

# Job Satisfaction Assessment Among Dentists And Dental Auxiliaries In India

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## Abstract

**AIMS:** The aim of present study was to evaluate the level of job satisfaction among Indian dentists, to explore the satisfaction with different work, environmental factors and relate it to job satisfaction. **MATERIAL AND METHODS:** The study was conducted among 98 dentists and 122 dental auxiliaries in Udaipur, India. A questionnaire containing 14 items was used. All items were written in 4 point Likert format with a score range from 1 (strongly dissatisfied) to 4 (strongly satisfied) except the item (intention to change the job) which was written in a 2 point scale (1-No, 2-Yes). Higher scores in all cases indicated greater job dissatisfaction. Kendall's tau Correlations, t- test were performed by using SPSS Software (version 11.0). **RESULTS:** Mean score for job satisfaction among dentist was 39.40 while among dental auxiliary it was 40.74. Results also shows that MDS are more satisfied than BDS qualification. (P=0.000) Dentist's had significantly higher job satisfaction scores than dental auxiliaries for income, recognition, opportunity to develop professionally, quality of care. (p<.05) **CONCLUSION:** Findings of this study shows the issue that needs special attention to increase the level of job satisfaction among Indian dentists and thus improve all dental care system.

## INTRODUCTION

This study describes the development and validation of a measure of job satisfaction that is applicable for dentists and dental auxiliaries. Working in a dental practice is recognized to be both physically and mentally demanding profession.

In general terms, job satisfaction can be defined as an individual's general attitude towards his or her job. Clearly, a person with a high level of job satisfaction invariably holds positive attitude towards their job, while, a person who is dissatisfied holds negative attitude about their job<sup>1</sup>.

Job satisfaction has been linked to various aspects of patient care and health system outcomes<sup>2</sup>, as well as to general life satisfaction and job performance<sup>3</sup>. Job satisfaction is therefore not a single entity but a complex set of interrelationship of tasks, roles, responsibilities, interaction, incentives and rewards<sup>4</sup>.

Apparently dentistry is a profession with a wide range of possible pit falls where dentists are subject to wide variety of occupational factors, that greatly affect their well being<sup>5,6,7,8,9,10</sup>. Many studies have shown high prevalence of physical and psychological disorders in dentistry also<sup>11,12,13,14,15</sup>.

Although the literature on job satisfaction is extensive, there is mere research done regarding job satisfaction among health service workers in Udaipur, Rajasthan especially among dentists.

A multidimensional scale allows the investigator to identify the specific areas where job satisfaction is high or low. The subscales can also be used to determine which aspects of job satisfaction are most affected by an intervent. This instrument is called as the "Dentist Satisfaction Survey"<sup>16</sup> and it has been used in other research.

Job resources may be derived from studies on job satisfaction among dentists, of which figure 1 shows a summary.

