

Application of Social Science Theories To Family Planning Health Education In the People's Republic of China

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Abstract: The transformation of the Chinese society was political and economic by revolution; it was also social and cultural through mass education. Group decisions have been used to induce social change in the Chinese society and applied extensively to the family planning program. The methods which Kurt Lewin developed to change food habits, have been perfected on a grand scale and in myriad ways by the Chinese.

Health education in China has the advantage of having the whole-hearted support of the community and its organizations once the decision of priority is made. It involves not only the message and the media

to communicate with the public, but also the social institutions, the values of society and community resources. The health education model developed by Green proved most useful in the analysis of factors contributing to the program success.

China's experience suggests that there is an element of universality in the social and psychological forces which enhance or impede change and in the educational components which facilitate the planning and development of a program to influence health behavior, irrespective of the social context in which education takes place. (*Am. J. Public Health* 66:440-445, 1976)

Introduction

Kurt Lewin once said that "there is nothing so practical as a good theory." Inherent in such a statement is the assumption that a good theory should hold good under the broadest range of circumstances. Theory building has become a legitimate pursuit in social science research since Lewin's time, much as it is in the hard sciences. Research, especially in social sciences, is an intellectual endeavor supported by societies with surplus economies. It is no surprise that social science research has been dominated by Western thought and prospered in Western industrial societies.

Within the last few years we have learned about the remarkable achievement of China's health care as we rediscovered China after 25 years of blockade. Previous accounts have described China's early effort in birth control,¹ the family planning services,² motivation for family planning,³ and the translation of a birth control manual.⁴

In this paper we shall apply social science theories to

the analysis of family planning health education in this enigmatic country. We shall apply the Chinese program's conceptual and educational components to a health education model,⁵ then discuss family planning as a health education effort to change health and reproductive behavior in light of Lewin's theory of group decision and social change.^{6,7}

Background

According to Malcolm Pott, China's family planning model is the most rational and extensive experiment in any country in which community support is given to the whole spectrum of birth control activities.⁸ It has developed a system of service where grassroot workers are capable of motivational work, community resources are mobilized and coordinated to support family planning services, and where social norms are created to exert social pressure and to give social support for small families.

The Marxist perception pictures the world's problems as caused by man's exploitation of man rather than by an imbalance of man and material resources. The Chinese leaders believe that if social ills and exploitation are removed, education and technology can solve the world's problems. Propaganda for family planning argues that birth control is necessary for reasons of maternal and child health and to free women to participate more actively in the development of national resources for socialist construction.

Delayed marriage and spaced birth are part of the Chinese strategy for population limitation within the larger scheme of planned development of the national economy to

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The observations recorded in this paper are based on the limited experience of a five-week visit to the People's Republic of China in the summer of 1973, during which the author studied the health care system and assisted in the production of a documentary film, "Barefoot Doctors in Rural China." (For information about the film, write to Diane Li Productions, P.O. Box 2110, Stanford, CA 94305.)

improve the peoples' health. This change in earlier values from early marriage and many births was promoted and sanctioned by a society which is allied with the revolution and class struggle.

Family planning is intimately tied to political ideology and state policy. Birth control is not only an individual matter, but a state affair. The behavior expected of its citizens is aptly stated by Chin as follows:⁹

"In China health behavior is more accurately described as health conduct. The older connotation in English of the word "conduct" meaning moral behavior, is appropriate because health acts are "political". For China and the "New Man" no act is devoid of political factors, which define the purposes and duration of the society. The health conduct is moral-political conduct laced together by the cognition, ideologies, actions and spirit of the socialist state and of the socialist citizen."

Ideally, two children is the desired family size and birth spacing is five years. Birth control is a voluntary action and acceptance is to be brought about by education and persuasion. Consistent with other phases of social development, the Chinese rely on health education and mass mobilization to promote birth control. Although physicians and hospitals are responsible for the technical aspects of family planning, grassroot workers and community organizations assume the responsibilities for program promotion and implementation. One of the most intriguing social phenomenon in the post-revolutionary China, the People's Republic, is the extensive application of group discussion-decision processes to changing human behavior.

