	Not Sure	Uncomfortable
Not Embarrassed	Not Sure	Embarrassed

    c. Asking your partner to wear a condom?

Comfortable	Not Sure	Uncomfortable
Not Embarrassed	Not Sure	Embarrassed

    d. Giving your partner a condom to wear?

Comfortable	Not Sure	Uncomfortable
Not Embarrassed	Not Sure	Embarrassed

49. Suppose your boyfriend refuses to wear a condom, but you want him to wear one.

What would you do? Choose one.

a. I would give up and accept that he won't wear one.
b. I would say, "Let's not sleep together for awhile."
c. I would sleep with him anyway and continue to try to change his mind.
d. I would check his body to make sure he does not have AIDS and them sleep with him.
e. I would ask him to wash his body before sleeping with him.
f. Are there are other things you can think of doing?

50. With whom should condoms be used? Why?
    a. Having sex with CSWs.
    b. Having sex with gays.
    c. Having sex with girlfriend or boyfriend.
    d. Both a and b.
    e. All of the above.
    f. None of the above.

51. Ask the respondent to demonstrate how to use a condom.
    (If the respondent shows any knowledge of condom use or is willing to try, use the check list.)

52. Have you heard of or do you believe there are any problems with condoms that would prevent you from using them?

53. Who should start talking about AIDS and other STDs when boys and girls are lovers? Select one.
    a. Boys
    b. Girls
    c. Both girls and boys.
    d. No one should talk about these things.
    e. No one should talk about these things until after marriage.
    f. None of the above. Why?

54. (Story and Picture 8) Sripun is worried that she is getting old and that no one will want to marry her. She has met a man, Maduah, who wants to sleep with her. She doesn't know him very well. She is worried about AIDS and STDs. But she is also worried that if she doesn't sleep with him, he will lose interest in her. What should Sripun do? What would you do?

55. (Story and Picture 9) Buah Pat wants to buy a condom, but she is worried what other people might say if they see her buy a condom, or if they hear that she bought a condom. Should she be worried about this? What can she do to overcome people's negative gossip? What would you think about Buah Pat if you saw her with a condom in her purse? If you were Buah Pat, would you buy a condom? Why yes? Why no?

56. (Story and Picture 10) Buah Pat and Boonsong are in love. They have slept together. Buah Pat would like to talk about condoms, but she is afraid what Boonsong will say or what he might think about her. Should she be worried? Why,

yes? or Why, no?

57. (Story and Picture 11) These girls work at a textile factory. They have learned about AIDS and other STDs. How can they help other women to prevent AIDS or other STDs? List three ways.

58. Who have you talked to about AIDS? about other STDs?

59. In the future if you have questions about AIDS or other STDs, where can you go to find out information? Be specific.

60. With which of the following do you agree or disagree?
    a. AIDS can be cured if treated early.
    b. An experienced person like a doctor or nurse can look at someone and tell whether that person is infected with AIDS.
    c. I would worry that having a condom with me would make my boyfriend think that I expected to have sex.
    d. I would be afraid that my boyfriend would think I had a disease if I told him to wear a condom.
    e. I would worry that if I asked my boyfriend to wear a condom, he will think that I don't trust him.

At this point the interviewer should put down the questionnaire and ask the following questions informally.

61. Do you have a boyfriend? How old were you for your first boyfriend? If no, have you ever had a boyfriend? When or how old were you? (If no, go directly to Question 66)

62. Do you sleep with him? Or, did you sleep with your former boyfriend?

63. Do you or have you ever used condoms? Why yes? Or, why no?

64. Do or did you ever talk to your boyfriend about AIDS? About other STDs?

65. If yes, what did he say to you? about AIDS? about STDs?
    What did you say to him? about AIDS? about STDs?

66. Even if you do not have a boyfriend now, but in the future if you have a boyfriend, do you think you will be able to talk with him about AIDS, other STDs and condoms? Why yes? Or, why no?