Figure 1

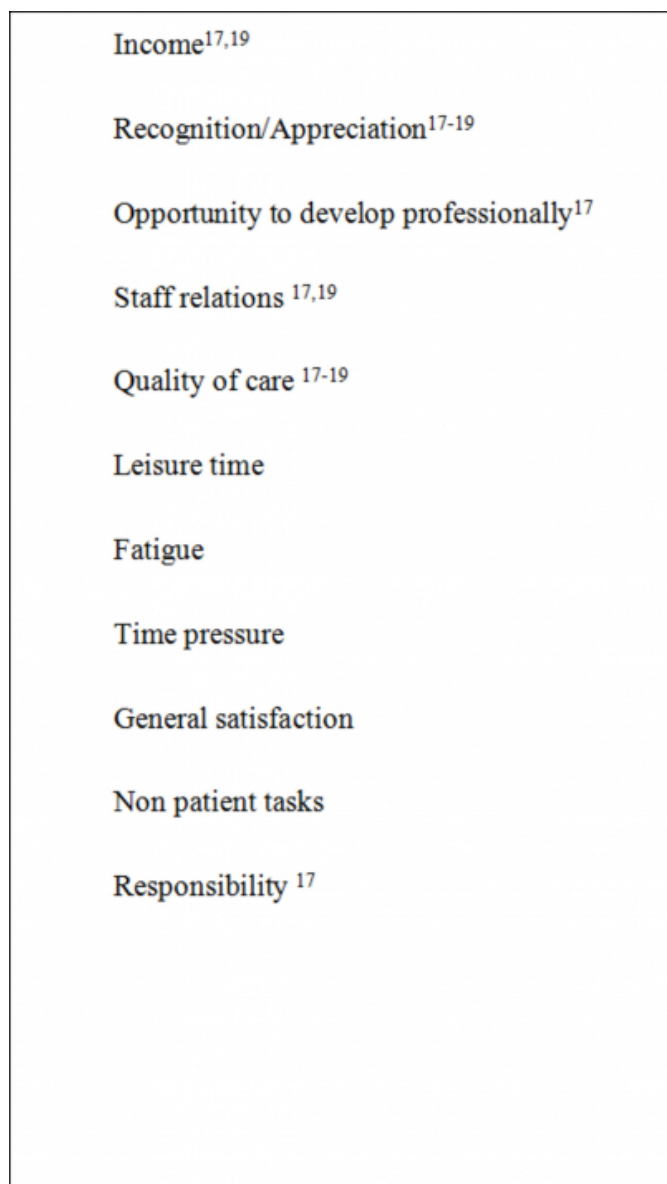


Figure-work related factors described as positively influencing job satisfaction among dentists

Self assessment of income and appreciation related to some internal expectation play large roles in satisfaction with dental practice. Stress, personal time management and lack of freedom are problematic to the hypothesis that dentist will be dissatisfied by those aspects of dental practice that challenge their core personality and values of being in control.

Delivery of care, technical aspects of dentistry, sense of accomplishment and even literally the “ability to control what goes in my office” are sources of satisfaction, as are relation with cooperative patient and staff.

Job satisfaction may be an important predictor of movement within the dental profession and intent to change job. Many studies in foreign countries have been carried out to explore this topic<sup>2021222324</sup>. There was no similar study conducted among Indian dentists and this is the first study about dental job motivation and satisfaction in Udaipur.

The specific aims of this study were to measure job satisfaction among dentists in Udaipur, India so as to identify issues that may influence recruitment and retention of dentists in active clinical practice.

## MATERIAL AND METHODS

This study was conducted in Udaipur city which is situated in south east zone of Rajasthan during the period of January-March in the year 2008. Before starting the study ethical clearance was obtained from the ethical committee of Darshan Dental College, Udaipur. Informed consent was taken from the subjects before starting the study.

## DESIGN AND SAMPLING

This study utilized a cross sectional survey of registered dentists in Udaipur. The study population comprised of 98 dentists and 122 dental auxiliaries. The study conducted among 2 private dental hospitals and 18 private dental clinics of Udaipur, Rajasthan, India. Over all response rate was 85%. 15% were excluded from our study those who were absent on the day of data collection and who did not cooperate.

## DATA COLLECTION

Self completed questionnaire were used to collect the data. The questionnaire collected information relating to dentist characteristics that is qualification, area of dentistry, practice type (private or public) and job satisfaction. Practitioners and auxiliaries were informed that responses were confidential and coding of practitioners preserved anonymity.

## DATA ITEMS

The questionnaire used for this study was based on a job satisfaction questionnaire developed by Michael.K.Chapko et al for use among dentists and dental auxiliary’s .Questionnaire was checked by a pre test prior to starting of study. Test/Retest analysis on the items in the final version of the questionnaire indicated a reasonably high level of reliability. The questionnaire measured both specific dimensions of job satisfaction and overall job satisfaction of dentists and dental auxiliaries.

A questionnaire containing 14 statements (items) was developed. They included both male and female dentists and associated dentists as well as practice owners. All items were written in 4 point Likert format with a score range from 1 (strongly dissatisfied) to 4 (strongly satisfied) except the item (intention to change the job) which was written in a 2 point scale (1-No, 2-Yes). Higher scores in all cases indicated greater job dissatisfaction.

The predictors of job satisfaction covered 10 conceptual and empirical dimensions of work, namely autonomy, relation with colleagues, relation with patients, relationship with staff, personal time, intrinsic satisfaction, administrative responsibilities, compensation, stress.

### **SCALE DEVELOPMENT**

Scales were developed using a rational empirical approach. This include- (1) Conceptual grouping of item by a panel of professionals and factor analysis.

(2) An examination of item correlation within and between subscales. A positive contribution to the internal consistency of sub scale was major criteria for including an item within a sub scale.

To verify the dimensionality of the scale, we examined the correlation between an item and the sum of other items in its sub scale. These correlations were than compare to the correlation of item with other sub scale. One way analyses of variance were performed separately to determine if there were any difference in job satisfaction between dentist and dental auxiliaries. Concurrent validity was examined by co relating job satisfaction sub scale and intent to change job for dentist and dental auxiliaries.

### **DATA ANALYSIS**

Dimension/sub scale mean scores were calculated by summing the values of the items and dividing by the number of items. Not all respondents filled in every data item, and so an exclusion criteria was adopted for-

- 1) Incompletely filled data
- 2) Dentists and dental auxiliaries who were not present on the day of study.

