

CHAPTER VI

RESULT

GENERAL CHARACTERISTIC OF THE SAMPLE

The survey covered 8 departments with the the total sample consisted of 297 professional nurses who worked on Emergency, Outpatient, Operating, Obstetrical/Gynaecological, Surgical, Critical care and Pediatrics department in Chulalongkorn Hospital. A majority (97.7 %) of the 304 questionnaires were completed. Questionnaires were handed in to 304 professional nurses on 17-27 January, 1992. Of these 304 professional nurses, 7 were eliminated because of their leaving. Table 5 summarized for the respondents of nurses in each of the eight departments.

TABLE 5 SUMMARY OF NUMBER OF NURSES' RESPONDENT AND PERCENTAGE BY DEPARTMENT

DEPARTMENT	NUMBER OF NURSES		PERCENTAGE OF NURSES RESPONDED
	TOTAL	RESPONDED	
Emergency	11	11	100.0
Medical	76	74	97.4
Out patient	16	16	100.0
Operating	34	34	100.0
Obstetrical/Gyn	33	30	90.9
Surgical	59	57	96.6
Intensive care	30	30	100.0
Pediatrics	45	45	100.0
Total	304	297	97.7

The average age of the nurses was 33.40 years, with a range of 26 - 40 years. The majority (64.0%) of marital status was single and married 34.0%. Most of the nurses were (87.9%) staff nurse positions and 12.1% were head nurse and deputy nurse positions. The majority (89.8%) had a bachelor's degree in nursing, 6.8% revealed that they had achieved a Nursing Diploma and only 3.1% had completed a Master's Degree. The average of work experience was 11.14 years, with a range of 5-18 years. Most of them (72.1%) were the rotating workshift and 14.5% were the day work. Nearly half of married nurses (42.3%) had only two children, 27.9% had one child, 15.4% without having the child and 14.4% had three children. Nearly half of spouse's employment (44.6%) were government civilian employees. A smaller proportion 31.7% were employed in the private factor. Most of workplace of spouses (73.0%) was in Bangkok and another 17% was in up-country far from Bangkok. Most nurses in this sample (65.2%) were comfortable to come to another to come to work and the detailed demographic characteristic of the sample are shown in Table 6.

TABLE 6 DEMOGRAPHIC CHARACTERISTIC OF THE SAMPLE POPULATION

DEMOGRAPHIC CHARACTERISTICS	N	%
(297)		
Age in years		
Range	26-40	
mean	33.40	
SD	8.66	
Marital Status		
Not Married	190	64.0
Married	101	34.0
widow	6	2.0
Area of practice		
Emergency	11	3.7
Medical	74	24.9
Out patient	16	5.4
Operating	34	11.4
OB/GYN	30	10.1
Surgical	57	19.2
Critical care	30	10.1
Pediatrics	45	15.2
Nursing position level		
Staff nurse	261	87.9
Administratered nurse	36	12.1

TABLE 6 (continued)

DEMOGRAPHIC CHARACTERISTICS	N (297)	%
Education level		
Bachelor's degree	264	89.8
Diploma	20	6.8
Master's degree	9	3.1
other	1	0.3
Years in work experience		
Range	5-18	
Mean	11.4	
SD	8.19	
Working time of nursing		
Rotating workshift	214	72.1
Day workshift	43	14.5
Day & Evening workshift	4	1.3
other	36	12.1
Number of total children ^a		
None	13	12.9
1 child	29	28.7
2 children	44	43.6
3 children	15	14.9
Total	101	100.0

^a For married

TABLE 6 (continued)

DEMOGRAPHIC CHARACTERISTICS	N (297)	%
Spouse 's occupation		
Government Civilian	45	44.6
Private sector	32	31.7
Bussiness	8	7.9
Doctor	6	5.9
Engineer	4	4.0
Lawyer	3	3.0
No response	4	4.0
 Salary		
Range	5500-9500	
Mean	7471.61	
SD	4036.3	
 Extra income		
Range	348-1950	
Mean	815.44	
SD	1454.56	
 Family income		
Range	8136-30428	
Mean	17991.88	
SD	5887.7	

