

“Visagism: A Study on Awareness and Knowledge in Dental Professionals”

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Abstract

Background: Visagism is a novel concept that applies the principles of visual art to the composition of a customized smile proposed by Paolucci et al. in 2012. According to this concept, clinicians can design a smile that blends with the patient's physical appearance, personality, and desires. **Aim:** The primary aim of this study is to assess the knowledge and awareness of visagism among dental professionals. By evaluating their understanding, the study seeks to determine the extent to which this concept has been integrated into dental practice. **Settings and Design:** A total of 250 dental professionals, including individuals from various dental colleges and private practitioners, were randomly selected to participate in the survey. A Google survey form was distributed among the dental professionals and were asked to fill those forms. **Materials and Methods:** A modified self-reporting questionnaire comprising 15 questions was utilized. The validity of this questionnaire was verified to ensure it effectively measures awareness and knowledge regarding visagism among dental professionals. After receiving filled forms from all the candidates, the collected data was summarized and statistical analysis is done. **Statistical Analysis Used:** The collected data were analyzed using Chi-square test statistics to measure the level of agreement among respondents. The Chi-square test statistic is a widely used method for assessing inter-rater agreement for categorical items, providing a measure of consistency beyond chance.

Keywords: Dentofacial esthetics, smile design, temperament, visagism

Introduction

Derived from the French visage, meaning “face,” the concept of Visagisminvolves the creation of a customized personal image that expresses a person’s sense of identity. The method used to apply this concept is derived from the association of the principles of artistic visual language with disciplines such as psychology, neurobiology, anthropology, and sociology. ⁽¹⁾

A smile plays a crucial role in expressing emotions and contributing to social interactions. It involves the movement of teeth and lips, influencing a person’s ability to function effectively in society. A smile can convey a wide range of emotions, from happiness to friendliness, which helps in non-verbal communication and building connections with others. It can boost self-esteem, especially in adolescents, by improving their confidence in social interactions and also affects personality development. ⁽²⁾

Age and gender plays an important role in understanding esthetics among patients came for prosthodontic treatments. Young women tend to be more aware and concerned about esthetics compared to young men. ⁽³⁾

The Dentogenic concept is used to harmonize the shapes of teeth with the face based on gender, personality, and age. Among these parameters, personality is uniquely specific to each individual and the most challenging to determine. The unveiling of personality traits and desires of the patient and their translation into natural tooth shapes to maintain psycho dentofacial harmony are challenges faced by clinicians when designing an esthetic smile. ⁽²⁾

Visagism is a novel concept that applies the principles of visual art to the composition of a customized smile proposed by Paolucci et al. in 2012. According to this concept, clinicians can design a smile that blends with the patient’s physical appearance, personality, and desires. ⁽¹⁾

According to Hippocrates, an individual’s personality is formed by a unique combination of four types of temperaments: ⁽¹⁾

- Choleric/strong temperament
- Sanguine/dynamic temperament
- Melancholic/sensitive temperament
- Phlegmatic/peaceful temperament

Paolucci et al. proposed the concept of combining the methods of esthetic smile designs in relation to these four temperaments.

Although visagism is not a new concept, it remains relatively unknown among many dental professionals and is rarely incorporated into routine clinical practice.

Due to fewer literature available regarding the concept of visagism and its awareness among dental professionals, a need was felt to investigate this among dental professionals including post graduates from various departments.

This clinical study aimed to know about the knowledge & awareness regarding the concept of visagism among dental professionals.

Materials and Methods

A total of 250 people were selected among post graduates and dental professionals by using purposive sampling method. The selected people were from different dental colleges and owners of private practice in different cities of India. Postgraduates from various departments are currently learning new technologies and methods. Meanwhile, private practice owners, whether holding a Bachelor of Dental Surgery (BDS) or a Master of Dental Surgery (MDS), continually experiment with innovative approaches to enhance their practices and provide superior prostheses and services to patients. This group was chosen as a sample because they are leading figures in dentistry across different cities in India.

A modified self-reporting questionnaire, consisting of 15 questions, whose validity was checked by performing a pilot study and was used. The questionnaire's design focused on simplicity to ensure clarity and facilitate participant engagement. Each of the 15 questions was crafted to be straightforward, minimizing the potential for misinterpretation. The response options—'yes,' 'no,' or 'doubtful'—were chosen to streamline the answering process and reduce respondent burden. In this case, the pilot study was done to identify any ambiguities or issues within the questionnaire, allowing for necessary revisions to improve its effectiveness. The development and implementation of a modified self-report questionnaire, validated through a pilot study and distributed via Google Forms and hard copies helped in data collection for the research. By prioritizing question clarity and utilizing mixed distribution methods, the response rates and data quality was enhanced and ultimately contributed to the robustness of study findings.

