

## **CHAPTER IV**

## **RESEARCH RESULTS**

After the questionnaires were returned, all of them were checked for completeness. The data were entered using Statistical Package for the Social Sciences (SPSS) and double checked for accuracy. Range check and logical check were done to assure for validity of data set. An analyzing by SPSS was run to analyze health centers' capacities for promoting health in four main parts as follow;

- 1. Characteristics of respondents
- 2. Individual capacities; knowledge, skills, commitment and resources
- 3. Organizational capacities; commitment, structure, culture and resources
- 4. Environmental capacities; political will, public opinion, supportive organization and applying ideas and resources

Descriptive statistics and inferential statistics were used in this process. Following are the results of data analysis.

# 4.1 Characteristics of Respondents

There are 88.9 per cent (168 out of 189) of health centers in all of Nakhonsawan province (table 4.1) where almost all of respondents are health centers (75.6 %), the next primary care units (PCU) and community medical care units (CMU), 21.4 % and 3 % respectively.

Table 4.1: Type of health centers which respondents work in

Type of health center	Frequency	Percent
Health center	127	75.6
Primary care unit	36	21.4
Community medical care unit	5	3.0
Total	168	100

As shown in table 4.2 the responsibility and service quantity of health centers (i.e. that is amount of responsible areas of all health centers) are 7.93 villages in average. These are almost all (96.4%) located in Tambon Administrative Office's area and minority (3.6%) located in municipal area. An average of all kind health workers is 3.0 per health center that served visitors for 729.7 times per month in average.

Table 4.2: Responsibility of health centers and service quantity

Responsibility and Service quantity	Min.	Max.	Mean	Median	SD.
Number of villages or communities	3	18	7.9	7	2.94
Number of visitors per month (average)	30	2100	729.7	600	378.60
Number of all kind health workers	1	7	3.0	3	1.15

The study found that health workers, who responded the questionnaires represent health center and are working for health promotion as their responsibility. Majority respondent are female (63.7 %) and are 38.2 years old in average. The highest level of achieved by majority is graduated level (87.5 %), 76.2 % for bachelor degree and 11.3 % for more than bachelor degree. Most of respondents, more than 1 over 3 (40.5 %), are public health administrative officers, 22.6 % are technical officers of public health, 18.5 % are professional nurses (registered nurse), 16.1 % are community health officers, 1.8 % are technical nurses and 0.6 % are midwifery. More

than 4 over 5 (88.7%) have worked for ten years or more, only two of them (1.2 %) are worked for less than one year. (See table 4.3)

Table 4.3: Characteristics of respondents (n = 168)

Characters	n	%
<u>Gender</u>		
Male	61	36.3
Female	107	63.7
Age (full year)		
< 25	5	2.9
25 - 34	52	31.0
35 - 44	72	42.9
45 - 54	35	20.8
55 and more	4	2.4
Mean = 38.2, SD.= 7.33, Median =	Mode=	
36.5,	35	
Education		
< Bachelor degree	21	12.5
Bachelor degree	128	76.2
> Bachelor degree	19	11.3
<u>Position</u>		
Midwifery	1	0.6
Technical nurse	3	1.8
Registered nurse	31	18.5
Public health administrative officer	68	40.5
Technical officer of public health	38	22.6
Community health officer	27	16.1
During time of working		
Less than one year	2	1.2
1 – 4 years	6	3.6
5 – 9 years	11	6.5
10 years or more	149	88.7

# 4.2 Individual Capacities of Health Worker in Health center

## 4.2.1 Knowledge

The table below (table 4.4) shows health promotion knowledge of health workers in health centers where average score of all criterions are greater than 3.0. The two highest mean scores (holistic understanding of health and its determinants and communities understanding) are nearly 4.0 (3.9) while others are greater than 3.5. The results mean majority respondents agree that they are appropriate knowledge for promoting health.