Spouse's workplace

Bangkok	73	73.0
Near Bangkok	9	9.0
Far from Bangkok	17	17.0
No response	2	2.0

Travelling to work

Not difficult	191	65.2
difficult	102	34.8
No response	4	1.0

TABLE 7 DESCRIPTIVE STATISTICS FOR STUDY VARIABLES BY MEAN AND STANDARD DEVIATION

VARIABLE	SAMPLE N = 297	MEAN	SD
Job satisfaction		77.24	15.31
Anticipated turnover		43.59	6.70
Autonomy		19.93	3.51
Instrumental communication		29.79	5.11
Internal labor market		12.51	2.75
External labor market		5.60	1.74
Work load		6.74	1.17
Stress		73.76	7.30

Descriptive statistics for the study variables are presented in Table 7. Statistics are presented for the total sample (N= 297) in terms of Mean (\bar{X}) and standard deviation (SD).

TABLE 8 DESCRIPTIVE STATISTICS FOR STUDY VARIABLES BY MEAN RATIO/ITEM

VARIABLE	N (297)	RANGE	MEAN	SD
Job satisfaction		1-7	4.06	0.80
Anticipated turnover		1-7	3.63	0.56
Autonomy		1-5	3.32	0.59
Instrumental communication		1-5	3.72	0.64
Internal labor market		1-5	2.50	0.55
External labor market		1-5	2.80	0.87
Workload		1-5	3.37	0.59
Job stress		1-5	2.63	0.26

Job satisfaction

Job satisfaction was measured with a short global satisfaction scale as well as with subscales to measure respondents' satisfaction with five specific context of their work: Job security, co-workers, compensation, growth opportunity and supervision. Each of these five context satisfaction scores could range from one to seven. For the total sample, the mean score of the global job satisfaction was 4.06 (n=297) indicating high level of job satisfaction.

Anticipated turnover

The Anticipated Turnover Scale was composed of 12 items each of which offered a range of response scored one through seven. A low number indicated low intent to leave and a high number indicated a high intent to leave. The

sample mean was 3.63 indicating an over moderate level of intent to leave in the total sample.

Autonomy

The Autonomy (job characteristics) was composed of 6 items with a range of one to five. The total sample mean was 3.32 (n=297). It meant that a moderate strong level of autonomy.

Instrumental communication

Scores on the Instrumental Communication Scale could range from one to five. A low score on the scale was an indication that the respondent did not feel well informed by the hospital. A high score indicated that the respondent felt very well informed. The total sample mean was 3.72 (n=297), revealing that the respondents perceived themselves to be "somewhat" to "quite well" informed.

Internal labor market

The Internal Labor Market Scores could range from one to five. A low score indicated the respondent felt was little promotional opportunity or even lateral movement possibility within the organization. A high score reflected the opposite view that great opportunity existed within the medical treatment facility for promotion or a change in duty. The total sample mean was 2.5 (n=297) with a range of one to five. This revealed a perceived moderate degree of promotional opportunity.

External labor market

Total scores on the External Labor Market Scale could range from one to five. The two items were scored such

that a low score reflected the respondent's view that it would be very easy to find another job with another employer in the adjoining community and would be difficult. The total sample mean was 2.8 (n=297) with a range of one to five. This meant that as a total group, the nurses perceived they could find another job another job quite difficulty.

Work load

Two items measured workload on a five point scale. The first item asked how heavy the workload was and the second asked to what extent the respondent was able to complete the work in the time available. Several respondents made a written comment near these questions revealing that the workload may have been very (i.e. a score of five on item one), they would stay overtime to get it done and would mark on item two that they always or most of the time got the work done (scores of one or two). Therefore, there was a "canceling out" effect of item two on item one. The range of score for the sample as a whole was from one to five, with a mean of 3.37 (n=297). The mean indicates a strongly moderate workload.

Job stress

Scores on Job Stress Scale could range from one to five. The highest possible score was 5 indicating low stress and the lowest possible score was 1 indicating high stress. The total sample mean was 2.63 (n=297). It meant that little lower moderate level of stress.

