CHAPTER 2

REVIEW OF LITERATURE

For this research, the researcher has reviewed literature along the following Topics:

Part 1 Health Promotion
Part 2 Concept of Health Promotion Leadership
Part 3 Education and Health Promotion Leadership Development
Part 4 Concept of Model for Health Promotion Leadership Development
Part 5 Concept of Factor Analysis
Part 6 The conceptual Framework of Model for Health Promotion Leadership Development

Part 1 Health Promotion

Health Promotion as an approach to health care, began in 1972 when the World Health Organization (WHO) set the objective of health for all using primary health care strategies. The concept was that people should not wait for service from health officers but should actively work to improve their own health. (WHO, 1981).

According to the Ottawa charter for Health Promotion (WHO, 1986), "Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and realize aspirations, to satisfy needs, and to change or cope with the environment. Health is therefore seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being"

Health Promotion is the process or activity of enable people to increase control over factors that affect their health. The researcher will present detail of Health Promotion as follows

The Meaning of Health Promotion

The Meaning of Health Promotion is the process or activity of enable people to increase control over factors that affect their health all of behavior, social and environmental. They can reach a stage of physical, mental, long life and quality of life. (Kaplan, Saillis & Patherson, 1993: 81; Pender, 1996: 34; Surakiat Achananupap, 1998: 10; WHO, 1986)

Strategy of Health Promotion

From Ottawa Charter for Health Promotion (WHO, 1986) The Strategies of Health Promotion:

1. Advocate

Good health is a major resource for social, economic and personal development and important dimension of quality of life. Political, economic, social, cultural, environmental, behavioral and biological factors can all be harmful to it. Health promotion action aims at making these conditions favorable through advocacy for health.

2. Enable

Health promotion focuses on achieving equity in health. Health promotion action aims at reducing differences in current health status and ensuring equal opportunities and resources to enable all people to achieve their fullest health potential. This includes a secure foundation in a supportive environment, access to information, life skills and opportunities for making healthy choices. People cannot achieve their fullest health potential unless they are able to take control of those things which determine their health. This must apply equally to women and men.

3. Mediate

The prerequisites and prospects for health cannot be ensured by the health sector alone. More importantly, health promotion demands coordinated action by all concerned: by governments, by health and other social and economic sectors, by nongovernmental and voluntary organization, by local authorities, by industry and by the media. People in all walks of life are involved as individuals, families and communities. Professional and social groups and health personnel have a major responsibility to mediate between differing interests in society for the pursuit of health.

The Frame Work

This is the framework as finalised by the WHO:

1. Healthy Public Policy

Policy and legislation must be consistent in its promotion of health. Therefore policy makers and legislators at all levels should be aware of and accept their responsibilities towards promoting healthy behaviour. Policy making and legislative processes must identify the barriers to healthy behaviour and seek to reduce them. This requires co-ordination and joint action in the areas of legislation, fiscal measures, taxation, and organisation.

2. Supportive Environments

There is a complex interaction between an individual and their social and physical environment. These social and physical environments must support healthy behaviour and the endeavours of individuals to adopt and maintain healthy behaviours. These social and physical environments include the built environment, the work social and physical environment, the non-work social and physical environment, economic factors, the support of peers and the support of those who are not peers.

3. Community determined solutions

At the heart of this state is the process by which communities (social and physical) gain ownership and control over their collective endeavours and destinies. Community development draws on existing human and material resources in the

community to enhance self-help and social support and to develop flexible systems for strengthening public participation and direction of health matters be they setting priorities, making decisions, planning strategies and delivering services.

4. Personal skills

Health is promoted by the development of appropriate skills for behaviour change and maintenance. The processes of skill development need to take into account the social and other factors which affect the development of skills and recognise that skill development occurs in a variety of different settings and institutions.

5. Appropriate Health Services

Appropriate health services are those which contribute to the pursuit of health. They include services which lie outside of those normally considered as being part of the health sector. "Appropriate" means that they respect the cultural, social, physical and economic experiences of individuals and groups of individuals. The responsibility for appropriate health services is shared between all those providing a service which can affect a person or a community's health.

Health promotion strategies and programs should be adapted to the local needs and possibilities of individual countries and regions to take into account differing social, cultural and economic systems.

Health Promotion Action

Health Promotion Action means: (WHO, 1986)

1. Build Healthy Public Policy

Health promotion goes beyond health care. It puts health on the agenda of policy makers in all sectors and at all levels, directing them to be aware of the health consequences of their decisions and to accept their responsibilities for health. Health promotion policy combines diverse but complementary approaches including legislation, fiscal measures, taxation and organizational change. It is coordinated action that leads to health, income and social policies that foster greater equity. Joint action contributes to ensuring safer and healthier goods and services, healthier public services, and cleaner, more enjoyable environments.

Health promotion policy requires the identification of obstacles to the adoption of healthy public policies in non-health sectors, and ways of removing them. The aim must be to make the healthier choice the easier choice for policy makers as well.

2. Create Supportive Environments

Our societies are complex and interrelated. Health cannot be separated from other goals. The inextricable links between people and their environment constitutes the basis for a socio-ecological approach to health. The overall guiding principle for the world, nations, regions and communities alike, is the need to encourage reciprocal maintenance to take care of each other, our communities and our natural environment. The conservation of natural resources throughout the world should be emphasized as a global responsibility.

Changing patterns of life, work and leisure have a significant impact on health. Work and leisure should be a source of health for people. The way society

organizes work should help create a healthy society. Health promotion generates living and working conditions that are safe, stimulating, satisfying and enjoyable.
Systematic assessment of the health impact of a rapidly changing environment particularly in areas of technology, work, energy production and urbanization is essential and must be followed by action to ensure positive benefit to the health of the public. The protection of the natural and built environments and the conservation of natural resources must be addressed in any health promotion strategy.

3. Strengthen Community Actions

Health promotion works through concrete and effective community action in setting priorities, making decisions, planning strategies and implementing them to achieve better health. At the heart of this process is the empowerment of communities their ownership and control of their own endeavors and destinies.

Community development draws on existing human and material resources in the community to enhance self-help and social support, and to develop flexible systems for strengthening public participation in and direction of health matters. This requires full and continuous access to information, learning opportunities for health, as well as funding support.

4. Develop Personal Skills

Health promotion supports personal and social development through providing information, education for health, and enhancing life skills. By so doing, it increases the options available to people to exercise more control over their own health and over their environments, and to make choices conducive to health. Enabling people to learn, throughout life, to prepare them for all of its stages and to cope with chronic illness and injuries is essential. This has to be facilitated in school, home, work and community settings. Action is required through educational, professional, commercial and voluntary bodies, and within the institutions themselves.

5. Reorient Health Services

The responsibility for health promotion in health services is shared among individuals, community groups, health professionals, health service institutions and governments.

They must work together towards a health care system which contributes to the pursuit of health. The role of the health sector must move increasingly in a health promotion direction, beyond its responsibility for providing clinical and curative services. Health services need to embrace an expanded mandate which is sensitive and respects cultural needs. This mandate should support the needs of individuals and communities for a healthier life, and open channels between the health sector and broader social, political, economic and physical environmental components.
Reorienting health services also requires stronger attention to health research as well as changes in professional education and training. This must lead to a change of attitude and organization of health services which refocuses on the total needs of the individual as a whole person.

6. Moving into the Future

Health is created and lived by people within the settings of their everyday life; where they learn, work, play and love. Health is created by caring for oneself and others, by being able to take decisions and have control over one's life circumstances,

and by ensuring that the society one lives in creates conditions that allow the attainment of health by all its members.

Caring, holism and ecology are essential issues in developing strategies for health promotion. Therefore, those involved should take as a guiding principle that, in each phase of planning, implementation and evaluation of health promotion activities, women and men should become equal partners.

Bangkok Charter for Health Promotion

Bangkok Charter for Health Promotion has been adopted today by participants at the 6th Global Conference on Health Promotion, co-hosted by the World Health Organization (WHO) and the Ministry of Public Health of Thailand. It identifies major challenges, actions and commitments needed to address the determinants of health in a globalized world by engaging the many actors and stakeholders critical to achieving health for all. (WHO, 2005)

Key commitments

The four key commitments are to make the promotion of health:

1. central to the global development agenda
2. a core responsibility for all of government
3. a key focus of communities and civil society
4. a requirement for good corporate practice.

There was the first inter-country workshop on the development of a Regional Strategy for Health Promotion for South-East Asia (SEA). The specific objectives for the inter-country consultation were to (a) exchange country experiences; (b) develop a Regional Strategy for health promotion framework; (c) draft a Regional Work plan for 2006-2007 to implement the recent World Health Assembly resolutions; and (d) to plan for the 6th Global Conference on Health promotion in Bangkok, Thailand. Thirty-one (31) participants were drawn from nine SEAR countries of the SEA Region. The inter-country consultation developed and adopted a Regional Strategy Framework for the Region. Several challenges were identified during country presentations and the need stressed for Member States and WHO to support multispectral approaches in order to build capacity, advocacy and alternative financial mechanism to promote health. Participants were briefed by WHO-HQ representative regarding the upcoming 6th Global Conference on Health Promotion in Bangkok, Thailand and its expected outcomes. (WHO, 2008)

Developing Health Promotion Competencies and Standards for Countries in WHO South-East Asia Region

Health Promotion is an emerging discipline that requires well defined practice competencies to ensure quality outcomes. Building national capacity for health promotion is critical for Member Stages in South-East Asia Region (SEAR), if health promotion archive desired health outcomes.

The need to identify what constitutes good “health promotion practice” including the performance indicators calls for the need to consult health promotion technical experts from both academic institution and practitioners. As part of strategic support to strengthen national capacity effective health promotion, a three-day

meeting for experts was conducted in WHO regional office for South-East Asia, New Delhi, 18-20 June 2008, to identify health promotion competencies and performance standard in order to guide the delivery of health promotion practice in the Region. The experts meeting was response to need to build a health promotion workforce with knowledge, skill and attitude appropriate to effectively practice health promotion in country-specific situations.

Health promotion performance criteria for core competencies

core competencies	**performance criteria**

1. Knowledge and comprehension of health promotion	• Demonstrate Knowledge of health system, health promotion principles, practice and determinants of health • Apply the knowledge to improve the wellbeing of people and the community • Disseminate knowledge and best practices
2. Community capacity strengthening	• Demonstrate cultural competency • Empower the community • - Ensure sustainability
3. Partnership building	• Establish appropriate partnerships within and outside the health sector • Establish appropriate partnerships with • Facilitate collaborative actions and sustainability
4. Evidence-based practice	• Determine public health priorities • Collect evidence using appropriate methods • Use and share evidence to improve health promotion actions
5. Programs management	• Conduct appropriate need assessment and demonstrate understanding of determinants of health • Plan and implement appropriate health promotion interventions • Monitor and evaluate health promotion inventions
6 Social marketing	• Understand concepts and strategies of social marketing • Create demand for health promotion and services • Use appropriate avenues, strategies and approaches to market “health” • Promote networking for social marketing
7 Advocacy	• Identify issues for Advocacy • Engage multi-level and multi-sector partner • Conduct public campaigns • Lobby with policy-makers
8 Health public policies	• Identify the role of public policy (health, health-related) and legislation in promoting and protecting health • Assess systematically the feasibility and implication of policy option options in health

9	Managing change/change management	• Advocate effectively for specific policy, organizational, structural or environmental changes to promote health using appropriate intra-and inter-sectorial mechanisms • Identify the element of key sectorial capacities to promote, protect and maintain health • Assist the health sector to develop capacity and network with other sectors to promote health • Assist and strengthen the capacity of health and other relevant sectors to promote health through a setting-based approach
10	Health promotion financing	• Identify sources (public and private) for funding health promotion initiatives • Develop cost effectively with others using all communication methods appropriately • Establish financial management system in health promotion programs including accountability and transparency
11	Communication	• Communicate effectively with others using all communication methods appropriately • Apply interpersonal skills (negotiation, teamwork, motivation, counseling, conflict resolution, decision making, problem solving and listening skill) • Present tailored communications to arrange of audiences considering cultural and other difference (gender, age, ethnicity)
12	Use of appropriate technology	• Comprehend the various relevant technologies available and their applicability to specific situations • Demonstrate the application of appropriate technology

13	Planning and organization	• Promote share vision • Apply knowledge of management tools for strategic planning • Identify appropriate mechanisms for consulting with relevant stakeholders and develop a consultation plan
14	Leadership and teamwork	• Identify and demonstrate effective leadership appropriate to particular situation and circumstances • Develop capacity to work effectively in a team • Initiate and sustain collaboration with all relevant stakeholders and the community
15	Ethical and professional practice	• Apply public health code of ethics for collection, management, dissemination and use of data and information • Seek ethical approval from appropriate bodies and informed consent as required • Maintain confidentiality, non-discrimination and equity in service provision

From the concept, the factors affect to health promotion activities are strong community and participation of community to decision-making, analysis, selection and implement by themselves. The activities support by health personnel. However, there have a lot of health problem that can management from health promotion.