Table 4.4: Mean and Percentage of individual knowledge level for promoting health (n=168)

Knowledge	_ x		Pei	rcent of R	Rating	
	••	1	2	3	4	5
1) Holistic understanding of health and its determinants.	3.9	0	1.8	22.6	64.9	10.7
2) Understand the fundamental principles of health promotion.	3.8	0	6.0	24.4	57.7	11.9
3) Familiar with a variety of strategies for health promotion.	3.6	0	6.5	36.9	50.6	6.0
4) Understand the contexts within which different health promotion strategies are effective.	3.6	0	3.6	39.9	50.0	6.5
5) Familiar with the conditions, aspirations, and cultures of the populations with whom I work.	3.9	0.6	2.4	20.2	63.1	13.7

x = mean of rating scale, 1= strongly Disagree, 2= disagree, 3= uncertain, 4= agree, 5= Strongly Agree

**4.2.2 Skills** 

Table 4.5: Mean and Percentage of individual skills level for promoting health (n=168)

Individual Skill	_ x		Per	cent of F	Rating	
		1	2	3	4	5
1) Able to effectively plan, implement and evaluate health promotion.	3.6	0	3.0	33.9	58.9	4.2
2) Communicate effectively with diverse audiences, using a variety of mean.	3.8	0	1.2	29.9	58.9	10.7
3) Work well with other, in a range of roles and contexts.	3.9	0	3.0	17.9	63.7	15.5
4) Systemically gather and use evidence to guide my practice.	3.4	0	7.1	52.4	39.3	1.2
5) Able to build the capacity of communities and organizations with which I work.	3.5	0.6	8.9	36.3	50.6	3.6
6) Strategic and selective in my practice.	3.4	1.2	10.7	39.9	44.0	4.2

x = mean of rating scale, 1= strongly Disagree, 2= disagree, 3= uncertain, 4= agree, 5= Strongly Agree

Table 4.5 is the result of individual skills for health promotion. Health workers were asked their opinions about use of skill for implementing health promotion. First, majority (58.9 %) responses show that they agree that they are able to effectively plan implement and evaluate health promotion. Second, more than 70 % of them have skill of effective communication. Third, 3 over 4 of all respondents, 63.7 % agree and 15.5 % strongly agree that they can work with others in any situations. Fourth, in terms of systemic and evidence guide practice, more than a half (52.4 %) respond uncertain rating. Fifth, the empowerment skill, a half (50.6 %), of respondents rated they agree that they are able to build the capacity of communities and organizations with which they work. Sixth, majority agree that they are strategic and selective practitioners. All of six criterions' average score was greater than 3.0, highest was 3.9 of working well with others skill and lowest was 3.4 of strategic and

selective practice skill. The results indicated majority agree that they have enough skills for promoting health.

4.2.3 Commitment

Table 4.6: Mean and Percentage of individual commitment level for promoting health(n=168)

Individual Commitment	$\frac{-}{x}$		Pei	rcent of R	Rating	
		1	2	3	4	5
1) energy, enthusiasm, patience and persistence in work	3.7	2.4	6.0	24.4	50.0	17.3
2) Value equity, justice, empowerment, participation and respect for diversity	4.3	0.6	0.6	7.7	50.0	41.1
3) flexible, innovative, and willing to take thoughtful risks	4.1	0.6	1.2	12.5	63.7	22.0
4) learn from own experiences, and from those of others	4.2	0.6	0.6	6.0	68.5	24.4
5) confident in self-abilities, and credible in the eyes of others	3.8	1.2	0.6	24.4	64.9	8.9
6) believe in and advocate for health promotion	3.9	1.2	1.8	19.0	59.5	18.5

 $<sup>\</sup>bar{x}$  = mean of rating scale, 1= strongly Disagree, 2= disagree, 3= uncertain, 4= agree, 5= Strongly Agree

In terms of commitment, respondents were asked six criterions which represented their work willingness, 1) enough energy for work, 2) valued in equity, justice, empowerment proceeding, participation and respect for diversity, 3) flexibility and innovative, 4) learn behaviors, 5) self-confident in own abilities and, 6) believe in and advocated health promotion. The highest average score, (table 4.6), of all subdomains, 3 out of 6 issues are greater than 4, valued in equity, justice, empowerment proceeding, participation and respect for diversity, flexibility and innovative, learn behaviors, and the others three nearly 4.0. These high average scores mean health workers have high level of health promotion willingness.

