

Article type:
Original Research

Al-Bayan University, College of Dentistry, Baghdad,
Iraq.

Corresponding author email address:
m.hassan@albayan.ed.iq

Psychological Satisfaction with Complete Dentures: Functional and Psychosocial Outcomes in Edentulous Patients

Mohammed Ridha Hassan Al.Rubaie *



Article history:

Received 23 Mar 2026
Revised 18 May 2026
Accepted 24 June 2026
Published online 01 Aug 2026

How to cite this article:

Al.Rubaie, M. R. H. (2026). Psychological Satisfaction with Complete Dentures: Functional and Psychosocial Outcomes in Edentulous Patients. International Journal of Body, Mind and Culture, 13(8), Article e2026-1401. <https://doi.org/10.61838/ijbmc.v13i8.1401>



© 2026 the authors. This is an open-access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

Objective: This study aimed to evaluate psychological satisfaction with complete denture use and examine the relationships among functional and psychosocial satisfaction domains in edentulous patients.

Methods and Materials: A cross-sectional questionnaire-based study was conducted among 100 complete denture wearers attending prosthodontic clinics between October 2025 and January 2026. Participants were aged 40 years or older and had used complete upper and lower dentures for at least three months. Data were collected using a validated four-point Likert-scale questionnaire assessing six domains: denture assessment, occlusion, aesthetics, phonetics, mastication, and comfort. Reliability was evaluated using Cronbach's alpha, and construct validity was assessed through inter-domain correlations. Data were analyzed using descriptive statistics, chi-square tests, one-way ANOVA with LSD post hoc analysis, and Pearson correlation.

Findings: Participants had a mean age of 63 ± 9 years, with 61% males and 39% females. Most participants reported good to very good satisfaction across all evaluated domains. The highest satisfaction scores were observed in aesthetic satisfaction and comfort, while mastication showed relatively lower scores. Significant differences were observed among mastication-related items ($p \leq .05$) and comfort-related items ($p \leq .05$), whereas no significant differences were found among items in denture assessment, occlusion, aesthetics, and phonetics domains. Significant positive correlations were observed among satisfaction domains, including denture assessment with mastication ($r = .78$) and occlusion ($r = .69$). The questionnaire demonstrated acceptable reliability ($\alpha = .82$) and validity (0.88).

Conclusion: Complete dentures provide acceptable psychological and functional satisfaction for most edentulous patients; however, mastication remains a key area requiring further clinical attention.

Keywords: Complete Denture, Patient Satisfaction, Edentulous Patients, Prosthodontics, Psychological Adaptation.

Introduction

Although edentulism is a widespread issue in nearly all societies around the world mostly affecting elderly people, it is linked to functional, cosmetic, and psychological effects that have a negative impact on the quality of life. Full dentures remain among the most popular and the least expensive modes of treatment of the completely edentulous patients and particularly in third world nations. Nevertheless, clinical/technical accuracy is not the only factor that defines the effectiveness of the complete denture treatment, it also bases on how those patients sense and adapt to their dentures; consequently, Patient-reported outcomes offer crucial insights that accompaniment clinical assessment (Emami et al., 2013; Fueki et al., 2021; Oo et al., 2020).

Psychological satisfaction of complete dentures is a concept which is multidimensional which includes comfort, mastication, phonetics, aesthetics, and social confidence. The subjective assessment that patients report is usually different than the objective assessment by clinicians and this indicates the significance of patient-reported outcome measures in both research and clinical practice in prosthodontics (Inukai et al., 2008; John et al., 2014); these dimensions underscore the urgent need to differentiate between clinician-based assessment and the perceptions of patient, where they often different. In prosthodontics' literatures, concepts like patient's satisfaction, comfort, functional adaptations, and oral health-linked quality of life are often considered interchangeably, as they referred to distinguished constructs. In fact, the satisfaction with dentures is multidimensional concept, comprising sides like mastication, phonetics, aesthetics, comfort, as well as occlusion. These dimensions mirror functional performance together with psychosocial adaptation, and they are best measured via validated patient-reported outcome measures instead of bases on clinician assessment alone. Several investigations deled with this topic, where the study of AL - Omiri et al., (2014) revealed that poor satisfaction could lead to poor quality of denture, impaired nutrition, social isolation and decline in the quality of life, despite technical denture suitability.

