



CHAPTER IV

RESEARCH RESULTS

For the presentation of research result, the researcher collected a total of 215 samples from the targeted 241 samples, accounted for 89.21%. Tables will be presented in this chapter with description below the table. The division is in 5 parts as follows:

Part 1: Personal factors of the samples

Part 2: Data on levels of work morale of public health personnel of health centers in Krabi province.

Part 3: Data on relationship between work morale and personal factors of public health personnel of health centers in Krabi province.

Part 4: Data on the difference (s) in terms of work morale of public health personnel of health centers in Krabi province with different personal factors.

Part 5: Data on opinions and suggestions regarding how to promote work morale in the personnel.

4.1 Personal factors of the samples

In this part, there will be the presentation of frequency and percentage of the samples, including sex, age, marital status, highest level of education obtained, job position, job status, job post in line of work, work experiences, and monthly household income, as follows:

Table 1: Frequency and percentage of the samples classified according to their personal factors

Personal factors	Numbers (n=215)	%
Gender		
Male	70	32.6
Female	145	67.4
Ratio Male to Female = 1:2		
Age		
21-29 years old	71	33.0
30-39 years old	84	39.1
40-49 years old	44	20.5
Over 50 years old	16	7.4
Mean = 34.44, SD= 8.74, min=21, max =57		
Marital status		
Single,	70	32.6
Married	133	61.9
Separated, Divorced, Widow or widower	12	5.5
Highest education level		
Lower than Bachelor's degree or equivalent	50	23.3
Bachelor's degree	161	74.9
Master's degree or higher	4	1.9
Job position		
Head of the health center	61	28.4
Employees of the health center	154	71.6

Table 1: (continued) Frequency and percentage of the samples classified according to their personal factors

Personal factors	Numbers (n=215)	%
Job status		
Officers	170	79.1
Permanent employees	3	1.4
Temporary employees	42	19.5
Job post by line of work		
Public Health Administrator	52	24.2
Public Health Technical Officer	37	17.2
Registered Nurse	61	28.4
Community Health Officer	59	27.4
Community Dental Health Officer	6	2.8
Work experiences		
Less than 10 years	104	48.4
10-20 years	60	27.9
More than 21 years	51	23.7
Mean = 11.97, SD= 9.11, min=1, max =39		
Monthly household income		
Less than 15,000 Baht	44	20.5
15,000-30,000 Baht	86	40.0
More than 30,001 Baht	85	39.5
Mean= 33,054, SD= 23,327.94, min=7,000, max =150,000		

From table 1 it found that the samples mostly were female (67.4%), aged between 30-39 years old (39.1%) (the least age was 21 years old and the highest age was 57 years old $\mu=34.4$ years $\sigma= 8.74$). Their marital status was mostly married

(61.9%), with majority of Bachelor's degree (74.9%). Their job post in line of work were Public Health Administrator (71.6%), Public Health Technical Officer with job status as officers (79.1%); Registered Nurse for 28.4%, Community Health Officer for 27.4%. Their work experiences were less than 10 years old (48.4%) (with least work experiences of less than one year and maximum of 39 year-long $\mu=12$ year $\sigma= 9.11$. In terms of their household income, the majority of them were between 15,000-30,000 baht per month, with least income of 7,000 baht per month and the maximum 150,000 baht per month $\mu=33,054.84$ $\sigma= 23,327.94$.

4.2 Data on levels of work morale of public health personnel of health centers in Krabi province.

In this part, the researcher presented the mean and the standard deviation of work morale of public health personnel of health centers in Krabi province as a total picture and as per aspect of 7 aspects in total in the following order:

Table 2: Mean and standard deviation of work morale of public health personnel of health centers in 7 aspects:

Items	μ	σ	Level of work morale
Household economic status	2.68	0.57	moderate
Opportunities for advancement	3.17	0.59	moderate
Relationships with supervisors	3.56	0.71	moderate
Relationships with peers	3.68	0.61	high
Intrinsic aspects of the job	3.60	0.48	moderate
Job satisfaction	3.51	0.52	moderate
Work conditions	3.43	0.56	moderate
Total	3.38	0.39	moderate

From table 2, it found that work morale of public health personnel of health centers in Krabi province in an overall picture was on moderate level ($\mu=3.38$). When taking into consideration each aspect, it found that relationships with peers had work morale in the high level ($\mu=3.68$). The rest were on moderate level with the lowest one on household economic status ($\mu=2.68$).