## 4.2.4 Resources

The last criterion of individual capacities is resources for implementing health promotion activities. The highest average score criterion that shows health workers have supportive managers, colleagues, and allies with whom to work and learn as 3.6. The lowest, 2.9, average score in this sub-domain is having tool to aid practice issue. Others are 3.0 and higher than average score. (See table below)

Table 4.7: Mean and Percentage of individual resources level for promoting health (n=168)

<b>Individual Resources</b>	$\bar{x}$	Percent of Rating					
		1	2	3	4	_ 5	
1) Adequate time to engage in health promotion practice.	3.3	7.1	13.1	28.0	45.8	6.0	
2) Have tool to aid practice	2.9	3.6	32.1	38.1	25.0	1.2	
3) Have the infrastructure needed to practice health promotion.	3.1	2.4	17.3	48.2	32.1	0	
4) Have supportive managers, colleagues, and allies with whom to work and learn.	3.6	3.6	3.0	32.1	48.8	12.5	
5) Can access adequate financial resources for health promotion practice.	3.0	6.5	25.6	36.9	27.4	3.6	

x = mean of rating scale, 1= strongly Disagree, 2= disagree, 3= uncertain, 4= agree, 5= Strongly Agree

# 4.3 Organizational Capacities of Health Center

## 4.3.1 Commitment

The appropriate organizational commitment can support individual work. In this study we want to know "what is going on in practitioners' level". As of the results, in this sub-domain the issue that shows the highest average is that the organization has partnerships with diverse organizations and communities. The other three issues are nearly 4, one of those the lowest commitment organizational capacity average score is priorities for addressing the determinants of health (3.6), as the table below.

Table 4.8: Mean and Percentage of organizational commitment level for promoting health (n=168)

Organizational Commitment	$\bar{x}$	Percent of Rating					
		1	2	3	4	5	
1) Value health promotion at all levels of organization.	3.9	0.6	5.4	16.1	61.9	16.1	
2) Have a clearly defined vision and mission to engage in health promotion.	3.7	1.2	8.9	22.0	55.4	12.5	
<ol> <li>Policies and programs support health promotion mission.</li> </ol>	3.8	0.6	1.8	26.8	60.7	10.1	
4) Have strategic priorities for addressing the determinants of health.	3.6	1.2	4.8	31.5	54.8	7.7	
5) Have partnerships with diverse organizations and communities.	4.0	1.2	0.6	20.2	54.2	23.8	

x = mean of rating scale, 1= strongly Disagree, 2= disagree, 3= uncertain, 4= agree, 5= Strongly Agree

## 4.3.2 Culture

For the organizational culture, the average score of all five criterions are nearly 4 meaning that majority agree that the organizations have a good culture for implementing health promotion where all five mean values are similar. There are two high average score of issues in this sub-domain, leaders and managers enable health promotion practice and positive and nurturing relationship is fostered among employees, with 3.9. The lowest average score (3.7) is also two issues which are practicing and celebrating of health promotion principles and organizational communication as the following table.

Table 4.9: Mean and Percentage of organizational culture level for promoting health (n=168)

Organizational Culture	$\bar{x}$	Percent of Rating					
		1	2	3	4	5	
1) Leaders and managers enable health promotion practice.	3.9	0.6	3.6	19.0	58.9	17.9	
2) Foster critical reflection, Innovation and learning.	3.8	1.2	2.4	22.0	66.1	8.3	
3) Health promotion principles and value are practiced and celebrated at all level.	3.7	1.2	3.0	26.8	61.9	7.1	
4) Positive and nurturing relationship is fostered among employees.	3.9	1.2	1.8	23.2	54.8	19.0	
5) Communication throughout the organization is open and timely.	3.7	0.6	8.3	28.0	48.8	14.3	

x = mean of rating scale, 1 = strongly Disagree, 2 = disagree, 3 = uncertain, 4 = agree, 5 = Strongly Agree

#### 4.3.3 Structures

The next organizational capacity is structure. The average scores are greater than three where the values are between 3.5 - 3.9 (table 4.10). The two highest issues are shared responsibility for health promotion and using of health promotion process as the accountability and successful monitoring. While, the lowest average score (3.5) indicated organizational structure that facilitate human resource collaboration both external and within organizational policies.