**TABLE 9 COMPARISON OF LEVEL OF ANTICIPATED TURNOVER
DEPENDING ON DEPARTMENT**

DEPARTMENT	MEAN	SD	RANK
ICU	46.27	5.66	1
ER	45.36	5.18	2
SUR	45.05	5.75	3
MED	43.63	6.60	4
OB/GYN	43.60	4.38	5
PED	42.78	5.66	6
OR	41.41	10.13	7
OPD	38.75	7.01	8

SCORE MINIMUM : 12
MAXIMUM : 84

HIGH LEVEL = SCORE > 52.57
MODERATE LEVEL = SCORE 34.60 to
52.56
LOW LEVEL = < 34.61

PRIMARY OUTCOME

The level of anticipated turnover, has been computed by summing of the scores of all the samples of those departments. The results was revealed in Table 9. And the percentage of reasons for anticipated leaving nursing position was shown in the Table 10. The result was poor salary (21.9%) n = 65. The second workshift was 50 (16.8%), poor advancement 45(15.8%), job burnout 44(14.8%), stress/intension 26(8.8%), poor management 22(7.4%), further education 20(6.7%), poor welfare 16(5.4%), family problem 11 (3.7%) and the lowest rate of factor was 9(3.0%).

TABLE 10 THE PERCENTAGE OF REASONS FOR ANTICIPATED LEAVING
NURSING POSITION

FACTORS	DEPARTMENT														TOTAL%	RANK		
	ER		MED		OPD		OR		OB/GYN		SUR		ICU				PED	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%			N	%
Poor Salary	2	18.2	16	21.6	-	-	8	23.5	12	40.00	13	22.8	5	16.7	9	20.0	65 (21.9)	1
Work shift	-	-	12	16.2	-	-	10	29.4	2	6.7	9	15.8	6	20.0	11	24.4	50 (16.8)	2
Poor Advancement	-	-	11	14.9	2	12.5	6	17.6	6	20.0	8	14.0	8	26.7	4	8.9	45 (15.2)	3
Job burnout	1	9.1	9	12.2	3	13.8	2	5.9	1	3.3	19	33.3	3	10.0	6	13.5	44 (14.8)	4
Job stress	2	18.2	8	10.8	6	37.5	4	11.8	-	-	2	3.5	2	6.7	2	4.4	26 (8.8)	5
Poor management	1	9.1	1	1.4	5	31.3	4	11.8	2	6.7	3	5.3	2	6.7	4	8.9	22 (7.4)	6
Futher education	2	18.2	4	5.4	-	-	2	5.9	3	10.0	2	3.5	2	6.7	5	11.1	20 (6.7)	7
Poor welfare	2	18.2	4	5.4	-	-	1	2.9	1	3.3	3	5.3	2	6.7	3	6.7	16 (5.4)	8
Famliy problem	1	9.1	3	4.1	1	6.3	2	5.9	1	3.3	2	3.5	1	3.3	-	-	11 (3.7)	9
Team work problem	-	-	3	4.1	-	-	1	2.9	2	6.7	1	1.8	1	3.3	1	2.2	9 (3.0)	10

TABLE 11 A COMPARISON OF STUDY VARIABLES IN RANGE OF SCORES IN ACCORDANCE WITH 8 DEPARTMENTS

FACTORS	ER (N=11)		MED (N=74)		OPD (N=16)		OR (N=37)		OB/GYN (N=30)		SUR (N=57)		ICU (N=30)		PED (N=45)	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Job satisfaction	77.73	12.09	78.78	14.75	85.00**	15.85	80.59	16.35	73.63	13.49	73.98	14.80	72.57*	17.40	78.96	14.91
Anticipated turnover	45.36	5.18	43.63	6.60	38.75*	7.01	41.41	10.13	43.60	4.38	45.05	5.75	46.27**	5.96	42.78	5.66
Autonomy	18.00*	4.22	20.45**	3.31	19.19	4.68	19.18	4.38	20.47	3.67	20.21	2.83	19.57	2.75	19.93	3.51
Instrumental - - communication	30.45**	4.99	29.57	5.32	27.63*	5.06	29.79	5.28	31.77	5.27	29.44	4.13	29.27	5.53	30.27	5.28
Internal labor market	13.36**	2.88	12.42	2.52	12.75	3.07	12.35	3.23	12.63	3.23	12.49	2.56	12.10*	2.72	12.71	2.75
External labor market	6.82**	2.12	5.68	1.76	5.50	1.75	5.12*	1.57	5.93	1.78	5.19	1.39	5.73	1.72	5.78	1.94
Workload	6.18*	1.08	6.57	1.19	6.81	1.05	6.62	1.28	7.73**	1.05	6.70	1.0	6.20	1.06	6.98	1.06
Job stress	69.09	6.36	74.39	7.23	75.63**	9.60	73.94	8.85	74.77	6.90	73.46	5.17	71.33	8.11	74.42	7.70