Appendix VII: Results from Evaluations Conducted With Peer Leaders, Program Participants, and Health Promoters

Interview with four peer leaders:

INTERVIEWER: How does it feel being a peer leader?

RESPONDENT: "Being a peer leader is an attractive position. I feel important. For example, if people in the factory want to ask about AIDS, they ask me. Look at me! I'm an important person, a leader!"

INTERVIEWER: What was the most useful thing about being a peer leader?

RESPONDENTS: "We were encouraged to speak up."
"People think we are important."

INTERVIEWER: What was the most difficult thing about being a peer leader?

RESPONDENTS: "At first we did not feel comfortable."
"I felt uneasy."
"Two months and now I feel wonderful. We feel we have good relationships after the program. It was fun too."
"Some people say I am the manager for destroying AIDS."

INTERVIEWER: What made you feel better?

RESPONDENTS: "Because of the cooperation in the group."
"The games, books, pictures helped us in speaking."

INTERVIEWER: If you were going to talk to the people in the Ministry of Health in Bangkok, what would you say to them about AIDS prevention for teenagers?

RESPONDENTS: "Talk to them before they get AIDS."
"If you don't work with them or stay with them, it's hard to speak to them."

INTERVIEWER: Do you think you could give this education to boys?

RESPONDENTS: "Yes, but it's difficult to talk with boys."
"If they talk badly to us, we are scared."

INTERVIEWER: For boys, how will they change?

RESPONDENTS: "Change the leaders of men."
"Men know they can talk to each other."
"If we talk to them, they will say, 'Did you used to do that? Do you want to try?'"
"Maybe we could make a skit to show them?"

RESPONDENTS: "Yes."
"Before the program, I thought so what. But now I am worried for women."

INTERVIEWER: For the first time, can you talk about condoms or give a condom to your boyfriend or husband?

RESPONDENTS: "Not the first time."
"I'm shy."
"But after that, we can."

INTERVIEWER: What do the young women in your group understand now?

RESPONDENTS: "How to prevent themselves."

INTERVIEWER: You mentioned problems of them coming late. How did you solve this problem?

RESPONDENTS: "Wait till they came. By eating the snack and waiting."
"Mine is on time."
"Mine is late."

INTERVIEWER: Did the role play activities cause problems?

RESPONDENTS: "At first yes."
"Because of shyness."
"But after we got used to each other, we could do it."

INTERVIEWER: When we first started the program, were people talking about AIDS in this factory outside of the peer program?

RESPONDENTS: "When you first came here to start the program, workers talked about it all day."
"Now, only sometimes."

INTERVIEWER: Besides talking in the factory, where else could you talk?

RESPONDENTS: "At home."
"Oh, it's very useful. We can make copies."
"We can teach our friends at home."

Interview with six program participants at the Peer Leader Group factory:

INTERVIEWER: What activities did you like in the education program?

RESPONDENT: "I liked the role play. We acted out Lamyai and Tong Dee. And one day we acted out a rich man trying to pick up a female singer and how she asked him to wear a condom."

INTERVIEWER: Which materials did you like?

RESPONDENTS: "I especially liked the comic book. It was so funny. Especially the part at the end with the cut off condom head."

"I liked *Lamyai*. Before I read this I thought men were faithful to women, but now I don't."
"I felt shy reading the Manual. The pictures with the sex organs too. Reading it with friends didn't matter so much."
"If I had been in another place, I'd have to choose a secret place to read it."

INTERVIEWER: Did all your friends join these activities?

RESPONDENTS: "The girls who stay in dorms outside the factory didn't join."
"They were afraid of missing their boyfriends more than AIDS."

INTERVIEWER: What did you say when they refused to join?

RESPONDENTS: "We asked them to join."
"It was easier to get cooperation from girls who live inside the factory."
"We couldn't force them."

INTERVIEWER: Has this program influenced your life in any way?

