

Original Research Article

The role of job and personal resources in alleviating dentists' emotional dissonance in dental clinics of Hyderabad: a cross sectional study

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ABSTRACT

Background: 'Emotional dissonance' (the discrepancy between the felt and expressed emotions) could occur in dentistry due to the challenge of pacifying patients irrespective of the dentist's state of mind and could influence their performance. The presence of certain factors could minimize this though. Our aim was to examine the role of 'optimism' and 'relation with colleagues' in buffering the effect of emotional dissonance on the performance of dentists.

Methods: Emotional dissonance' was evaluated among 390 dentists of Hyderabad using Zapf scale; 'optimism' using 3-items adapted from 'The Life Orientation Test (LOT)', 'relation with colleagues' assessed with a self-constructed 4-item scale and the 'performance of a dentist' using 6 items picked from Goodman scale. Regression analysis was done using SPSS 24, to predict the influence of 'optimism' and 'relation with colleagues' on the 'performance' of dentists in dissonance.

Results: Emotional dissonance was found to be negatively related to dentists' performance. 'Optimism' ($p=0.018$) and 'relation with colleagues' ($p=0.039$) significantly predicted their performance when under dissonance, but in the negative direction.

Conclusions: The results necessitate the need to identify various resources to handle dissonance owing to its intensity found in the present study.

Keywords: Dentist, Emotional dissonance, Job resources, Job demands, Optimism, Performance

INTRODUCTION

Human service professionals are a part of that occupational group, which involves the satisfaction of serving the mankind. It is a great privilege for the dentists to interact with different people and address their health issues. This is further encouraging when there is team work involved, because of the support derived from colleagues. On the other hand, the dentists in a solo practice are more likely to report higher levels of emotional exhaustion and lower levels of personal accomplishments, making them victims of emotion work.¹ The joy of treating people could turn out to be

stressful when some patients fail to co-operate, leading to instances of high emotional dissonance which is considered to be both an organisation demand and a stress reaction related to emotional exhaustion.¹ Such circumstances might or not impact the performance or the quality of services provided, depending on the influence of certain factors.

Emotional dissonance

Emotion work that involves regulating emotions as per the organizational rules, includes emotional dissonance as one among its four dimensions, which is the dissonance

between the felt and displayed emotions.¹ It places a noxious demand on the employee as it is a major source of work stress and its negative consequences, like ill health.

The job-demand-resource model

According to this model, an employee's health and well-being result from a balance between the positive (resources) and negative (demands) characteristics of a job. It encompasses a set of job demands and job resources capable of influencing an employee. More job demands with less of resources, lead to a negative outcome. Similarly, the presence of plenty of resources despite increased job demands leads to a positive outcome.

Job demands are "those physical, social or organizational aspects of job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs" where-as job resources are "those physical, social or organizational aspects of the job that may be functional in achieving work goals, reduce job demands and stimulate personal growth and development. Personal resources are those pliable psychological attributes inherent within one-self making them able to control and impact their environment successfully. Both personal and job resources are similar in being helpful to accomplish work related goals, thus enhancing personal growth and development."²

There is minimal evidence in the past studies about the consequences of dissonance and resources that help dentists tackle this. Alma et al found in their study that a dentist's job resources like the good co-operation with one's assistant may moderate the negative effect of emotional dissonance on his job where-as personal resources like optimism were found to have a less influence on his performance.¹

In another study by Arnold et al on police officers, emotional dissonance was positively related to burn-out that was significant and negatively related to their performance.³ Emerik et al found that a good supportive environment within the team shields the negative outcome at work place.⁴

Going by the JDR model that job demands and the resources together might have an impact, either positive or negative on the employee, the aim of the present study was to probe if a good co-operation with colleagues (job resource) and a sense of optimism (personal resource) could influence the performance of a dentist under emotional dissonance.

METHODS

A cross sectional questionnaire study was conducted to examine the role of job and personal resources in altering

the emotional dissonance of dentists and influencing their performance in Hyderabad city. The study extended over a period of three months starting from July 2018 to September 2018. Ethical clearance was obtained from the institutional review board of Sri Sai College of Dental Surgery. A total of 390 dentists from all the five zones of Hyderabad city- North, South, East, West and Central zones were included in the study based on a sample size estimated from the pilot study, following a cluster sampling.