Table 4.10: Mean and Percentage of organizational structure level for promoting health (n=168)

Organizational Structure	$\bar{x}$	Percentage of Rating					
		1	2	3	4	5	
1) Health promotion is a shared responsibility.	3.9	1.2	3.0	17.3	62.5	16.1	
2) Health promotion is integral to accountability mechanisms.	3.9	0.6	3.0	17.9	58.9	19.6	
3) Structures facilitate collaboration, both internally and externally.	3.5	1.2	8.3	31.5	53.6	5.4	
4) Have effective policies for human resource development.	3.5	1.2	6.0	36.3	51.2	5.4	
5) Use empowering and evidence-based processes for strategic and program planning.	3.6	1.2	4.2	38.7	50.0	6.0	

x = mean of rating scale, 1= strongly Disagree, 2= disagree, 3= uncertain, 4= agree, 5= Strongly Agree

#### 4.3.4 Resources

In terms of organizational resources for promoting health, there are 4 out of 5 issues where average scores are greater than 3, while another is lower than 3. This lowest average score, 2.7, indicated the capacity of organization that dedicated adequate human resources to health promotion activities. The result stated the need of increasing health workers in practice level; especially these are reflections of Tambon level, the level of real community health promotion practice area. Although the others are greater than three average score, but at least two issues, adequate infrastructure and equipment and within organization core budget allocation are a little bit more than three, 3.3 and 3.4 respectively. This tends to indicate the shortage of health promotion resources support situation.

Table 4.11: Mean and Percentage of organizational resources level for promoting health (n=168)

Organizational Resources	$\frac{-}{x}$		Perce	ntage of l	Rating	
_		1	2	3	4	5
1) Have many employees with solid knowledge and skills in health promotion.	3.7	1.2	4.8	25.0	59.5	9.5
2) Dedicate adequate human resources to health promotion activities.	2.7	18.5	28.0	25.0	26.8	1.8
3) Resources for health promotion are allocated from our core budget.	3.4	3.0	16.1	28.6	45.2	7.1
4) Actively engage with communities.	3.7	1.2	6.5	25.6	50.6	16.1
5) Provide practitioners with adequate infrastructure and equipment to do their jobs.	3.3	3.6	12.5	39.3	40.5	4.2

x = mean of rating scale, 1 = strongly Disagree, 2 = disagree, 3 = uncertain, 4 = agree, 5 = Strongly Agree

## 4.4 Environmental Capacities of Health Center

## 4.4.1 Political Will

The first sub-domain in this part shows the political support from outside both laterally and vertically. Although all mean values are more than three, (table 4.12), but those which are a little greater than three, means that majority lightly "agree" that there are political wills supported. The highest average score is 3.4 which stated organizations were supported from provincial/regional health care organizations that are mandated to invest core funding in population health promotion. While the local governing support is the lowest average score with 3.1, however, that is nearly the highest (3.4) mean score.

Table 4.12: Mean and Percentage of political wills level that support promoting health (n=168)

Political Will	$\bar{x}$		Percen	tage of R	ating	
	•••	1	2	3	4	5
1) Governments (district, provincial and federal) provide adequate financial resources for the comprehensive health system, including care, prevention and promotion.	3.2	3.6	22.0	34.5	34.5	5.4
2) Departments of health (district, provincial and federal) provide leadership for health promotion agenda.	3.3	4.8	13.1	38.1	40.5	3.6
3) Provincial/regional health care organizations are mandated to invest core funding in population health promotion.	3.4	2.4	13.7	33.3	45.8	4.8
4) Local governing value and support health promotion as a core mandate of their organization.	3.1	12.5	10.1	34.5	36.3	6.5

x = mean of rating scale, 1= strongly Disagree, 2= disagree, 3= uncertain, 4= agree, 5= Strongly Agree

## 4.4.2 Public opinion

The following table, there are 4 over 6 criterions' mean value "disagree", with less than 3, where people in communities can support promoting health. Majority indicated "uncertain" rating of all issues. The near three average scores in this sub-domain, both greater than and less than three, stated unclear situation of communities' health concerned. The two highest average scores are 3.2 showing the capacities' issues that people take collective action to foster community well-being and people believe the health system has a mandate for health promotion. The lowest state of positive public and media attention is paid to health promotion with 2.7. The others two criterions are both 2.8 average score value (table 4.13).

