

# Correlation of Patient's Mental Attitude with Age, Sex, Educational Level and Number of Missing Teeth

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## Abstract

**The Aim:** To Determine any relationship, if exists, between the patient's mental attitude with age, sex, educational level and the number of missing teeth. **Method:** This study based on case sheet information of 270 patients. The age ranged (20\_60) years. The clinical data were correlated, frequencies and percentages with age, gender, the level of education, and the missing teeth with mental attitude of the patient. **Result:** the largest number was for philosophic patients (212) followed by exacting patients (38), then hysterical (12), and the least number was indifferent patients (8). The female philosophic percentage (43%) was more than male, also for exacting patient the female was more percentage (7.40%) than exacting male. About the relation between the mental attitude and the age, the largest percentage was group (3) philosophic patient followed by group (4) then group (2) and group (1) and the least for group (5). The number of educated philosophic patient was more than non-educated, also indifferent educated patient more than indifferent non-educated, while the exacting and hysterical patient, the non-educated was more. In all the four house mental attitude class, the number of patient with missing teeth more than 5 teeth was more than patient with missing teeth less than 5 teeth. **Conclusion:** There is an increase in philosophic patients followed by exacting patients then hysterical and the least number was indifferent patients. The female philosophic percentage was more than male, also for exacting patient the female was more percentage than exacting male. The largest percentage of age group was group (3) philosophic patient followed by group (4). The number of educated philosophic patient was more than non-educated, also indifferent educated patient more than indifferent non-educated. The number of patient with missing teeth more than 5 teeth was more than patient with missing teeth less than 5 teeth.

**Key word:** mental attitude , age, sex, educational level, number of missing teeth.

## Introduction

Life expectancy has increased international with many countries falling into the category of "Greying Country".<sup>1,2</sup> Individual's ability to adapt to new things and integrate new ideas may be deteriorated by physical, mental and social wellbeing of a person which are related with the aging process.<sup>3</sup> Many diseases and disabilities tend to develop to people with advancing age, as well as the dental diseases in geriatric patients which considered as one of the most

predominant chronic conditions. Deteriorating of oral health conditions can be occurred due to compromised physical dexterity, family members economic dependence, mental weakening compounded by psychiatric morbidity.<sup>4</sup> Multi factorial process is the terminal outcome of complete edentulism which includes removal of all erupted teeth and necessities preservation of the remainder dento-alveolar structures for replacement or reconstructive rehabilitations. A multidimensional association

between genetic, cultural, personal, behavior or oral habits and economic state factors that can lead to increase the rate of complete edentulism.<sup>5</sup> The withdrawal from job and loss of income considered as social changes, physiological changes that associated with aging process like hair loss, teeth loss and decreasing in facial height which lead to appearance of folds and wrinkles. As well, weakening in vision, hearing and taste perception may lead to anxiety in these persons.<sup>1</sup> All these changes will effect on the individuals personality, and in return will reduce the medical or dental treatment acceptance ability. So the challenge to the prosthodontics was how to treat such person, this demands a lot of experience and patience. All these factors should be identify by the clinician before initiating any rehabilitative and therapeutic treatment.<sup>1</sup>

One of the key determinants for the long-term success of the complete denture therapy was the psychological aspects of edentulous patient and this can be deduced by the famous dictum by Devan<sup>1</sup> “Meet the mind of the patient before you meet the mouth of the patient”. The effective behavior modulation of geriatric patients who undergoing denture treatment is of paramount importance for any clinician to understand the effects of psychology of such patients for a successful practice. The patient’s attitudes and his reaction to different situations was so important to improve mutual trust which can affect the outcome of the treatment.<sup>1</sup>

The mental attitudes was classify by several systems like the M.M. House Classification, Heart well’s classification, Winkler’s Classification of the Elderly, and Sharry’s Classification. On the base of the patient psychological responses’ to the ability to adapt to new denture and being edentulous , Milus M. House in 1950 was credited with devising a classification system of patient’ mental attitudes, and this classification helped the clinician and considered

as a basic in anticipating various responses of patient to specific denture procedure.<sup>6</sup> House classified patients into 4 types:

**Philosophical mind** -: “these types of patient are rationale, sensible, calm, co-operative and indulgent in every situation. They understand the limitation of denture and the dental procedures”.