Dentists practicing in Hyderabad at the time of the study, those who consented for the study and those dental clinics with more than one dentist were included in the study. Those not interested in the study or busy with a case at the time of distributing the questionnaire and those clinics with a single dentist i.e., those who managed their clinics all alone without a consultant were excluded.

The questionnaire was validated and pre-tested, consisting of 17 questions in all, under 4 domains emotional dissonance, optimism of the dentist, relationship with colleagues and the performance of the dentist. A few demographic details about the age, gender, speciality, type of clinic (single dentist/multi-speciality) and experience also were noted. Emotional dissonance was estimated using Zapf scale consisting of four-items and rated on a five-point scale ranging from '1=very rarely/ never' to '5=very often'.

Optimism was assessed using three items adapted from the life orientation test (LOT-R) that included only the positively phrased items and were rated on a five-point scale ranging from '1=totally disagree' to '5= totally agree'. The relationship with colleagues was assessed using a self-constructed four-item scale, the answers of which were rated on a four-point scale ranging from '1=never' to '4=always'.

The performance of the dentist was assessed using six-items picked from the scale given by Goodman, each question consisting of 5 options ranging from '1=strongly disagree' to '5=strongly agree'. The total score under each domain was obtained by summing up the scores of the individual questions divided by the number of questions. The negative questions were scored in reverse i.e., a score of 1 was assigned to strongly agree and a score 5 to the option strongly disagree. The collected data was subjected to statistical analysis using SPSS 25.

RESULTS

The participants in the present study as shown in Table 1 included 201 males representing 51.5% of the sample and 189 females representing 48.5%. The mean age of the sample was 31.77 years. The average number of working years as a dentist was 6 years. 157 of the total sample had completed their post-graduation while 233 had a bachelor's degree. The sample included dentists from both multi-speciality and single clinics.

Table 2 showed the correlations between the various domains of the study according to which emotional dissonance and performance of the dentist were significantly and negatively co-related (Pearson correlation co-efficient, $r=-0.106$, $p<0.05$). Optimism ($r=0.307$, $p<0.01$) and a good relation with colleagues ($r=0.250$, $p<0.01$) were found to be significantly and positively correlated with the performance.

The predictor variables were centred on their means, and computed through regression analysis. Demographic details were added initially. In the next step, emotional dissonance was added and in the third and fourth step were included the resource products- optimism and relation with colleagues. The results of hierarchical regression analysis, as depicted in Table 3, showed that emotional dissonance in the presence of the other demographic and job demands and resources, negatively (significant) predicted the performance. Optimism and a good relation with the colleagues significantly and negatively predicted the performance of the dentists.

Table 1: Demographics and other descriptive characteristics of the study sample.

Variable	Groups	Number of people (%)
Gender	Males	189 (47.2)
	Females	211 (52.8)
Qualification	BDS	190 (47.5)
	MDS	210 (52.5)
Experience (in years)	0-5	201 (50.2)
	6-10	157 (39.3)
	11-15	25 (6.3)
	16-20	3 (0.7)
	21-25	10 (2.5)
	26-30	4 (1)
	31-40	68 (17)
Age (in years)	31-40	310 (77.5)
	41-50	22 (5.5)
	51-60	20 (5)
Status	Owner	80 (20)
	Employee	300 (75)
	Both*	20 (5)

Table 2: Correlation between predictor and outcome variables predicted through Pearson's correlation coefficient 'r'.

Variables	Mean	SD	1	2	3	4
Dissonance	3.0933	1.0087	-	-0.010	-0.053	-0.106*
Optimism	4.0000	0.82692	-0.010	-	0.218**	0.307**
Relation with colleagues	3.2212	0.44487	-0.053	0.218**	-	0.250**
Performance	4.3103	0.45761	-0.106*	0.307**	0.250**	-

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

Table 3: Regression analysis of all the predictor variables with performance as the outcome variable.