** MAXIMUM ER : EMERGENCY

* MINIMUM MED :

OPD : OUT PATIENT

OR : OPERATING

OB/GYN : OBSTETRICAL / GYNAECOLOGICAL

SUR : SURGICAL

ICU : CRITICAL CARE

PED : PEDIATRICS

A COMPARISON OF THE STUDY VARIABLES IN RANGE OF SCORES IN
ACCORDANCE WITH 8 DEPARTMENTS

The differences of range of scores in each factors according to workplace was shown in Table 11. The maximum of average scores of Job satisfaction was 85.0 (SD=15.87) and minimum was 72.57 (SD=17.4). Job satisfaction was lowest among nurses in critical care (ICU) and highest among nurses in Out-patient Department (OPD).

The maximum of average scores of anticipated turnover was 46.27(SD=5.69) and minimum was 38.75(SD=7.01). Indicating an overall -moderate level of intent to leave in the total sample (n=297). The scores for the total sample ranged from one to seven.

Nurses who had worked in Medical unit, had the highest Autonomy 20.45 (SD=3.31) and the lowest was 18.0 (SD=4.22) in Emergency unit.

The highest average score of Instrumental communication was 30.45(SD=4.99) in Emergency unit and the lowest was 27.63(SD=5.06) in Out-patient Department.

The highest Internal labor market score 13.36 (SD=2.88) indicated that the repondent felt there was great promotional opportunity or even lateral movement possibility within hospital, was the nurses who had worked in Emergency room and the lowest scores 12.10(SD=2.72) revealed in ICU. A low score of External labor market reflected the respondents's view that it would be very easy

to find another job with another employer, this score revealed 5.12 (SD=1.57) was nurses in Operating unit and a high score meant that finding another job would be difficult. The score revealed 6.82 (SD=2.12) was nurses in Emergency unit.

The highest score of Workload 7.73 (SD=1.05) was Obstetrical unit and the lowest score 6.18 (SD=1.08) was emergency unit. In OPD reveal a high score meant that a little degree of stress was 75.63 (SD=9.60) and a great stress revealed 69.09 (SD=6.36) was Emergency unit.

The analysis of correlation between the anticipated turnover and the study factors (18 factors) were divided to be 2 groups and were the quality of level measurement factor. These 5 factors were marital status, nursing position level, education level, spouse's workplace and travelling to work. And the quantity of level measurement, 13 factors were age, work experience, number of children, salary, extra income, family income, job satisfaction, autonomy, instrumental communication, internal labor market, external labor market, workload and job stress.