Table 4.13: Mean and Percentage of public opinions level that support promoting health (n=168)

Public Opinion	<u> </u>		Perce	Percent of Rating			
•	х _	1	2	3	4	5	
1) People have a holistic understanding of health and its determinants.	3.0	5.4	17.9	52.4	22.6	1.8	
2) People believe that addressing the determinants of health is a shared responsibility.	2.8	8.3	25.0	44.6	20.8	1.2	
3) People take ownership of and responsibility for their own health and well-being.	2.8	6.0	31.5	38.7	22.6	1.2	
4) People take collective action to foster community well-being.	3.2	3.0	17.3	39.9	38.1	1.8	
5) People believe the health system has a mandate for health promotion.	3.2	2.4	17.3	45.8	31.0	3.6	
6) Positive public and media attention is paid to health promotion.	2.7	11.3	36.3	29.8	20.8	1.8	

x = mean of rating scale, 1= strongly Disagree, 2= disagree, 3= uncertain, 4= agree, 5= Strongly Agree

## 4.4.3 Supportive organizations

For supportive organization advocating, mostly agree with all criterions in overview calculation. The average scores are a little greater than three, and similar values. The highest score is 3.3 and lowest is 3.1. Three issues are equal to highest score those are there are both inside and outside supportive organizations, supportive organizations are linked both through informal networks and formal associations, and supportive organizations frequently partner with one another, including inter-sectors. The lowest is the responsibility areas have diverse organizations address the determinants of health (table 4.14).

Table 4.14: Mean and Percentage of Support of supportive organizations (n=168)

Supportive Organization	$\bar{x}$	Percent of Rating					
	-	1	2	3	4	5	
1) Diverse organizations address the determinants of health.	3.1	2.4	25.6	36.3	34.5	1.2	
<ol> <li>Supportive organizations include those from outside the health sector.</li> </ol>	3.3	1.8	11.9	48.2	34.5	3.6	
3) Supportive organizations frequently partner with one another, including intersectorally.	3.3	1.8	11.9	42.3	42.9	1.2	
4) Supportive organizations are linked both through informal networks and formal associations.	3.3	3.6	11.9	36.3	45.2	3.0	
5) Supportive organizations advocate enhancing the credibility of health promotion.	3.2	4.2	11.9	44.0	37.5	2.4	

x = mean of rating scale, 1= strongly Disagree, 2= disagree, 3= uncertain, 4= agree, 5= Strongly Agree

#### 4.4.4 Ideas and other resources

For applying ideas and resources that support health promotion activities, the survey found those average scores are greater than three, most nearly three. The highest score is 3.5 and lowest is 3.1. Two highest score issues are evidence of effectiveness of health promotion which can easily be found and recourse materials and conceptual tools that are available for wide range of health promotion strategies, initiatives and processes. The other two lowest score issues are networks of researchers and practitioners are available for advice and support with regard to specific challenges and appropriate opportunities exist for professional development in health promotion. One other issue was stimulating and innovative ideas about promoting health are widely accessible that indicated 3.3 average score (table 4.15).

Table 4.15: Mean and Percentage of ideas applying and other resources (n=168)

Ideas and other Resources	$\frac{-}{x}$	Percentage of Rating					
		1	2	3	4	5	
1) Stimulating and innovative ideas about promoting health are widely accessible.	3.3	4.2	17.3	31.5	42.9	4.2	
2) Evidence for the effectiveness of health promotion can easily be found.	3.5	0.6	13.1	29.8	52.4	4.2	
3) Recourse materials and conceptual tools are available for wide range of health promotion strategies, initiatives and processes.	3.5	0.6	10.1	36.9	48.8	3.6	
4) Networks of researchers and practitioners are available for advice and support with regard to specific challenges.	3.1	6.5	18.5	42.9	28.0	4.2	
5) Appropriate opportunities exist for professional development in health promotion.	3.1	2.4	19.0	44.6	31.0	3.0	

x = mean of rating scale, 1= strongly Disagree, 2= disagree, 3= uncertain, 4= agree, 5= Strongly Agree

The highest summated mean of three domains is the organizational capacity that indicated mean value equal to 3.68, next is individual capacity with 3.65 and environmental capacity with 3.20. In sub-domain level, the highest summated mean score (4.0) is commitment in individual capacity domain, while lowest summated mean score (3.0) is public opinion in environmental capacity domain. Sub-domain that is indicated the highest mean score of issue (4.3) is commitment individual capacity and the two lowest mean score of issue (2.7) are public opinion of environmental capacity and resources organizational capacity (table 4.16).