Problems from implementation of health promotion

In 1986, Thailand began to use the health promotion process, improving overall health in Thailand; however, Thai people continue to have many health problems and these tend to be long term. The top five causes of illness in 2010 were respiratory disease, circulation disease, musculoskeletal disease, problems with the digestive system and endocrinology disease and nutrition and metabolism. (Office of Policy and Strategy, 2010). The top five causes of death in 2003–2007 were cancer and tumors, accidents, hypertension and cerebral vascular disease, heart disease and pneumonia and lung disease. (National Statistical Office, 2010). Furthermore, the number of outpatients in public hospitals increased to 140,078,456 in 2007 and to 152,424,645 in 2009. In fact, the government paid 76,598.80 million baht for people in the government health security system at an average of 2,100 baht per person per

year, resulting in a budget deficit in 2008. Public hospitals were further indebted for 1,600 million baht. Most of these illnesses and deaths were caused by non-communicable diseases that could have been prevented through health promotion; however, health promotion was limited by a lack of capacity in Primary Care Units (PCUs).

Health Promotion in Primary Care Units

Primary Care Units (PCUs) are primary public health services that are easily accessible to the community. They are also known as First Line Care, Primary Care, Primary Medical Care, Family Practice, Family Service and Health Promotion Hospital District (Working Group on the Universal Health Insurance Policy, 2010). The role of PCUs is to emphasize health promotion, prevention, treatment and rehabilitation for individuals, families and communities. PCUs must create a strong community and coordinate with other local organizations. While the National Health System Reform Office standards specify that PCUs are not required to have a full time doctor, dentist or pharmacist, they should always have nurses and health officials.

The importance of nurses in PCUs is underscored in a study by Thussana Boonthong (2000) which found that nurses were the most important health personnel in PCUs. People wanted nurses to do home visits, follow up treatment outcomes and provide treatment and health counseling. Another study by Sumrherng Yangkra tok and the Department of Nursing (2002) found that nurses were the driving force in PCUs, and staff at PCUs could not operate without them.

In addition to their client responsibilities, nurses in PCUs must have competency in health promotion leadership. They must be able to lead and motivate people to change their lifestyle, environment and social life to be more physically and mentally healthy and live a long life, leading to a better quality of life. However, research shows that nurses often lack this basic competency. For example, Koabkun Punjareinvorakun et al, (2001) surveyed 351 primary staff in 28 Thai hospitals. They found that nurses' basic skills of communication, coordination, leadership and decision-making at the individual, family and community level were inadequate.

Other studies show nurses lack competency in basic health promotion skills. Areewan Klunklin et al. (2003) studied the competencies of 161 graduated nurses in the nursing institute at Chiang Mai University in 2000. They found that health promotion competency, prevention, treatment and rehabilitation were only average. In fact Patricia, et al. (2003) found that the health profession as a whole was not concerned about health promotion. However, under the new standards, nurses must now advise people on how maintain their health instead of focusing only on treating illness. To facilitate this change, nurses should learn about and understand health promotion so that they can transfer this knowledge to clients, leading to the opportunity for universal health.

The importance of nurses for achieving the goals of health promotion, and the need for comprehensive health promotion leadership training means that nursing colleges need to supplement the traditional curriculum with health promotion leadership development. Health promotion leadership development can be done in the

fourth year of the nursing curriculum since fourth year students will have already completed coursework in both nursing theory and practice. Moreover, they will be available to work on a health team. A health promotion leadership model is based on "transformation leadership theory" (Bass et al., 1985). Transformational leadership is defined as a leadership approach that causes change in individuals and social systems. In its ideal form, it creates valuable and positive change in followers with the end goal of developing followers into leaders. Enacted in its true form, transformational leadership enhances the motivation, morale and performance of followers through a variety of mechanisms. These include connecting the follower's sense of identity and self to the mission and the collective identity of the organization, being a role model for followers that inspires them, challenging followers to take greater ownership of their work and understanding the strengths and weaknesses of followers, so the leader can align followers with tasks that optimize their performance (Bass et al., 1985: 152).

The Nursing's Roles of the Health Promotion in Primary Care Units (PCU)

The nurse is the key person of the health promotion in PCU. From the reviewed document, the researcher summarized the roles as follow. (American Association of Colleges of Nursing (AACN), 2005; Leaddy, 2003 : 11-12; Nuttaya Puthanawanichnun, 2005 : 1 ; Thailand Nursing and Midwifery Council, 2009; WHO, 1986)

1. Nursing's Role as Care Provider

1.1Caring the person, family, group and community by use the nursing process for guide on the evaluation, nursing diagnosis, planning and operation. In addition, caring with continuous, expectation and prevention planning

1.2 Must be has the knowledge-base for keep quality to help the patient

1.3 Design, coordinate and evaluate the caring for person, family and community, focus on the health promotion and reduce risk

1.4 Immunization follows by the Ministry of Public Health guideline

1.5 Evaluation and diagnosis the family, group and community by appropriate technique. Use the strategies for working at community for create strong community and create the cooperation in community, in order to reduce risk of health and set the health promotion activity.

1.6 Analysis of the local knowledge for prevention and health promotion

2. Assessment

2.1 Evaluate the growth and development of person and family by the appropriate strategy. Evaluate health risk, health diagnosis, risky to disease and illness. They plan the health promotion for person and family.

2.2 Evaluate the health of client by consider the Determinants of Health. These are the factors as individualized, family, social, economic and environment, arrange the healthy state, that are health behavior, life style, income, social status, education, salary, working state, health service assessment, physical environment.

3. Nursing's Role as Educator in Health

3.1 Use the principle of health promotion, health education, health behavior modification, empowerment to promote the health behavior, e.g. Behavior of exercise, eating and stress management

3.2 Role as knowledge's provider to the client for health promotion and prevention, advise for self-health care and self-rehabilitation

3.3 Role as developer the teaching program for the people to be awareness, knowledge and skill in appropriate self-care and behavior modification.

3.4 Sensitive for the multi physical, cultural, social and ecology of health promotion

3.5 The nurse must understand the concept of empowerment and use to empower the people to powerful and able to modify the health, environment management.

3.6 Stimulate the people to be health promotion in life style and self-care

3.7 To help the client to understand the health factors

3.8 To teach the client that the life experience can be handles and meaningful by rising the responsive and dedication

3.9 To teach and conduce the convenience for the client in self-care, in order to rising the body strength, stress management, nutrition, create positive relationship, belief and environment

3.10 To be advice the growth promotion and development of children

4. Nursing's Role as Consultant

4.1 Self-develop as the role model in health promotion behavior for trust the client

4.2 Develop the knowledge and counseling skill as holistic approach, it means physical, mental, and spiritual under the context of family, cultural and environment

4.3 Use the principle of health promotion, well-being, stress prevention, attention for man and environment. The goal of holistic approach counseling is self-reliance, to help the client for problem management, responsive to the decision-making process and able to self-decision.

5. Nursing's Role as Manager

The American Nurse Association sets the nurse as the case manager consists of access to a holistic approach, finding the health requirements and coordination. The main duty of case manager is the health promotion manager of the client that consist of screening, care-planning, operation, evaluation, care-plan reform, follow up, problem and requirement evaluation, in order to problem solving. The problem solving is care directly to the client or with the health officer, patient, family, in addition, must be control and supervise. The home Health Care is the health service proactively by advice the client and family to self-care and promotion, connection with the health officer, it is the Comprehensive Community Home-Based Health Care. The Nursing's Role focus on promote, advisory and empower the patient and family to self-care, efficiency counseling, referral system as rapidly, create the awareness of community for participate the health care.

6. Nursing's Role as Advocator

6.1 Micro level

Information about the right and promotion for rational self-decision

6.2 Macro level. Public information for social steaming and social

pressure to the authorized who power for set healthy policy. The characteristic of Nursing's Role as Advocate could be have at least 4 characteristics

6.2.1 Appropriated presenting

6.2.2 Could be attended and sincere in advice the choice to the client

6.2.3 Able to well communication

6.2.4 Able to identify the working system for help the client to decision

6.2.5 Research for present the choice to social. Coordinate with community for find out the cause and factor of problem, and then present and setting the community stage for find out the appropriate guideline and able to real practice.

7. Nursing's Role as Facilitate and Collaborator

7.1 Able to coordinate with others health team for the client, e.g. The Home Health Care team is consists of the physician, nurse, health educator, dietician, physical therapist, almoner and village health volunteers.

7.2 Create the healthy mainstay in community for coordinate working

7.3 Coordinate with others health promotion team for act the health promotion with the community, e.g. Bicycle association, association of Laryngectomee, association of Healthy Living, Senior Citizens Club and Health Club.

8. Increase the Enabling for the people for have authority by mobilized the man and materials for health promotion

8.1 To help the people to access the health information

8.2 To promotion for develop skills and access to power-driven for example; the party for drive the new legal for healthy policy setting, e.g.. The legal for smoking area setting, legal for helmet.

9. Nursing's Role as Leader

9.1 The leader of innovation in caring, prevention and develop the health of people, e.g. Develop to APN, create the guideline for best practice, to be the leadership and promote the officer, the patient and community for eating Brown rice, exercise. To be the originator of the health promotion program for the industrial worker, develop the program for health promotion and prevention disease.

9.2 To participate the plan setting and policy of health development of the people

9.3 To be the Role Model of healthy

9.4 Create to health promotion leader in community

9.5 As the team manager to assign, resource management. To be the leader and participatory in health team

10. Nursing's Role as Researcher

10.1 To be the researcher as research –based in health problem solving and create the innovation for health promotion. They use the research and development to develop the health as the real and sustainable. The community nursing research could be has the commune participatory, in order to sustained development.

10.2 Setting the project of health promotion, prevention the disease and illness for the family, group and community.

From the reviewed literature about the health promotion reveals that the exchange of healthy system and health status of people leading to the healthy reform.

The goal is health promotion for the Thais to control the risk factor and healthy, able to live with social, community and the environment. The barrier for achieve the health promotion is the power-driven from the associated parts, especially, the health facilities. However, the lack of personal is persists. The mainly person in health promotion is the nurse, so if the Nursing College under Praboromrajchanok Institue, the Ministry of Public Health, as the duty to produce the nurse, understand the and rising the quality of the nurse according to the requirement of commune and social, the healthy reform will be driven for health for all of Thais.

