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**DENTAL STUDENTS PERCEIVED PREPAREDNESS TO TREAT PATIENTS IN  
CLINIC AFTER A FIXED PROSTHODONTICS PRECLINICAL COURSE- A SURVEY**

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**ABSTRACT**

Prosthodontics is the dental specialty pertaining to the diagnosis, treatment planning, rehabilitation, and maintenance of the oral function, comfort, appearance, and health of patients with clinical conditions associated with missing or deficient teeth and/or maxillofacial tissues by using biocompatible substitutes (GPT 9). This study aims at analyzing the dental students' perceived preparedness to treat patients in clinic after a fixed prosthodontics course in pre clinicals. A questionnaire was distributed through an online google forms link to about 100 people. The study population were asked to fill out the online form after reading each question thoroughly. The results were collected and the data was analysed using SPSS version 20. From the study population, the whole of 100% of the participants gave a positive response when asked if they were aware about dental students' perceived preparedness to treat patients in clinic after a

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fixed prosthodontics course. This study gives an insight about the perception towards the dental students perceived preparedness to treat patients in clinics after a fixed prosthodontics course.

**Keywords: Dental students, fixed prosthodontics course, treat patients, equipment, laboratory procedures, clinics**

## INTRODUCTION

Mastering the fundamentals through stimulation labs and lectures helps to develop treatment plans for patients' oral health. Teaching students should be improvised by introducing new methods and techniques [1, 2]. Preclinical and post clinical performances may have positive relationships between students and professors [3, 4]. There is a wide variation among dental schools and their educational methods in the world [5]. Operative dentistry is a popular branch of dentistry these days [6]. Positive learning experiences should be present [7, 8] Routine clinical practice should be taken care, so that when the students meet patients they don't get panic and treat them with their full grace and power [9, 10]. Once the student lacks or losses interest or even misses the classes prior to clinical course, they may treat patients inappropriately which may lead to destruction of oral cavity of patient [11, 12]. Health care costs should also be considered. The costs should be kept minimal for economically weaker based on the procedure the dentist is going to perform [13] Functional recovery is must for the patient.

The dentist should plan treatment based on the diagnosis of the patient's oral cavity [14, 15]. The dentist should always be aware that what lifestyle his or her patient is following so that they can warn the patients about the consequences he or she is going to face for their oral cavity [16, 17].

## MATERIALS AND METHODS

**Study design:** A cross sectional survey was conducted among third year students to know about dental students' perceived preparedness to treat patients after a pre clinical course. The sampling method is a simple random sampling method. The sample size of this study is 100. The participants did the survey voluntarily and no incentives were given to them. The study was conducted in the month of May, 2020. Ethical approach and informed consent from the participants were obtained.

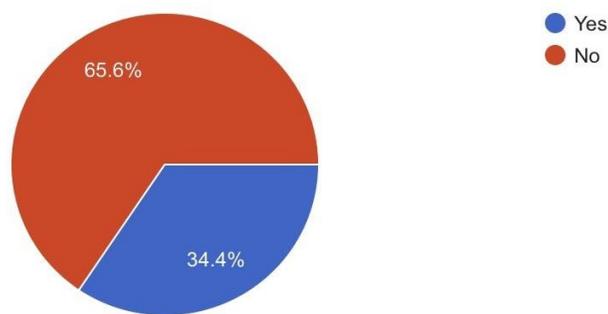
**Survey Instrument:** The survey instrument which was a questionnaire was prepared after extensive review of the existing literature. The questionnaire was reviewed and amendments were made to improve clarity of the questions to eliminate ambiguous responses. The questionnaire consisted of 20

questions with both open and closed ended questions. The questionnaire was shared to students using an online survey platform.

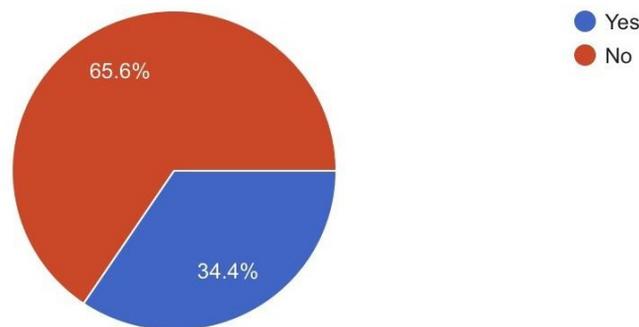
**Data Analysis:** Only completed surveys were taken for analysis and the uncompleted surveys were eliminated. The statistical test used is descriptive statistics. All the

responses obtained were tabulated in Excel and reliability of the data was checked. Frequency tables were prepared for each question and analysed using IBM SPSS data analysis software [10, 17-20].