Through out this analysis, parametric, descriptive and inferential statistics have been used. Kendall's tau Correlations, t- test was used by using SPSS Software (version 11.0)

### **RESULTS**

A factor analysis performed for dentist and dental auxiliaries, data indicated that the items grouping were similar for the above two groups. An analysis combining dentist and dental auxiliaries' data was then used to identify item groupings applicable to both above professional groups.

The professional growth dimensions were split into two dimensions as a result of a factor analysis: opportunity to develop for professionally and time to develop professionally. The non patients task dimension was also split into two dimensions – non patients task and leisure time.

The final job satisfaction instrument consists of a general job satisfaction major and two specific subscales as listed in table.

Each of the specific sub scale measures a different conceptual dimension. The twelve subscales have a total of thirteen items. M.D.S. (Master of Dental Surgery) staff had significantly higher job satisfaction score than B.D.S. (Bachelor of Dental Surgery) staff.

**Figure 2**

Table-1 characteristics of dentist and dental auxiliaries in job satisfaction measure

Sub Scale	No. of items	Dentist		Dental Auxiliaries		Sample Item
		Mean Score	SD	Mean Score	SD	
INCOME	1-4	2.48	0.92	2.95	0.71	Income receive from dental practice
RECOGNITION	1-4	2.8	0.63	3.123	0.51	The praise receive for your dental practice
OPPORTUNITY TO DEVELOP PROFESSIONALLY	1-4	2.87	0.78	3.57	2.7	Opportunity to enhance your career
TIME TO DEVELOP PROFESSIONALLY	1-4	3.07	0.5	3.11	0.68	Time you get your profession
RESPONSIBILITY	1-4	3.02	0.59	3.11	0.63	Responsibility you are accepted to fulfill
NON PATIENT TASK	1-4	3.29	0.7	3.23	0.97	Pre clinical , paper work etc. you have to do
STAFF RELATION	1-4	2.9	0.58	3.08	0.58	Your compatibility with your colleagues
QUALITY OF CARE	1-4	3.15	0.66	3.25	0.56	Your attitude towards patients
LEISURE TIME	1-4	2.98	0.57	2.87	0.67	The amount of time you have for your self
FATIGUE	1-4	3.18	0.72	2.93	1.01	Tiredness from your work
TIME PRESSURE	1-4	3.12	0.71	2.95	1.04	Management of time
GENERAL SATISFACTION	1-4	3.07	0.63	3.2	0.68	Are you happy with your work

t-test- t value\*- 82.65, P\*-0.000; t value\*\*-64.80, P-0.000

Table 1 shows the final job satisfaction instrument consisting of a general job satisfaction measure and 11 specific sub scales. Each specific sub scale measures a different conceptual dimension. The 12 sub scales have total of 13 items.

Considering the job satisfaction for dentists, maximum mean value was obtained in non patient tasks and least for income among the 12 sub scales.

Considering dental auxiliaries, maximum mean value was obtained for developing job opportunities and least for leisure time.

**Figure 3**

Table-2 RELATINOSHIP BETWEEN DESIRE TO CHANGE THE JOB AND JOB SATISFACTION SUB SCALE FOR DENTIST'S AND DENTAL AUXILIARIES

JOB SATISFACTION SUB SCALE	DENTIST	DENTAL AUXILIARIES
INCOME	0.68*	-0.393**
RECOGNITION	.348**	-0.293**
OPPORTUNITY TO DEVELOP PROFESSIONALLY	.269**	-0.192*
TIME TO DEVELOP PROFESSIONALLY	0.046	-0.438**
RESPONSIBILITY	0.164	-0.254**
NON PATIENT TASK	0.069	-0.368**
STAFF RELATION	.260**	-0.081
QUALITY OF CARE	.224*	-0.167
LEISURE TIME	-0.138	-0.450**
FATIGUE	-0.113	-0.446**
GENERAL SATISFACTION	.356**	-0.215*
<b>INTENT TO CHANGE JOB</b>		
Mean	3.47	3.36
SD	0.72	0.48

\* Correlation is significant at the 0.05 level (<-tailed) - p<0.05

\*\* Correlation is significant at the 0.01 level (<-tailed) - p<0.01

Table 2 shows the co-relation between job satisfaction scales and intent to change job among dentists and dental auxiliaries. For dentists, the co-relation between sub scales and intent to change the job were less when compared to that of dental auxiliaries.

Dentist's had significantly higher job satisfaction scores than dental auxiliaries for income, recognition, opportunity to develop professionally, quality of care and general job satisfaction scales.(P<0.05) Auxiliaries had significantly higher job satisfaction scores than dentists for the non-patient tasks sub scale.(P<0.01)

**Figure 4**

Table-3 INTERRELATIONSHIP BETWEEN QUALIFICATION AND JOB SATISFACTION

SCORE	Qualification	N	Mean	S.D
	1. B.D.S.	55	37.01	3.88
	2. M.D.S.	43	41.3	5.05

t-test, t value- -3.765, P-0.000

Table 3 shows interrelationship between qualification and job satisfaction show that MDS are more satisfied than BDS qualification. Mean value for MDS was 41.3 and for BDS it was 37.01. t-test was done (statistical procedure) to test the equality of the mean values.