Table 4.16: Capacities' mean score, highest and lowest scores

Capacities	Mean	Highest	Lowest
Individual capacity			
Commitment	4.0	4.3	3.7
Knowledge	3.8	3.9	3.6
Skills	3.6	3.9	3.4
Resources	3.2	3.6	2.9
Average	3.65	3.93	3.40
Organizational capacity			
Commitment	3.8	4.0	3.6
Culture	3.8	3.9	3.7
Structure	3.7	3.9	3.5
Resources	3.4	3.7	2.7
Average	3.68	3.88	3.38
Environmental capacity			
Applying ideas and others	3.3	3.5	3.1
resources	3.3	3.4	3.1
Political will	3.0	3.2	2.7
Public opinion	3.2	3.3	3.1
Supportive organization	3.20	3.35	3.0
Average			

# 4.5 Relationship between Capacities among domains and

## sub-domains

As the previous results are univariate analysis, this part shall consider the relationship among variables. Non-parametric statistics, Spearman's rank correlation coefficient was used as appropriate to serve the study objectives. Focus was on organizational capacity domain and others, especially those individual capacities as it represent organizational functions.

The results found Spearman's correlation coefficient values are < 0.5 of all bivalents, according to acceptable values  $-1 \le r \le 1$  that nearly 1 is more ranking agreement of bivalent, but significant at p-value < 0.05 and almost < 0.001. These following are selected results. (For more information please refer to appendices C)

#### 4.5.1 Individual skills and organizational capacity

Relationship between individual skills and organizational cultures showed statistically significant relationship at p-value < .05, and mostly are < .001 even if all correlation coefficient values are less than 0.5. These results showed that organizational cultures and individual skills are significantly correlated.

For individual skills and organizational structure, skill of strategic implementation was related with appropriate human resources management and policy, and use of empowerment and health information of organizational structure were also related significantly at p-value < .001. The skill of empowerment proceeding was related with all criterions of organizational structure significantly at p-value < .001. The same as other four skills, learning and community analysis

proceeding, team working, communication, and skill of planning and evaluation were related significantly with all criterions of organizational structure at similar p-value nearly .001 and < .001.

The next was relationship between individual skills and organizational resources. According to the results, most individual skills and organizational resources are related significantly at p-value < .05 and nearly .001 levels. Skill of strategic following implementation has relationship with all criterions of organizational resources at p-value .001 and < .001, while the continuing community activities for health promotion has no significant relationship. Skill of empowerment proceeding has relationship with good workers, continuing community activities participation, and enough tools and infrastructures support of organizational resources at p-value < .001. Same as skill of learning an community analysis proceeding has relationship with those four criterions of organizational resources at p-value < 0.05 and < .001. The skill of team working and communication were also related with 3 out of 5 criterions of organizational resources at p-value at < .001 (table 4.17).

Table 4.17: Relationship between individual skills and organizational resources\* (n=168)

Individual skills	have good worker in organizatio	have enough worker	within the organization budgeting for health promotion	continuing community activities participatio	enough tools and infrastructur e support
skill of strategic	.255**	.291***	.249**	.144	.244**
following implementation			.2.19		.2
skill of	.422***	.146	.220**	.346***	.269***
empowerment proceeding					
skill of learning and community analyzing proceeding	.385***	.280***	.175**	.273***	.399***
skill of team	.374***	.107	.178**	.317***	.339***
working					
skill of	.394***	.105	.155**	.368***	.336***
communication					
skill of planning and evaluation	.418***	.056	.167**	.377***	.258**

<sup>\*</sup> Used Spearman's rank correlation, \*\*p < 0.05, \*\*\*p < 0.001

## 4.5.2 Individual skills and Environmental capacity

The relationship between individual skills and environmental capacities, first, we consider the relationship between individual skills and political will. The results found that all bivalents are related at p-value < .05 except two bivalents those are skill of empowerment proceeding with enough budget support and skill of planning and evaluation with enough budget support that have no significant relationship. The highest significant relationship among skill and political wills is skill of learning and community analysis proceeding that is related with all criterions of political will at p-value < .001. Other bivalents are related at p-value nearly .001 as shown in table 4.18.