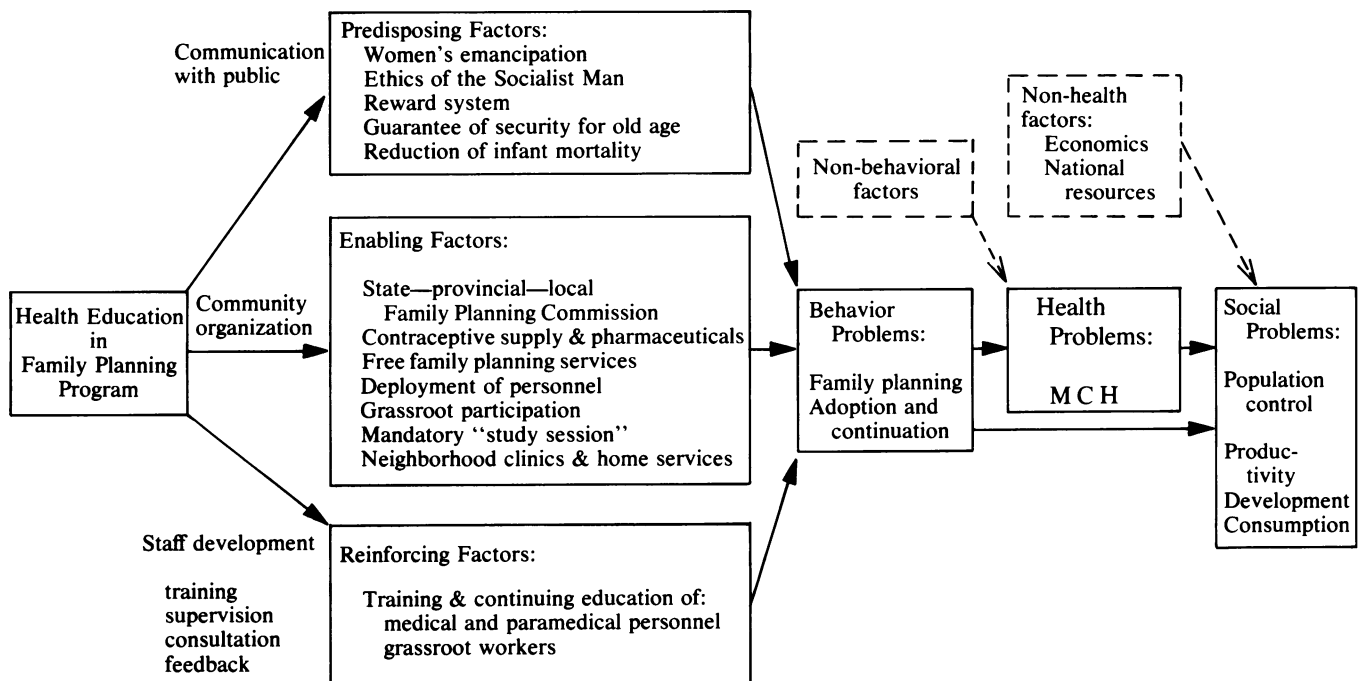
Health Education Program Development

Health education program development is more complex than designing the message and media for a particular audience. Educational components must be combined with organizational, administrative, fiscal, logistical, and manpower considerations. In discussing the conceptual and technical problems of evaluation relevant to health education, Green suggested that health educators must first analyze the social problem which is influenced by one or more health problems and the behavioral problems bearing on the health problems.¹⁰ Each behavior identified as having an effect on the health problem has a set of contributing factors that influence the behavior. These are classified as enabling factors, (availability of resources, accessibility, and referrals); predisposing factors (knowledge, attitudes, values, perceptions, and norms); and reinforcing factors (attitudes and behavior of health personnel in the organization and administration of a program).

Green then delineates three components of an educational program to induce change: communication, community organization, and staff development. Communication is directed primarily at influencing the predisposing factors, community organization at the enabling factors, and staff development at influencing the reinforcing factors. A thorough analysis of the social and health problems and the factors influencing behavior is essential to the planning of a health education program and in its evaluation.

Taking the China experience as a point of departure, the health education model developed by Green has been adapted to Figure 1.

