

# Influence of Growth Need Strength on the Relationship between Overall Life Satisfaction and Job Satisfaction for Medical Service Quality and Delivery

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**Abstract**— This study is to determine the influence of Growth Need Strength [GNS] between overall life satisfaction and job satisfaction among SRN's. Data were collected through survey using questionnaire. This study employed stratified random sampling involving a total of 390 nurses at selected general hospitals. The finding of the study contributes in the specific area of literature, theory and also in research design. The results of this study suggest that the GNS as moderator have played significant important role between overall life satisfaction and job satisfaction. It is also to improve medical service quality and delivery in order to provide a much better conducive working environment by incorporating policies that can improve job satisfaction.

**Keywords**— GNS; Job Satisfaction; Overall Life Satisfaction; Linear / Hierarchical Regression; Medical Industry

## 1. Introduction

Ministry of Health [MOH] (2010 – 2016) has found itself in a position where it has inadequate empirical information that might guide its efforts in enhancing psychological well-being for SRN of ensuring effective and efficient operation for any general hospital. It has been established that, the psychological well-being for SRNs is determined to a large extent by that person's satisfaction with the individual experience of the various domains of life [1]. One important domain is job satisfaction among the SRN [2].

According to ref. [5], the decline in job satisfaction and the lack of a comprehensive approach to improve it may be the result of the limiting assumption on Growth Need Strength [GNS] towards nurses working in government hospitals. Moreover, in hospital operation, it is especially important for the SRNs to experience a better GNS that will contribute to job satisfaction.

## 2. Literature Review

### 2.1. Overall Life Satisfaction

A study from ref. [13] identify the levels of life satisfaction and work satisfaction among Korean hospital nurses and the relative importance of negative and positive life satisfaction in explaining the variance of work satisfaction of nurses. The study was undertaken with 194 nurses from general hospitals of 300 beds or more in southern Korea. Data were analysed using descriptive statistics, Pearson correlations and multiple regressions. The result reported that life satisfaction moderate levels of work satisfaction. Those who experienced higher personal life satisfaction and lower emotional exhaustion and who were satisfied with their professional status and did not work at night reported higher work satisfaction. This study highlights the relative importance of life satisfaction on nurses' job satisfaction [13].

In additional perspective, [15] outlined the relationship between overall life satisfaction and job satisfaction. The sample of 185 healthcare professionals from three medical settings in Croatia was administered a questionnaire which included the measures of worker's satisfaction with the opportunity to carry out a set of 15 of off-the-job activities, as well as the measures of subjective well-being: life satisfaction, happiness and job satisfaction. Regression analyses were used to examine the effects of satisfaction with the opportunity to carry off-the-job activities on well-being measures. Out of various off-the-job activities, healthcare professionals in our sample were most satisfied with the opportunity to carry out family and household oriented activities (raising children, being with spouse or partner, shopping for household needs) and least satisfied with the opportunity to exercise, take part in organization and keep up with news. The satisfaction with the opportunity to shop for

household needs was the only significant predictor of life satisfaction. None of the off-the-job activities predicted the overall happiness, only being younger was associated with higher reported overall happiness. Job satisfaction was predicted by satisfaction with balancing work and family life [15].

In a later development, a study by ref. [9] concerning the job satisfaction of pharmacy retail chain in Tucson area identify the facets of life satisfaction that have the greatest contribution to job satisfaction. The Warr-Cook-Wall questionnaire of job satisfaction was used to evaluate community pharmacists' satisfaction with their current position. This study used Rasch analysis to assess the validity and reliability of the questionnaire. The Rasch scores obtained for each respondent were used as a dependent variable in univariate and bivariate analyses to evaluate differences in job satisfaction. A total of 32 pharmacists responded from 129 chain community pharmacies in the cities of Tucson, Marana and Oro Valley, Arizona. The mean (SD) Rasch score for job satisfaction was 0.93 (2.1). Results from bivariate analysis indicate that pharmacists in the Tucson area with life satisfaction outside its own community were less satisfied with their job compared to those without life satisfaction ( $p < 0.01$ ). This pilot evaluation suggests that having experience of life satisfaction outside community practice affects pharmacist job satisfaction. Additionally, findings from this study indicate that there is reliability and validity evidence to support the use of the modified Warr-Cook-Wall questionnaire for assessing overall job satisfaction in chain community pharmacy practice [9].