Table 3: Mean and standard deviation of the samples regarding work morale in terms of household economic status

Items	μ	σ	Level of work morale
Your present income is appropriate with the work load and your job responsibility.	3.01	0.67	moderate
Your income is sufficient for your present cost of living.	2.75	0.79	moderate
Your present income is appropriate when compare with the length of your work experiences.	2.77	0.78	moderate
Your present income is appropriate when compare with other organizations with similar missions.	2.61	0.75	moderate
Your present income is appropriate with your monthly household expenditure.	2.65	0.74	moderate
Other types of welfare help your income to be sufficient for your present cost of living.	2.67	0.84	moderate
You do not need to find extra income in addition to your regular work.	2.36	1.08	moderate
Total	2.68	0.57	moderate

From table 3, it found that work morale in terms of household economic status of public health personnel of health centers in Krabi province was on moderate level ($\mu=2.68$). When looking into each item, it found that the highest level of work morale

was in the statement of “your present income is appropriate with the work load and your job responsibility” ($\mu=3.01$). The lowest one was in the statement of “you do not need to find extra income in addition to your regular work”. ($\mu=2.36$).

Table 4: Mean and standard deviation of the samples regarding work morale in terms of opportunities for advancement

Items	μ	σ	Level of work morale
You have a chance to further your higher level of study.	3.17	0.88	moderate
You have opportunities for advancement in your line of command.	2.73	0.84	moderate
You have opportunities to be trained to develop your knowledge and capability.	3.40	0.82	moderate
You have opportunities to be promoted to higher position with fairness.	2.97	0.87	moderate
You have opportunities to express your own work performance.	3.34	0.71	moderate
You have opportunities to be selected for training or for field trip study.	3.22	0.84	moderate
You have get fairness in opportunities to be developed in job advancement.	3.37	0.83	moderate
Total	3.17	0.59	moderate

From table 4, it found that work morale in terms of opportunities for job advancement of public health personnel of health centers in Krabi province was on moderate level ($\mu=3.17$). When looking into each item, it found that the highest one was in the statement of “you have opportunities to be trained to develop your knowledge and capability” ($\mu=3.40$), and the lowest one was in the statement of “you have opportunities for advancement in your line of command”. ($\mu=2.73$).

Table 5: Mean and standard deviation of the samples regarding work morale in terms of relationships with supervisors

Items	μ	σ	Level of work morale
The supervisor trusts you in performing your job.	3.67	0.72	high
The supervisor takes good care of you and helps you when facing any problems in work.	3.59	0.83	moderate
Your opinion and suggestion are usually accepted by the supervisor.	3.39	0.89	moderate
The supervisor honors you and gives you an opportunity to work to your fullest capability.	3.77	0.77	high
The supervisor is a person whom you can seek for advice or suggestion in your personal matter.	3.44	1.02	moderate
The supervisor is fair to all subordinates equally.	3.49	1.00	moderate
The supervisor supports and promotes the advancement of the subordinates.	3.58	0.87	moderate
Total	3.56	0.71	moderate

From table 5, it found that work morale in terms of relationships with supervisors of public health personnel of health centers in Krabi province was on moderate level ($\mu=3.56$). The highest one was in the statement of “The supervisor honors you and gives you an opportunity to work to your fullest capability” ($\mu=3.77$) and the lowest one in “Your opinion and suggestion are usually accepted by the supervisor” ($\mu=3.39$)

Table 6: Mean and standard deviation of the samples regarding work morale in terms of relationships with peers

Items	μ	σ	Level of work morale
Peers at the health centers work collaboratively and help out in solving problems for work under responsibility.	3.89	0.81	high
You and your peers honor one another when expressing opinions and also listen to each other legitimately.	3.97	0.73	high
When you have personal matter or work issue, you always tend to consult your peers.	3.37	0.98	moderate
Your work practice tends to get cooperation from your peers at the health center.	3.91	0.89	high
In your health center, there is assistance in case peers are in trouble.	3.74	0.79	high
You have a chance to party with your peers beyond work hours or in some special occasions.	3.35	0.88	moderate
Your peers are always willing to spend time with you when you require.	3.54	0.81	moderate
Total	3.68	0.61	high

From table 6, it found that work morale in terms of relationships with peers of public health personnel of health centers in Krabi province was on high level ($\mu=3.68$). The highest one was in the statement of “You and your peers honor one another when expressing opinions and also listen to each other legitimately” ($\mu=3.97$) and the lowest one in “You have a chance to party with your peers beyond work hours or in some special occasions.” ($\mu=3.35$).