TABLE 12 CORRELATION AMONG STUDY VARIABLES RELATED TO ANTICIPATED TURNOVER

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
1	1.000	.9710 ^a	.4257 ^a	.8613 ^a	.0905	-.0142	-.0669	.1283	-.1676	.1135	.2232	-.1425	.1769	.0475	-.2148 ^a
2	1.000	.4064 ^a	.8656 ^a	.0980	-.0214	-.0454	.1601	-.1803	.0945	.2456 ^a	-.1828	.1748	.0475	-.2128	
3	1.000	.3807 ^a	.8807 ^a	-.0790	-.0618	-.0552	.1062	.0437	.0481	.0959	.2636 ^a	.0366	.0501	-.2789 ^a	
4	1.000	.1025	.8831 ^a	-.0005	-.0005	-.0831	.2162	-.1494	.0938	.1975	-.0739	.1304	.1130	-.2068 ^a	
5	1.000	-.0272	-.0460	-.0444	-.1954	.0714	-.0270	-.2064	-.0495	-.0101	-.0423	.0289	.0695	-.0516	
6	1.000	.0727	.0518	.0207	-.0915	.0318	-.0592	-.3218 ^a	-.2754 ^a	-.2056	.1594	-.4396 ^a	-.3008 ^a		
7	1.000	-.1902	-.1503	-.1944	-.1466	-.0057	.0567	-.3993 ^a	-.2920 ^a	.0106	-.4025 ^a	.1998 ^a			
8	1.000	.3704 ^a	.2976 ^a	.4007 ^a	-.0406	.1221	.0904	.1755	-.1520 ^a	1.000	-.5020	.0929	.1755	-.1520 ^a	
9	1.000	.3962 ^a	.2461 ^a	.3235 ^a	.0904	1.000	-.0562	.2050	.0525	1.000	-.3281 ^a	.1110 ^a			
10	1.000	.3235 ^a	.0904	1.000	-.0562	.2050	.0525	1.000	.2292 ^a	1.000	.2292 ^a				
11	1.000	.2292 ^a	.0904	1.000	-.0562	.2050	.0525	1.000	1.000						
12	1.000	.2292 ^a	.0904	1.000	-.0562	.2050	.0525	1.000							
13	1.000	.2292 ^a	.0904	1.000	-.0562	.2050	.0525								
14	1.000	.2292 ^a	.0904	1.000	-.0562	.2050									
15	1.000	.2292 ^a	.0904	1.000	-.0562										

^a p < .001 p < .05 1. AGE 2. WORK EXPERIENCE 3. NUMBER OF CHILDREN 4. SALARY 5. EXTRA INCOME 6. FAMILY INCOME

7. TRAVELLING TO WORK 8. JOB SATISFACTION 9. AUTONOMY 10. INSTRUMENTAL COMMUNICATION 11. INTERNAL LABOR MARKET

12. EXTERNAL LABOR MARKET 13. WORKLOAD 14. JOB STRESS 15. ANTICIPATED TURNOVER

CORRELATION AMONG STUDY VARIABLES

Correlation among study variables were calculated to determine whether variables related to anticipated turnover and to each other variables. Further the correlation matrices suggest areas for further research by revealing significant relationships among variables. As a rule of Thumb, weak correlation was those $\leq .20$; moderate .21 to .40; moderately strong were .41 to .60; and strong were those $\geq .60$.

Table 12 shows a total sample correlation matrix for variables. The matrix reveals that several variables related anticipated turnover. For example, age was negatively related to anticipated turnover ($r = -.2148$, $p > .05$). Age was also positively correlated with work experience, number of children, salary, ($r = .9710, .4257, .8613$, $P < .0010$). This variables seem to be used as a helpful proxy for other variables.

Work experience shows significant positive relationship with internal labor market ($r = .2456$, $p < .05$) but was negatively related to anticipated turnover ($r = -.2128$, $p < .05$).

Kinship responsibility (number of children) was positively related to age, work experience, salary ($r = .4257$, $p < .05$) but was negatively related to anticipated turnover ($r = -.2789$, $p < .05$).

Salary was significantly positive relationship with age, work experience, ($r=.8613, .8656, p<.001$). These variables show a strong level. And also salary was positively correlated with number of children ($r=.3807, p<.001$) but was negative relationship with anticipated turnover ($r=-.2068, p<.05$).

Extra income and family income were not significantly related to every variables.

Job satisfaction was positively related to autonomy ($r=.3704, p<.001$), instrumental communication ($r=.2976, p<.05$), internal labor market ($r=.4007, p<.001$) but was negatively related to job stress ($r=-.4396, p<.001$) and anticipated turnover ($r=-.3008, p<.001$).

Autonomy shows a moderately strong and positive association with job satisfaction ($r=.3704, p<.001$), instrumental communication ($r=.3962, p<.001$) internal labor market ($r=.2461, p<.05$). The correlation between autonomy and anticipated turnover was significant ($r=-.2920, p<.001$).