FIGURE 1—A Health Education Model* of the Chinese Family Planning Program



*Adapted from L. W. Green.⁵

China's huge population base, rapidly expanding at 10 to 15 millions annually, is a social problem of major proportion. Although China's rationale for family planning differs from that of the western societies. It recognizes that unless population growth is brought under control, social and economic development for the country would be greatly hampered. In developing the family planning strategy, pilot projects or demonstration programs were initiated in various strategic locales. Family planning adoption was sought first among the cadres, health workers, and state employees, who would then serve as role models to the populace. These model projects were to be emulated by other communities.

In the transformation of the Chinese society, much depended upon changing customs, values, attitudes, beliefs, and social norms which were deeply rooted in tradition and culture. The Chinese leaders were convinced that the task could be successful only if a new consciousness were created through mass education. Education was to go hand-in-hand with legislation, industrialization, modernization, and social welfare in the process of social change.

Predisposing Factors

The emancipation of women through the Marriage Law paved the way to equal employment and equal pay for both sexes. The Marriage Law of 1950 sanctioned a marriage contract only after the man had reached the age of 20, and the woman 18—age limits considerably higher than those of century-old customs with marriages contracted by parents for their children in early or mid-teens. The law also abolished arbitrary and compulsory marriage arrangements, guaranteed equal property rights for women, and awarded them custody of children after divorce. In subsequent years, the legal age for marriage was raised to 20 for women and 23 for men, then to 24 or 25 for women and 28 for men.

In addition to the Marriage Laws, day care centers were organized in neighborhoods and places of employment, subsidized by the production units, and working mothers were given time off during work hours to breast feed their babies. A national ethic in which the collective good of society is above the individual was created and promoted through propaganda as well as the reward system. Youths who aspire to enter universities or professional school must be single and remain single during the course of study, in order to give their concentrated efforts to study and for "socialist construction of the fatherland." "Serve the people" became the motto and a way of life. Social esteem is to be regarded by the community as being progressive, proven by actions which have high social values, such as family planning adoption or participation in the patriotic health movement. In a society where there is little material incentive and the emphasis is on egalitarianism, to be hailed as a model by one's community is a reward which nourishes the spirit and fulfills many of the social and psychological needs met by conspicuous consumption in more materialistic societies.

Another predisposing factor is the drastic reduction in infant mortality.¹¹ With the provision of services for prenatal and postnatal care, better environmental sanitation, and im-

proved nutrition, the threat of infant and childhood death is greatly minimized. For generations past, a large number of children was not only an economic asset, since it meant more hands on the farm, it also assured having a son to bear the family name. Today, men and women are deemed equally valuable to society. As a matter of fact, a child may choose to be named after either parent.

Communication with the public is designed to inform people of these varied reasons for family planning and influence their attitudes accordingly. In addition to the mass media, China employs propaganda teams and the cultural arts to disseminate information and solicit popular support. Actors spread the message in plays and songs which include how to obtain the services. This method of educating the public is especially effective with semi-literate or illiterate populations. In the days when Mao's army was fighting a guerilla war in the countryside, cultural entertainment was the primary mechanism for spreading party teaching to the peasants. Education through propaganda is usually uni-directional having the advantage of political and ideological support.

Enabling Factors

The enabling factors include the specific resources available and accessible to the target population which, when mobilized, would make possible the acceptance of a behavior. At the national level, the Family Planning Commission is under the State Council, the highest decision-making unit of the Communist Party. The Family Planning Commission has representation from the Ministries of Health, Propaganda, Culture and Commerce, All China's Women's Federation, the Young Communist League, the Chinese Medical Society, and many others. This Commission sets basic policies for birth limitation and supports the Ministry of Health in its planning and implementation. The Family Planning Commission has its counterparts at the provincial, county, district, and street levels, extending all the way down to the resident groups. They function as coordinating bodies in involving community organizations and local residents in birth control education and the promotion of family planning behaviors. Undoubtedly, much of China's success in health work, including the eradication of venereal diseases and the elimination of pests, lies in its ability to mobilize grassroot organizations and public participation.