**Exacting mind** -: “the exacting patients are methodist, precise, strict, and often make excessive demand”.

**Indifferent mind**- : “This patient is apathetic, uninterested and lacks motivation”.

**Hysterical mind**: “the hysterical patients are emotionally unstable, excessively apprehensive, easily excitable, easily anxious and have unrealistic expectations”.

Jamieson<sup>7</sup> actually specified that “fitting the personality of the aged patient is often more difficult than fitting the denture to the mouth”. A series of social factors (the patient’s sex, age, education, vocation, social factors, upbringing, home environment, etc.) as well as the state of general health possibly can influence on the patient’s attitude.<sup>8</sup> Sufficient information can help the dentist concerning the patient’s mental attitude as careful observation and listening in a structured interview<sup>9</sup> and questionnaire<sup>10</sup>. Identification of the behavior of the patients can obtain from the further help of graphoanalysis. The improvement of the treatment rendered can obtain from knowledge of patient’s mental attitude which may provide insight into patient behavior.<sup>11,12</sup>

### **Aim of the Study**

The aim of this study was to determine any relationship, if exists, between the patient’s mental attitude with age, sex, educational level and the number of missing teeth.

## Method

This study based on case sheet information of 270 patients who attended the outpatient prosthodontics clinic in College of Dentistry, University of Babylon in Iraq, from (10 Oct 2018 to 10 May 2019), for fabrication of new partial dentures were selected. The number of male 120 patients and female 146 patients. The age ranged (20\_60) years. The Subjects who took part in this study divided in to five age groups; group one (20\_30)years old ,group two (31\_40) years old, group three(41\_50), group four (51\_60) years old, group five (more than 60 years old) (table1).

The inclusion criteria for the study included: patients who have previous partial denture, and attend the clinic to replace it. The selection of the patient case sheet was random without any preformed idea about them. The information was filled by the clinician from the case sheet history and all relevant data related to mental attitude “according to a predefined classification of determining mental attitudes” was recorded in a case sheet. Outcomes from the survey were with participant gender, age, and educational status. The clinical data were correlated, frequencies and percentages with age, gender, the level of education, and the missing teeth with mental attitude of the patient.

## Result

The distribution of mental attitude shown in figure (1), it is obvious that the largest number was

for philosophic patients (212) followed by exacting patients (38), then hysterical (12), and the least number was indifferent patients (8).

About the relation between the mental attitude and the gender, the distribution of gender shown in the figure (2), male 124 and the female 146, and from table (2), the female philosophic percentage (43%) was more than male, also for exacting patient the female was more percentage (7.40%) than exacting male.

About the relation between the mental attitude and the age, the distribution of age group in table (1), the largest percentage was gr.3 followed by gr.2 and the least percentage was gr.5. From table (3), the largest percentage was group (3) philosophic patient followed by group (4) then group (2) and group (1) and the least for group (5).

About the relation between the mental attitude and the level of education, figure (3) shows that the number of educated philosophic patient was more than non-educated, also indifferent educated patient more than indifferent non-educated, while the exacting and hysterical patient, the non-educated was more.

About the relation between the mental attitude and the number of missing teeth, figure (4) shows that in all the four house mental attitude class, the number of patient with missing teeth more than 5 teeth was more than patient with missing teeth less than 5 teeth.