Instrumental communication, or having the information necessary to do the job, had a significant positive relationship with job satisfaction ($r=.2976, p<.05$), with autonomy ($r=.3962, p<.001$), with internal labor market ($r=.3255, p<.001$) but negative relationship with job stress ($r=-.4025, p<.001$), with anticipated turnover ($r=-.1998, p<.001$).

The internal labor market variable, or perceived promotional opportunity with agency, showed a moderately

strong and positive association with job satisfaction ($r=.4007, p<.001$) and showed moderately and positive association with autonomy, instrumental communication ($r=.2461, p<.05$ and $r=.3235, p<.001$). The correlation between promotional opportunity and anticipated turnover was significant ($r=-.1520, p<.05$).

External labor market, high scores on the external labor market scale meant that the nurse perceived great difficulty in finding employment alternatives. The external labor market, or the perception about alternative employment, was positively related to the number of children ($r=.2636, p<.05$). The other variables were not correlated.

Workload shows a significant positive relationship with job stress ($r=-.3281, p<.001$) and anticipated turnover ($r=-.1110, p<.05$).

Job stress was negatively correlated with job satisfaction ($r=-.4396, p<.001$), with autonomy ($r=-.3993, p<.001$), with instrumental communication ($r=-.4025, p<.001$), and positively correlated with workload ($r=.3281, p<.001$), anticipated turnover ($r=.2292, p<.001$).

Travelling to work was negatively correlated with workload, job stress ($r=-.3281, -.2754, p<.001$).



**THE STATISTICS ANALYSIS OF THE STUDY FACTORS AFFECTING
TURNOVER BY ONE WAY ANOVA METHOD**

5 factors taken into consideration for the analysis in this study were Marital status, Nursing position level, Education level, Spouse's workplace and Travelling to work. The one-way method was used to analyse according to the continuous data and qualitative data.

From the Table 13 revealed that marital status of nurses and travelling to work have a statistically significant association with the anticipated turnover at P-value = .0095, .001. And also nursing position level has shown a statistically significant at p-value = .0001. The other variables such as Education level, Spouse's workplace, no variable was associated with the anticipated turnover.

TABLE 13 THE STATISTICAL ANALYSIS OF THE STUDY FACTORS AFFECTING ANTICIPATED TURNOVER BY ONE-WAY ANOVA METHOD

VARIBLE	N	X	SD	F	P-VALUE
Marital status					
Not married	190	44.38	6.08		
married	101	42.38	7.02		
widow	6	38.67	13.67		
Total	297	43.58	6.61	4.73	.0095 ^a
Nursing position level					
- Staff nurse	261	44.16	6.11		
Administrated-					
- nurse	36	39.42	9.05		
Total	297	43.59	6.53	16.72	.0001 ^a
Education level					
Nursing dip	20	39.85	9.16		
Bachelor	264	43.88	6.41		
Master	9	42.44	8.14		
Other	1	47.00	0.00		
Total	297	43.57	6.68	2.43	.065
Spouse's workplace					
Bangkok	73	42.00	7.49		
up-cuntry					
- near Bangkok	9	41.78	6.61		
- far from BKK	17	44.11	5.37		
No response	2	46.00	0.00		
Total	101	42.38	7.11	.51	.67

TABLE 13 (continued)

VARIABLE	N	X	SD	F	P-VALUE
Travelling to work					
Not difficult	191	42.97	6.73		
Difficult	102	44.64	6.52		
Total	2.93	43.56	6.67	4.19	.04*
no response 4 cases					

* P-VALUE < .05

** P-VALUE <.001

THE STATISTICAL ANALYSIS OF THE STUDY FACTORS AFFECTING
ANTICIPATED TURNOVER BY PEARSON PRODUCT MOMENT COEFFICIENT

The Pearson r statistic was used to summarize the magnitude and direction of relation between two variables. (Polit & Hungler, 1983). In this study, 13 Factors taken into consideration as possible predictors of anticipated turnover were age, duration of work experience, number of total children, salary, extra income, family income, job satisfaction, autonomy, instrumental communication, internal labor market, external labor market, work load and job stress. The result of statistical analysis of Pearson product moment coefficient showed that age, duration of work experience, number of total children, salary, internal labor market and workload were significantly associated with anticipated turnover (P-value $<.05$), Table 9. And also 4 factors of job satisfaction, autonomy, instrumental communication and job stress were significantly associated with anticipated turnover (P-value $<.001$). The other variables such as extra income, family income and external labor market no variable was associated with the anticipated turnover (Table 14).