Part 2 Concept of Health Promotion Leadership

Concept of Health Promotion Leadership, that the researcher reviewed literature along the following topic: (1) The meaning of "Leadership" and "Health Promotion Leadership" (2) Transformational Leadership (3) The factors of Transformational Leadership (4) The importance of transformational leadership on health promotion in the community (5) Health Promotion Leadership Variables synthesis (6) Health Promotion Leadership Development (7) How to develop leadership

The meaning of "leadership" and "health promotion leadership"

The research reviewed the meaning of leader from scholars in Thailand and foreigner. The research can conclusion the meaning. (Bass , 1981 cite in Marriner – Tomey, 1993: 5 ; Draft, 2005: 5 ; Hersey, Blanchard & Johnson, 1996: 91 ; Phra Bhramagunabhorn, 2001: 2 and Thailand Productivity Institute, 2002 : 12) Leadership is the capability of person to convince, motivation others to follow inorder to achieve the goals of group or organization in any situation.

Health Promotion refers to the process of enabling people to increase control over, and to improve, their health. (Kaplan, Saillis & Patherson, 1993: 81; Pender, 1996: 34; Surakiat Achananupap,1998 : 10 ; WHO, 1986)

So that, "Health Promotion Leadership" refers to the ability of nursing students to lead and motivate people to change their lifestyle, environment and social life to be more physically and mentally healthy and live a long life, leading to a better quality of life and able to evaluated by the knowledge, attitude, health promotion behavior form.

Transformational Leadership

Transformational Leadership refer to enhances the motivation, morale and performance of followers through a variety of mechanisms. These include connecting the follower's sense of identity and self to the mission and the collective identity of the organization; being a role model for followers that inspires them; challenging followers to take greater ownership for their work, and understanding the strengths

and weaknesses of followers, so the leader can align followers with tasks that optimize their performance. (Bass, 1985; Raymoul Nuntsupawat,1999 : 76)

The factors of Transformational Leadership

The factors, the definitions and groupings, have been through a number of changes. It is now accepted that the concept involves four factors exhibited by effective leaders. (John R. Schermerhorn, Jr.,1989: 68; Kouzes, posner และGarder, 1995: 79; Bass,1985: 152; McDaniel & Wolf, 1992: 19-21; Bass,1990: 303)

1. Idealized Influence

Leaders display conviction; emphasize trust; take stands on difficult issues; present their most important values; and emphasize the importance of purpose, commitment, and the ethical consequences of decision. Such leaders are admired as role models; they generate pride, loyalty, confidence, and alignment around a shared purpose.

2. Inspirational Motivation Leaders articulate an appealing vision of the future, challenge followers with high standards, talk optimistically and with enthusiasm, and provide encouragement and meaning for what needs to be done.

3. Intellectual Stimulation Leaders question old assumptions, traditions, and beliefs; stimulate in others new perspectives and ways of doing things; and encourage the expression of ideas and reasons.

4. Individualized Consideration

Leaders deal with others as individuals; consider their individual needs, abilities and aspirations; listen attentively; further their development; advise; and coach.

The importance of transformational leadership on health promotion in the community.

Today, there have a lot of changing that dimension of health environments such as Technology Change, Product or Service Change, Structure Change, Administrative Change and Attitude or Value Change. (Puwngrat Boonyanuruk, 2001: 43) Including, increase of resource and health care costs. (Reinhardt, A.C. 2004). The changes that affect to lifestyle to be health problem as obesity, stress, chronic disease: Diabetic Mellitus, Cancer, Hypertension, Cardio Vascular Disease Etc. Health care service have to change themselves that focus on health promotion. So that nurses should have to adapt in their role, to be the leader in the health service system.

Health Promotion Leadership performance criteria synthesis

A synthesis of literatures related to leadership and health promotion. The synthesis can be present in following tables. (Barker, 1992 ; Bass, 1985 ; Choochai Supavong, 2009 ; Kanchana Suntipattanachai et al., 2001 ; Marisa Krairiksh, 2005 ; Nuttaya Puthanawanichnun, 2005 ; Praboromrajchanok Institue, the Ministry of Public Health, 2002 ; Thailand Nursing and Midwifery Council, 2009 ; WHO, 2008) **1. Idealized Influence**

Idealized Influence refer to characteristic of nursing student that make people feel peace of mind, love, respect, trust and be role model.

This thesis has three variable groups of Idealized Influence as follows.

“Moral” refers to the ability of nursing students to express the well status.

"Nursing knowledge and health promotion" refers to understanding in health promotion and nursing, then able to effective adoption.

"Personality" refers to the ability of nursing student to show the good performance and then help the colleagues to trust, warmed, love, and commitment to set health.

The synthesis of Idealized Influence is given in Table 1.

Table 1 The synthesis of Idealized Influence from 7 literatures

Order	Performance Criteria	Data Sources						
		Kanchana	Marisa	Nuttaya	Thailand Nursing	Praborom	Choochai	Bass
	Moral							
1	Recognizing the importance of the rights of individuals.	✓		✓	✓	✓		
2	Respect the worth and dignity of human beings	✓		✓	✓	✓		
3	Responsibility for their actions.	✓	✓	✓	✓	✓		
4	Discipline.	✓	✓		✓	✓		
5	Honest	✓	✓	✓	✓	✓		
6	Follow professional ethics.	✓			✓	✓		
7	A good example to others and to sustain their operations.		✓	✓	✓			✓
8	Help people get to know and understand their rights.	✓		✓	✓	✓	✓	
	Knowledge							
9	Knowledge and understanding of the	✓		✓	✓	✓	✓	

	essence of nursing science.							
10	Knowledge and understanding of the essence of the nursing process and its use.	✓		✓	✓	✓	✓	
11	Knowledge and understanding of the essence of the process of acquiring knowledge. Knowledge management.	✓	✓		✓		✓	
12	Knowledge and understanding of the essence of the administration and management.	✓		✓	✓		✓	
13	Knowledge and understanding about health promotion.	✓			✓		✓	
14	Ability to integrate medical knowledge in other fields of knowledge.	✓					✓	
15	Able to use of local knowledge for health promotion.	✓				✓	✓	

Table 1 (cont.)

Order	Performance Criteria	Data Sources						
		Kanchana	Marisa	Nuttaya	Thailand Nursing	Praborom	Choochai	Bass
16	Diagnostic evaluation of risk factors. Planning and health promotion.				✓		✓	
17	Knowledge and understanding of key information technologies in the field of health promotion.			✓	✓		✓	
18	Understand the cultural impact and public health.	✓			✓			
	Personality							
19	There are reliable personalities.	✓		✓	✓	✓		✓
20	Capable of critical thinking and clinical judgment.	✓		✓	✓	✓	✓	
21	The emotional maturity.	✓			✓	✓		✓
22	Healthy behaviors.	✓				✓		

23	Show willingness and eager to serve.	✓			✓			
24	Aware of the rights and duties in the profession.	✓			✓			
25	Can behave appropriately in providing health care to individuals.		✓			✓		

2. Inspirational Motivation

Inspirational Motivation refers to the ability of nursing students to motivate the people to be concerned rising attention their health.

The synthesis of Inspirational Motivation is given in Table 2.

Table 2 The synthesis of Inspirational Motivation

Order	Performance Criteria	Data Sources					
		Kanchana	Nuttaya	Choochai	Thailand Nursing	Bass	WHO
26	Strategies implemented in the community. To build a strong community.	✓		✓			✓
27	The empowerment process.	✓		✓			✓
28	A leader in community health.			✓	✓		✓
29	The ability to coordinate.	✓	✓	✓	✓	✓	✓

30	Able to reasonable to convince others.	✓	✓		✓	✓	
31	Reinforcement to motivate and create a good atmosphere in their work.	✓			✓	✓	

3. Intellectual Stimulation

Intellectual Stimulation refers to the ability of nursing students to create strong vigorous communities, create cooperation among people to decrease health risks and create health promotion activities.

The synthesis of Intellectual Stimulation is given in Table 3.

Table 3 The synthesis of Intellectual Stimulation.

Order	Performance Criteria	Data Sources						
		Kanchana	Nuttaya	Choochai	Thailand Nursing	Praborom	Bass	WHO
32	To stimulate public awareness of the issues that affect health.	✓		✓	✓			✓
33	According to the new ways to solve problems.		✓				✓	
34	To attract and support new initiatives.	✓			✓		✓	✓

35	Able to encourage people to try to find a new solution.	✓					✓	
36	The public is encouraged to think and reason. And criticism of his ideas.			✓			✓	
37	People feel that the problem is a challenge and an opportunity to solve common problems.			✓			✓	
38	To encourage community participation in health promotion for the physical, cultural, social and ecological harmony with the community.	✓		✓				✓
39	Stimulate people to life and health care.	✓		✓	✓			✓
40	Help clients understand the determinants of health.		✓	✓				✓
41	Teaching and facilitating access to patients in the care of their own.	✓	✓		✓	✓		✓
42	Be encouraged to assess community problems and needs. Participation in the planning and implementation of health problems.			✓	✓	✓	✓	✓
43	Encourage community participation in the control of the supervision and evaluation of health promotion practices.		✓	✓			✓	✓

Table 3 (cont.)

Order	Performance Criteria	Data Sources						
		Kanchana	Nuttaya	Choochai	Thailand Nursing	Praborom	Bass	WHO
44	Awareness and community participation in health promotion.			✓	✓	✓	✓	✓
45	Can provide information to public health policy.		✓		✓			✓
46	Encourage communities to mobilize resources that can be different. To health.	✓		✓				✓
47	Help people access their health information.	✓			✓	✓		✓

48	Research can be used as a base for health promotion.	✓	✓		✓	✓		✓
49	The research community to participate in the largest.	✓	✓		✓	✓		
50	Can provide health promotion programs.		✓	✓	✓			✓
51	Research to offer an alternative approach for the social and community context.	✓			✓	✓		✓

4. Individualized Consideration

Individualized Consideration refers to the individual characteristics of nursing students, that promotes health team membership, helps them to be a role model for health promotion and encourages client peace of mind, happiness, love, faith, belief, respect and trust.

The synthesis of Individualized Consideration is given in Table 4.

Table 4 The synthesis of Individualized Consideration

Order	Performance Criteria	Data Sources							
		Kanchana	Nuttaya	Thailand Nursing	Praborom	Choochai	Bass	Barker	WHO
52	Able to meet the individual needs appropriately.	✓		✓			✓		✓
53	Advising the individual.	✓	✓	✓	✓	✓	✓		✓
54	Taking into account the group's lead counsel for the group.							✓	
55	Taking into account the characteristics of the individual. By treating people differently according to their needs and abilities of each person.	✓		✓	✓			✓	✓
56	To evaluate the potential of others.	✓	✓	✓			✓		
57	Promote two-way communication.	✓	✓	✓				✓	✓
58	Ability to provide reliable information.	✓	✓	✓				✓	✓

Health Promotion Leadership Development

Leadership Development is a part of Human Resource Development. The researcher summarized meaning of Human Resource Development form scholars. (Choocheep Puthaprasert, 2000: 82 ; Payom Wongsarasri, 1997: 156 ; Phetcharee Roopwichet, 2006 :19–24 ; Wirot Sanrattana, 1999: 82) “Human Resource Development is the learning process. Person increase the knowledge, ability and skill to work. They have adjusted themselves to the task, and more qualified. As a result, progress in the work in the future. Organizational productivity gets quality and successful. The methods used in a variety of staff development, orientation, training, the thought process. Providing education and training to the study, sent to school, coaching, seminars, television, radio news, searches the site, talk to your advisor and read”.