Table 4.18: Relation ship between individual skills and political will\* (n=168)

Individual skills	enough budget support	Leadership developed	guided and consulted	local official supported
skill of strategic following implementation	.197**	.291***	.269***	.227**
skill of empowerment proceeding	.151	.274***	.253**	.292***
skill of learning and community analyzing proceeding	.341***	.433***	.404***	.418***
skill of team working	.069	.195**	.177**	.228**
skill of communication	.201**	.265**	.291***	.217**
skill of planning and evaluation	.138	.209**	.209**	.176**

<sup>\*</sup> Used Spearman's rank correlation, \*\*p < 0.05, \*\*\*p < 0.001

The next was relationship between individual skills and public opinions which were interested issue as it represented success of health promotion practice. Public opinions stated knowledge and concern of people in communities for implementing health promotion. Appropriate skills of health workers can lead health centers to reach health promotion's goals. In this part, we consider relationship of six skills of health workers and six criterions of public opinion. Test of relationship found that more than half of bivalents are related at p-value nearly .05 and mostly are < .001 levels. 11 out of 36 bivalents have no relation. The most interesting result is skill of following strategic implementation which was related with all criterions of public opinion at p-value .001 and less. The relationship shows that strategic practitioners can serve people knowledge and concern. While, the skill of planning and evaluation has no significant relationship with people believe and people concern. Others are shown in table 4.19.

Table 4.19: Relationship between individual skills and public opinion\* (n= 168)

Individual skills	community understandi ng of integrated	health sharing believed of people in communi	health concerne d of people in commun	health participati on of people in communit	people believed "good health system included good health	health promotion was accepted community
1 0	health	ty	ity	<u>y</u>	promotion"	wide
skill of strategic following implementation skill of empowerment	.354***	.292***	.188**	.310***	.356***	.354***
proceeding skill of learning and community analyzing proceeding	.393***	.232	.254	.380	.451	.332***
skill of team working	.224**	.079	.113	.250**	.290***	.143
skill of communication skill of	.228**	.108	.071	.339***	.303***	.203**
planning and evaluation	.228**	.065	.076	.249**	.216**	.179**

<sup>\*</sup> Used Spearman's rank correlation, \*\*p < 0.05, \*\*\*p < 0.001

More than a half of bivalents between individual skills and supportive organizations are related significantly. The skill of learning and community analysis proceeding has high significant relationship with all criterions at p-value < .001. Mostly kills' criterions are related with several of supportive organizations significantly. However, skill of planning and evaluation has no significant relationship with organizational support and community wide media support for health promotion. Furthermore, communication skill can not serve appropriate support from both inside and outside organization as statistical significant value shown in table 4.22.

The last one to be considered is the relationship between individual skills and ideas and other resources. The test results found that nearly all bivalents to be highly significant at p-value < .001. One bivalent has no significant relationship

that is skill of team working and technicians and practitioners' network support. Of all individual skills, they have highly significant relationship with health promotion principles and concepts applying. For high significant relationship of these two subdomains, the most interesting issue is strategic practitioner can not served success of community health promotion as the statistical significant relation value shown in table 4.20, mean skill of strategic following implementation can serve understanding to community but still can not serve concrete successful of community health promotion (compare with table 4.19), as of shed the non-significant p-value.

Table 4.20: Relationship between individual skills and ideas and other resources\* (n= 168)

	innovative and applied	success of health	concept and principle of health	technicians	
Individual skills	health	promotion	promotio	and	Good
	promotion	in	n	practitioners	opportunity
	tools in	communit	applicatio	network	for self-
	community	У	n	support	development
skill of strategic	.320***	.136	.258**	.197**	.394***
following					
implementation		201444	201444	200444	4 - 4 - 1 - 1 - 1
skill of	.455***	.301***	.281***	.389***	.474***
empowerment					
proceeding skill of learning	.429***	.429***	.484***	.479***	.388***
and community analyzing	.427***	.429	.404	.479	.300
proceeding					10544
skill of team	.259**	.253**	.251**	.147****	.185**
working	204***	.326***	.285***	.273***	.343***
skill of communication	.394***	.320***	.283***	.2/3	.343
skill of planning					A (83)
and evaluation	.346***	.306***	.322***	.291***	.329***

<sup>\*</sup> Used Spearman's rank correlation, \*\*p < 0.05, \*\*\*p < 0.001