



## Awareness of intraoral photography among dental students

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### ABSTRACT

Precise shade matching is one of the most testing parts of dental restorations and stylish dentistry. Because of the incredible assortment of regular tooth shading accomplishing a nearby shade match of a fake rebuilding with normal dentition is a mind-boggling process. Photography has been utilized for a long time trying to improve correspondence among dental specialists and dental professionals. The aim of the study was to evaluate the awareness of intraoral photography among dental graduates. This was a questionnaire based cross-sectional type of study comprising 100 dental college students in Chennai. After the responses were received from 100 participants, data were collected and analysed. 76% of dental graduates stated the intraoral photographs were taken in automatic mode and only 24% of dental graduates set the camera in manual mode to capture the intraoral image. 97% of Dental graduates use the grey card as the contrast to the subject taken, and 98% of dental graduates are unaware about the use of white balance in-camera setting, and 1% of dental graduates are only aware of the 18% grey card and the use of grey card to pre-set the white balance. 100% of the people recommend the intraoral photography courses included in the dental course. 33% of the graduates have attended the photography courses to learn the technique to capture the intraoral photographs. The awareness of intraoral photography among dental students is moderately adequate. More than 30 of the graduates have attended the photography courses to learn the technique to capture the intraoral photographs. The documentation of the clinical cases is being encouraged in dental schools, but the proper training for the intraoral photographs is not being met. 100% of graduates recommend the photography courses be included in the dental curriculum.



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### INTRODUCTION

Exact shade matching is one of the most testing parts of dental restorations and tasteful dentistry (Chu *et al.*, 2010). Because of the incredible assortment of regular tooth shading accomplishing a nearby shade match of a counterfeit rebuilding with characteristic dentition is a complex process (Vichi *et al.*, 2011). Photography has been utilized for a long time trying to improve correspondence among dental specialists and dental technicians (Silva *et al.*, 2008). As of not long ago, no technique was depicted that permitted dental photos alone to supplant shade determination by the dental specialist and additionally the

dental technician (Bengel, 2003; Silva et al., 2008).

Different strategies must be utilized to evaluate tooth shading shade and splendor Nevertheless, and a photographic picture furnishes the dental professional with a great deal of data, including tooth morphology, surface, shading circulation, radiance, and different properties. Enthusiasm for tooth-dying techniques has drastically expanded in ongoing years. Today blanching is viewed as a vital piece of tasteful dentistry (Joiner, 2006). Initially, customary photos were made utilizing 35 mm slide film. A few analysts utilized slides in mix with optional techniques, for example, colorimeters to decide a clinically perceptible shading change (Oliver and Van B. Haywood, 1999). As of late computerized photography has begun to supplant customary photography (Balabanović et al., 2000). Analysts have begun to utilize computerized cameras for the appraisal of fading strategies by producing an advanced picture and stacking it into picture altering software. This product gives numeric estimations of picture shading and brightness. 1420 Film-preparing pictures at that point can be digitized and examined with business programming (Silva et al., 2008).

Light Photography signifies "composing drawing with light." One of the most significant properties of light is its shading temperature (i.e., the shade of light transmitted by a "dark body," communicated in degrees Kelvin). In contrast to our cerebrum, which adjusts to various shading temperatures and "sees" a white piece of paper consistently as white, in any event, when lit by a yellowish light source, a camera considers the to be temperature all things considered: nonpartisan at 6500°K, yellowish at 2800 to 4000°K, and pale blue at temperatures somewhere in the range of 7000 and 9000°K. Shading temperature of sunshine changes relying upon the time, the season, the climate, and the heading a window is confronting. Consequently, light influences the shading interpretation of a picture, causing a specific shading cast. This is the reason shading shade determination in the dental office ought not to be performed under sunlight. Room illumination influences shading version also. Frequently fluorescent cylinders are utilized that are intended to mirror sunshine. Ordinarily, they have no ceaseless range and are not entirely impartial. The dental working light is another wellspring of shading cast. Regularly halogen bulbs are utilized in the light. The aim of the study was to evaluate the awareness of intra oral photography among dental graduates.