RESPONDENTS: "I would like to copy these materials and show them at the village health center."
"In the factory there has never been activities like this."
"If I had a boyfriend, I would have trusted him before, but now I would ask him to wear a condom."
"Before this education, I would not have thought about asking my boyfriend to wear a condom. After this training, I feel more confident that I can protect myself."

Interview with four participants from the Peer Leader Group:

INTERVIEWER: Did you enjoy the activities?

RESPONDENTS: "I enjoyed the activities."
"I never missed any of them even though I had to hurry back from my village on Sunday to join."
"Sometimes we had discussions, but we didn't know the answer so we asked Pe Wan (one of the researchers)."

INTERVIEWER: Which materials did you like? Did you read them?

RESPONDENTS: "I liked all the books."
"I especially liked *Lamyai*. The scenes were like real life in the factory."
"In our group we all wanted to know more about AIDS. There was one girl who always answered wrong when we had a discussion. So we asked her, 'Do you pretend to not know the answers or should we all reread these books?' We all laughed, but her pretending helped us to understand and explain things. And if we were not

sure, we'd check the books."

INTERVIEWER: Do you think you could educate other people about AIDS now?

RESPONDENTS: "If I was asked to be a leader in another factory, I think I could do it."
"There is a doctor at the health center who tries to give knowledge about AIDS to villagers. But there are only children and old people in the audience. No young men and young women. Maybe they are afraid they are at risk."
"In the village there are no books like these--only leaflets. Maybe if the people had books like these, they might be interested."

At this point in the interview, the respondents said they planned to take these materials to their village and teach their family and relatives. According to one respondent: "I think I have the confidence to do this now."

INTERVIEWER: Do you think this program has changed you in anyway?

RESPONDENTS: "Before I attended this seminar, I had little knowledge of AIDS. I was more afraid too. If my boyfriend wanted to have sex, I don't think I could have spoken with confidence. Now I would dare to talk and to ask anything."
"Now I dare to talk to my boyfriend and if he does not know how to protect himself, he is out-of-date."
"Talking about this will be an ordinary matter because everyone knows now that wearing condoms to prevent AIDS."

Interview with participants in the Health Promoter Group (dormitory outside the factory):

INTERVIEWER: Can you tell me something about the activities you liked?

RESPONDENTS: "In the beginning we wanted to come to the activities. But then many of us stopped coming."
"Some came because they wanted the snack."
"The leaders started coming late so we didn't wait for them."
"The leaders always made an appointment by considering their free time, not ours."
"The leaders made an appointment for the activity in the morning. That's the same time most of us go out."
"When the time came, we avoided the training."
"The leader became angry with us."
"Sometimes the leaders disagreed with each other."
"We especially liked the condom demonstration."
"The leaders showed some terrible pictures of people with AIDS

that we have hanging on the walls."

INTERVIEWER: Which materials did you like? Did you read them?

RESPONDENTS: "We liked the comic book. It was easy to read."
"I am interested in AIDS because I want to teach my friends and family and people in our village about AIDS. I want to take these books for them to see." (This young woman attended all the training sessions)

The health promoters had told the researchers that the girls in this factory would not answer the questions. They remained silent. But researchers found that when they came to interview these young women, they talked incessantly about the program. Many of them were highly critical of the health promoters because the health promoters had insulted them out of frustration.

Interview with participants in the Health Promoter Group (dormitory inside the factory):

INTERVIEWER: How did you like the activities?

RESPONDENTS: "We liked the activities and the snacks."
"The leader asked us questions and we answered them."
"I liked the role play. We acted out Lamyai and Tong Dee flirting together."
"It was fun putting condoms on a male organ."
"That was good 'cause it showed us how to wear it."

The respondents said they came to most of the activities on time and told the leaders when they couldn't come.

INTERVIEWER: Which materials did you like?