TABLE 14 THE STATISTICAL ANALYSIS OF THE STUDY
FACTORS AFFECTING ANTICIPATED TURNOVER BY PEARSON PRODUCT
MOMENT COEFFICIENT

VARIABLE	r	P-VALUE
Age	-.2148	.015 [*]
Work experience	-.2128	.016 [*]
Number of total children	-.2789	.002 [*]
Salary	-.2068	.019 [*]
Extra income	-.0423	.337
Family income	-.0516	.304
Job satisfaction	-.3008	**
Autonomy	-.2920	**
Instrumental communication	-.1998	**
Internal labor market	-.1520	.004 [*]
External labor market	.0525	.184
Workload	.1110	.026 [*]
Job Stress	.2292	**

** P-value <.001

* P-value <.05

THE SUMMARY OF THE MULTIPLE REGRESSION ANALYSIS OF THE STUDY
FACTORS AFFECTING ANTICIPATED TURNOVER BY STEPWISE METHOD

From the Table 15 asked to what extent age, work experience, number of children, salary, extra income, family income, travelling to work, job satisfaction, autonomy, instrumental communication, internal labor market, external labor market, workload and job stress explained variability in anticipated turnover. The data were analysed using multiple regression statistics. The R^2 statistic can be interpreted as percentage of explained knowledge about a variable. The beta coefficient tells how strongly or weakly one variable influences another.

A stepwise multiple regression approach was subsequently used to determine which variable was the most for predicting anticipated turnover in this study.

The 14 variables were entered as predictor set with anticipated turnover as dependent variable, the predictor set explained 29.63% of the variance in anticipated turnover. Using stepwise multiple regression analysis, with anticipated as the dependent variables and the same predictor set, 4 variables emerged as significant predictors of anticipated turnover, as shown in Table 15. Job satisfaction accounted for 16.60% of the explained variance in anticipated turnover, with a beta of $-.2305$. Followed by, Number of children accounted for 5.60% of the variance, with a beta of $-.2262$. Internal labor market accounted for 4.48% of the variance, with a beta $-.2098$. And the fourth variable, Autonomy

accounted for 2.93 %, with a beta $-.1857$. These findings indicate that the strength of association between Job satisfaction and anticipated turnover was moderate and negative. And also 2 variables, number of children and internal labor market was moderate and negative with anticipated turnover. The strength of association between Autonomy and anticipated turnover was weak correlation and negative.

TABLE 15 STEPWISE MULTIPLE REGRESSION WITH ANTICIPATED TURNOVER AS DEPENDENT VARIABLE AND STUDY VARIABLES AND STUDY VARIABLES AS PREDICTORS

	cumulative R	cumulative R ²	change in R ²	b	final step beta
<u>Anticipated turnover</u>					
(n=297)					
Step :					
1. Job satisfaction	.4074	.1660	.1660	-.1041	-.2305 ^a
2. Number of children	.4713	.2222	.0562	-1.8837	-.2262 ^a
3. Internal labor-					
market	.5167	.2670	.0448	-.5673	-.2098 ^a
4. Autonomy	.5444	.2963	.0293	-.3897	-.1857 ^a

^a P-value $<.05$

DISCRIMINANT ANALYSIS

In this part, all independent variables had been tested by Discriminant Analysis method. The discriminant functions' coefficients can be standardized and then interpreted in the same manner as in multiple regress to draw conclusions about which variables are important in discriminating among the group (P. Suchart and R. Laddawan, 1985). The formula was shown as follow.

$$D_1 = d_{11} Z_1 + d_{12} Z_2 + \dots + d_{1p} Z_p$$

when D = Discriminant score

d = weighting coefficients

Z = standardized score of discriminated variables

p = variable which entered to the discriminated equation

The independent variable was selected to study in the equation of discriminant analysis. The problem of multicollinearity was also determined and for selecting the predicted variable, the stepwise method had performed to test the statistic F-test with p-value = 0.05.