The meaning of Health Promotion Leadership Development of nursing students is the 4 year nursing students passed the process for Health Promotion Leadership Development by the model that developed, make them to be the health promotion leadership and services a quality task in Primary Care Unit.

The Approach to Develop Leadership

The researcher has reviewed literature about “The approach to develop leadership” from scholars. (Arun Raktum, 1998: 196-234; Bass, 1990 ; Truelove, S., 1992: 168-169 ; Vichian Vitayaudom, 2005: 249 ; Wentling, T.L.,1992: 78-79 ; Wills, M.,1993: 9) The researcher can summary “how to develop leadership” in 3 methods as 1) self-learning 2) one by one learning and3) group learning :

1. Self-learning:

1.1 The lesion program: The learning that the learners can learn by their capability. They can practice activity, have a test and feedback for reinforcement.

1.2 The distance learning: It is a field of education that focuses on teaching methods and technology with the aim of delivering teaching, often on an individual basis, to students who are not physically present in a traditional educational setting such as a classroom. It has been described as "a process to create and provide access to learning when the source of information and the learners are separated by time and distance, or both." Distance education courses that require a physical on-site presence for any reason (including taking examinations) have been referred to as hybrid or blended courses of study.

1.3 Computer-Assisted Instruction (CAI): A teaching process that uses a computer in the presentation of instructional materials, often in a way that requires the student to interact with it. Also It called computer-assisted learning.

1.4 Mental Development: Mental development is also known as cognitive development. It is basically the construction of mind activity such as thought processes, memory, problem solving and decision making as well as overall intelligence. Cognitive development is the name given to the area of study in neuroscience and psychology that looks at a child’s brain development and the aspects within.

1.5 The look in the mirror: Management strategy of feedback by open to listening, thank review in pictures of people around you, to identify strengths and shortcomings and to improve. And Vision, Goal of life, Benchmarking and Performance Review all the time.

1.6 Online learning E-learning: Includes all forms of electronically supported learning and teaching, and more recently Edtech. The information and communication systems, whether networked learning or not, serve as specific media to implement the learning process. The term will still most likely be utilized to reference out-of-classroom and in-classroom educational experiences via technology, even as advances continue in regard to devices and curriculum.

1.7 Home Learning: Person's self-study by the University or organizations may offer training courses to educate themselves to be able to return to study at home. And they have contributed to the discovery of any additional libraries.

1.8 Plan their own development: Plan to plan in advance their own development in a systematic and continuous, to prioritize, key areas to focus and guide their own development.

2. One by one learning:

2.1 Coaching: Coaching may also happen in an informal relationship between one individual who has greater experience and expertise than another and offers advice and guidance, as the other goes through a learning process.

2.2 Job Instruction: Step by step (structured) on the job training method in which a trainer (1) prepares a trainee with an overview of the job, its purpose, and the results desired, (2) demonstrates the task or the skill to the trainee, (3) allows the trainee to mimic the demonstration on his or her own, and (4) follows up to provide feedback and help.

2.3 Job Rotation: A job design technique in which employees are moved between two or more jobs in a planned manner. The objective is to expose the employees to different experiences and wider variety of skills to enhance job satisfaction and to cross-train them.

3. Group Learning:

3.1 Seminar: A seminar is, generally, a form of academic instruction, either at an academic institution or offered by a commercial or professional organization. It has the function of bringing together small groups for recurring meetings, focusing each time on some particular subject, in which everyone present is requested to actively participate. This is often accomplished through an ongoing Socratic dialogue with a seminar leader or instructor, or through a more formal presentation of research. Normally, participants must not be beginners in the field under discussion.

3.2 Conference: A prearranged meeting for consultation or exchange of information or discussion (especially one with a formal agenda).

3.3 Workshop: An educational seminar or series of meetings emphasizing interaction and exchange of information among a usually small number of participants.

3.4 Brainstorming: A group or individual creativity technique by which efforts are made to find a conclusion for a specific problem by gathering a list of ideas spontaneously contributed by its member(s).

3.5 Study Activities: The students to learn outside of the facility to learn about their own conditions of work that actually look like. Students have the opportunity to meet people, Place and any other self-study such as viewing, listening, interviewing, discussion, exchange of ideas and participation.

3.6 Discussion board: The consideration by a group of experts to debate the host about 3-5 people.

3.7 Lectures on the Board: The speaker has been assigned to a description. No discussion of other people as a group discussion.

3.8 Training: Practice by institutions or organizations, to learn the work under the guidance of colleagues in the organization.

3.9 Role-plays: A method, popular with some, to practice clinical skills. Learners take on different roles for playing through a clinical scenario. Usually there

is an opportunity to call "time out" which stops the role play for reflection and discussion.

3.10 Management game: The mortgage situation is up to students to face the trial. Students will have the opportunity to practice decision and selecting the appropriate solution.

3.11 Case study: A written account that gives detailed information about a person, group, or thing and their development over a period of time.

3.12 Sensory training: Training students to be the result of behavior and their attitude towards others. Learners have to interact with others. This behavior is due to their experience to test their relationship with others. Students will find and react to feedback from others and what they can learn from the interaction within the group.

3.13 Activities: Sharing one or more activities such as singing, clapping rhythmically together, the manner of singing, the game briefly with an emphasis on group activities. In order to, change attitudes and to build relationships and create fun for the students.

3.14 Working group: Training course run jointly by the leadership of the joint planning and joint decision-making practice level.

3.15 The discussion circle: The discussion, participants sit in a circle to view the comments on that particular subject. The first speaker on the issue and encourage people to participate in the discussion.

3.16 A.I.C.: The group with three steps: 1) to determine the needs, 2) discuss and comment 3) step process to solve problems or achieve goals.

3.17 Educational games: Activities that contribute to learning in an atmosphere of fun, not boring, to help develop the skills to work as a team. Develop skills in leadership, decision not chili, agility and senses are.

3.18 Laboratory Training / Sensitivity Training /Group Dynamic: Students will find the answers and evaluation of a reverse reaction from others and what they can learn from the interaction within the group. Aims to, make students aware of their behavior and their attitude towards others. Help them understand themselves and their colleagues and build positive relationships. Focus on solving problems by experimenting.

Part 3 Education and Health Promotion Leadership Development

The presenting of Education and Health Promotion Leadership Development, for understanding the researcher should present about details of Praboromarajchanok Institute. Praboromarajchanok Institute is a Publishing Technology program at the institution, Ministry of Public Health. It's continuing commitment of the King's Works in the medical courses. Vikram Adulyadej, Praboromarajchanok, the Father of Modern Medicine and Public Health, Thailand.
Somdech Phra Srinagarindra Boromarajajonani, She is the Princess Mother's, Mother of Health. It founded by merging organizations, related to the field of public health together to a unified policy and the implementation plan. Praboromarajchanok Institute has occurred on 26 February 19993, to establish a "National Institute of

Health Manpower Development" responsible for the production and development of health manpower of the Ministry of Health. (Praboromrajchanok Institue, the Ministry of Public Health, 2002) And the Self Identify is “The people of community to meet the health care community”. That is produce and develops health care personnel to provide working in agencies under the Ministry of Public Health, associated with maintenance support and protect public health. (Praboromrajchanok Institue, the Ministry of Public Health, 2011)

Curriculum Philosophy

Praboromarajchanok Institute believes that Integrate Curriculum make nurses to be vision person, like to learning, systemic thinking, apply knowledge to health promotion and can solving holistic health problem with participation of people.

Nursing is interaction between nurse and people to health promotion, prevention, when healthy and care, rehabilitee the patient. The services stick to social sciences. It base on generosity, Morality and ethics of the profession. All of personal potential development to individual, family and community by Taking into account the individuality, dignity, value their freedom to choose to have the right to be treated equally and quality. Health is a balance of physical, psychological, social and spiritual life has changed over the years and perceived by the individual. This corresponds to a changing environment.

Teaching and learning is the process of exchanging knowledge, experience teaching students between the individuals, families and communities in ways that ange. The learning environment is a community-oriented activity. The study encourage students to seek knowledge and wisdom by facilitate.

Graduate nurses, who are competent professional, communication skills and ethics to adhere to professional ethics, good attitude, leadership changes, a life-long learning. They can integrate knowledge of nursing and other disciplines to work in the health system and meet the needs of people in good health until the end of the life. They help the illnesses people to maintain and develop self-reliance, to the quality of life. They are the members of the profession, the good citizen and live happily.

The Identity Graduate is “Health services with human heart”. It refer to the service is friendly, in love, mercy, attention to the problem and suffering of the service. The services are based on their problems and needs. (Praboromrajchanok Institue, the Ministry of Public Health, 2011)

The Purpose of Curriculum

The graduate nurses should have the abilities from this:

1. Nursing Professional Characteristic:
   - Respect for the dignity and value of individuality and of themselves and others.
   - Has a strong sense of service.
   - Healthy and emotional maturity.
   - Ethics and professional conduct.
   - Creative and critical thinking.
   - Leadership and self-management.
   - Working by themselves and team.
   - Lifelong learning

- The members of the profession and to society as good citizens.

2. Nursing care base on generosity, moral principles and ethics.
3. Primary health care by boundary of nursing profession.
4. Potential development of individuals, families, groups and communities to self-care
5. Communication, education and health consultation.
6. Cooperate in research and use the result.
7. Available resources, technological innovation and local knowledge in nursing.
8. Cooperation in the conservation of the environment. Development and Environments affect health.

The analysis of subjects that relate to health promotion development in Nursing Curriculum

The analysis of subjects that relate to health promotion development in Nursing Curriculum, show that:

General Subject

Department of Humanities: Department of Human Health and the Environment 3 credits.

Special Subject

1. The basic professional courses: Nutrition 3 credits, Health Economics 3 credits Nursing Communication Law 2 credits and Ethics Nursing Profession 3 credits.

2. Professional courses: Health Promotion and Prevention of Illness 3 credits, Practice in Health Promotion and Prevention of Illness 2 credits, Family and Community Nursing (1) 3 credits, , Practice in Family and Community nursing (1) 2 credits, Family and Community Nursing (2) 3 credits, Practice in Family and Community nursing (2) 2 credits, Counseling 2 credits, Health Administration 2 credits, Practice in Nursing Administration 2 credits.

Elective

1. Thai Wisdom 2 credits, Health Exercise 2 credits, Teamwork and Group Dynamics (2) 2 credits, Systematic Think Development 2 credits and Personality Development and Emotional Maturity 2 credits.

Analysis of Curriculum

Analysis of health promotion concept was analyzed in every subjects, theory and practice.

1. The Purpose of Curriculum

The purpose of Curriculum is determining student to be leadership and professional abilities to care individual, family and social in healthy. Develop potential of people, family, group and community to self-care and self-dependent. They can communicate, teach and counseling. And they help the researcher and use the result. The characteristics are the comprehensive of Nursing Graduate.

2. The Structural of Subjects involved Health Promotion

The Structural of Subjects involved Health Promotion, consists of 5 main content areas.

1) The development: In the growth and develop promotion with age in

childhood, adolescence and young adults to seniors.

2) Nutrition: In subjects of nutrition as concept of nutrition, type and value of nutrient, energy from nutrient, cooking, nutrient in stage of age, nutrition education and dietary therapy.

3) Exercise: In subject of exercise, there are contents about Principles of exercise, type of exercise, recreation, meditation and music.

4) Psychological: In theory of stress, the mechanism of mental and adaptation.

5) Environmental: In man and environment.