One of the key factors that determine denture satisfaction is masticatory efficiency because a poor

dietary habits and overall health can be affected by the inability to chew. Research has shown that the lack of stability and retention of dentures has adverse effects on the process of mastication and patient confidence when eating, especially at the social level (Ikebe et al., 2007; Oweis et al., 2022). Equally, phonological issues related to poorly fitting dentures can cause embarrassment and communication avoidance and workplace challenges, thus adding to the psychological distress (Manar, 2018; Meira et al., 2022).

The role of aesthetic satisfaction in the psychological acceptance of complete dentures is important. The arrangement and color of teeth, smile harmony, and facial appearance have a great effect on self-esteem and social interaction. Some studies have demonstrated that there have been strong correlations between the aesthetics of the dentures and the willingness to smile and to attend social events and sustain interpersonal relationships among the patients (Cornejo et al., 2013; Hantash, 2011). Other factors that also influence the acceptability of dentures are comfort and occlusal harmony. Causes of dissatisfaction and denture abandonment are commonly cited as pain, sore spots and uneven contacts of the teeth. Effective occlusion and symmetric contacts have been linked to better comfort, practical functionality, and long-term adjustment to total dentures (Carlsson & Omar, 2010; Zarb et al., 2012).

Since there is a complex association between functional performance and psychological perception, validated questionnaires and Likert-scale tests have been extensively advised as a way of encompassing patient satisfaction. The evaluation of reliability, validity, and correlations between various domains of satisfaction can be conducted with the help of such tools, and it is valuable to enhance the outcomes of prosthodontics (Tew et al., 2025; towards Edentulousness, 2003).

However, still there a critical gap in the literature, which is involved absence of systematic evaluation of specific domains of denture appraisal and their linkages. Whilst mastication and aesthetics were frequently investigated, less attention had been rewarded on consolidating multiple domains into a cohesive framework that can elucidate patient's adaptation. Moreover, despite the widespread use of questionnaires, but their reliability and validity are not always demonstrated transparently, restricting confidence in

the outcomes. To address these gaps, structured approaches evaluate satisfaction over distinctly defined domains and examine the correlations among them are required. Accordingly, the current cross-sectional questionnaire study investigates patients-reported satisfaction with entire dentures across several domains including denture evaluation, occlusion, aesthetics, phonetics, mastication, along with comfort, in addition to examine the connections between these domains using validated statistics framework.

Methods and Materials

Study Design

The current cross-sectional questionnaire study has been conducted between October 2025 to January 2026 at private clinics of prosthodontics, this study was designed to assess patients-reported satisfaction, where the patients were examined clinically and interviewed using a structured questionnaire, to measure different dimensions of denture satisfaction.

Participants

A total of 100 complete denture wearers were involved in our study. The determination of sample size was depended on previous related studies (Emami et al., 2013; Fueki et al., 2021; John et al., 2014), which often included 100–200 samples, and was regarded adequate to detect acceptable correlations ($r \geq 0.3$) with a power of 0.80 and probapility value < 0.05 . The patients were recruited consecutively from those attended the follow-up appointments during period of study, which represents a convenience-dependent consecutive sampling strategy.

The inclusion criteria included participants aged 40 years or older who had lost all their natural teeth and were being rehabilitated with complete upper and lower dentures. To ensure optimal adaptation, patients who had worn dentures for at least three months were involved, since this period is considered sufficient for functional and psychosocial adjustment. Participation requirements also included the ability to independent communication and to attend follow-up appointments in prosthodontics clinics. On the other hand, patients have systemic diseases (such as diabetes mellitus, cardiovascular disease), as well as neuromuscular disorders such as Parkinson's disease), or psychological disorders that may impair perception, communications,

and functional competence have been excluded form participation. Moreover, patients have implant-supported prostheses or partial dentures were as well excluded to ensure sample homogeneity.

Finally, it is important to mention that written informed consent was obtained prior to the commencement of work from patients who met all inclusion criteria.

Instruments

A validated questionnaire, which is a Likert scale, was used to collect the data in terms of psychological satisfaction regarding the use of complete dentures. The questionnaire was divided into two major sections, namely, demographic data, such as gender distribution, and evaluation of six domains of denture satisfaction, such as denture assessment, occlusion, aesthetic satisfaction, phonetics, mastication, and comfort. The scoring was done on a four-point Likert scale with poor (1), fair (2), good (3), and very good (4). The proportion and the ranking of the individual items were computed through multiplication of individual responses on each item with its respective weight and then the score was divided by the number of participants.