Having imported contraceptive technology from Japan, China developed a large manufacturing and distribution system of its own. The Chinese deployed and trained nearly one million "barefoot doctors" and midwives for preventive services, including health education and family planning. These grassroot workers play a pivotal role both in the dissemination of family planning information and in delivering the services. They are accepted by the professionals who trained them, and they are accepted by the community which selected them for training. Their proximity to the people of the community enhances the likelihood of their messages being accepted, as pointed out in a peasant society by Rogers and Shoemaker.¹²

Sanctioned by medical authority, the barefoot doctors are allowed to prescribe "the pill," and midwives can insert the intrauterine device while in the home. Tubal ligation, abortion, and vasectomy are performed in hospitals without cost to the patients. Local organizations and production units are mobilized to educate the people on the advantages and desirability of having a small family. The pill can be picked up at the place of employment or delivered to the home by a barefoot doctor. Free transportation is provided for those who must travel some distance to a county or district hospital for surgical intervention. In their advocacy, the barefoot doctor and the midwife accompany their clients in need of specialized services to the clinics. Such action provides psychological support to the patient.

As material incentive for family planning, acceptors are entitled to paid vacation (IUD, 3 days; vasectomy, 1 week; abortion, 2 weeks; tubal ligation, 3 weeks). The production teams and community agencies bear these costs as their contribution to the family planning program.

Community organization as a method of mobilizing and coordinating people and resources and agency efforts is a basic approach in all Chinese developmental work be it delivering family planning services, constructing a dam, or organizing a cooperative. The mass campaign against venereal disease, whose success was vividly described by Horn,¹³ was a dramatic demonstration of community organization.

Reinforcing Factors

Continuing education is crucial to manpower development both in terms of medical knowledge and ideology. The Chinese put a great deal of emphasis on the feelings and attitudes of health workers, being convinced that unless one feels for those one serves and has the "correct" attitude toward serving the people, the health worker can be neither a good public servant nor sensitive to community needs. Part of the continuing education is clinical; but part is ideological and places the health workers, including professionals, to work side by side with the clients they serve. Health workers form mobile health teams to go into the countryside and factories to treat disease, train the barefoot doctors, and participate in productive labor along with the peasants. Their interaction with the consumers of services helps improve the accuracy and comprehensiveness of the information base for strategic planning and operational control of health service delivery and resolve differences in perception and values.

The barefoot doctors are trained on a part-time, short-term and continuing basis. This policy evolved out of necessity because of limited resources, as well as because it does not require eight years of medical education to teach hygienic habits, conduct clean-up campaigns, organize discussion groups, and render first aid. The goal is to give each barefoot doctor two years of accrued training and to enable them to participate in some rudimentary curative care. The training may stretch over many years, depending on local needs and local conditions. It is conducted in the community, supervised by public health departments and hospitals, and has been described elsewhere.¹⁴

Staff development is also extended to non-health work-

ers and volunteers such as cadres, party members, local leaders, and volunteers since China's health work is shared by professionals and the lay community.

Close coordination and cooperation between the professional medical community and the non-health sector is an outstanding feature of China's health education program development, as it is in the delivery of health care services. China's family planning program illustrates the interplay of educational components with the three sets of factors in influencing behavior, and demonstrates that educational inputs expected to influence behavior must be supported by other educational inputs directed at factors related to that behavior.

Group Discussion in the Mass Line

The transformation of the Chinese society was political, economic, and cultural. The process which hastened this transformation was education of the masses (e.g., the lower and middle class peasants and workers) to assume a new role in their conduct as the "socialist man" who holds the collective good of society as primary. Ideologically, the Chinese believe that anything denying the abilities or obstructing the participation of the masses negates the best of planning and action. Hence, the "mass line" figures prominently in the decision making process whether it is establishing a cooperative medical care program or digging ditches for farm irrigation. "Mass line" means releasing the energy and creative talents of the people by channeling their cognitive structure and perceptual field into a new consciousness in which they accept their destiny as the "socialist man". It also means organizing the masses to assume community responsibilities and communal tasks in a self-reliant way in which "red and expert" are united—"red" meaning the political ideology of the socialist man; "expert" meaning the technical knowledge and special competence acquired and released into the mass domain.