Strategies for health promotion

There have not content-specific strategies for health promotion But In the course of teaching Health and counseling only.

Health Promotion in Clients Group

There have subjects about health promotion and prevention of people in their age, but not have contents about health promotion in family and community.

Practice Skill in Health Promotion

1. Health Assessment: Practice health assessment in individual and their life style.
2. Nursing Activities: Vaccinations, Case study care, Implement and evaluation
3. Leadership: Practice in ward, team.
4. Care the Healthy People: Practice in children, adult and aging.
5. Care the patients: They have practice in patients more than healthy.

The problem of education

The data from interviewed instructors and students, they have problem about education from this:

1. They have a short time to practice, so limited experience hard to evaluation.
2. Some community denial students because they think students lack of knowledge and experience.
3. There have no systematic evaluation.
4. The studies are not focus on health promotion.
5. Practice health promotion in 2nd years, students lack of leadership and health education.

The Suggestions of Educations

1. Teacher should follow graduated in their health promotion job, and then use the results to develop curriculum.
2. There should have more credit about health promotion in every level all of theory and practice.
3. There should develop curriculum by focus on health promotion in Primary Care Unit.

The researches about education for Health Promotion Development

There have been several studies on health promotion leadership development in education. Siriporn Khampalikit (2006) analyzed the curriculum of nursing health promotion. The study found that while there had been education in personal knowledge of health promotion and education in basic nursing skills, training in leadership skills for the promotion of health education was quite limited. Undergraduates did not receive any education in research and knowledge management of health promotion. Chanthana Chunbunjong (2001) Kesorn Sumpoatong and Sunee Numkum. (2005) studied the development of the health promotion curriculum. They found that the necessary skills for health promotion were communication, analysis, policy development, planning and public health science. Kesorn Sumpoatong and Sunee Numkum (2005) looked at demand for knowledge and skills for health promotion development. They found that nurses wanted nutrition knowledge such as food - specific diseases, nutritional needs for each age group, nutritional needs assessment skills, and knowledge of exercise patients with chronic diseases. A study by Prakin Suchaya et al. (2002) revealed that nurses complained about workload, skill, anxiety, management and opportunities for professional development.

Part 4 Concept of Model for Health Promotion Leadership Development

This thesis is the research for Health Promotion Leadership Development. The research reviewed documents and researches that relate model: The Meaning of Model, Factors of Model, Research Methodology by Model and Model Creative and Development.

The Meaning of Model

The researcher reviewed the meaning of model and conclusion it as follows. (Boonchom Srisaad, 2002; Daft & Palus, 1994: 20; Keeves, 1998: 559; The Grolier International Dictionary, 1994: 641; Webster International Dictionary, 1993: 871; Yaowadee Rangchaikul, 1999: 27) The approach to convey the idea, understanding that have a lot of characteristic as (1) show of the research purposes (2) the model structure show of factors correlation (3) present by chart (4) recognized (5) to be model or guideline to create the new one. In addition, the model can change for easy to understand and short and clear.

Factors of Model

From reviewed, found that the main factor of model has 2 factors as Homothetic Dimension and Idiographic Dimension. (Gibson, Ivancevich & Donnelyl, 1997: 20-21)

1. Institution

It is a social systemic such as education, medical etc. When we mix it, it is a Institution. There have guideline in role and expect. The role affect to personality and behavior of person in their carrier. Now, they use this concept to set the role in the position in their job. That can achieve the goal.

2. Individual

Individual is the main factor in social system because they drive the operation of institution.

Research Methodology by Model

Research Methodology by Model has 2 stages. (Boonchom Srisaad, 2002: 52; Willer, 1986: 83)

1. Construct and Development

Construct the model is setting concept. (Keeve, 1998: 54; Steiner, 1990: 23)

1) The model should consists of the relationship is structured more than linear relationship.

2) The model should be used as a guide to predict the product. It can be verified by observation and finding by empirical data.

3) The model should show reasonable of the study.

4) The model make new concept.

The construct of the model from reviewed literatures. (Benjaporn Kaewmesri, 2002; Chawalit Kerdtip, 2007; Juntakan tunjaroenpanich, 1996; Kulyarat Meuangsong, 2007; Pakyanee Chaichanadee, 2003; Prateep Binchai, 2003; Paisan Chantarapakdee, 2005; Phichawee Mekkayai, 2007; Somboon Sirisunhirun , 2005; Ungsinan Intarakamhang and Tasana Tongpukdee, 2006; Worathep Poompakdeepan, 2007; Yongyutha Sornmai, 2007) found that the stage of the construct of model have stage is given in table 5

Table 5 The synthesis stages of construct of research and development leadership

Stages	Data Sources											
	Benjapor	Chawalit	Juntakan	Kulyarat	Pakyane	Prateep	Paisan	Phichaw	Somboo	Ungsina	Worathe	Yongyuth
1.Reviewed Literature for Set Research Framework	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2.Study Desirable Leadership and Requirements		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
3.Synthesis Model and Approach of Development	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
4.Construct Model	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5. Validity	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
6. Experimental		✓					✓	✓			✓	✓

7. Act	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
8. Evaluation	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
9. Present	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓

Table 5 shown the synthesis stage of construct of research and development leadership, the conclusion of the synthesis is: the stage of development leadership research have 9 stages: 9 (1) Reviewed Literature for Set Research Framework (2) Study Desirable Leadership and Requirements (3) Synthesis Model and Approach of Development (4) Construct Model (5) Validity (6) Experimental (7) Act (8) Evaluation and (9) Present Model.

1.2 Setting Factors of the Leadership Development Model

The research analyzed and synthesized factors of development model. That use to guide line to present the model for health promotion leadership development from scholars: Annop Jeenawathana (1996) studied Proposed Development Program for Secondary Schools Department of Education, Augsburg College (2000) studied Augsburg's model of leadership development, McCauley & others (1998) studied Development experiences in managerial work, Prasit Keawsri (2001) studied Proposed model for leadership development of school administrators in school-based management schools, Pranee Santaweesuk (2004) studied A Propose Model of Instructional Leadership Development for School Administrators under the Jurisdiction of Angtong Educational Service Area Office, Somsak Phuvipadawat, et al., (2011) studied Research and Development of a Model for Schoo-based Teacher and Administrator Development in Chiang Mai and Chiang Rai's Small-sizeed School, Vichien Chiwapimai (1996) studied The Model of Leadership for the Administration of Schools Office of the National Primary Education Commission, Watchanee Chowadumrong (1999) studied The Development of a Professional Teacher Education Students' Education, Wiboonluk Preeyavongsakul (2006) studied A Nursing Students Development Model with Activities Enhancing Self-Directed Learning Readiness for Increase earning Ability. That is given in table 6.

Table 6 Synthesized Factors of Development Model

Factors	Data Sources								
	Annop	Augsburg	McCauley	Pranee	Prasit	Somsak	Vichien	Watchanee	Wiboonluk
1. Concept of Development	✓	✓	✓	✓	✓	✓	✓	✓	✓
2. Goal of Development	✓	✓	✓	✓	✓	✓	✓	✓	✓

3. Scope of Development		✓	✓	✓			✓	✓	
4. Structure of Management	✓	✓	✓			✓	✓	✓	
5.Factors that Involved						✓			
6. Development Strategy	✓	✓	✓		✓	✓		✓	
7. Evaluation before Development			✓	✓		✓		✓	
8. The Development	✓	✓	✓	✓	✓	✓	✓	✓	✓
9. Evaluation after Development			✓	✓	✓	✓	✓	✓	✓
10. The Analysis and Update the Assessment does not pass.				✓		✓	✓		
11. Target of Development		✓	✓	✓		✓	✓	✓	✓

The researcher can summary the factors of development model from this: (1) Concept of Development (2) Goal of Development Scope of Development (3) Structure of Management (4) Development Strategy (5) Evaluation before Development (6) The Development (7) Evaluation after Development (8) The Analysis and Update the Assessment does not pass and (9) Target of Development. But step 6–9 are steps in the Development Process. To clarified that, the research will present the synthesis and detail of the stage of Leadership Development from 12 researches: (Benjaporn Kaewmesri, 2002; Chawalit Kerdtip, 2007; Dunn & Pope, 2001; Juntakan tunjaroenpanich,1996; McCauley & others, 1998; Pakyanee Chaichanadee., 2003; Pranee Santaweesuk, 2004; Prasit Keawsri, 2001; Prateep Binchai, 2003; Somboon Sirisunhirun, 2005; Vichien Chiwapimai, 1996; Worathep Poompakdeepan, 2007). That is given in table 7.

Table 7 The synthesis and detail of the steps of Leadership Development from 12 researches.

Steps	Data Sources

	Benjaporn	Chawalit	Dunn	Juntakan	McCaule	Pakyanee	Pranee	Prasit	Prateep	Somboon	Vichien	Worathep
1. Assign tasks to perform											✓	
2. Preparation / build concept	✓	✓				✓	✓	✓		✓	✓	✓
3. Define leadership development needs.	✓		✓	✓						✓		
4. Assessment before		✓	✓		✓	✓	✓		✓		✓	
5. Proceeding Objectives.			✓					✓				
6. The development techniques.			✓		✓			✓				
7. The development.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8. Practice	✓	✓				✓	✓	✓	✓	✓	✓	
9. Evaluation and follow up	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10. The analysis and update the assessment does not pass.		✓				✓	✓				✓	
11. To maintain leadership.		✓										

Table 7 shows that the steps of development have 5 steps, that is given in table 8

Table 8 Steps of Leadership Developments and Details from Model Analysis

Steps	Details from Model Analysis
1 Preparation	1. Setting purpose of development 2. The basic idea of health promotion leadership
2 Pre-test	1. Knowledge 2. Skills 3. Attitude
3 Development and Evaluation	1. Preparing 2. Training 3. Practice

		4. Nursing Education in regular system. 5. Evaluation and Follow up 6. Update
4	Evaluation	1. Analysis the process every steps 2. Analysis of Performance
5	Improvements	1. Update Develop Model

From the study, the researcher summarized the factors of Model for Health Promotion Development, Specific in the development part has 2 part: 1) Structural of Development 2) Units of Development. They have details as follow.

1) The development structure refers to the factors for model implementation. They are 5 steps; 1) pre operation 2) pre evaluation 3) operation 4) post evaluation 6) adjustment.

2) Unit development refers to learning experience. They are 5 factors; 1) concept 2) aim of knowledge 3) content of knowledge 4) knowledge management 5) evaluation 6) resource 7) learning media.

Model for health promotion leadership development of nursing students refers to the structure that present the connection of factors for develop the health promotion leadership of nursing student, although participation of Nursing College, PCU, community and nursing student.

Factor 1 The aims of development refer to setting need of nursing student from model implementation to capable

Factor 2 The scope of development refers to setting the category and direction of the develop the health promotion leadership. The develop mentioned the knowledge, attitude and skill.

- **Knowledge development** refers to the process to rising the understanding of the health promotion leadership by the model for the nursing student.
- **Attitude development** refers to the process to rising the feeling, value and motivation of the health promotion leadership by the model for the nursing student.
- **Skill development** refers to the rising of health promotion leadership behaviors for nursing student.

Factor 3 The structure of management refers to the elementary to help planning and operation to successful. They are policy, administration and cooperating between PCU and community.

Factor 4 Development Strategy

Development Strategy help to achieve the goal of development.