## MATERIALS AND METHODS

This was a questionnaire based cross-sectional type of study comprising 100 dental college students in Chennai. A self-designed questionnaire contains 10 questions based on the knowledge, awareness on intra oral photography among dental college students. Questionnaires were circulated through an online website survey planet. After the responses were received from 100 participants, data were collected and analysed.

## RESULTS AND DISCUSSION

Dental graduates do recommend the documentation of the clinical cases reported and the outcome of the treatment. But the graduates were not aware of the correct procedure for documentation of the clinical case. 76% of dental graduates stated the intraoral photographs taken in automatic mode, and only 24% of dental graduates set the camera in manual mode to capture the intraoral image (Figure 1). 97% of Dental graduates use the grey card as the contrast to the subject taken (Figure 2). 98% of dental graduates are unaware of the use of white balance in-camera setting (Figure 3). 100% of the people recommend the intraoral photography courses included in the dental course (Figure 4). 33% of the graduates have attended the photography courses to learn the technique to capture the intraoral photographs (Figure 5).

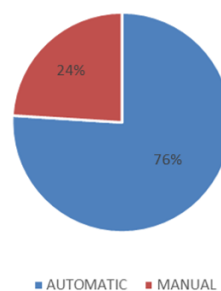


Figure 1: Method of image capture

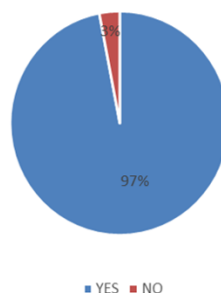
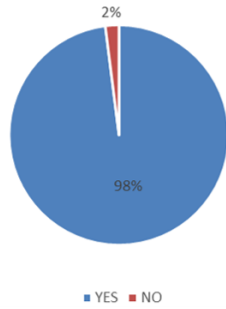
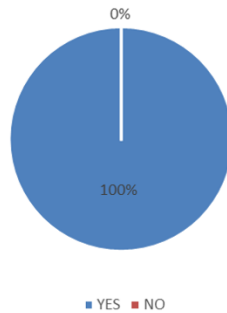


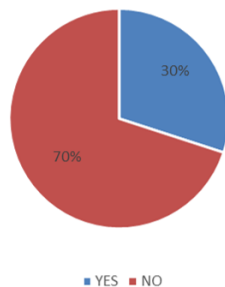
Figure 2: Use of the grey card



**Figure 3: Use of white balance**



**Figure 4: Recommendation of photography courses**



**Figure 5: Attending photography courses**

In computerized photography, the impact of elements, for example, light, camera innovation, and clinical technique on the subsequent pictures can be diminished to a base yet not killed. The utilization of an advanced procedure doesn't ensure a sensible result. Albeit specialized subtleties gave in certain distributions sound noteworthy and modern, they may not affect precision (Apted et al., 2006).

The utilization of a "motorized zoom lens," for instance, has no impact on the result of a picture investigation. Referencing that red-green-blue estimations of every tooth pixel are resolved sounds great. However, this is actually what each and every CCD or CMOS chip does, even in ease cameras. There are, obviously contrasts, in the precision of different techniques, there is no photographic strategy that is liberated from drawbacks parched errors. In any event, while normalizing the method however

much as could reasonably be expected, there are sure varieties of a specialized sort that can't be kept away from. Numerous methods are suggested that incorporates an unbiased test focus on, a bit of dim card, in the picture itself. The grey card can be utilized to neutralise picture hues and to adjust picture brilliance with Image-altering programming (Balabanović et al., 2000; Landry, 2008).

Dental graduates do suggest the documentation of the clinical cases announced and the result of the treatment. In any case, the alumni didn't know about the right technique for documentation of the clinical case. More concentrated preparing programs and instructive projects on the advantages of intraoral photography ought to be effectively advanced.

## CONCLUSION

The awareness of intraoral photography among dental students is moderately adequate. More than 30 of the graduates have attended the photography courses to learn the technique to capture the intraoral photographs. The documentation of the clinical cases is being encouraged in dental schools, but the proper training for the intraoral photographs is not being met. 100% of graduates recommend the photography courses be included in the dental curriculum.

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## Conflict of Interest

The authors declare that they have no conflict of interest for this study.

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