The reliability coefficients were used to measure the internal consistency of the questionnaire and the correlation analysis among the various questionnaire axes was used to measure the validity. The values of reliability and validity of each domain were also computed and the values were also calculated on the questionnaire as a whole to ascertain the accuracy, consistency, and appropriateness of the measurement tool in measuring psychological satisfaction in complete denture wearers.

Data Analysis

All data were entered and analyzed employing the statistical packages of the social sciences- SPSS (2019) to identify the impact of the difference factors on the study parameters. The descriptive statistics like frequency, percentage, mean, and standard deviation (SD) have been calculated to display the demographic variables. As previously mentioned, the response from each questionnaire has been coded on Four-point Likert scale Poor(1); Fair (2); Good (3); Very Good (4). The mean scores have been calculated all items by weighting frequency of response by their numerical value and dividing by total numbers of patients included in our study. To keep the same directionality, negatively

worded items were reverse-scored, so that higher scores always represented greater satisfaction. Domain scores were calculated by averaging the mean of the items within each domain, and items were ordered according to their mean. Chi-square analysis has been used to examine the distribution of responses across categories, while one-way ANOVA analysis has been used to compare mean satisfaction scores among multiples items within each domain (like insertion/removal, flange extension, vertical relations). When ANOVA reveals significantly difference values, the post-hoc test Least Significant Difference (L.S.D) was applied in order to determine the pairwise contrasts. Pearson correlation analysis was applied to demonstrate the associations between difference Axes in questionnaire list. The Cronbach's alpha was applied to check the internal consistency reliability, while to construct the validity we used the inter-domain correlations. Statistically significant has been set at $P \leq 0.05$.

Findings and Results

One hundred full denture wearers formed the current study. As indicated in Table 1, the male population was dominant in the sample (61%), and the female population was 39%. Chi-square test showed that there was a significant difference between gender representations ($P \leq 0.05$).

Table 2 summarizes findings of the domain of denture assessment. The vast majority of respondents have mentioned satisfaction with quality of insertion and removal, extension of the denture flange, and vertical relationships as good and very good. Among these parameters, the highest mean score was registered in vertical relations, which is a positive perception of denture stability and maxillomandibular relationship. Statistical testing did not have any significant differences between items within this domain ($P > 0.05$).

Centric and eccentric occlusion had high levels of satisfaction in the occlusion domain (Table 2). The centric occlusion revealed a slight large mean score than the eccentric occlusion but the two parameters did not differ significantly each other ($P > 0.05$) as a sign of good occlusal harmony by most of the participants.

Evaluation based on aesthetic satisfaction indicated that overall scores of satisfaction were high based on all the items assessed as indicated in Table 2. Interest

regarding the satisfaction with a facial appearance and profile was the greatest after which confidence in attending social events, contentment with tooth size, form, and color appeared. Despite the fact that the avoidance of smiling or laughing was associated with relatively lower mean scores, the scores were at the good to very good range. No significant differences were found between the aesthetic parameters ($p > 0.05$).

The results that refer to the domain of phonetics are described in Table 2. The majority of the respondents indicated that they were either good to very good when it comes to speech clarity, air escape during speech, avoid social due to speech problems, and the impact of the speech on the professionals. Comprehensive satisfaction during speech with dentures was positive and statistically no significant differences were observed between phonetic items ($P > 0.05$).

Mastication assessment showed a moderate to high level of satisfaction, as presented in Table 2. Participants indicated that there was some impairment in chewing capacity and food choice; though, satisfaction on denture stability, especially upper denture retention and lower denture stability on tongue movement were highest in this area. A significant difference was found amid the mastication related items on statistical analysis ($P \leq 0.05$).

Table 2 shows the findings of the comfort domain. A high score in satisfaction was achieved particularly in the matter of the importance of dentures to the subjects, even contact during closure, and the absence of pain during mouth opening and closing. The overall comfort was rated a good to very good although some respondents felt sore and had issues of fitting. The difference between the items related to comfort was statistically significant ($P \leq 0.05$).

Table 3 demonstrates the correlation analysis of the various domains of the questionnaire. The scores of domain have been calculated by averaging the items means in every domain, providing continuous variables appropriate for this analysis. All correlation relationship present in this table was statistically significant positive, but the score of correlation varied based on values of r-coefficient.