**Table (1): Distribution of the patients' age:**

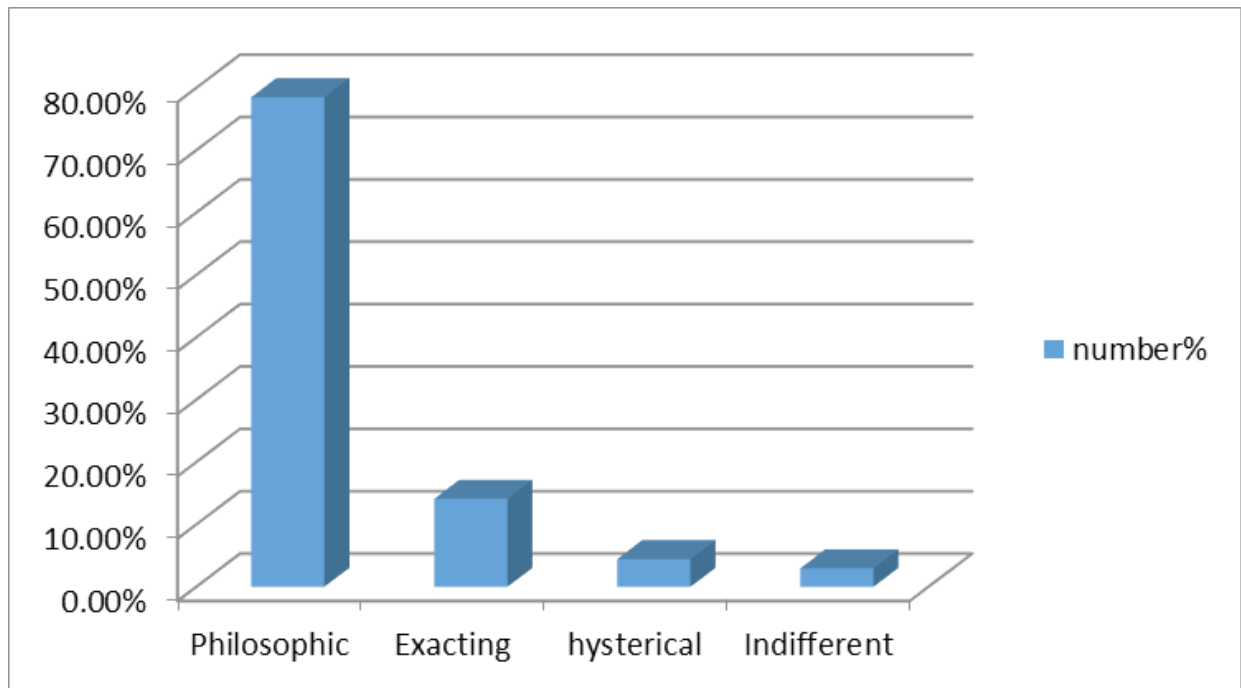
Ages	Numbers	Percentage %
G1 (20-30)	52	19.26
G2 (31-40)	62	22.96
G3 (41-50)	70	25.93
G4 (51-60)	54	20
G5 (more than60)	32	11.85
Total	270	100

**Table (2): Relation between mental attitude and gender:**

Mental attitude	Male Percentage%	Male Number	Female Percentage%	Female number
Philosophic	35.6	96	43	116
Exacting	6.60	18	7.40	20
Hysterical	2.22	6	2.22	6
Indifferent	1.48	4	1.48	4
Total	45.9	124	54.1	146

**Table (3): Relation between mental attitude and age:**

G5	G4	G3	G2	G1	mental attitude
10.4%	17.8%	20.7%	16.3%	12.6%	Philosphical
0.74%	1.48%	3.7%	4.44%	3.7%	Exacting
0.74%	0.74%	0.74%	2.22%	0%	Hysterical
		0.74%		2.96%	Indifferent