Questionnaire Form

Section 1: Demographic Information

- 1) Name: _____
- 2) Age : _____
- 3) Years of Experience in Dentistry: _____
- 4) Dental Specialty (if applicable): _____

Section 2: Knowledge and Awareness (PLACE ☒ BEFORE YOUR ANSWER)

- 5) Are you familiar with SPA concept?
Yes _____ No _____

6) Do you feel that your personality is important factor in your smile?

Yes completely _____

Yes to some extent _____

Not at all _____

7) What according to you is most important during smile makeover?

Age of patient _____

Sex of Patient _____

Personality of patient _____

8) Are you familiar with golden proportion concept in dentistry?

Yes _____ No _____

9) Do you follow rules of golden proportion when giving prosthesis to patient?

Yes _____ No _____

10) How do you determine the appropriate tooth form, size, and color for a patient's smile design?

Based solely on mechanical parameters (shape and size of the face) _____

Consider both mechanical parameters and the patient's psychological characteristics (personality and temperament) _____

Not sure _____

11) Do you consider understanding the social behaviour or personality of your patient before giving them prosthesis?

Yes _____

Sometimes _____

It's difficult to know your patient's behaviour _____

No _____

12) Are you familiar with the concept of Visagism?

Yes _____ No _____

13) Have you ever used digital tools or simulations that analyzes your facial features to help you visualize potential dental treatment outcomes?

Yes always _____

Sometimes _____

Only in anterior prostheses cases _____

Only in younger Patients _____

14) Have you received feedback from patients who underwent smile design using Visagism principles?

Yes _____

No _____

15) How likely are you to incorporate Visagism principles into your future dental practice?

Likely _____

Neutral _____

Unlikely _____

Questionnaire Evaluation

The questionnaire was straightforward and easy to comprehend, with clear and direct questions. The questionnaire you referenced delves into several key concepts in modern dentistry, particularly focusing on the SPA concept, smile design principles, the golden proportion, and visagism. It also examines the application of these principles by dental professionals in prosthesis delivery and considers the influence of personality and temperament on a person's smile.

Results

The collected data were analyzed using Chi-square test statistics to measure the level of agreement among respondents. It was found that most of the participants were not familiar with the concept of Visagism (62.0%). Sixty percent of the participants consider both mechanical parameters and the patient's psychological characteristics (personality and temperament). {Fig 1}

All those who were familiar with the concept of Visagism told that they are likely to incorporate Visagism in their future practice.{Fig 2} The concept of golden proportion was familiar to 81.0% of the participants and 70.0% of the participants reported that they apply principle of golden proportion.

According to most of the participants, personality of the patient is the most factor for doing smile makeover while 29.0% and 18.0% of the participants considered age and gender respectively to be the most important factors.{Fig 3}{Fig 4} Eighty seven percent completely agreed that personality is an important factor in smile designing. Many participants (66.0%) consider understanding the social behaviour or personality of patients before giving prosthesis is important.{Fig 5}

SPA concept was known to 71.0% of the participants. Most of the participants did not receive feedback from participants patients treated on Visagism principle.

The use of digital tools or simulations that analyze facial features was always done by 20.0% of the subjects whereas most of the participants use it sometime (58.0%).{Fig 6}