The correlation analysis showed denture assessment had significant moderate association with aesthetics and phonetics, and significant strong correlation with both occlusion and mastication. As for Occlusion, it had

significant strong correlation with aesthetics and phonetics, while it showed significant moderate correlations with both mastication and comfort. Regarding Aesthetics, it showed significant strong correlation with phonetics, while it correlated moderately with mastication and comfort. Phonetics had a significant strong correlation with mastication, but it significantly moderately correlated with comfort. Finally, Mastication and comfort showed significant weakest correlation.

Tables 4 gives a summary of the reliability and validity results of the questionnaire. The reliability coefficients were between 0.74 and 0.86, and the validity ranged between 0.78 and 0.92 across the domains that were tested. The total questionnaire showed an acceptable level of reliability (0.82) and validity (0.88), which supporting internal consistency. Construct validity has been indicated by significant inter-domain correlation, but external validation was not achieved.

Part 1: Demographics information

Table 1

Distribution of sample according to Gender

Age	Mean	SD
	63	9
Gender	No	Percentage (%)
Female	39	39.00%
Male	61	61.00%
Total	100	100%
Chi-Square- χ^2	(P-value)	4.840 * (0.0278)

* ($P \leq 0.05$): Significant using chi-square test

Table 2

Mean, SD and Rank according to Questionnaire List

Q No.	Axes and Question	Po or	Fai r	Go od	Very Good	Sig.	Mean $\pm$ SD	Rang
Dentures assessment								
Q1	Quality of insertion and removal	2	6	62	30	**	1.96 $\pm$ 0.22	3
Q2	Denture flanges extension	2	10	53	35	**	2.11 $\pm$ 0.35	2
Q3	Vertical relations	1	9	49	41	**	2.29 $\pm$ 0.28	1
	One-way ANOVA (LSD)	-	-	-	-	-	0.372 NS	-
Occlusion								
Q4a	Centric	1	6	53	40	**	2.26 $\pm$ 0.31	1
Q4b	Eccentric	2	16	49	33	**	2.05 $\pm$ 0.18	2
	One-way ANOVA (LSD)	-	-	-	-	-	0.294 NS	-
Aesthetic								
Q6	Are you satisfy your present profile	0	7	40	53	**	2.65 $\pm$ 0.38	3
Q7	Are you avoid laughing or smiling	5	13	32	50	**	2.56 $\pm$ 0.41	5
Q8	Are you afraid to visit an occasion	7	10	29	54	**	2.68 $\pm$ 0.46	2
Q9	Are you satisfy with your facial appearance	2	7	35	56	**	2.74 $\pm$ 0.46	1
Q10	Are you satisfy with the size, shape and color of artificial teeth	0	10	38	52	**	2.62 $\pm$ 0.37	4
	One-way ANOVA (LSD)	-	-	-	-	-	0.388 NS	-
Phonetics								
Q11	Do you have a speech problem	10	10	31	49	**	2.53 $\pm$ 0.28	1
Q12	Does air blow during speech	14	5	33	48	**	2.50 $\pm$ 0.33	2
Q13	Do you avoid people due to speech problem	13	6	35	46	**	2.44 $\pm$ 0.24	3
Q14	Has the speech problem affected your profession	13	7	36	44	**	2.38 $\pm$ 0.31	4
Q15	Are you satisfied with your speech with dentures	2	4	48	46	**	2.44 $\pm$ 0.35	3
	One-way ANOVA (LSD)	-	-	-	-	-	0.361 NS	-
Mastication								

Q16	Have your chewing capability been compromised without dentures	30	14	28	28	**	1.90 ± 0.24	6
Q17	Have your ability to engulf been affected by wearing dentures	10	15	44	31	**	1.99 ± 0.27	4
Q18	Has your diet selection changed	7	14	49	30	**	1.96 ± 0.22	5
Q19	Do you avoid eating with others	9	14	39	38	**	2.20 ± 0.34	3
Q20	Have the denture affected your digestion and general health	9	12	42	37	**	2.17 ± 0.19	7
Q21	Do your upper denture falling down while opening the mouth	13	6	29	52	**	2.62 ± 0.34	1
Q22	Do your lower denture getting displaced on tongue movements	13	10	35	42	**	2.32 ± 0.25	2
	One-way ANOVA (LSD)	-	-	-	-	-	0.569 *	-
Comfort								
Q23	Do you have pain while opening or closing the mouth with dentures	11	4	29	56	**	2.74 ± 0.32	3
Q24	Do you have even contact of the dentures on both sides while closing the mouth	2	4	36	58	**	2.80 ± 0.37	2
Q25	Have you had sore spots due to dentures	13	11	25	51	**	2.59 ± 0.41	4
Q26	Have you felt that your dentures have not been fitting properly	12	8	37	43	**	2.35 ± 0.32	5
Q27	Do you felt easy swallow food and water	2	7	51	40	**	2.26 ± 0.19	6
Q28	Do you enjoy your meal	1	12	48	39	**	2.23 ± 0.26	7
Q29	How important is dentures to you	1	6	26	67	**	3.07 ± 0.45	1
	One-way ANOVA (LSD)	-	-	-	-	-	0.544 *	-