1. Quality Management: PDCA (Utai Dulkasame, 2009).

PDCA (plan–do–check–act) is an iterative four-step management method used for the control and continuous improvement of processes and products. It is also known as the Deming circle. PDCA was made popular by Dr. W. Edwards Deming, who is considered by many to be the father of modern quality control; however he always referred to it as the "Shewhart cycle". Later in Deming's career, he modified

PDCA to "Plan, Do, Study and Act" (PDSA) because he felt that "check" emphasized inspection over analysis. (Weerapon Bordeerat, 2000: 7)

PLAN

Establish the objectives and processes necessary to deliver results in accordance with the expected output (the target or goals). By establishing output expectations, the completeness and accuracy of the specification is also a part of the targeted improvement. When possible start on a small scale to test possible effects.

DO

Implement the plan, execute the process, make the product. Collect data for charting and analysis in the following "CHECK" and "ACT" steps.

CHECK

Study the actual results (measured and collected in "DO" above) and compare against the expected results (targets or goals from the "PLAN") to ascertain any differences. Look for deviation in implementation from the plan and also look for the appropriateness/completeness of the plan to enable the execution i.e.,"Do". Charting data can make this much easier to see trends over several PDCA cycles and in order to convert the collected data into information. Information is what you need for the next step "ACT".

ACT

Request corrective actions on significant differences between actual and planned results. Analyze the differences to determine their root causes. Determine where to apply changes that will include improvement of the process or product. When a pass through these four steps does not result in the need to improve, the scope to which PDCA is applied may be refined to plan and improve with more detail in the next iteration of the cycle, or attention needs to be placed in a different stage of the process.

Participation

From the National Education Act 1999 Category 4, The approach to education. Section 24 (6) Identified. “Learning happens all the time, all over the place. The parents and community stakeholders collaborated to jointly develop their full potential. Section 8 resource and Investments in Education Section 58 (2)” Stated that Individuals, families, communities, community organizations, local governments, Private Organizations, Professional Organizations, Religious Institutions and Establishments and other social institutions, mobilize resources for education. There are organized and participated in the study donated property and other resources and contribute to the cost of education as appropriate and necessary.

Meaning of Participation

Participation refers to the community took part in activities such as Finding Problems, Planning Solutions, Activities and Control Evaluation to achieving the objectives together. (Nirun Jongvutivaje, 2004:186; Phisit Dejvongya, 2000: 7)

Participation Style

Participation has 4 styles. (Cohen and Uphoff 1979: 141-142)

1) Decision Making 3 steps: Initiative, Decision-making.and Operating Decisions.

2) Implementation: resource support management and collaboration.

3) Benefits

4) Evaluation

Steps of Participation

The researcher reviewed steps of participation from the scholars. (Chuchat Puangsomjit, 1999: 19; Jermsuk Pintong,1996: 17; Pairat Techarin, 1994: 18; WHO, 1981: 22)

1) Participation in Finding Problem and Cause. People stay in problem and more know problem but they do not encounter problem core. So people should participate in learning problem and analyze it.

2) Participation in Planning and Activities. When people learn about their problem, they should to participation in planning and activities solution. They find resource to support their solution.

3) Participation in Investments and Activities. The activities make people and community feel the owner. Moreover the activities make people close learning, If they have benefit, they continue activities.

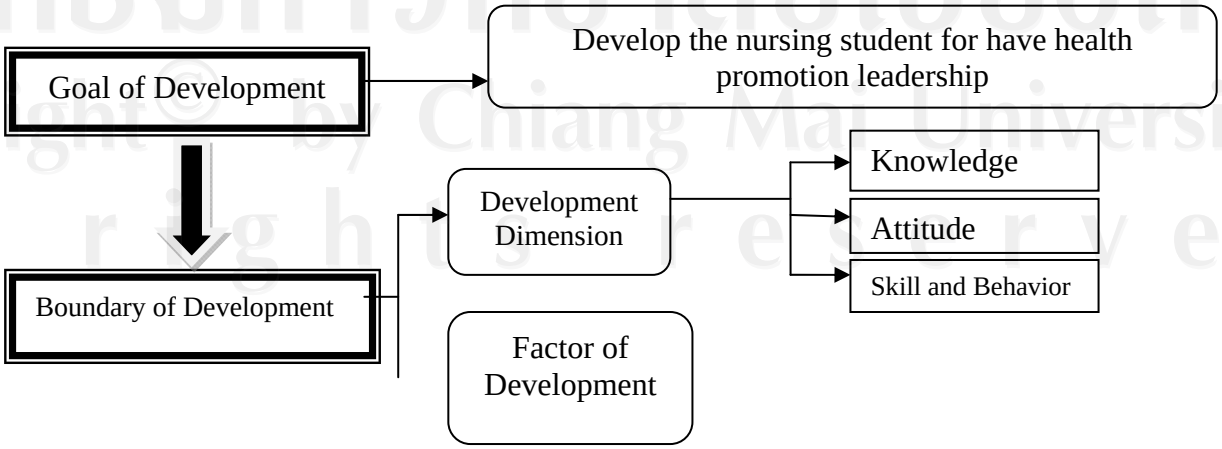
4) Participation in Evaluation. Participation in Evaluation makes people be aware that activities are good or bad. They should consider how to continue. The evaluation make people learning and see benefit together and affect to achieve the goal of others activities in the future.

Factor 5 The development structure refers to the factors for model implementation. They are 5 steps; 1) pre operation 2) pre evaluation 3) operation 4) post evaluation 6) adjustment.

Factor 6 Unit development refers to learning experience. They are 5 factors; 1) concept 2) aim of knowledge 3) content of knowledge 4) knowledge management 5) evaluation 6) resource 7) learning media.

Factor 7 Target of output refers to the development of the nursing student to be health promotion leadership.

The result of synthesized the model for leadership development, It is Model of development for health promotion leadership (draft), given in Figure 1



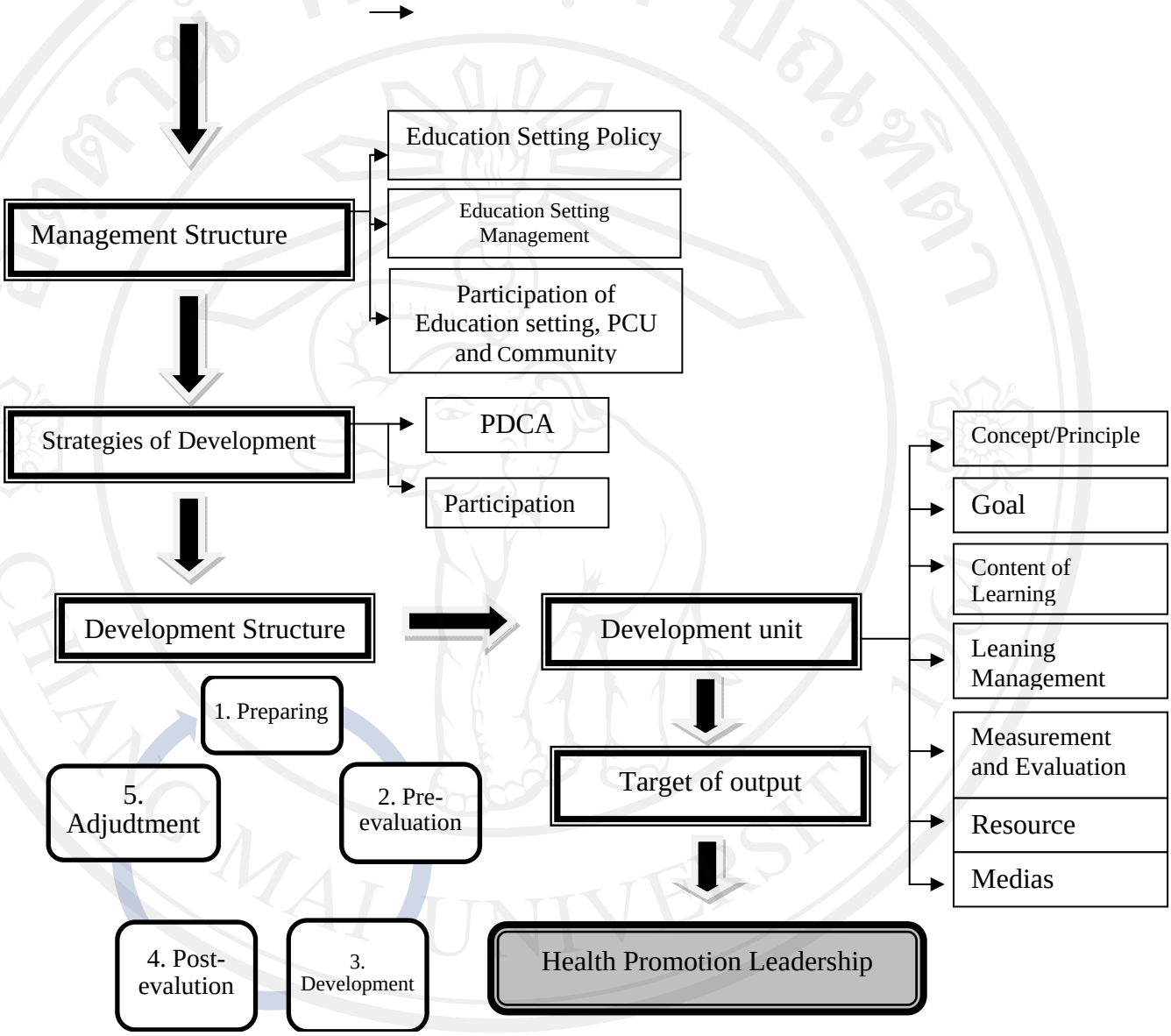


Figure 1 Model of development for health promotion leadership (draft 1)

2. Approach to test the validity of the model.

The aim of the model is to test or validate the model with the empirical data by estimating the parameters of the model. Therefore, the model is built; it should be clear and appropriate monitoring procedures. Typically, social science and behavioral science research is often conducted by means of a statistical model. The results of the test will lead to acceptance or rejection of the model and lead to the creation of a new theory. Test or validate the model can be made of two words.

1. Test validity by evaluation, Joint Committee on Standards for Educational Evaluation. The proposed assessment criteria to determine which model are the four categories. (Madaus, Scriven & Stufflebeam, 1983), as follows.

1.1 Feasibility Standards: It is possible to evaluate the actual implementation.

1.2 Utility Standards: Measures to meet the needs of the user model.

1.3 Propriety Standards: To justify in terms of law and morality.

1.4 Accuracy Standards: An assessment of the Trust. The material covered in full by their needs.

2. Testing or evaluation in some form, it is not possible because the limitations of the different environment. Eisner (1976) The concept of testing or evaluation by a panel of experts that conducted the research, educational, scientific or quantitative principle, too. And some are more sensitive to the numbers and concluded that the concept of validity as follows.

2.1 Evaluation by experts will focus on analytical and critical depth in the issues being considered. Not necessarily related to the purpose, or who is involved with the decision that it is possible to integrate several factors into consideration together, the judgment of experts to draw conclusions about the quality and appropriateness of things.

2.2 Evaluation model is specialization in the evaluation. The development of art criticisms are deeply sensitive and require a high level to make the decision. Because of the measure cannot be estimated with any device, and requires knowledge of the assessment that this concept can be used in formal higher education more because the body of knowledge specific to the study of it really, know and understand deeply.

2.3 The format in which the person is qualified as a tool for evaluation by the experts believed that honesty and good judgment. The standards and criteria are the result of experience and expertise of the experts there.

2.4 Model that allows flexibility in the work of experts by leisure and aptitude of the expert. The important issues be taken into account, identification of information needs, data collection, processing and presentation of diagnostic information.