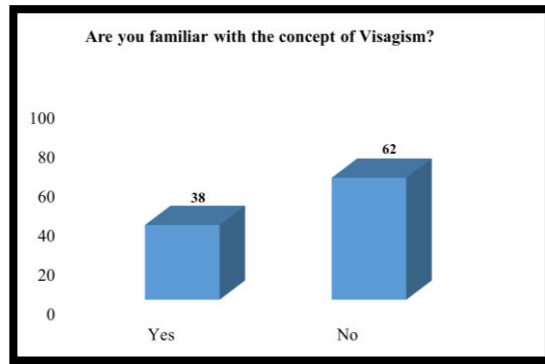


Fig 1

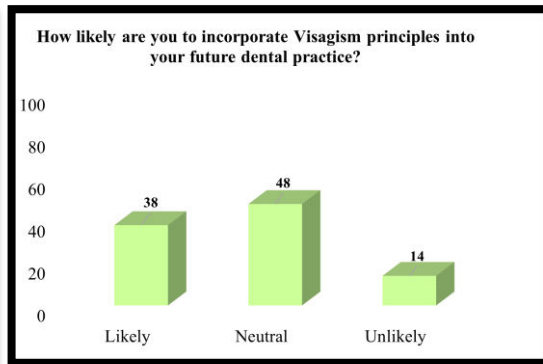


Fig 2

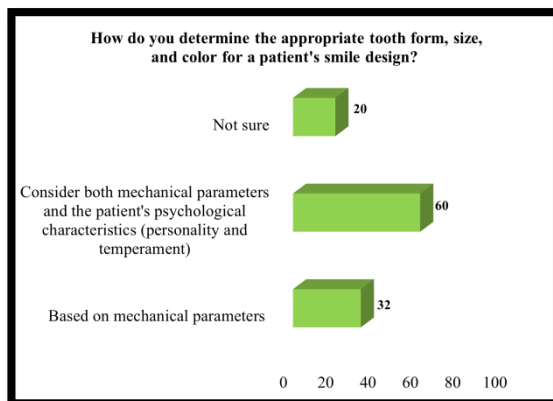


Fig 3

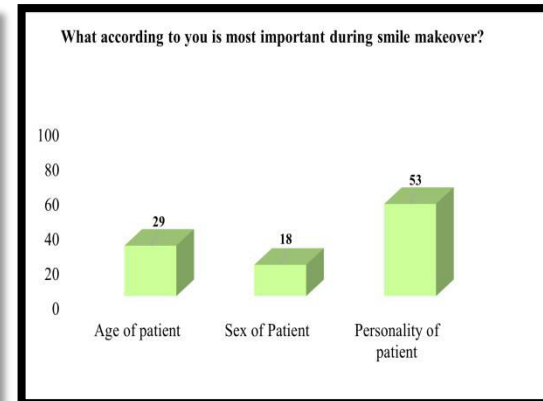


Fig 4

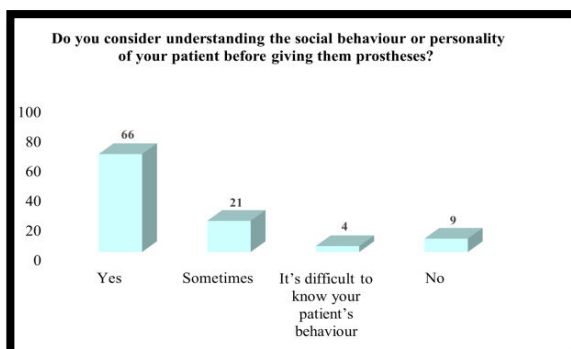


Fig 5

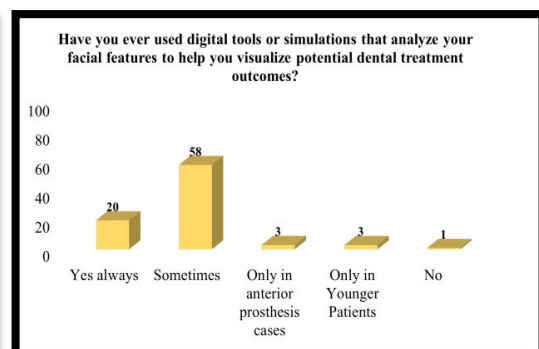


Fig 6

Discussion

The concept of Visagism and smile designing is known to majority of the dental professionals. The use and importance is acknowledged by the dental practitioner. It is important to give a personalized smile to the patient so that he or she can accept the dental makeover and the results will be more satisfying to the patient. A patient's self-esteem, confidence and quality of life can be improved by accomplishing a successful esthetic dental treatment through the creation of a beautiful smile. The size, shape, and arrangement of teeth form a major contribution to esthetic anterior dentition, the upper central incisors being the key determinants for evaluation.⁽¹⁾

According to Fisher, the personality factor has been shown to be one that can be employed specifically for the predetermination of esthetic results and can help to eliminate the costly and unsatisfactory “trial and error” procedure for obtaining acceptable esthetic results. The personality factor has been interpreted and suggestions for its practical application have been described.^{(4) (6)}

An attempt was made in this study to evaluate dental practitioners' awareness of the concept of Visagism through a questionnaire, and its application in daily practice was explained. The participants included in the study were aged between 23 and 54 years; however, information regarding their frequency distribution and gender was not provided. Additionally, the educational background of the participants was not disclosed, leaving their level of understanding and capability to answer the questionnaire unknown.