The step of variate selection was considered depending on the partial multivariate F ratio, wilks' lamda by selecting the variance with the lowest value of wilks' lamda through the highest value. The variable was selected to enter the equation when the value of partial multivariate F ration more than one. The test of partial multivariate F ration had performed before the variable entered to the step of discriminate equation.

Using the equation of discriminant analysis in this study, researcher had decided to be 2 groups as this follows.

Group I = anticipated turnover score \leq 52.56
indicated weak intentions to leave the
nursing position.

Group II = anticipated turnover score \geq 52.57
indicated strong intentions to leave
the nursing position.

TABLE 16 MEAN AND STANDARD DEVIATION OF VARIABLE BETWEEN 2 GROUP

VARIABLE	GROUP I		GROUP II		TOTAL	
	X	SD	X	SD	X	SD
Age	33.43	8.62	31.23	7.93	38.3	8.58
work experience	11.17	8.19	9.11	6.55	11.04	8.11
number of children	0.55	0.93	0.58	0.87	0.55	0.92
Salary	7780.64	3557.43	6603.53	2311.29	7735.08	3498.58
Extra income	739.92	1406.83	1532.94	2148.87	826.69	1461.40
Family income	18558.77	61160.47	10845.88	6131.10	18106.64	59379.66
Travelling to work	0.33	0.47	0.52	0.51	0.34	0.48
Job satisfaction	59.39	12.19	57.41	13.61	59.28	12.27
Autonomy	20.03	3.50	18.17	3.74	29.35	3.53
Instrumental communication	29.71	5.06	29.35	5.99	29.69	5.11
Internal labor market	12.49	2.75	12.23	2.96	12.47	2.75
External labor market	5.56	1.75	6.05	1.47	5.59	1.74
Workload	6.78	1.14	6.12	1.31	6.74	1.16
Job Stress	73.83	7.35	72.53	7.81	73.75	7.37

TABLE 17 DISCRIMINANT ANALYSIS OF INDIVIDUAL VARIABLES OF GROUP I (LOW SCORE) AND GROUP II (HIGH SCORE)

STEP	VARIABLE	WILKS' LAMDA	SIG.
1	Workload	0.98215	0.0229 ^a
2	Autonomy	0.96860	0.0103 ^a
3	Extra income	0.96047	0.0091 ^a
4	Travelling to work	0.95604	0.0120 ^a
5	Job stress	0.95153	0.0145 ^a
6	Job satisfaction	0.94773	0.0180 ^a

^a P < .05

From the Table 17 showed that each factor was significant p-value < .05.

TABLE 18 STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

VARIABLE	STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENT	
	STANDARD SCORE	RAW SCORE
Extra income	-.36058	-.24731
Travelling to work	-.30804	-.64889
Job satisfaction	.29823	.65899
Autonomy	.54592	.15529
Workload	.66616	.57498
Stress	.42736	-.57887
constant	-3.44808	

Canonical discriminant function evaluated at group means (group centroids)

	Function I
Group I (low intent to leave)	.05840
Group II (high intent to leave)	-.93788

This equation could predict percent of group I (low intent to leave) correctly classified : 71.1%, group II (high intent to leave) correctly classified : 58.8% and predicted percent of "group" cases (group membership) correctly classified : 70.34%

TABLE 19 CANONICAL DISCRIMINANT FUNCTION OF GROUP I AND GROUP II

DISCRIMINANT FUNCTION	EIGENVALUE	CANONICAL CORRELATION	WILKS' LAMBDA	CHI-Sq	Df	Sig
1	.0552	.2286	0.9477	15.301	6	.0180

TABLE 20 PERCENT OF PREDICTED GROUP MEMBERSHIP OF GROUP I (LOW SCORE) AND GROUP II (HIGH SCORE)

ACTUAL GROUP	PREDICTED GROUP MEMBERSHIP		NO OF CASES
	GROUP I	GROUP II	
Group I	71.1% (194)	28.9% (79)	273
Group II	41.2% (7)	58.8% (10)	17

Percent of "grouped" cases correctly classified : 70.34%