Table 7: Mean and standard deviation of the samples regarding work morale in terms of intrinsic aspects of the job

Items	μ	σ	Level of work morale
Your present position is appropriate with your knowledge and capability.	3.71	0.64	high
Your present job is what you are skillful at.	3.60	0.73	moderate
Your can use your knowledge and capability in your work to a full extent.	3.45	0.85	moderate
You participate in giving suggestions in work.	3.67	0.61	high
You are free to express your ideas fully.	3.71	0.70	high
Your opinions are accepted and are brought to improve work.	3.54	0.63	moderate
The assigned job is appropriate for you.	3.57	0.66	moderate
Total	3.60	0.48	moderate

From table 7, it found that work morale in terms of Intrinsic aspects of the job of public health personnel of health centers in Krabi province was on moderate level ($\mu=3.60$) The highest one was in the statement of “Your present position is appropriate with your knowledge and capability.” ($\mu=3.71$) and “You are free to express your ideas fully” ($\mu=3.71$), the lowest one in “Your can use your knowledge and capability in your work to a full extent.” ($\mu=3.45$)

Table 8: Mean and standard deviation of the samples regarding work morale in terms of job satisfaction

Items	μ	σ	Level of work morale
You are happy to work as assigned.	3.44	0.95	moderate
You can use your initiatives and personal capability in work.	3.65	0.63	moderate
The work under your responsibility is challenging and motivates you to work.	3.45	0.78	moderate
You are satisfied with your present work.	3.52	0.80	moderate
The assigned work is interesting and useful.	3.72	0.63	high
The workload of responsible job is appropriate, not too little and not too much.	3.26	0.81	moderate
You are satisfied in the knowledge and capability of your existing peers.	3.60	0.72	moderate
Total	3.51	0.52	moderate

From table 8, it found that work morale in terms of job satisfaction of public health personnel of health centers in Krabi province was on moderate level ($\mu=3.51$) The highest one was in the statement of “The assigned work is interesting and useful.” ($\mu=3.72$), the lowest one in “The workload of responsible job is appropriate, not too little and not too much..” ($\mu=3.26$).

Table 9: Mean and standard deviation of the samples regarding work morale in terms of work conditions

Items	μ	σ	Level of work morale
The health center you are working for has noise, light, and weather, which are appropriate for work.	3.78	0.75	High
The health center you are working for has materials and equipments, which are adequate for work.	3.15	0.92	Moderate
The health center you are working for has public facilities which enable your work.	3.28	0.84	Moderate
The building of health center has enough space for work.	3.42	0.91	Moderate
You have proper work hours.	3.56	0.74	Moderate
The health center you are working for has hazard prevention system from work.	3.22	0.80	Moderate
The health center you are working for is clean, tidy, and neat.	3.64	0.84	Moderate
Total	3.43	0.56	Moderate

From table 9, it found that work morale in terms of work conditions of public health personnel of health centers in Krabi province was on moderate level ($\mu=3.43$) The highest one was in the statement of “The health center you are working for has noise, light, and weather, which are appropriate for work..” ($\mu=3.78$), the lowest one in “The health center you are working for has materials and equipments, which are adequate for work.” ($\mu=3.15$).

4.3 Data on relationship between work morale and personal factors of public health personnel of health centers in Krabi province.

In this part, the presentation is about relationship of personal factors, including sex, age, marital status, highest education level obtained, job position, job status, job post in line of work, work experiences, and monthly household income and work morale of of public health personnel of health centers in Krabi province. They are presented in the following orders.

Table 10: The relationship between sex and work morale of public health personnel of health centers in Krabi province.

Gender	Level of work morale				Total	
	Moderate		High		No.	%
	No.	%	No.	%		
Male	55	78.6	15	21.4	70	100
Female	111	76.6	34	23.4	145	100

$$X^2 = 0.11 \quad df=1 \quad p\text{-value}=0.74$$

From table 10, it found that sex and work morale of public health personnel of health centers in Krabi province did not have significant statistically relationship.

Table 11: The relationship between age and work morale of of public health personnel of health centers in Krabi province.

Age (years)	Level of work morale				Total	
	Moderate		High		No.	%
	No.	%	No.	%		
< 30	59	83.1	12	16.9	71	100
30-39	61	72.6	23	27.4	84	100
40-49	34	77.3	10	22.7	44	100
≥ 50	12	75.0	4	25.0	16	100

$$X^2 = 2.45 \quad df=3 \quad p\text{-value}=0.48$$

From table 11, it found that age and work morale of public health personnel of health centers in Krabi province did not have significant statistically relationship.

Table 12: The relationship between marital status and work morale of public health personnel of health centers in Krabi province.

Marital status	Level of work morale				Total	
	Moderate		High		No.	%
	No.	%	No.	%		
Single	57	81.4	13	18.6	70	100
Married	98	73.7	35	26.3	133	100
Widow, widower, separated	11	91.7	1	8.3	12	100

$X^2 = 3.07$ $df=2$ $p\text{-value}=0.21$

From table 12, it found that marital status and work morale of public health personnel of health centers in Krabi province did not have significant statistically relationship.

Table 13: The relationship between highest education and work morale of public health personnel of health centers in Krabi province.

Highest education	Level of work morale				Total	
	Moderate		High		No.	%
	No.	%	No.	%		
Lower than Bachelor's degree or equivalent	40	80.0	10	20.0	50	100
Bachelor's degree or higher	126	76.4	39	23.6	165	100

$X^2 = 0.29$ $df=1$ $p\text{-value}=0.59$

From table 13, it found that highest education obtained and work morale of public health personnel of health centers in Krabi province did not have significant statistically relationship.