The approach to education and reeducation is the group discussion, known as the "study session". These sessions involve studying Mao's thoughts and ideologies in relation to a specific event, program, or act—such as family planning. While tilling the soil and building machinery are important activities in the building of a new society and economic production, the Chinese spend four to ten mandatory hours in study sessions each week depending on the political climate of the day. Obviously, the Chinese leaders found this investment of trillions of man-hours worthwhile. The utility of the study sessions is that they are instrumental in changing the psychological forces leading to change in behavior. These study sessions, once mandatory, are now internalized as a way of life.

The education process involves communication with those whose behavior is to be changed, motivation by responding to their needs and concerns, and decision of the activated masses to take part in the action. In educating the masses "correct information" is first disseminated through the responsible organizations and local leadership. The problem is then evaluated in group settings. Consensus and commitment to action usually follows. The Chinese seem to

make a distinction between those problems which require individual action in order to bring about a change from those which must involve group action in order to be successful. Both may be influenced through group discussion methods. Family planning, for example, is an individual decision which is encouraged through group discussion. On the other hand, the allocation of welfare funds for cooperative medical care or the digging of irrigation ditches are matters for group action. In either case, there is no resort to authoritarian regulation and fear arousal, since these modalities are seen as tending to affect self reliance negatively and to inhibit initiative and creativity.

Education for family planning invariably aims at informing the people of the relationship between health and economic productivity, the importance of late marriage in the development of the intellect for socialist construction, and one's own physical maturation. The married are made aware of the different contraceptive methods available for both men and women and the point of contact to obtain the services. Through the system of reward, spiritually and otherwise, attitudes for delaying marriage and desiring small families are instilled. Such attitudes are linked to what is considered as socially desirable and acceptable, such as the number of children born and reared and how one relates to one's community as a responsible citizen in the ethic of placing the good of the community above one's own self interest. The act of adopting contraceptive methods is often hailed as a confirmation in being a good citizen concerned with the transformation of society.

Study sessions in family planning usually take place under the leadership of the barefoot doctor, the midwife, or a community leader. They generally include information giving, followed by discussion-decision. The discussion leader reads from a booklet the rationale and desirability of birth control. Each of the items is discussed in turn, usually referring to concrete local examples. Somewhere along in the discussion, someone raises objections. The group then discusses these objections and points out to the objector the error in his thinking. Usually the group position is accepted by the objector. Someone else may point out that children are necessary to support parents in their old age; others in the group then explain how the new society provides assistance for old age through the guarantees for food, shelter, clothing, medical care, and burial and that fewer children are better for maternal health as well as the child's welfare. The group discusses the various methods used in birth control. Again, each method is discussed and the various objections raised. Thus, someone might be concerned about taking medicine which affects body humour or inserting a piece of plastic or metal into the body, or having the tubes tied. Others point out that there are no side effects; perhaps, some members of the group who have already accepted these methods come forward to give testimonials that they are healthy and actually feel better without the fear and the burden of frequent pregnancy; that this new freedom has enabled them to become economically productive, and resulted in better care and better education for their children.

Throughout the process, the use of positive incentives, such as praise, is employed. For example, a person voicing

objections is praised for caring enough to think about the potential problems; those arguing against the objections are praised for their level of understanding; and the objector, who acknowledges his errors is praised for his capacity to learn. Sometime during this process a woman may say that she wishes to use a particular contraceptive method, and she is praised for her progressive thinking. This approach has a two-fold effect. First, with all of this public praise and reinforcement, it becomes quite difficult for the woman to change her mind later or to "forget" to take the pill. Second, if practicing birth control is progressive, then the implication is that those who fail to practice it are less progressive or even reactionary.

During the course of discussion, the participants are drawn into the process of thinking about family planning and their own stand with respect to what is being urged by the discussion leader. The voluntary commitment in making a public announcement of one's intention to participate and the praise one receives makes it very difficult to change one's mind and regress.

The methods used not only insure compliance to socially desired norms, they are also inexpensive, a great bulk of the work is handled locally with minimum involvement and, hence, cost to the state. This is not to say that *all* the work is done locally by community organizations and the people themselves or that people become family planning adopters only because their cognitive structure is changed. The state prints informational materials, supports and trains the doctors (barefoot doctors, etc.) and invests in factories. It organizes the distribution system for contraceptive supplies and further subsidizes the hospitals for the cost of sterilization and abortion or even health education. Reminders to become the socialist man are displayed from every side, be it at work or at play. The program is a good example of combining central and local efforts and resources.