**Figure (1) Distribution of the patients metal attitude.**

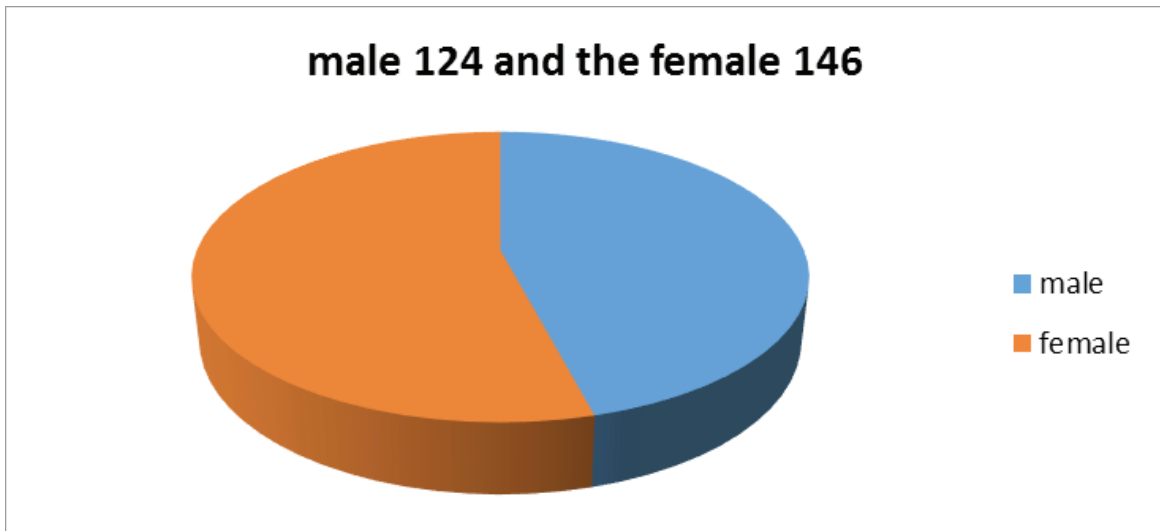


Figure (2) Distribution of the patients gender.

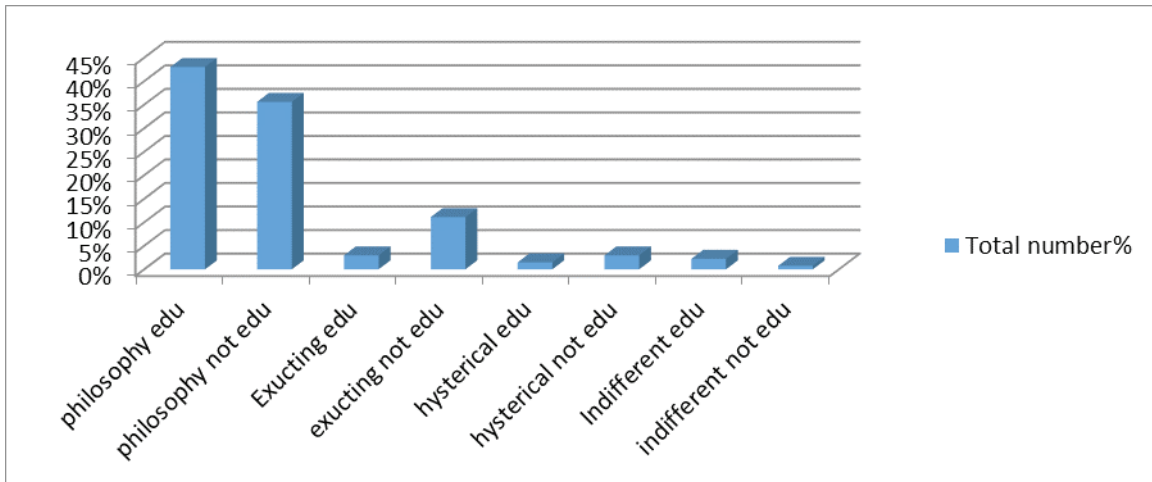


Figure (3) the relation between the mental attitude and the level of education.