Table 14: The relationship between job position and work morale of public health personnel of health centers in Krabi province.

Job position	Level of work morale				Total	
	Moderate		High		No.	%
	No.	%	No.	%		
Head of health center	46	75.4	15	24.6	61	100
Employees	120	77.9	34	22.1	154	100

$X^2 = 0.16$ $df=1$ $p\text{-value}=0.69$

From table 14, it found that job position and work morale of public health personnel of health centers in Krabi province did not have significant statistically relationship.

Table 15: The relationship between job status and work morale of public health personnel of health centers in Krabi province.

Job status	Level of work morale				Total	
	Moderate		High		No.	%
	No.	%	No.	%		
Officers	129	75.9	41	24.1	170	100
Permanent and temporary employees	37	82.2	8	17.8	45	100

$X^2 = 0.81$ $df=1$ $p\text{-value}=0.37$

From table 15, it found that job status and work morale of public health personnel of health centers in Krabi province did not have significant statistically relationship.

Table 16: The relationship between job post in line of work and work morale of of public health personnel of health centers in Krabi province.

Job post in line of work	Level of work morale				Total	
	Moderate		High		No.	%
	No.	%	No.	%		
Public Health Administrator	39	75.0	13	25.0	52	100
Public Health Technical Officer	29	78.4	8	21.6	37	100
Registered Nurse	43	70.5	18	29.5	61	100
Community Health Officer and Community Dental Health Officer	55	84.6	10	15.4	65	100

$X^2 = 3.76$ $df=3$ $p\text{-value}=0.29$

From table 16, it found that job post in line of work and work morale of public health personnel of health centers in Krabi province did not have significant statistically relationship.

Table 17: The relationship between working experiences and work morale of public health personnel of health centers in Krabi province.

Working experiences (years)	Level of work morale				Total	
	Moderate		High		No.	%
	No.	%	No.	%		
< 10	85	81.7	19	18.3	104	100
10-20	42	70.0	18	30.0	60	100
> 20	39	76.5	12	23.5	51	100

$X^2 = 2.99$ $df=2$ $p\text{-value}=0.22$

From table 17, it found that working experiences and work morale of public health personnel of health centers in Krabi province did not have significant statistically relationship.

Table 18: The relationship between monthly household income and work morale of public health personnel of health centers in Krabi province.

Monthly household income (baht)	Level of work morale				Total	
	Moderate		High		No.	%
	No.	%	No.	%		
< 15,0000	35	79.5	9	20.5	44	100
15,000-30,000	73	84.9	13	15.1	86	100
> 30,000	58	68.2	27	31.8	85	100
$\chi^2 = 6.90$ $df=2$ $p\text{-value}=0.03^*$						

From table 18, it found that monthly household income and work morale of public health personnel of health centers in Krabi province had a significant statistically relationship with $p < 0.05$

4.4 Data on the difference (s) in terms of work morale of public health personnel of health centers in Krabi province with different personal factors.

In this part, the presentation is the mean of work morale of public health personnel of health centers in Krabi province and personal factors, in the following orders:

Table 19: The comparison of difference between the mean of work morale of public health personnel of health centers and gender

Work morale components	Gender	N	μ	σ	T
Household economic status	Male	70	2.57	0.57	-2.10*
	Female	145	2.74	0.57	
Opportunities for job advancement	Male	70	3.08	0.58	-1.68
	Female	145	3.22	0.60	
Relationships with supervisor	Male	70	3.51	0.78	-0.66
	Female	145	3.58	0.68	
Relationships with peers	Male	70	3.76	0.64	1.21
	Female	145	3.65	0.60	
Intrinsic aspect of job	Male	70	3.55	0.53	-1.24
	Female	145	3.64	0.46	
Job satisfaction	Male	70	3.53	0.53	0.24
	Female	145	3.51	0.52	
Work conditions	Male	70	3.43	0.65	-0.06
	Female	145	3.44	0.52	
Total	Male	70	3.35	0.42	-0.88
	Female	145	3.40	0.38	

* $p < 0.05$

The table 19 shows the comparison of work morale of public health personnel of health centers in Krabi province and gender in an overall picture and found no difference. When looking into each item, it was household economic status that had the difference with $p < 0.05$.