While in Malaysia, studies by [11] conducted in Universiti Teknologi MARA (UiTM) Penang, Malaysia. The objective of the study was to examine the life satisfaction of the academic and non-academic staff. Findings revealed that some demographic variables had a significant difference on life satisfaction. This study could provide meaningful information to the top management to design intervention programs to improve life satisfaction among the UiTM staff [11].

## 2.2 Impact between Overall Life Satisfaction and Growth Need Strength

Ref. [10] tested on the longitudinal influence of personality (measured by the GNS) on psychology outcomes on intrinsic work motivation and emotional exhaustion. The study hypotheses were tested in a multioccupational sample consisting of bank employees and teachers, using a 2-wave panel design with a 1-year time interval and structural

equation modelling. Negative affectivity had a cross-lagged direct and additive relationship with emotional exhaustion and also moderated the relationship between Time 1 workload and Time 2 emotional exhaustion. The study concluded that negative affectivity may have multiple effects on overall life satisfaction that persists over time [10].

Thus this study is to determine the impact of Growth Need Strength on the relationship between overall life satisfaction and job satisfaction among state registered nurse at selected general hospital.

## 3. Methodology

This study is a quantitative research with 390 of nurses at selected general hospitals. This study intends to determine the influence of GNS on the relationship between overall life satisfaction and job satisfaction among SRNs at selected general hospitals. The scope of the study is limited in the areas of sample size, data collection methods and data analysis. The study used the critical mass of the sample population from the total population to measure the influence of GNS on the relationship between overall life satisfaction and job satisfaction among SRNs at selected general hospitals and thus may result in a smaller sample size.

### 3.1 Overall Life Satisfaction

The measure of overall life satisfaction was adapted from the general index of well-being as defined by [17] in the Quality of Employment Survey. There were 10 semantic differential scale items concerning their overall satisfaction and happiness with life based on a five-point scale. In the original instrument there were eight semantic differential scales items based on seven-point scale and two global items with responses based on three-point scale. The semantic differential format requires respondents to choose between two opposite positions.

It was reported by [16] that the internal consistency was high for both the 8 semantic differential items and the 2 global questions (alphas = 0.90 and 0.70).

### 3.2 Growth Need Strength

The measure of GNS was adapted from the instrument developed by [6]. The intention to develop the original instruments was derived from previous empirical and theoretical works proposing that such needs may moderate the relationship between job characteristics and job satisfaction [3]. The entire items on 12 items from 76 to 87 are statement questions with nil positive and negative items.

The instrument was also best considered in conjunction with [7] GNS instrument. It was reported by ref. [3] that an initial sample of 332 varied government employees obtained an alpha coefficient of 0.93 using ten items from the scale. Responses were on a five-point Likert type format ranging from “Almost none (0-20%)” to “a great deal (81-100%)”. The mean item score was used as the overall index.

### 3.3 Job Satisfaction

According to [19], job satisfaction was measured based on the Minnesota Satisfaction Questionnaire (MSQ). The measure was of the primary indicators associated with a comprehensive theory of work adjustment developed by [4]. Responses to the questionnaire were given on a five-point scale ranging from “very dissatisfied” to “very satisfied”.

Ref. [3] indicates that the MSQ appears to provide a sound measure of job satisfaction since it has tapped a wide range of features. The Hoyt internal reliability coefficients for the scale have been respectable (ranging from 0.59 to 0.97 across occupational groups). Substantial inter correlations among the MSQ scales justified the global satisfaction score [18].

The level of measurement selected for measuring all the variables discussed above was categorized at the interval scale. The interval level of measurement is superior to the nominal and ordinal measurement scales. This level of measurement yields continuous data, which can be analyzed by more powerful correlation and multiple regression procedures.

## 4. Discussion on Findings

### 4.1 Sampling Result

A total of 390 questionnaires were returned with a response rate of 87% from 450 of questionnaires. The statements were put on a Likert scale of 1 to 5 to measure the influence of GNS on the relationship between self-esteem and job satisfaction among the SRN at the selected general hospitals.

The study targeted SRNs who work at selected general hospitals. The selected general hospital has 11 departments which include:

1. Ophthalmology,
2. Ear, Nose and Throat,
3. Rehabilitation,
4. Orthopedic,
5. Pediatric,
6. Obstetric and Gynae,
7. Surgical,

8. Medical,
9. Neurosurgery,
10. Intensive Care Unit and
11. Emergency Department.

Based on the communication with representative of the hospital director, it has been acknowledged that the population consist of 3200 SRNs working at selected general hospitals. It represents a crude yardstick to achieve the aim of this study. Thus, in the context of this study, the appropriate sampling design selected was stratified random sampling.