To summarize, the model can be used two ways, namely the evaluation of the concept of the Joint Committee on Standard for Education Evaluation and assessment by a qualified person according to Eisner, a way to structure their thinking on the basis of comparison concept of experience and information on the composition and relationships of the various. Authors have synthesized research related to development patterns in the process and how to test a total of 10 researches from the following scholars. (Atiya Sarakshetrin, 2003; Benjaporn Kaewmesri, 2002; Chawalit Kerdtip. , 2007; Rattigorn Chongvisal, 2001; Pakyanee Chaichanadee, 2003; Paisan Chantarapakdee, 2005; Phichawee Mekkayai, 2007; Somboon Sirisunhirun, 2005; Teerapong Tanajalearlux, 2009; Worathep Poompakdeepan, 2007) That is show in Table 9

Table 9 Synthesized of Stages and Approach to test the validity of the model of

Leadership Development

Stages/Approach	Data Sources									
	Rattigorn	Atiya	Benjaporn	Chawalit	Paisan	Pakyanee	Phichawee	Somboon	Teerapong	Worathep
evaluation 1 group	✓	✓			✓	✓	✓	✓	✓	
evaluation 2 group			✓	✓						✓
Questionnaire / evaluation form	✓	✓	✓			✓	✓	✓		✓
interview				✓						
seminar			✓		✓					
focus group				✓					✓	✓

Table show that most of the test pattern for a one group experts. It was used in both closed and open questionnaires to suggestions of the experts.

For this study, researcher used the method to test the validity of the model by evaluating the principles of the Joint Committee on Standards for Educational Evaluation for 9 experts.

Part 5 Concept of Factor Analysis

Factor analysis is used to uncover the latent structure (dimensions) of a set of variables. It reduces attribute space from a larger number of variables to a smaller number of factors and as such is a “non-dependent” procedure (that is, it does not assume a dependent variable is specified). Factor analysis could be used for any of the following purposes:

Benefits of factor analysis

Benefits of factor analysis (Kalaya Wanichbuncha, 2006: 5; Yuth Kaiwan, 2007: 106)

1. To reduce a large number of variables to a smaller number of factors for modeling purposes, where the large number of variables precludes modeling all the measures individually. As such, factor analysis is integrated in structural equation modeling (SEM), helping create the latent variables modeled by SEM. However, factor analysis can be and is often used on a stand-alone basis for similar purposes.
2. To select a subset of variables from a larger set, based on which original variables have the highest correlations with the principal component factors.

3. To create a set of factors to be treated as uncorrelated variables as one approach to handling multicolinearity in such procedures as multiple regression.

4. To determine network groups by determining which sets of people cluster together.

The purpose of factor analysis

Factor analysis is a complex multivariate statistical procedure that can be used for any of 4 basic purposes (Kalaya Wanichbuncha, 2006: 5; Yuth Kaiwan, 2007: 106):

1. to reduce the number of variables to a more manageable and understandable number
2. detect and analyze structure in a set of variables
3. determine the dimensions of an existing test or measure, select items to be included on a test or measure

Assumptions of Factor Analysis

Assumptions of Factor Analysis that can be used for the following (Kalaya Wanichbuncha, 2006: 3; Yuth Kaiwan, 2007: 106):

1. Homoscedasticity. Since factors are linear functions of measured variables, homoscedasticity of the relationship is assumed. However, homoscedasticity is not considered a critical assumption of factor analysis.
2. Linearity. Factor analysis is a linear procedure. Of course, as with multiple linear regression, nonlinear transformation of selected variables may be a pre-processing
3. Multivariate normality of data is required for related significance tests. PCA and PFA, significance testing apart, have no distributional assumptions. Note, however, that a less-used variant of factor analysis, maximum likelihood factor analysis, does assume multivariate normality. The smaller the sample size, the more important it is to screen data for normality. Moreover, as factor analysis is based on correlation (or sometimes covariance), both correlation and covariance will be attenuated when variables come from different underlying distributions (ex., a normal vs. a bimodal variable will correlate less than 1.0 even when both series are perfectly co-ordered). Nonetheless, normality is not considered one of the critical assumptions of factor analysis.
4. Factor interpretations and labels must have face validity and/or be rooted in theory. It is notoriously difficult to assign valid meanings to factors. A recommended practice is to have a panel not otherwise part of the research project assign one's items to one's factor labels. A rule of thumb is that at least 80% of the assignments should be correct.
5. Adequate sample size. At a minimum, there must be more cases than factors 10 times.

Characteristic of Data for factor analysis

Characteristic of Data for factor analysis have two charectors: (Kalaya Wanichbuncha, 2006: 3; Yuth Kaiwan, 2007: 106)

1. Interval Scale and Ratio Scale
2. If not Interval Scale and Ratio Scale should be dummy the variables (0,1) before analysis from Factor Analysis

Steps in a Factor Analysis

Factor Analysis has 4 steps.

1. Correlation Matrix
2. Factor Extraction/ Initial Factor
3. Factor Rotation
4. Factor Score

There have details from following:

1. Correlation Matrix Before a factor analysis is run, a simple correlation matrix should be run to examine what individual pairs of variables (test items) are related to each other. Variables that are correlated tend to form "factors."

Table Correlation Matrix:

Table 10 Correlation Matrix

	Sex	Ex1	Ex2	Ex3	A1	A2	A3	A4
Correlation	1.000	-.335	.458*	.777*	.345*	.602*	.425*	.714*
	-.335	1.000	-.165	.142	-.233	.165	.002	-.400
	.458*	-.165	1.000	.736*	-.263	.653*	.493*	.516*
	.777	.142	.736*	1.000	-.506	.883*	.656*	.505*
	.345	-.233	-.263	-.506	1.000	-.023	-.226	-.225
	.602*	.165	.653*	.883*	-.023	1.000	.772*	.261
	.425*	.002	.493*	.656*	-.226	.772*	1.000	-.122
	.714*	-.400	.516*	.505*	-.225	.261	-.122	1.000

Table show that, pairs of variable have correlation each other.

Analysis of correlation can use technique of KMO (Kaiser – Meyer - Olkin) (Wiyada Tanvatanagul, 2005: 220)

KMO >= 0.90	Data is very suitable for Factor Analysis
KMO 0.80 – 0.89	Data is suitable for Factor Analysis
KMO 0.70 – 0.79	Data is mild suitable for Factor Analysis
KMO 0.60 – 0.69	Data is a little suitable for Factor Analysis
KMO 0.50 – 0.59	Data is not suitable for Factor Analysis

2. Factor Extraction/Initial Factor

2.1 The purpose of this process is to pull out factors, or groups of related variables/items from a data set. The SPSS calculations will be based on the correlation matrix of the variables.

2.2 There are several ways to extract factors from a data set. The most commonly used technique is called principal components analysis. This is the method you should generally use. In the factor extraction dialog box in SPSS, you should choose "Principal Components" as the "method." At this point, you should also check "Correlation Matrix" under Analyze, and "Unrotated factor solution" under Display.

2.2 There are 2 other important items to select in the factor extraction

dialog box in SPSS. Both of these items help you make the decision of how many factors you should retain in the "solution" to your factor analysis.

2.2.1 Eigenvalues: An eigenvalue for a factor or principal component is the amount of total variance explained by each factor. As a general rule, only factors with eigenvalues of 1 or greater should be retained in a factor solution.

2.2.2 Scree Plot: A scree plot is another technique to determine how many factors should be retained in a factor solution. This plot is a graphic representation of the magnitude of each eigenvalues plotted against the factor numbers. The point at which the scree plot levels off (stops dropping sharply) generally indicates which factors should be retained in a factor solution. Be sure you check the Scree Plot box in the SPSS factor extraction dialog box before you proceed.

2.3 You can either an eigenvalue of 1 or greater OR the scree plot drop-off point, OR BOTH in determining how many factor to retain. The general recommendation is to retain all components/factors with eigenvalues in the sharp descent of the scree line before the first one where the leveling effect occurs.

Once you have extracted the principal components and determined with eigenvalues and/or scree plot which factors to retain for further analysis, you move into the second step of factor analysis, which is *factor rotation.*

Principal components analysis (PCA): By far the most common form of factor analysis, PCA seeks a linear combination of variables such that the maximum variance is extracted from the variables. It then removes this variance and seeks a second linear combination which explains the maximum proportion of the remaining variance, and so on. This is called the principal axis method and results in orthogonal (uncorrelated) factors. PCA analyzes total (common and unique) variance.

Table 11 Component Matrix and Factor Loading

Variables	Component Matrix	
	1	2
X_1	.372	-.632
X_2	.400	-.500
X_3	-.511	-.460
X_4	.720	.580
X_5	.711	.555

Extraction method: Principal component analysis a.2 component extract

3. Factor Rotation

In SPSS, you will go back to the Factor Extraction dialog box to set your factor rotation.

Factor rotation is a manipulation of factors that is very complex. Its basic purpose is to "reorganize" the factors to maximize their "understandability" and clarity. Rotation makes a factor solution more interpretable without altering its underlying mathematical structure. Rotation actually redefines the factors so that loadings of various items on various factors are either very high (near "1") or very low (near "0"), eliminating as medium-sized loadings as possible.

There are several different types or "criteria" for factor rotation. SPSS will ask you to choose a rotation method before you run a rotation. One of the best – and the one you should use if you are a factor analysis novice- is called varimax. Factor rotation can be either orthogonal (which causes factors to be uncorrelated with each other) or oblique (which results in factors that are correlated with each other. Oblique rotations are much more difficult to interpret. Varimax is an orthogonal rotation.

When you run a factor rotation in SPSS, you will get several output boxes. The most important is the Factor Matrix a factor matrix shows the number of derived and rotated factors on the columns and the list of variables/test items on the rows. Each cell shows a factor loading for each variable on each factor. The factor loading is interpreted as the Pearson correlation of a variable to a factor, with a value of 1 (perfect association with the factor) to 0 (no association with the factor). The higher the factor score (closer to 1), the stronger the "loading" or relationship of the variable to the factor. Factor loadings can be either negative or positive, just like any correlation.

Types of Rotation

The rotation I used on these data is the VARIMAX rotation. It is the most commonly used rotation. Its goal is to minimize the complexity of the components by making the large loadings larger and the small loadings smaller within each component. There are other rotational methods. QUARTIMAX rotation makes large loadings larger and small loadings smaller within each variable. EQUAMAX rotation is a compromise that attempts to simplify both components and variables. These are all orthogonal rotations, that is, the axes remain perpendicular, so the components are not correlated with one another.

1. Orthogonal Rotation : Perpendicular axes, uncorrelationed, 90^o

Reducing a matrix of component/factor loadings (**A**) to a "simpler" structure where components/factors are still perpendicular (orthogonal, uncorrelationed, 90^o)

Methods

1. VARIMAX
   - Simplies the columns (factor/component) of **A**
   - Variance of squared loadings of each column is maximized
2. The most commonly used method
   QARTIMAX
   - Simplies the rows (variable) of **A**
3. Variance of squared ladings of each rows is maximized
   EQUIMAX
   - Simplies the columns and rows of **A**

Oblique Rotation

Reducing a matrix of component/factor loadings (A) to a “simpler” structure where components/factors are NOT perpendicular.

Methods

1. Direct oblimin
   i. Simplies factors by minimizing sum of cross-products of squared loadings in **A**
   ii. More commonly used than Promax
2. Promax
   i. Orthogonally rotated factors rotated again to oblique factors

4. Factor Score

Factor scores: Also called *component scores* in PCA, factor scores are the scores of each case (row) on each factor (column). To compute the factor score for a given case for a given factor, one takes the case's standardized score on each variable, multiplies by the corresponding factor loading of the variable for the given factor, and sums these products. Computing factor scores allows one to look for factor outliers. Also, factor scores may be used as variables in subsequent modeling.