Table 20: Analysis of variance of work morale of public health personnel of health centers in Krabi province and age

Work morale components	Sources of variance	SS	df	MS	F
Household economic status	Between group	0.76	3	0.25	0.76
	Within group	70.68	211	0.33	
	Total	71.44	214		
Opportunities for job advancement	Between group	0.94	3	0.31	0.87
	Within group	75.31	211	0.36	
	Total	76.25	214		
Relationships with supervisor	Between group	0.42	3	0.14	0.27
	Within group	108.37	211	0.51	
	Total	108.79	214		
Relationships with peers	Between group	4.53	3	1.51	4.11*
	Within group	77.59	211	0.37	
	Total	82.12	214		
Intrinsic aspect of job	Between group	0.58	3	0.19	0.82
	Within group	49.77	211	0.23	
	Total	50.35	214		
Job satisfaction	Between group	2.89	3	0.96	3.65*
	Within group	55.81	211	0.26	
	Total	58.70	214		
Work conditions	Between group	3.09	3	1.03	3.32*
	Within group	65.41	211	0.31	
	Total	68.50	214		
Total	Between group	1.00	3	0.33	2.18
	Within group	32.32	211	0.15	
	Total	33.32	214		

* $p < 0.05$

The table 20 shows the comparison of work morale of public health personnel of health centers in Krabi province and age in an overall picture and found no difference. When looking into each item, it was relationship with peers, job satisfaction, and work conditions, that had the difference with $p < 0.05$.

Table 21: Comparison of the mean of work morale of public health personnel of health centers in Krabi province and age range

Work morale components	Age range (years)	μ	Age range (Year)			
			1 3.49	2 3.82	3 3.77	4 3.58
Relationship with peers	< 30	3.49		*	*	
	30-39	3.82				
	40-49	3.77				
	≥ 50	3.58				
Job satisfaction	< 30	3.36	3.36	3.57	3.64	3.63
	30-39	3.57		*	*	
	40-49	3.64				
	≥ 50	3.63				
Work conditions	< 30	3.37	3.27	3.55	3.49	3.41
	30-39	3.55		*	*	
	40-49	3.49				
	≥ 50	3.41				

* $p < 0.05$

- 1 = < 30 years
 2 = 30-39 years
 3 = 40-49 years
 4 = ≥ 50 years

The table 21 shows the pair with statistic relationship at 0.05 of work morale with age range, in terms of relationship with peers, job satisfaction, and work conditions; they were the range of less than 30 years and between 30-39 years, and less than 30 years, and between 40-49 years.

Table 22: Analysis of variance of work morale of public health personnel of health centers in Krabi province and marital status

Work morale components	Sources of variance	SS	df	MS	F
Household economic status	Between group	0.21	2	0.11	0.32
	Within group	71.23	212	0.34	
	Total	71.44	214		
Opportunities for job advancement	Between group	0.53	2	0.26	0.74
	Within group	75.72	212	0.34	
	Total	76.25	214		
Relationships with supervisor	Between group	0.06	2	0.30	0.06
	Within group	108.73	212	0.51	
	Total	108.79	214		
Relationships with peers	Between group	2.41	2	1.20	3.20*
	Within group	79.71	212	0.38	
	Total	82.12	214		
Intrinsic aspect of job	Between group	0.80	2	0.40	1.71
	Within group	49.55	212	0.23	
	Total	50.35	214		
Job satisfaction	Between group	2.66	2	1.33	5.02*
	Within group	56.04	212	0.26	
	Total	58.70	214		
Work conditions	Between group	1.80	2	0.90	2.85
	Within group	66.71	212	0.31	
	Total	68.50	214		
Total	Between group	0.78	2	0.39	2.55
	Within group	32.53	212	0.15	
	Total	33.32	214		

* $p < 0.05$

The table 22 shows the comparison between work morale of the samples with marital status in an overall picture and found no difference. Looking into each item, the statistical difference at 0.05 level were in relationship with peers and job satisfaction.

Table 23: Comparison of the mean of work morale of public health personnel of health centers in Krabi province and marital status

Work morale components	marital status	μ	marital status		
			1	2	3
			3.55	3.76	3.54
Relationships with peers	Single	3.55		*	
	Married	3.76			
	Separated, Divorced, Widow or widower	3.54			
			3.36	3.60	3.55
Job satisfaction	Single	3.36		*	
	Married	3.60			
	Separated, Divorced, Widow or widower	3.55			

* $p < 0.05$

1 = single

2 = married

3 = Separated, Divorced, Widow or widower

The table 23 shows the pair with statistic relationship at 0.05 of work morale with marital status, in terms of relationship with peers and job satisfaction; they were single and married status.