* ($P \leq 0.05$): Significant, ** ($P \leq 0.01$): Highly significant.

Table 3

Correlation coefficient between difference Axes in Questionnaire List

Axes	Correlation coefficient-r
Dentures assessment	Occlusion 0.69 **
	Aesthetic 0.42 *
	Phonetics 0.47 *
	Mastication 0.78 **
	Comfort 0.39 *
Occlusion	Aesthetic 0.77 **
	Phonetics 0.65 **
	Mastication 0.43 *
	Comfort 0.51 *
Aesthetic	Phonetics 0.67 **
	Mastication 0.44 *
	Comfort 0.47 *
Phonetics	Mastication 0.65 **
	Comfort 0.43 *
Mastication	Comfort 0.37 *

* ($P \leq 0.05$): Significant, ** ($P \leq 0.01$): Highly significant.

Table 4

Reliability and Validity in this study according to Axes of Questionnaire List

Axes	Reliability	Validity
Dentures assessment	0.78	0.84
Occlusion	0.82	0.87
Aesthetic	0.74	0.78
Phonetics	0.81	0.87
Mastication	0.86	0.92
Comfort	0.79	0.86
Total	0.82	0.88

Discussion and Conclusion

The prevalence of edentulism was declined notably in recent decades (Peltzer et al., 2014). Nevertheless, with the persistent ageing of society worldwide, the total number of edentulous subjects is not expected to diminish. As a consequence, demanding for complete denture treatment still substantial (Carlsson & Omar, 2010). In spite of the fact that dental implant therapy has advanced markedly over past few decades, the traditional complete dentures proceed to considered the main treatment option, which are greatly accepted for their esthetic consequences and remain more reasonably priced than the implant-based alternatives (Doundoulakis et al., 2003). In our investigation, the mean age of participants was (63±9), and the satisfaction levels were usually high across studied domains. This finding aligns with Choudhary et al., (2019), who previously revealed that age affected denture satisfaction, where older patients often expressed lower expectations, thus high acceptance as compared with younger wearers, this statement may justify why the older participants showed relatively stable satisfaction scores in our study.

Regarding gender, male showed predominance in using denture than female, this finding agrees Pan et al., (2008), who reported a similar finding, also they revealed gender differences in satisfaction, where women were more sensitive to esthetic and speech results, while men prioritize chewing activity. Conversely, Choudhary et al., (2019) showed that female percent more than male in their study.

In the context of adaptation period, it regarded a crucial player, participants who were worn dentures for at least three months expressed higher comfort and mastication levels, compatible with evidence that satisfaction ameliorates after an initial adjustment state (Al-Jammali et al., 2023). This enhances our inclusion criterion of a minimum three month adapting period.

The results of the current study indicate that most of the complete denture users expressed good to very good levels of psychological satisfaction of all the domains considered, denture assessment, occlusion, aesthetics, phonetics, mastication and comfort. This proves the idea that patient satisfaction with complete dentures is a multifactorial construct that goes beyond clinical adequacy into psychological and social wellbeing as

required in the past research (Emami et al., 2013; towards Edentulousness, 2003).

With respect to the denture assessment, a high level of insertion and removal satisfaction, flange extension, and vertical relations have shown a satisfactory dental construction and adjusting of patients. It is known that proper vertical dimension and denture extension can lead to increased stability and comfort, which has a positive effect on patient confidence and general denture acceptability (Carlsson & Omar, 2010). Lack of a significant difference in this field indicates homogenous performance in clinical areas by participants.