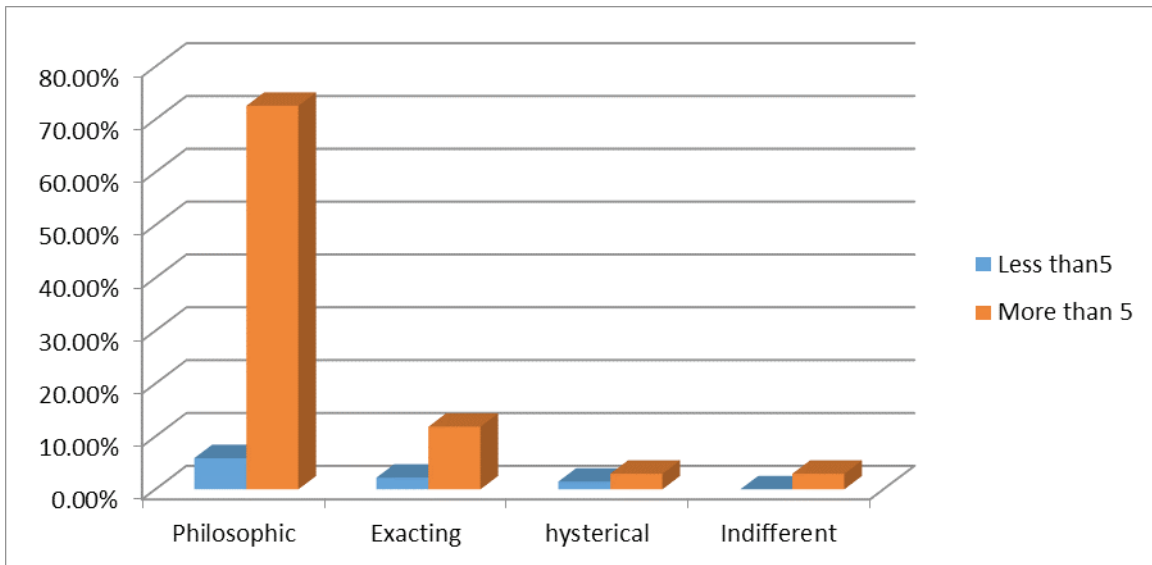


Figure (4) the relation between the mental attitude and the number of missing teeth.

## Discussion

The aim of this study was to find the mental attitudes of patients presenting for prosthodontics treatment and to determine if any relationship existed between the patient's mental attitude with age, sex, or educational and number of missing teeth.

About the gender, the results of this study show that females were found to be more philosophic than male, and this result agree with Shah *et al.*<sup>13</sup> study who found that females visit dental clinic more than males because of females have a better health seeking behaviors and more conscious for their appearance, also agree with Polsani *et al.*<sup>14</sup> who found that women effect more than men by the changes that influencing the appearance, such as loss of hair and face height, wrinkling of skin, changes in tooth appearance, and loss of natural teeth. Women frequently voice their concern while men may be more dramatic but concealed, on other hand, this study disagree with some studies like Brunello and Mandikos<sup>15</sup> who found that female subjects have a higher dental anxiety scale scores than males and Myers opinion<sup>16</sup>, who studied the association of the women irritable personality, that this related to psychosomatic pressures, and he thought that happiness related to social support, marriage, career, and religious faith, can play an effective role in general and mental health.

As concerns the relationship of age with mental attitude is concerned, according to this study, the largest percentage was group (3) philosophic patient followed by group (4), the younger edentulous age groups in their late 40s and early 50s were more demanding and existing philosophic behavior during the treatment procedure as compared to other age groups, and this agree with Hägglin *et al.*<sup>17</sup> who stated that persons in the age group of 55-64 years were mature and wise mentally than other ages.

Seeing the effect of education level on mental attitude we found in our study that educational patients are more philosophic while not educational patients are more exacting and indifferent and these results agree with some studies such as a study by Celebic *et al.*<sup>18</sup> which found that the satisfaction of patient and acceptance of the complete denture affected by the level of education, and decline in the educational level patients were more for indifferent patient and needed motivation for wearing and maintaining, because the ignore person could not assess his condition in a suitable manner, also agree Emami E *et al.*<sup>19</sup> who found that patient with poor level of education tend to be indifferent, while high school graduated patient tend to be exacting than university graduate, and this can be explained that less educated patients, have low income, hypercritical, hypersensitive, anxious, and do not trust the physician.<sup>20,21</sup>

According to the number of missing teeth we found that the most patients in all of the four classifications have 5 or more missing teeth because people with lesser missing teeth are looking for fixed prosthetic or another treatment approaches than RPD. As far as we know, there is no research done on the relation between mental attitude and the number of missing teeth for comparison.

## Conclusion

The present study showed that, among dental patients attending outpatient clinics, College of Dentistry, Babylon University, there is an increase in philosophic patients followed by exacting patients then hysterical and the least number was indifferent patients. The female philosophic percentage was more than male, also for exacting patient the female was more percentage than exacting male. The largest percentage of age group was group (3) philosophic patient followed by group (4) then group (2) and group (1) and the least for group (5). The number of educated philosophic patient was more than non-

educated, also indifferent educated patient more than indifferent non-educated, while the exacting and hysterical patient, the non-educated was more. The number of patient with missing teeth more than 5 teeth was more than patient with missing teeth less than 5 teeth.

### **Declaration of Competing Interest**

There is no conflict of interest from any funding agencies in the public and commercial.

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### **Ethical approval**

The ethical permission was sought from the Scientific Committee of the Department of Prosthodontics, College of Dentistry, University of Babylon, Iraq.

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