The study's limitations include a lack of detailed demographic information, such as gender distribution and educational background, which are crucial for assessing the participants' ability to comprehend and respond accurately to the questionnaire. Moreover, the small sample size and broad age range may affect the reliability and generalizability of the findings.

To overcome these limitations, in the present study, 100 individuals from the dental profession (32% were general dentist and 68% were postgraduates and faculty members) were chosen as participants.

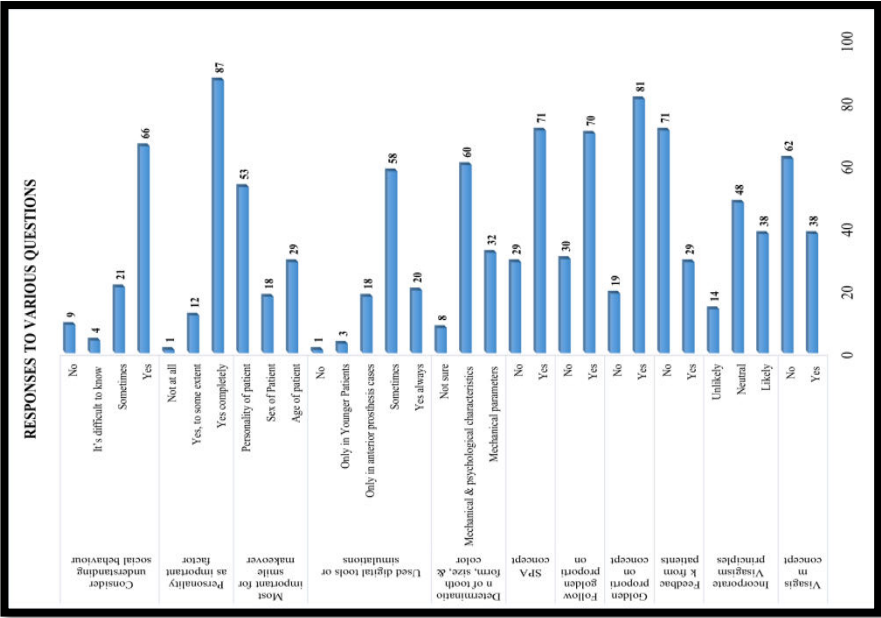


Fig 7

Conclusion

Considering the limitations of this study, it can be concluded that the concept of principles of mental temperaments and smile design through visagism in its present format, is slightly ancient in its current state, and hence may not be a practical approach in clinical practice to create a personalized smile for each patient.⁽²⁾

Among the participants, 62% of the dental professionals were familiar with concept of Visagism but only 38% were likely to incorporate Visagism principles into their future dental practice. This suggests that the awareness and practice to use Visagism in daily practice has to be increased.

The golden proportion is a constant that mathematically defines the ratio between the dimensions of a larger and a smaller length. The specific relation is unique in that the ratio of the larger length relative to the smaller length is identical to the ratio of the total length to the larger.⁽⁸⁾ But recreating a smile only mathematically seems odd. A touch of personality along with the ratio of face and teeth gives a personalized and more attractive smile to an individual.

A study by Van der Geld et al stated that the psychosocial importance of an attractive smile suggests that dental aesthetics can influence self-perception and personality traits. Understanding these correlations can aid dental professionals in addressing patients' esthetic concerns and improving their overall well-being.⁽⁹⁾

Personality is a practical and inspiring approach to initiate the treatment planning for smile makeover. It paves the path for the further sex and age refinements which are necessary to the dentogenic restoration. The consideration of the personality factor allows a realistic approach to the problem posed by the necessity of using artificial substances to create an illusion of reality in the smile.⁽⁶⁾ Smile is the beauty of soul, and personality is the blueprint of the soul, and amalgamation of both the virtues (smile and personality) is achieved through the concept of Visagism.⁽¹⁰⁾

The dentist is the artist whose accomplishments in dentogenics, smile designing and Visagism are limited only by the degree of skill he has acquired and knowledge regarding the techniques. By acknowledging the importance of aesthetics, personality, and patient comfort, dental professionals can deliver treatments that enhance both the function and appearance of smiles, leading to improved patient satisfaction and well-being.⁽²⁾

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