Table 24: Analysis of variance of work morale of public health personnel of health centers in Krabi province and highest education level

Work morale components	Sources of variance	SS	df	MS	F
Household economic status	Between group	0.36	2	0.18	0.54
	Within group	71.08	212	0.33	
	Total	71.44	214		
Opportunities for job advancement	Between group	0.88	2	0.44	1.23
	Within group	75.37	212	0.36	
	Total	76.25	214		
Relationships with supervisor	Between group	0.17	2	0.09	0.17
	Within group	108.62	212	0.51	
	Total	108.79	214		
Relationships with peers	Between group	0.91	2	0.45	1.18
	Within group	81.21	212	0.38	
	Total	82.12	214		
Intrinsic aspect of job	Between group	1.17	2	0.58	2.51
	Within group	49.18	212	0.23	
	Total	4535	214		
Job satisfaction	Between group	0.73	2	0.36	1.34
	Within group	57.96	212	0.27	
	Total	58.69	214		
Work conditions	Between group	0.23	2	0.11	0.35
	Within group	68.27	212	0.32	
	Total	68.50	214		
Total	Between group	0.29	2	0.14	0.40
	Within group	33.03	212	0.16	
	Total	33.32	214		

The table 24 shows the comparison between work morale of the samples with highest education obtained in an overall picture as well as in each item and found no difference.

Table 25: The comparison of difference between the mean of work morale of public health personnel of health centers and job position

Work morale components	job position	N	μ	σ	T
Household economic status	head	61	2.74	0.51	0.87
	employee	154	2.67	0.60	
Opportunities for job advancement	head	61	3.17	0.59	-0.04
	employee	154	3.17	0.60	
Relationships with supervisor	head	61	3.41	0.73	-1.90
	employee	154	3.62	0.70	
Relationships with peers	head	61	3.91	0.	3.50*
	employee	154	3.59	0.64	
Intrinsic aspect of job	head	61	2.65	0.47	0.73
	Employee	154	3.59	0.49	
Job satisfaction	head	61	3.66	0.49	2.58*
	Employee	154	3.46	0.53	
Work conditions	head	61	3.51	0.52	0.45
	Employee	154	3.40	0.58	
Total	head	61	3.44	0.35	0.18
	Employee	154	3.36	0.41	

* $p < 0.05$

The table 25 shows the comparison between work morale of the samples with job position in an overall picture and found no difference. Looking into each item, the statistical difference at 0.05 level were in relationship with peers and job satisfaction.

Table 26: Analysis of variance of work morale of public health personnel of health centers in Krabi province and job post in line of work

Work morale components	Sources of variance	SS	df	MS	F
Household economic status	Between group	4.60	4	1.15	3.62*
	Within group	66.84	210	0.32	
	Total	71.44	214		
Opportunities for job advancement	Between group	3.16	4	0.79	2.27
	Within group	73.09	210	0.34	
	Total	76.25	214		
Relationships with supervisor	Between group	5.04	4	1.26	2.55*
	Within group	103.75	210	0.49	
	Total	108.79	214		
Relationships with peers	Between group	3.71	4	0.93	2.49*
	Within group	78.41	210	0.37	
	Total	82.12	214		
Intrinsic aspect of job	Between group	1.91	4	0.48	2.07
	Within group	48.43	210	0.23	
	Total	50.34	214		
Job satisfaction	Between group	3.04	4	0.76	2.87*
	Within group	55.66	210	0.26	
	Total	58.70	214		
Work conditions	Between group	1.67	4	0.42	1.31
	Within group	66.83	210	0.32	
	Total	68.50	214		
Total	Between group	1.05	4	0.26	1.71
	Within group	32.27	210	0.15	
	Total	33.32	214		

* $p < 0.05$

The table 26 shows the comparison between work morale of the samples with job post in line of work in an overall picture and found no difference. Looking into each item, the statistical difference at 0.05 level were in household economic status, relationship with supervisor, with peers, and job satisfaction.

Table 27: Comparison of the mean of work morale of public health personnel of health centers in Krabi province and job post in line of work

Work morale components	job post in line of work	μ	job post in line of work				
			1	2	3	4	5
			2.71	2.71	2.86	2.50	2.36
	Public Health Administrator	2.71					
Household economic status	Public Health Technical Officer	2.71					
	Registered Nurse	2.86				*	*
	Community Health Officer	2.50					
	Community Dental Health Officer	2.36					
				3.34	3.78	3.59	3.55
	Public Health Administrator	3.34		*			
Relationships with supervisor	Public Health Technical Officer	3.78					
	Registered Nurse	3.59					
	Community Health Officer	3.55					
	Community Dental Health Officer	3.93					
				3.90	3.67	3.58	3.59
Relationships with peers	Public Health Administrator	3.90			*	*	
	Public Health Technical Officer	3.67					
	Registered Nurse	3.58					
	Community Health Officer	3.59					
	Community Dental Health Officer	3.79					
Job satisfaction	Public Health Administrator	3.67				*	
	Public Health Technical Officer	3.59				*	
	Registered Nurse	3.51					
	Community Health Officer	3.36					
	Community Dental Health Officer	3.36					

* $p < 0.05$

- 1 = Public Health Administrator
- 2 = Public Health Technical Officer
- 3 = Registered Nurse
- 4 = Community Health Officer
- 5 = Community Dental Health Officer

The table 27 shows the pair with statistic relationship at 0.05 of work morale with job post in line of work, in terms of household economic status which was registered nurse and community health officer and registered nurse and community dental health officer. In terms of relationship with supervisor, the pair in difference were public health administrator and public health technical officer. In terms of relationship with peers, the pair in difference were public health administrator and registered nurse, and between public health administrator and community health officer. For job satisfaction, the pair in difference were public health administrator and community health officer, and between and public health technical officer and community health officer.