RESPONDENTS: "We liked *Lamyai* and the comic book. We also liked the manuals thought at first we were shy to look at them."
"Later we could talk about these things because everyone had seen the same thing."
"We liked *Lamyai* because it was like real life."
"We talked about the characters that they should have said this or that."

INTERVIEWER: Did most of the girls join the activities?

RESPONDENTS: "Some girls came unwillingly but they came because their friends did."
"Some never came though they were asked to. Instead they went out of the factory whenever they had a chance."

INTERVIEWER: Why did you come to the activities?

RESPONDENTS: "The leaders were so friendly."

"It was not difficult to participate and we got snacks."
"They asked us questions and if we couldn't answer, we could ask our friends."
"The activities in the beginning were better and that made us more interested in reading the material."

INTERVIEWER: How do you think you can use the knowledge you gained here in the future?

RESPONDENTS: We can teach people around our house, our family, friends and relatives."
"If we have boyfriends and they want to have sex with us, we think we can talk about condoms now."
"We can talk about AIDS now."
"If our boyfriend had some sexual experiences before marriage, we will ask him to get his blood checked before marriage."
"A doctor who came to this factory said that we should carry condoms in our pocket in case we had sex with a boyfriend we would be prepared."

What did you like about the training?

Health Promoters:

"This kind of training increases our confidence."
"We are learning the feelings of others in order to understand them."
"The procedures for the training is good."
"Using pictures helps us to talk about these topics and gives everyone the chance to express their opinion."

Peer Leaders:

"We feel less shy each time."
"Role play helps us to get more knowledge and understand the feelings of others."
"We've learned about AIDS and how to protect ourselves."
"It makes us brave to perform and express our opinions."
"The teachers are so kind to give us good advice and explanation when we don't understand something."
"I love the food."
"This training is so much fun. I feel brave to talk to my boyfriend about AIDS and to talk with friends."
"We had chance to practice many skills and learn the seriousness of AIDS and how to prevent it."

What would you like to see improved and/or what more would you like to learn from training?

Health Promoters:

"There should be more pictures, posters and pamphlets."

"After being selected for role play, the participants should have more time to practice before performing."

"Role play is too difficult to perform."

"We would like to know more details about the factory workers."

"If the group members have no ideas about a topic, how should the leader lead the discussion without stumbling?"

"Manual II should be read in a private place."

"Some problems are not discussed clearly in the group."

Peer Leaders:

Most of the questions or comments had to do with sex and reproductive health education. For example, "Is it dangerous for women to have white menstruation?" "We wonder why men's sex organ is still in good condition even though it is used frequently where women's become loose after 1-2 times?" "Can women who swallow men's semen get AIDS?" "Why do women menstruate and men don't?" "Can a piece of sanitary napkin get stuck in a woman's vagina and cut off her vaginal membrane?" "How is it that a woman can become pregnant after having sex with a man only one time?" "Why do people discriminate against lesbians?" "How is it that women who have never had a child control birth?"

Many questions like these promoted the researchers to write a sex education and reproductive health education storyboard to include in the education programs.

ABOUT THE WOMEN AND AIDS RESEARCH PROGRAM

The Women and AIDS Research Program was initiated in August 1990 with support from the Offices of Health and Women in Development of the U.S. Agency for International Development. The objective of the program was to support research in developing countries to identify the behavioral, sociocultural, and economic factors that influence women's vulnerability to HIV infection. The program also sought to identify opportunities for intervention to reduce women's risk of HIV infection.

The first phase of the program supported 17 research projects worldwide: seven in Africa, five in Asia, and five in Latin America and the Caribbean. The studies focused on women and men in rural and urban communities, school-based and nonschool-based adolescents, and traditional women's associations. The focus of the second phase of the program, which began in August of 1993, is to support eight of the original seventeen projects in the design, implementation, and evaluation of interventions developed from the research findings of the first phase of the program. The second phase of the program is expected to be completed by February of 1996.

Publications from the Women and AIDS Research Program

ICRW Policy Series

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Research Report Series

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