The SPSS FACTOR procedure saves standardized factor scores as variables in your working data file. In SPSS, click Scores; select 'Save as Variables' and 'Display factor score coefficient matrix'. The factor (or in PCA, component) score coefficient matrix contains the regression coefficients used down the columns to compute scores for cases, were one to want to do this manually. By default SPSS will name them FAC1_1,FAC2_1, FAC3_1, etc., for the corresponding factors (factor 1, 2 and 3) of analysis 1; and FAC1_2, FAC2_2, FAC3_2 for a second set of factor scores, if any, within the same procedure, and so on. Although SPSS adds these variables to the right of your working data set automatically, they will be lost when you close the dataset unless you re-save your data.

Table 12 Factor Scroe

Variables	Factor 1	Factor 2	Factor 3	Factor 4
X_1	.40	.60	.42	.24
X_2	.63	.52	.11	1.42
X_3	.73	.46	.45	.67

$X_1 = (.40 \times .24) + (.63 \times 1.42) + (.73 \times .67) = 1.48$
$X_2 = (.60 \times .24) + (.52 \times 1.42) + (.46 \times .67) = 1.19$

$X_3 = (.42 \times .24) + (.11 \times 1.42) + (.45 \times .67) = 0.56$

Interpreting and Naming Factors

Interpreting and naming factors is an art as much as a science. It requires careful analysis of what individual test items load on various factors according to the factor loadings reported in the factor matrix. You have to analyze what the factor "represents" or "means" based on what items load on it.

Factor names should be descriptive and should represent a common element or individual variables that load highly on the factor. The name should convey what the factor "means."

Research related to leadership factor analysis

Kisda Pongpitaya (2004) studied analyze the factor of desirable leadership traits and behavior of school administration. The study found that desirable leadership traits consisted of 6 factors, namely personality, accountability, competency, emotion quotient (E.Q.), human relationship, amd visions. Desirable leadership behavior consisted of 7 factors, namely relationship oriented management, participatory management, teamwork management based on diversity, change-oriented management, achievement-oriented management, democratic leadership, and decentralized management.

Chawalit Kerdtip (2006) analyzed factors for educational technology leadership of school administrators under the Office of Basic Education Commission in Southern Thailand and development model of educational technology leadership of school administrators under the Office of Basic Education Commission in Southern Thailand the result found that 1) Educational technology leadership factors consisted of nine factors: regulations and ethics in educational technology, educational technology literacy, technology infrastructure management, value and realization to organization and society, technology intelligence and capabilities, personalities, technology integration in educational management, social background and evaluation and supervision. 2) The development model of educational technology leadership for school administrators under OBEC in Southern Thailand consisted of six levels: 1) perception and realization 2) pre-operation evaluation 3) change operation 4) improvement 5) post-operation evaluation and 6) stabilization.

Part 6 The conceptual frame work of Model for Health Promotion Leadership

The conceptual frame work of Model for Health Promotion Leadership Development of Nursing Students in Nursing College under Praboromrajchanok Institute, the Ministry of Public Health. From the studied variables shown as following:

1. The innovation of the study is Model for Health Promotion Leadership Development of Nursing Students in Nursing College under Praboromrajchanok Institute, the Ministry of Public Health.

Model for health promotion leadership development of nursing students refers to the structure that present the connection of factors for develop the health promotion leadership of nursing student, although participation of

Nursing College, PCU, community and nursing student. It has 7 factors as (1) The aims of development (2) The scope of development (3) The structure of management (4) The development strategies (5) The development structure (6) Unit development (7) Aim of Output .

The conceptual come from review research and literatures as follow.

- Transformational Leadership Theory.

There are four elements of transformational leadership: 1) individualized consideration 2) intellectual stimulation 3) inspirational motivation 4) idealized influence. (Bass, 1985)

- **Health promotion**

Health promotion is the process of enabling people to increase control over, and to improve, their health. (WHO, 1986) The process are: (1) Advocate, Health promotion action aims at making the conditions favorable through advocacy for health. (2) Enable, Health promotion focuses on achieving equity in health. (3) Mediate, Health promotion demands coordinated action by all concerned.

- **Nursing Roles for Health Promotion.**

Nursing Roles for Health Promotion are important in community. Nursing's Role as Care Provider, Assessment, Educator in Health, Consultant, Manager, Advocator, Facilitator and Collaborator, Enabling, Leader, Researcher (American Association of Colleges of Nursing (AACN), 2005 ; Leaddy, 2003 :11-12; Nuttaya Puthanawanichnun, 2005:1 ; Thailand Nursing and Midwifery Council, 2009; WHO, 1986)

- Bachelor of Desirable Features.

Graduate nurses, who are competent professional, communication skills and ethics to adhere to professional ethics, good attitude, leadership changes, a life-long learning. They can integrate knowledge of nursing and other disciplines to work in the health system and meet the needs of people in good health until the end of the life. They help the illnesses people to maintain. and develop self-reliance, to the quality of life. They are the members of the profession, the good citizen and live happily. (Praboromrajchanok Institue, the Ministry of Public Health, 2011)

- **Characteristics of personnel in Tambol Health Promotion Hospital**.

Characteristics of personnel in Tambol Health Promotion Hospital are the important such as able to intergrade medical knowledge with others knowledge, care and treatment, health service management, team and resource cooperative. (Choochai Supavong, 2009).

- Health Promotion Leadership Development

Health Promotion Leadership Development refers to the process to improve ability of nursing students to lead and motivate people to change their lifestyle, environment and social life to be more physically and mentally healthy and live a long life, leading to a better quality of life and able to evaluated by the knowledge, attitude, health promotion behavior form. The research find out them from health promotion performance criteria. (Barker, 1992 ; Bass, 1985 ; Choochai

Supavong, 2009 ; Kanchana Suntipattanachai et al., 2001 ; Marisa Krairiksh, 2005 ; Nuttaya Puthanawanichnun, 2005 ; Praboromrajchanok Institue, the Ministry of Public Health, 2002 ; Thailand Nursing and Midwifery Council, 2009 ; WHO, 2008)

- Model for development

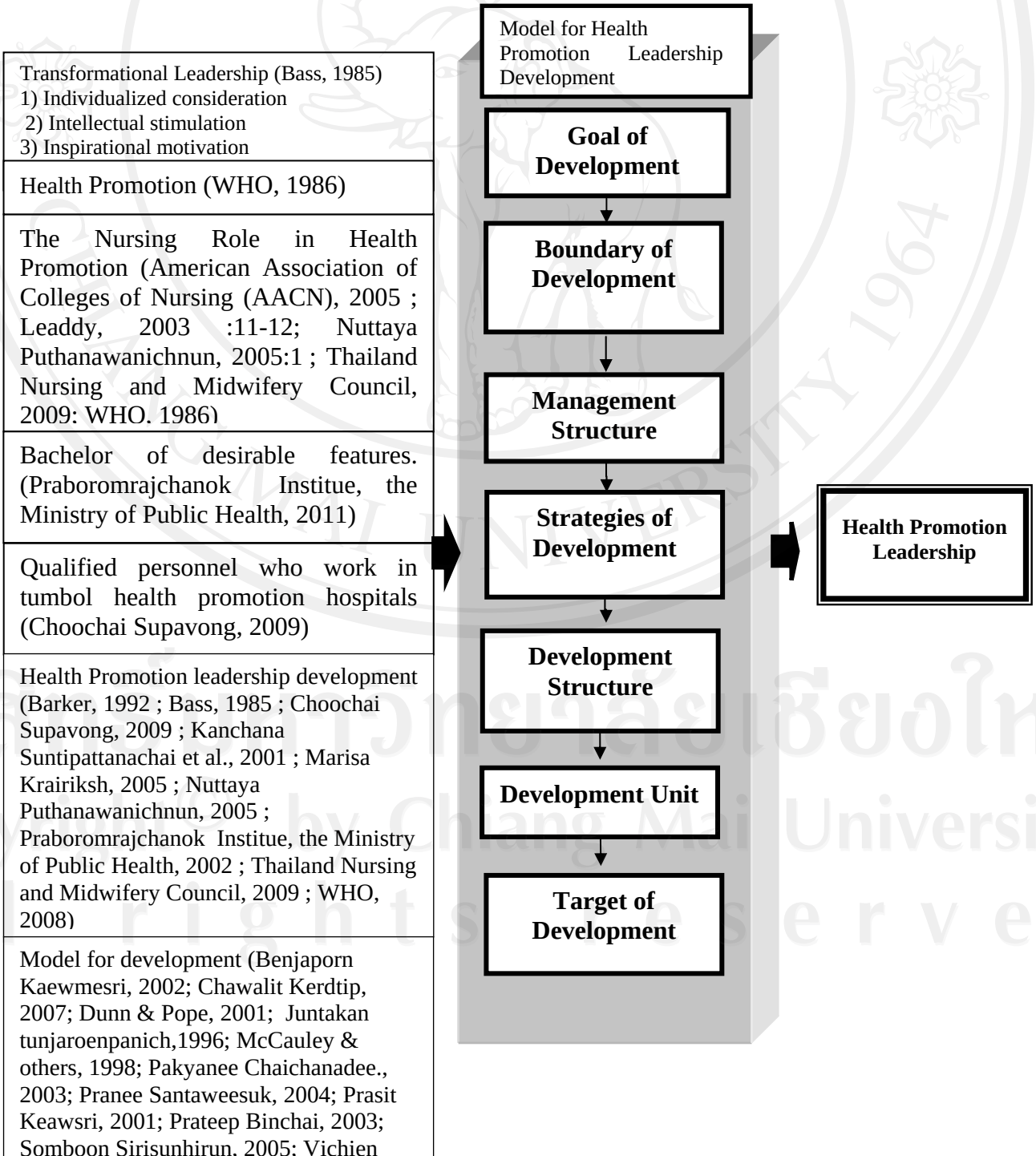
Model for development is the data soreces from academics and researches that consistant about model for develops. (Benjaporn Kaewmesri, 2002; Chawalit Kerdtip, 2007; Dunn & Pope, 2001; Juntakan tunjaroenpanich,1996; McCauley & others, 1998; Pakyanee Chaichanadee., 2003; Pranee Santaweesuk, 2004; Prasit Keawsri, 2001; Prateep Binchai, 2003; Somboon Sirisunhirun, 2005; Vichien Chiwapimai, 1996; Worathep Poompakdeepan, 2007)

Quality of the model refers to the suitable and response of model for develops the leadership and must be standardized. The standards are Feasibility, Utility, Propriety, Accuracy and Adequacy.

2. Dependent variable is Health Promotion

Leadership Health Promotion Leadership refers to the ability of nursing students to lead and motivate people to change their lifestyle, environment and social life to be more physically and mentally healthy and live a long life, leading to a better quality of life and able to evaluated by the knowledge, attitude, health promotion behavior form.

From the details, summarized the conceptual framework of Model for Health Promotion Leadership Development of Nursing Students in Nursing College under Praboromrajchanok Institue, the Ministry of Public Health. That show in Figure 2.



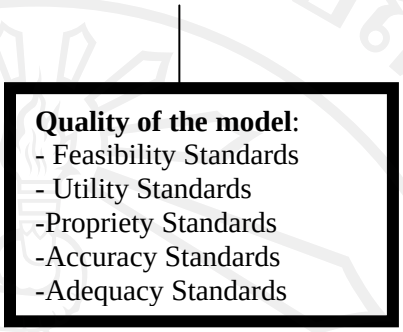


Figure 2 Framework of the Study "Model for Health Promotion Leadership Development of Nursing Student in Nursing College under Praboromrajchanok Institute, the Ministry of Public Health"