Table 28: Analysis of variance of work morale of public health personnel of health centers in Krabi province and job status

Work morale components	Sources of variance	SS	df	MS	F
Household economic status	Between group	0.20	2	0.10	0.29
	Within group	71.24	212	0.34	
	Total	71.44	214		
Opportunities for job advancement	Between group	0.11	2	0.05	0.15
	Within group	76.14	212	0.36	
	Total	76.25	214		
Relationships with supervisor	Between group	1.29	2	0.64	1.27
	Within group	107.50	212	0.51	
	Total	108.79	214		
Relationships with peers	Between group	0.57	2	0.28	0.74
	Within group	81.55	212	0.38	
	Total	82.12	214		
Intrinsic aspect of job	Between group	0.10	2	0.05	0.21
	Within group	50.25	212	0.24	
	Total	50.35	214		
Job satisfaction	Between group	0.61	2	0.30	1.11
	Within group	58.09	212	0.27	
	Total	58.70	214		
Work conditions	Between group	1.06	2	0.53	1.66
	Within group	67.44	212	0.32	
	Total	68.50	214		
Total	Between group	0.09	2	0.45	0.29
	Within group	33.23	212	0.16	
	Total	33.32	214		

The table 28 shows the comparison between work morale of the samples with job status in an overall picture and each item and found no difference.

Table 29: Analysis of variance of work morale of public health personnel of health centers in Krabi province and working experiences

Work morale components	Sources of variance	SS	df	MS	F
Household economic status	Between group	0.17	2	0.83	0.25
	Within group	71.27	212	0.34	
	Total	71.44	214		
Opportunities for job advancement	Between group	0.55	2	0.27	0.77
	Within group	75.70	212	0.36	
	Total	76.25	214		
Relationships with supervisor	Between group	0.36	2	0.18	0.36
	Within group	108.43	212	0.51	
	Total	108.79	214		
Relationships with peers	Between group	9.20	2	4.60	13.37*
	Within group	72.92	212	0.34	
	Total	82.12	214		
Intrinsic aspect of job	Between group	1.71	2	0.85	3.72*
	Within group	48.64	212	0.23	
	Total	50.35	214		
Job satisfaction	Between group	4.78	2	2.39	9.40*
	Within group	53.92	212	0.25	
	Total	58.70	214		
Work conditions	Between group	4.34	2	2.17	7.18*
	Within group	64.16	212	0.30	
	Total	68.50	214		
Total	Between group	1.28	2	0.64	4.23*
	Within group	32.04	212	0.15	
	Total	33.32	214		

* $p < 0.05$

The table 29 shows the comparison between work morale of the samples with working experiences in an overall picture and found 0.05 statistical significance. When looking into each item, there were 0.05 statistical significance, in terms of relationship with peers, intrinsic aspect to job, job satisfaction, and work conditions

Table 30: Comparison of the mean of work morale of public health personnel of health centers in Krabi province and working experiences

Work morale components	Working experiences	μ	working experiences		
			1 3.48	2 3.97	3 3.75
Relationships with peers	Less than 10 years	3.48		*	*
	10-20 years	3.97			
	More than 20 years	3.75			
			3.54	3.60	3.76
Intrinsic aspect of job	Less than 10 years	3.54			*
	10-20 years	3.60			
	More than 20 years	3.76			
			3.38	3.57	3.74
Job satisfaction	Less than 10 years	3.38		*	*
	10-20 years	3.57			
	More than 20 years	3.74			
			3.29	3.62	3.50
Work conditions	Less than 10 years	3.29		*	*
	10-20 years	3.62			
	More than 20 years	3.50			
			3.30	3.44	3.47
Total	Less than 10 years	3.30		*	*
	10-20 years	3.44			
	More than 20 years	3.47			

* $p < 0.05$

- 1 = Less than 10 years
 2 = 10-20 years
 3 = More than 20 years

The table 30 shows the pair in difference with 0.05 statistical significance of work morale of the samples and working experiences in an overall picture were less than 10 years work experiences and between 10-20 years, and between less than 10 years and more than 20 years.

In terms of relationship to peers, work conditions, job satisfaction, namely, those with less than 10 years work experiences and between 10-20 years, and between less than 10 years and more than 20 years.

For intrinsic aspect to job found key pair of different in less than 10 years experience and more than 20 years.