The satisfaction levels in the domain of occlusion were positive in both centric and eccentric contacts and no statistical differences were observed between the two. Balanced occlusion has not only been extensively proposed to play a vital role in denture stability, comfort, and functional efficiency, but it also leads to less trauma to supporting tissues and greater adaptation in patients (Zarb et al., 2012). The obtained results are aligned with that of Oweis et al., (2022), which have stated that occlusal harmony is an important factor in the long-term success of dentures.

The great level of satisfaction in the aesthetic sphere shows the significance of the facial look, smile and the features of teeth in the psychological acceptance of complete dentures. Facial appearance and social confidence lead to beliefs that properly-designed denture can be effective in improving self-esteem and socialization. Other researchers noted the same, which Hantash (2011) and Cornejo et al., (2013) found that the aesthetics of the dentures were strongly correlated with the readiness of the patients to participate in social life.

In terms of phonetics, most respondents have indicated that they had good performance when using dentures to speak. Even though the early years of adaptation are associated with the development of speech difficulties, denture contouring and palatal thickness can be important in the process of restoring normal phonation (Meira et al., 2022). In this study, the phonetic satisfaction is mostly high, which indicates a successful denture design and effective patient adaptation.

The mastication domain showed relatively lower scores of satisfaction as compared to other domains and there was statistically significant difference between items. This observation is consistent with the literature

that masticatory performance with complete dentures is still lower than natural dentition and prostheses supported by implants (Ikebe et al., 2007). However, the denture retention and stability satisfaction were high especially in the maxillary dentures, which shows that the mechanical factors have a certain ability to neutralize a decrease in chewing efficiency and enhance patient satisfaction (Fueki et al., 2021).

The level of satisfaction was high in the comfort domain as the respondents noted that they were satisfied mostly with the role of the dentures in the area, even occlusal contact and pain-free functioning. The concept of comfort is a determining factor of denture acceptance because one of the most frequent causes of denture dissatisfaction and non-use is pain, sore spots, and poor fit (AL - Omiri et al., 2014). The high discrepancies in this field might be due to personal differences in oral tissue tolerance and adaptation ability.

While the results of correlation analysis indicated that functional and psychosocial domains of denture satisfaction are inherently related and point to the fact that the positive changes in one of the functional or psychological areas were linked to the greater satisfaction in other areas, However as the degrees of correlation were variable, so the results must be interpreted accurately. These finding may reflect the conceptual overlapping among studied domains that could contribute to varied correlations values.

However, our current results somewhat confirm the interdependence of the satisfaction of dentures, as the technical quality of its improvement opens the door to functional performance, and this aspect of the solution positively impacts the psychological well-being (John et al., 2014; Tew et al., 2025). Our findings are in line with the study of Alfadda (2014), which revealed that some denture quality parameters like occlusion and extension were strongly correlated with patient satisfaction; they supported the strong correlations present in our investigation between occlusion and mastication. Likewise, another study showed that esthetics and phonetics were moderately associated with overall satisfaction, enhancing our findings where psychosocial domains exhibited weaker associations (Ahmed et al., 2019). In addition, our findings line up the study of Bhutta et al., (2023), which emphasized that the functional quality of dentures was a powerful predictor of

satisfaction than esthetic outcomes. Future studies should apply factor analysis or structural equation modeling to explain overlapping constructs and support the dimensionality of denture satisfaction more rigorously.

Lastly, the high values of reliability and validity recorded in this study prove that the questionnaire was a stable and good instrument to measure psychological satisfaction among the complete denture wearers. This justifies the use of patient-reported outcome measure as critical elements in the process of evaluation of the prosthodontic and highlights their usefulness in enhancing clinical decisions and treatment outcomes (Inukai et al., 2008).

All in all, the findings of this research support the significance of thorough evaluation of functional as well as psychological outcomes of complete denture treatment in an attempt to attain maximization of satisfaction and subjective living of patients.

Our study assessed the self-reported satisfaction with complete dentures over functional and psychosocial domains and showed that the majority of complete denture users demonstrated good to very good rates of psychological satisfaction in all the areas of assessment undertaken, such as denture assessment, occlusion, aesthetics, phonetics, mastication and comfort. According to these findings based the current studied population, effectiveness of complete dentures depends not only on technical or clinical accuracy, but also on an integrative process between technical accuracy and the patient's self-awareness and psychological adaptation.