**DISCUSSION**

This is the first study inquiring about job satisfaction among dentist and dental auxiliaries in Udaipur, Rajasthan. In fact, there have been a lot of previous studies on stress in dentistry<sup>2526</sup>; study on job satisfaction has received less attention.

It seems appropriate to note that the respondents included registered dentists and dental auxiliaries from two dental colleges and 18 private dental clinics of Udaipur city and so the findings can be generalized only within this population. In addition to this, the study did not include dentist who were no longer practicing.

High positive impact on dentist job satisfaction had the reduction of working hours, satisfaction with income, professional evaluation and appreciation, possibility to realized ones capabilities and talent to improve and quality them. All these factors to gather show that the most important things for dentist to be satisfied with their job is to have permanent not limited possibility to develop professional development.

Study have shown that personal time, patient and professional relations, work organization, work load to be critical and often hazardous areas of dental practitioners, that greatly affect job satisfaction. Job satisfaction among dentist is known to show an inverse relation to experienced work stress<sup>2728</sup> studies on job satisfaction and on occupational stress among dentists show a number of overlapping work characteristics<sup>293031</sup>. Foreign studies show that substantial numbers of dentists don't cope with profession demands and leave it<sup>3233</sup>.

The job satisfaction instrument described above appears to

have met the original objectives for developing such an instrument – multi dimensionality, adequate validity and applicability to both dentist and staff. Each of these objectives is described below:–

**MULTIDIMENSIONALITY**

The final job satisfaction job instrument contains 11 subscales and one general satisfaction scale. A multidimensional scale allows the investigator to identify the specific areas where job satisfaction is high or low. It also allows the selection of specific sub scales that are of theoretical or practical significance. A three sub scale measure of job satisfaction consisting of opportunity to develop professionally, staff relations and fatigue meets these criteria.

**VALIDITY**

The data reported here shows a relationship between job satisfactions and intend to change job for dentists and dental auxiliaries. The greater the job satisfaction the less likely the intend to change the job, the lack of relationship between job satisfaction and intend to change the job may be due to Low variability in dentists intends to the change the job, Satisfaction not being related to dentist's intent to change the job and Poor validity of satisfaction measure when applied to dentist.

**SCALE APPLICABLE TO BOTH DENTISTS AND STAFF**

The structure and characteristics of final scale were applicable to all groups. MDS had greater job satisfaction scores than BDS. Dentist also had greater job satisfaction score than dental auxiliaries on the income, recognition, opportunity to develop professionally and responsibility subscale. The present study showed the mean overall job satisfaction score which was 41.30 for M.D.S. and 37.91 for B.D.S. High Mean overall job satisfaction among dentist and dental auxiliaries' shows dentistry to be perceived as a rewarding job, regardless its hazards.

Auxiliaries may be more tolerant because they have different job expectation than the dentists resulting from differences in amount and type of education.

These finding suggest that the scale as developed can be used as a measure of job satisfaction for all dental personnel. The instrument can be used to determine the relationship between job satisfaction and changes in dentistry such as expanded functions, alternative forms of practice organization and financing, introduction of computers and a

changing dentist to population ratio. Research with dental practitioners has determined that system of remuneration, the characteristics of working environment, and the types of service in which an individual works all exert an influence upon the practitioner's experience of their working life. <sup>343536</sup>

The scale presented here could be used cross-nationally after appropriate modification and validation. Job satisfaction of dental personnel has been reported for several individuals' countries <sup>37383940</sup>. Cross-national comparisons of job satisfaction <sup>4142</sup> and comparisons between subcultures within the same country <sup>43</sup> have also been interest.

Overall the study has revealed that dentists in active clinical practice are reasonably satisfied with various components of their job.

In our study dentist's had significantly higher job satisfaction scores than dental auxiliaries for income, recognition, opportunity to develop professionally, quality of care and general job satisfaction scales. ( $P < 0.05$ ) Auxiliaries had significantly higher job satisfaction scores than dentists for the non-patient tasks sub scale. ( $P < 0.01$ ) This result was similar to a study conducted by Michael K. Chapko, <sup>44</sup> in which dentist had significantly ( $P < 0.05$ ) higher job satisfaction score than dental hygienist or assistant for income, recognition, opportunity to develop professionally and responsibility subscale.

Job satisfaction is potentially an important predictor of movement within the dental profession and intends to change job. It is shown that dentistry is a profession that holds many opportunities for those being part of it.

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