Table 31: Analysis of variance of work morale of public health personnel of health centers in Krabi province and monthly household income

Work morale components	Sources of variance	SS	df	MS	F
Household economic status	Between group	2.33	2	1.17	3.58*
	Within group	69.11	212	0.33	
	Total	71.44	214		
Opportunities for job advancement	Between group	0.71	2	0.36	1.00
	Within group	75.54	212	0.36	
	Total	76.25	214		
Relationships with supervisor	Between group	0.77	2	0.39	0.76
	Within group	108.12	212	0.51	
	Total	108.79	214		
Relationships with peers	Between group	3.33	2	1.67	4.45*
	Within group	78.79	212	0.37	
	Total	82.12	214		
Intrinsic aspect of job	Between group	0.71	2	0.35	1.51
	Within group	49.64	212	0.23	
	Total	50.35	214		
Job satisfaction	Between group	3.85	2	1.92	7.45*
	Within group	54.85	212	0.26	
	Total	58.70	214		
Work conditions	Between group	2.19	2	1.09	3.50*
	Within group	66.31	212	0.31	
	Total	68.50	214		
Total	Between group	1.10	2	0.55	3.63*
	Within group	32.21	212	0.15	
	Sources of variance	33.32	214		

* $p < 0.05$

The table 31 shows the comparison between work morale of the samples and monthly household income in an overall picture and found 0.05 statistical

significance. In each item, it found that household economic status, relationship with peers, job satisfaction, and work conditions, had 0.05 statistical significance.

Table 32: Comparison of the mean of work morale of public health personnel of health centers in Krabi province and monthly household income

Work morale components	monthly household income	μ	monthly household income		
			1 2.53	2 2.66	3 2.80
Household economic status	Less than 15,000 Baht	2.53			*
	15,000-30,000 Baht	2.66			
	More than 30,000 Baht	2.80			
Relationships with peers	Less than 15,000 Baht	3.56	3.56	3.59	3.84
	15,000-30,000 Baht	3.59			*
	More than 30,000 Baht	3.84			*
Job satisfaction	Less than 15,000 Baht	3.35	3.35	3.45	3.68
	15,000-30,000 Baht	3.45			*
	More than 30,000 Baht	3.68			*
Work conditions	Less than 15,000 Baht	3.26	3.26	3.43	3.53
	15,000-30,000 Baht	3.43			*
	More than 30,000 Baht	3.53			
Total	Less than 15,000 Baht	3.30	3.30	3.33	3.47
	15,000-30,000 Baht	3.33			*
	More than 30,000 Baht	3.47			*

* $p < 0.05$

- 1 = Less than 15,000 Baht
 2 = 15,000-30,000 Baht
 3 = More than 30,000 Baht

The table 32 shows the pair in difference with 0.05 statistical significance of work morale of the samples and monthly household income in an overall picture were less than 15,000 baht and more than 30,000 baht, and 15,000-30,000 baht and more than 30,000 baht.

In terms of household economic status and work conditions were less than 15,000 baht and more than 30,000 baht.

In terms of Relationships with peers and job satisfaction, it found the key pair of difference in below 15,000 baht and more than 30,000 baht, and 15,000-30,000 baht and more than 30,000 baht.

Table 33: Numbers of opinions and suggestion regarding the promotion for work

morale	
Items	Number
Adjust salary rate/wage for higher to be in line with economic situation	42
Should arrange for more welfare from present ones ie per diem, rewards	33
Increase manpower to be in line with more tasks	27
Should have provincial executives to give an orientation/visit the centers on a constant basis	24
Should have training to revive knowledge on a constant and continuing basis	23
Should be criteria to allocate money to boost up morale/proper annual rewards	21
Should have in place job description of each position in a clear manner and not redundant with other positions	19
Should have promotion in salary in employees as in officers	17
Should allow to have student trainees of Ministry of Public Health to be officers	15
Those finished Bachelor's degree should be considered for change of job line without any examination	11
There should be an evaluation for higher position promotion with justice	10
There should be a pause in transferring health centers to be in the supervision of local administrative body	10
There should be laws to protect work	9
There should be projects allowing people in other Amphurs to have mutual activities	5
Executives at all levels should perceive importance of employees at the lower level more than now	3
There should be an adjustment on data system/report system to avoid redundancy	3
There should be budgets to promote people to further their higher education	3
There should be budgets to renovate landscape of health centers for beautifying	2

Table 33 shows the opinions and suggestions of the samples for the first top 5 were adjust salary rate/wage for higher to be in line with economic situation for 42 samples, followed with Should arrange for more welfare from present ones i.e. per diem, rewards for 33 samples, increase manpower to be in line with more tasks for 27 samples, should have provincial executives to give an orientation/visit the centers on a constant basis for 24 samples and should have training to revive knowledge on a constant and continuing basis for 23 sample