Generally, the participants' demonstrated moderate to high satisfaction, with stronger correlations observed among functional domains like occlusion and mastication, along with modest correlations among esthetic and comfort domains. These outcomes highlight the significance of both technical quality and patient adaptation outcomes in denture therapy. The current results are definitely worth taking a look at, however, we should shed a light on some limitations of this study that must be addressed and covered in subsequent studies in order to pave the way for a more holistic view of denture outcomes.. Satisfaction was only measured based on the self-report that is a subjective variable by nature influenced by the expectations of the patient, previous disease background, and possibly, by the adaptation period to the relative health improvement; furthermore,

sociodemographic characteristics such as gender and age may be effective on satisfaction perception. Moreover, the correlations between domains may simply reflect conceptual overlap, producing higher associations than what would be the case. In spite of these limitations, the present study offers insight into patient perspectives and demonstrates that conventional complete dentures continue to remain an adequate and economical treatment option.

Acknowledgments

The authors express their gratitude and appreciation to all participants.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Declaration of Helsinki, which provides guidelines for ethical research involving human participants. Ethical considerations in this study were that participation was entirely optional.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently, with personal funding, and without financial support from any governmental or private institution or organization.

Authors' Contributions

All authors equally contributed to this study.

References

- Ahmed, A. R., Muneer, M. U., Hussain, M. W., Chaturvedi, S., Khan, M. F., & Rana, S. A. A. (2019). Clinical analysis of complete denture satisfaction factors: dentist and patient perspective. *International Journal of Medical Research & Health Sciences*, 8(8), 128-134. <https://www.ijmrhs.com/abstract/clinical-analysis-of-complete-denture-satisfaction-factors-dentist-and-patient-perspective-18774.html>
- Al-Jammali, Z. M., Hameed, H. A., & Alam, M. K. (2023). The Effect of Several Factors on the Patient's Satisfaction with the Complete Dentures and the Correlation with the Adaptation Period. *The Journal of Contemporary Dental Practice*, 23, 889-894. <https://doi.org/10.5005/jp-journals-10024-3411>
- AL-Omiri, M. K., Sghaireen, M. G., Alhijawi, M. M., Alzoubi, I. A., Lynch, C. D., & Lynch, E. (2014). Maximum bite force following unilateral implant-supported prosthetic treatment: within-subject comparison to opposite dentate side. *Journal of oral rehabilitation*, 41(8), 624-629. <https://doi.org/10.1111/joor.12174>
- Alfadda, S. A. (2014). The relationship between various parameters of complete denture quality and patients' satisfaction. *The Journal of the American Dental Association*, 145(9), 941-948. <https://doi.org/10.14219/jada.2013.48>
- Bhutta, H. E., Moharamzadeh, K., Martin, R., & Martin, N. (2023). Patient satisfaction with upper and lower complete dentures: A service evaluation report. *European Journal of Prosthodontics and Restorative Dentistry*, 31(1). https://doi.org/10.1922/EJPRD_2416Bhutta13
- Carlsson, G., & Omar, R. (2010). The future of complete dentures in oral rehabilitation. A critical review. *Journal of oral rehabilitation*, 37(2), 143-156. <https://doi.org/10.1111/j.1365-2842.2009.02039.x>
- Choudhary, S., Kumar, A., & Arora, H. (2019). Effect of age, gender, and mental attitude on complete denture satisfaction in north Indian population. *J Contemp Dent*, 9(1), 8-12. <https://doi.org/10.5005/jp-journals-10031-1245>
- Cornejo, M., Pérez, G., de Lima, K. C., Casals-Pedro, E., & Borrell, C. (2013). Oral health-related quality of life in institutionalized elderly in Barcelona (Spain). *Medicina oral, patología oral y cirugía bucal*, 18(2), e285. <https://doi.org/10.4317/medoral.18280>
- Doundoulakis, J. H., Eckert, S. E., Lindquist, C. C., & Jeffcoat, M. K. (2003). The implant-supported overdenture as an alternative to the complete mandibular denture. *The Journal of the American Dental Association*, 134(11), 1455-1458. <https://doi.org/10.14219/jada.archive.2003.0073>
- Emami, E., de Souza, R. F., Kabawat, M., & Feine, J. S. (2013). The impact of edentulism on oral and general health. *International journal of dentistry*, 2013(1), 498305. <https://doi.org/10.1155/2013/498305>
- Fueki, K., Inamochi, Y., Yoshida-Kohno, E., Hayashi, Y., & Wakabayashi, N. (2021). Responsiveness of methods to evaluate chewing ability after removable partial denture treatments. *Journal of oral rehabilitation*, 48(4), 449-457. <https://doi.org/10.1111/joor.13128>
- Hantash, R. (2011). Relationship between impacts of complete denture treatment on daily living, satisfaction and personality profiles. *The Journal of Contemporary Dental Practice*. <https://doi.org/10.5005/jp-journals-10024-1035>
- Ikebe, K., Hazeyama, T., Morii, K., Matsuda, K.-i., Maeda, Y., & Nokubi, T. (2007). Impact of Masticatory Performance on Oral Health--Related Quality of Life for Elderly Japanese. *International Journal of Prosthodontics*, 20(5), 478. <https://pubmed.ncbi.nlm.nih.gov/17944335/>
- Inukai, M., Baba, K., John, M., & Igarashi, Y. (2008). Does removable partial denture quality affect individuals' oral health? *Journal of dental research*, 87(8), 736-739. <https://doi.org/10.1177/154405910808700816>
- John, M. T., Feuerstahler, L., Waller, N., Baba, K., Larsson, P., Čelebić, A., Kende, D., Renner-Sitar, K., & Reißmann, D. R. (2014). Confirmatory factor analysis of the oral health impact