According with ref. [8], stratified random sampling is a “process in which certain sub-groups or strata are selected for the sample in the same proportion as they exist in the population. Since there are eleven departments in selected general hospital, this research design would increase the likelihood of representativeness.

In order to calculate and gain a more accurate result on the sample size, Slovin’s Formula was used. A few studies of job satisfaction have used Slovin’s formula to estimate the sample size of the study [12].

Figure 4.1, illustrates the basis to estimate the sample size through Slovin’s Formula.

$$n = \frac{N}{1 + Ne^2}$$

**Figure 4.1:** Slovin’s Formula

Where,

n = Sample size

N = Population of SRNs in selected general hospitals

e = Desired margin of error

The estimated sample size is 356 by using 0.05 desired margin of error (e) and the population of SRNs in selected general hospitals is 3200. The result from Slovin’s formula proves that the estimated sample size falls within the same range which is suggested by ref. [20].

Figure 4.2 justification of the Slovin’s calculation:

$$\begin{aligned} &= 3200 / (1 + 3200 * 0.052) \\ &= 3200 / (1 + 3200 * 0.0025) \\ &= 3200 / (1 + 8) \\ &= 3200 / 9 \\ &= 356 \end{aligned}$$

**Figure 4.2:** Slovin’s Calculation

The Sloven formula shows that the number of 356 observations can efficiently represent the population in this study. However in order to

increase accuracy with a larger sample, the survey was conducted with 450 respondents.

In order to illustrate the accessible population located in eleven departments in selected general hospitals, a sampling frame was constructed. The 450 respondents were selected in proportion to the accessible population in the eleven departments. Out of the 450 questionnaires, 390 were filled completely and the response rate was 87%.

It can be perceived that there was relatively high external validity. There was also confident that the responses were representative of the total sample [8].

Table 4.1 shows the breakdown of respondents in the eleven departments.

**Table 4.1:** Distribution of Respondents from Selected General Hospitals

Departments	Popula tion	Sample	(%)
1. Ophthalmology	250	35	7.8
2. Ear, Nose and Throat	102	14	3.2
3. Rehabilitation	290	41	9.1
4. Orthopaedic	245	35	7.7
5. Paediatric	240	34	7.5
6. Obstetric and Gynae	350	49	10.9
7. Surgical	450	63	14.1
8. Medical	720	101	22.5
9. Neurosurgery	100	14	3.1
10. Intensive Care Unit	276	39	8.6
11. Emergency Department	177	25	5.5
Total	3200	450	100.0

#### 4.2 Relationship Analysis between Overall Life Satisfaction and Job Satisfaction

Based on the result, it reveals that overall life satisfaction are statistically significant at 1% levels, contributing to the overall life satisfaction and have positive effects on job satisfaction among 390 respondents. R<sup>2</sup> is the coefficient of determination, interpreted as the percentage of variance in Y (overall life satisfaction) that can be explained by X (job satisfaction).

The highest R<sup>2</sup> of 0.601 indicates that 60.1 percent of the variance in job satisfaction can be explained by overall life satisfaction.

Table 4.2 shows regression analysis is performed to determine the relationship between overall life satisfaction and job satisfaction by using linear regression.

**Table 4.2:** Linear Analysis between Overall Life Satisfaction and Job Satisfaction

Variable	Consta nt	R <sup>2</sup>	SE B	Beta	Sig
Overall Life Satisfac tion	1.211	0.601	0.026	0.627	0.001*
Job Satisfac tion					

\*p < 0.01

#### 4.3 Influence of GNS between Overall Life Satisfaction and Job Satisfaction

The results of hierarchical regression analysis, as presented in Table 4.8, indicate that 60.1 % of the variance of the job satisfaction is explained by the overall life satisfaction which has significant relationship between overall life satisfaction and job satisfaction variables (R<sup>2</sup> = 0.601, F $\Delta$  = 337.862, p < 0.05). With GNS variable, it gives additional contribution of 3.5% to explain the job satisfaction (R<sup>2</sup> = 0.636, R<sup>2</sup> $\Delta$  = 0.035, F $\Delta$  = 247.712, p < 0.05). In the Step3, with both overall life satisfaction and GNS variables incorporated in the equation, the results show that the interaction variables (overall life satisfaction  $\times$  GNS) contributes additional 32.3 % of the explanation of the variance of job satisfaction, which is statistically significant (R<sup>2</sup> = 0.959, R<sup>2</sup> $\Delta$  = 0.323, F $\Delta$  = 2,398.655, p < 0.05).