Model 1	B	T	P-value
Age	0.086	1.771	0.077
Gender	0.031	0.628	0.530
Qualification	-0.017	-0.343	0.732
Experience	0.121	2.492	0.013
Single/multi clinic	0.069	1.424	0.155
Emotional dissonance	-0.101	-2.086	0.038
Emotional dissonance*optimism	-0.134	-2.369	0.018
Model 2			
Age	0.091	1.850	0.065
Gender	0.029	0.586	0.558
Qualification	-0.016	-0.331	0.741
Experience	0.129	2.627	0.009
Single/multi clinic	0.051	1.032	0.303
Emotional dissonance	-0.092	-1.855	0.064
Emotional dissonance*relation with colleagues	-0.109	-2.075	0.039

Dependent variable: Performance

DISCUSSION

The job-demands-resources model states that one's outcome at job is influenced by a balance between the resources (job and personal together) and the job demands, based on which the present study was conducted.² Demanding patient interactions and work load have made burn-out and emotional exhaustion frequent in dentistry making it important to understand the influence of job demands. Of all the job demands, as dissonance is most frequently encountered, we chose to examine its role in a dentist's performance.⁶

Optimism is generally considered to be the crux of happiness and one of the paths to success. We were interested in finding if being optimistic (personal resource) was helpful in dentistry. The job resources also play a role in overcoming demands at work as most of the time is spent at work place. One such resource is having a good relation with colleagues, in dentistry in particular, because a day long conversation with different patients still makes loneliness inseparable from dentistry. The best solution is to discuss profession related problems like difficult treatments with colleagues. But the dentists' perception of this support also matters, which is why, we measured perceived support amongst other job resources.

The dentists scored slightly high on the dissonance scale (3.09) and demographic variables had no significant role on the emotional dissonance similar to a study by Murtoma wherein all participants experienced burnout symptoms of the same intensity.⁷

The results of the study showed a negative and significant correlation between emotional dissonance and the performance of the dentist with $r=-0.106$. This was also seen in a study by Hakanen et al on dentists suggesting that the need to expend energy in managing dissonance may be prejudicial for performance and makes them futile in accomplishing their objective of providing a superior grade service to their patients.⁸ To add to this, the exhaustion of a person's energy resources leads to additional losses like retrogression in the performance according to Hobfoll's conservation of resources theory.⁹

On considering the role of optimism and a good relation with colleagues in shielding dissonance through a regression analysis, both of them were found to significantly predict the performance but in the negative direction.

The mean score on the domain of relation with colleagues was found to be good (3.22). The desire of boosting up the patient count, with a comprehensive dental care could have led to having a good network of friends from different specialities. But this network would not have been true enough, to help them mitigate dissonance leading to the negative prediction in regression. Moreover, the study being cross sectional assessed all the domains at a single time frame leaving it unclear if the same colleagues had been accompanying them since the development of dissonance. The temporality of the results also cannot be established. On the contrary, previous studies by Adanike et al and Driscoll et al have shown social support to be important in coping with the job demands while a study by Luthans et al found a positive organisational behaviour to cut down strain and palliate their stresses thus moderating the stress-strain relationships.¹⁰⁻¹²

The dentists in this study were found to be highly optimistic (Mean=4.00) with 77% of them agreeing to being optimistic about their future. But this failed to bring them out of dissonance because, as claimed by Alma et al, the benefits of optimism depends on timing, making it necessary to consider other things like the circumstances, antecedents and consequences of optimism.¹ Over optimism might have made them foolhardy of dealing with emotionally adverse situations as a result of which the performance could have fallen down. On the other hand, studies like that of Scheier et al and Makikangas et al have linked optimism with positive outcomes.¹³⁻¹⁴

Studies on the demand control model have produced mixed results regarding the demand-control interactions, and some authors argued that the reason for lack of evidence about demand-control interactions was studying

homogenous groups, leaving little room for variance on predictor variables.^{15,16}

The study was based on a self-report questionnaire, the answers to which, were the dentists' perceptions of the work environment. As perceptions do not necessarily have to match with reality, future research could consider including other dentists' ratings as well. Also, the interaction effect of only two resources against a single job demand was concentrated while predicting the performance. Examining the other demands and resources also as predictors of performance is recommended to understand the correct interaction effects.

CONCLUSION

The results, in line with literature, have portrayed the inseparable connection between job demands and professions like dentistry, making it necessary to consider this on a serious note right from graduation. Measures to lighten the burden of dealing with emotions have to be taught to all the graduating dentists as a part of their curriculum. This would improve both their academic and clinical performance. Regular contacts with colleagues and interactive discussions about patient treatments could more importantly help the dentists in a solo practice.

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