- profile. *Journal of oral rehabilitation*, 41(9), 644-652.
<https://doi.org/10.1111/joor.12191>
- Manar, J. (2018). Prosthodontic considerations of speech in complete denture. *Research Journal of Pharmacy and Technology*, 11(11), 5173-5178.
<https://doi.org/10.5958/0974-360X.2018.00945.9>
- Meira, I. A., Gama, L. T., Prado-Tozzi, D. A., Pinheiro, M. A., & Garcia, R. C. M. R. (2022). Speech in implant-supported and removable complete denture wearers: A systematic review. *The Journal of prosthetic dentistry*, 128(6), 1230-1238.
<https://doi.org/10.1016/j.prosdent.2021.03.006>
- Oo, K. Z. M., Fueki, K., Yoshida-Kohn, E., Hayashi, Y., Inamochi, Y., & Wakabayashi, N. (2020). Minimal clinically important differences of oral health-related quality of life after removable partial denture treatments. *Journal of Dentistry*, 92, 103246. <https://doi.org/10.1016/j.jdent.2019.103246>
- Oweis, Y., Ereifej, N., Al-Asmar, A., & Nedal, A. (2022). Factors affecting patient satisfaction with complete dentures. *International journal of dentistry*, 2022(1), 9565320.
<https://doi.org/10.1155/2022/9565320>
- Pan, S., Awad, M., Thomason, J. M., Dufresne, E., Kobayashi, T., Kimoto, S., Wollin, S. D., & Feine, J. S. (2008). Sex differences in denture satisfaction. *Journal of Dentistry*, 36(5), 301-308. <https://doi.org/10.1016/j.jdent.2008.02.009>
- Peltzer, K., Hewlett, S., Yawson, A. E., Moynihan, P., Preet, R., Wu, F., Guo, G., Arokiasamy, P., Snodgrass, J. J., & Chatterji, S. (2014). Prevalence of loss of all teeth (edentulism) and associated factors in older adults in China, Ghana, India, Mexico, Russia and South Africa. *International journal of environmental research and public health*, 11(11), 11308-11324. <https://doi.org/10.3390/ijerph111111308>
- Tew, I. M., Soo, S. Y., & Pow, E. H. N. (2025). Digitally versus conventionally fabricated complete dentures: A systematic review on cost-efficiency analysis and patient-reported outcome measures (PROMs). *The Journal of prosthetic dentistry*, 133(4), 998-1007.
<https://doi.org/10.1016/j.prosdent.2023.10.028>
- towards Edentulousness, A. (2003). A review of the functional and psychosocial outcomes of edentulousness treated with complete replacement dentures. *J Can Dent Assoc*, 69(10), 662. <https://pubmed.ncbi.nlm.nih.gov/14611716/>
- Zarb, G. A., Hobkirk, J., Eckert, S., & Jacob, R. (2012). *Prosthodontic treatment for edentulous patients: complete dentures and implant-supported prostheses*. Elsevier Health Sciences. <https://shop.elsevier.com/books/prosthodontic-treatment-for-edentulous-patients/zarb/978-0-323-07844-3>