This finding indicates that there is evidence to suggest that the GNS as moderator in the relationship between overall life satisfaction and job satisfaction.

The following regression equations were used to analyse the role of GNS as moderator of the relationship between overall life satisfaction and job satisfaction:

$$\text{Equation 1} = \text{job satisfaction} = a + b_1 (\text{overall life satisfaction}) + e$$

$$\text{Equation 2} = \text{job satisfaction} = a + b_1 (\text{overall life satisfaction}) + b_2 (\text{GNS}) + e$$

Equation 3 = job satisfaction = a + b1 (overall life satisfaction) + b2 (GNS) + b3 (overall life satisfaction \* GNS) + e

**Table 4.3:** GNS between Overall Life Satisfaction and job satisfaction

Note:  $R^2 = 0.601$  in Step 1;  $R^2\Delta = 0.035$  in Step 2 ( $p = 0.05$ );  $R^2\Delta = 0.323$  in Step 3  
\* $p < 0.05$

## 5. Conclusion and Implication

### 5.1 Significant of Overall Life Satisfaction for Job Satisfaction

As the results of the linear regression analysis show that 60.1 % of the variance of the job satisfaction is

Variable /s	R <sup>2</sup>	R <sup>2</sup> Δ	FΔ	SE B	Beta	Sig
Step 1 Overall Life Satisfaction	0.601	0.601	337.862	0.026	0.627	0.001*
Step 2 Overall Life Satisfaction GNS	0.636	0.035	247.712	0.066 0.059	0.258 0.355	0.001* 0.001*
Step 3 Overall Life Satisfaction GNS Overall Life Satisfaction × GNS	0.959	0.323	2,398.655	0.031 0.021 0.005	- 0.936 - 0.051 0.297	0.001* 0.016* 0.001*

explained by overall life satisfaction, which is statistically significant.

Result from hierarchical regression with GNS variable shown that contributes additional 3.5% to explain the job satisfaction. With both overall life satisfaction and GNS already in the equation, the results show that the interaction variable (overall life satisfaction × GNS) gives additional contribution of 32.3 % of the variance, which is statistically significant.

The finding indicates that there is an evidence to conclude that the GNS as moderator in the relationship between overall life satisfaction and job satisfaction.

### 5.2 Role of Growth Need Strength

Growth needs strength play an importance role because it acts as a strong need for personal challenge and accomplishment, for learning, and for professional development on the job.

From the result, it can be concluded SRN's who have strong growth needs strength are predicted to develop a strong internal motivation when working on complex and challenging jobs. In other words, nurses with strong growth needs strength will respond more positively to the conflict in their personal life due to their job satisfaction. Therefore, it is important to consider the roles of growth need strength to develop job satisfaction.

Based on hierarchical regression, the findings suggest that although nurses face challenge as a result of overall life satisfaction, but most of them show that they have a high satisfaction level with their profession. Overall life satisfaction indicating that GNS have played significantly important role in nurses' job satisfaction as moderator.

### 5.3 Policy and Practical Implications

Hence, merely improving overall life satisfaction will not necessarily improve job satisfaction. Subsequently, the pursuit of better job satisfaction by changing things within the context of the organization must be viewed cautiously. Job satisfaction should probably be perceived as the result of a complex interplay overall life satisfaction.

It is important to take a constructive step in this direction by recognizing, understanding and accepting the fact that the concept of job satisfaction has indeed expanded. This realization will help policy – makers in developing a clearer and more comprehensive approach of managing employee job satisfaction. The policy maker should pay more attention to overall life satisfaction and GNS as potential sources.

It is also to improve medical service quality and delivery in order to provide a much better conducive working environment by incorporating policies that can improve job satisfaction.

This research study is hoping to add the much needed anticipated knowledge about ways to raise job satisfaction in one aspect of the social science field and may also create awareness by influencing the GNS on the relationship between overall life satisfaction and job satisfaction among SRNs at selected general hospitals.

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