Application of Lewin's Theory of Discussion-Decision in Social Change

Lewin's research suggested that individual cultural habits are more pliable to change through group discussion and decision than through an approach to the individual. One of the causes of resistance to change in the group situation lies in the relationship of the individual to the values and standards of the group. Lewin's investigations suggested that the effectiveness of his method was attributable to (1) a higher degree of personal involvement than as a passive recipient of information as in a lecture, (2) discussion offered the individual opportunities to observe the response of other group members which in turn may influence the individual's decision, since resistance to change can be due to disinclination to deviate from a group norm, and (3) the decision places the full weight behind one of the two conflicting alternatives, for or against change, the one displacing the other.

Stated in theoretical terms, a level of behavior is maintained by a balance of psychological forces in a state of dynamic equilibrium. These psychological forces may facilitate or resist change in behavior. Behavior can be changed by either increasing the facilitating change forces or reducing the

resisting forces or both. A successful change includes three procedures: unfreezing the present level, moving to the new level, and freezing at the new level. Differences in procedure may have different effects aside from the result or outcome. An increase in pressure of forces toward change may be effective in inducing change, but it may also produce a relatively high state of tension associated with higher aggressiveness, higher emotionality, lower constructiveness, and greater resistance. On the other hand, a reduction of the forces opposed to change would result in a state of relatively low tension and thus preferred. Lewin refers to the result or outcome of group discussion in terms of decisions about individual goals in the group setting. If the group standard is changed, the resistance which is due to the relation between individual and the group standard is eliminated.

In the Chinese experience, study session participants are usually neighbors or co-workers who already know each other and who share some mutual concerns, so that there is already a sense of belonging even before the study sessions. The method the leader uses in urging the group to become family planning adopters is similar to the type of discussion and the leader's request for a decision in Lewin's experiments.¹⁴ The leader does not employ high pressure tactics, ridicule, or authoritarian rule but skillfully steers the group toward a free flow of information with appropriate intervention to diminish the forces which impede change. Statements such as those of the state's support for old age, the testimonials of those who already practice contraception and found it to be satisfactory, and the praise for the various points of view are equivalent to removing the forces resisting change. The announcement of one's intention is both a decision and a public commitment to that decision.

In the beginning, members of the discussion group may or may not know of the advantages of family planning, or the state position in support of it. During the course of discussion with everyone involved, everyone learns the various reasons for family planning as well as the arguments against various objections. At this point, the involvement becomes personal. In the next stage there is a consensus to the desirability of small families. The group is then urged by the leader to make a decision in favor of family planning, not in any way setting a group goal but as an individual decision. This procedure has the effect of unfreezing, moving, and freezing at a new level of performance. The group setting increases the individual's readiness to change and helps him to keep close to group standards and social values. It serves as a link between motivation to become the socialist man and the action one takes to limit births. This level of freezing, of course, is supported and reinforced by the grassroot workers whose job is to deliver the services. The barefoot doctor keeps a record of all those who participate in family planning. Periodically, the record is made public so that the number of adopters using various contraceptive methods is revealed. Non-participation suggests one is being left out of an event which is important to the community.

The discussion process has a cathartic effect, the individual having purged the prejudice can become receptive to new attitudes and new learning. A discussion on the desir-

ability of family planning often leads the women to recall the "bitter past" where women were chattel whose reason for existence was to bring forth children and to serve men. The discussion process has helped the participants to recognize the prejudice and the oppression of one sex toward the other through the previous generations.

Family planning adoption by women signifies emancipation and renewal. But before a new behavior pattern is adopted or any action takes place, people need to perceive past error and gain a new sense of direction. Allport noted that the cathartic process may lead the participants to admit some guilt even while evading some, or shock themselves out of complacency, or vent pent-up hostility until they are receptive to new facts or different points of view.¹⁵ Thereafter, the restructuring of attitudes and perception can begin.

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