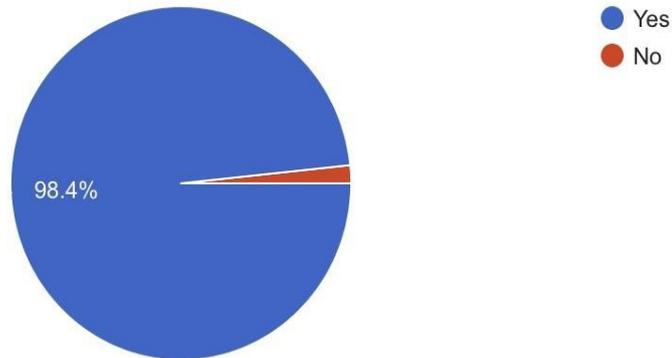
**RESULTS AND DISCUSSION**



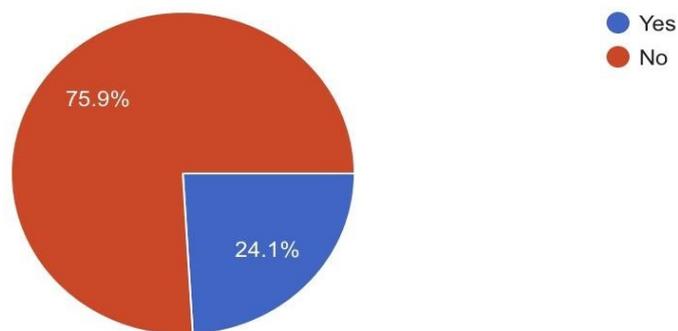
**Figure 1: Required skills to begin with clinical stages. Out of 100 responses, 65.6% participants say yes and 34.4% participants disagree**



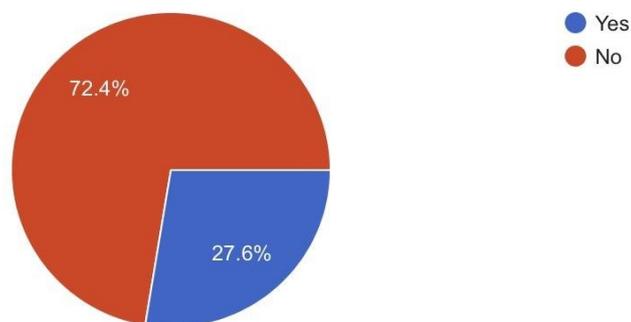
**Figure 2: Students preparedness to treat patients. Out of 100 responses, 65.6% of the participants are ready to treat patients and the remaining 34.4% are not ready**



**Figure 3: Anxiety associated with clinical practice.** Out of 100 responses, 98.4% of the participants feel that they might get anxious once they start with clinical practice



**Figure 4: Skilled to work on patients:** Out of 100 responses, 75.9% of the participants feel that students are skillful to do Fixed dental treatment and the remaining 24.4% doesn't feel the same



**Figure 5: Medical history and family history:** Out of 100 responses, 72.4% of the participants feel that knowledge about medical history of the patients is essential and the remaining were not concerned about the same

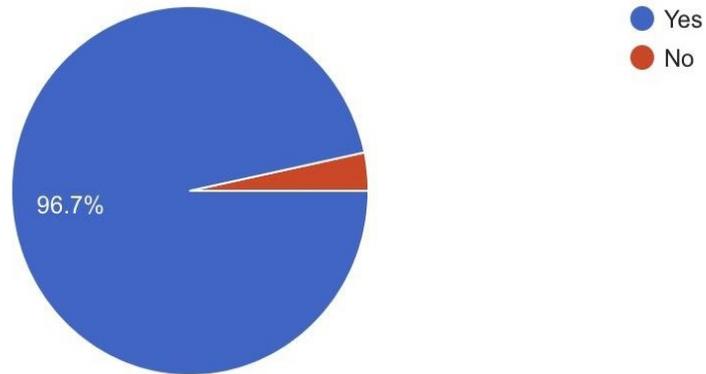


Figure 6: Knowledge from preclinical stages to clinic stage. Out of 100 participants , a majority of 96.7% of the participants feel that it is essential to correlate the knowledge and experience from preclinical stages to clinical stages

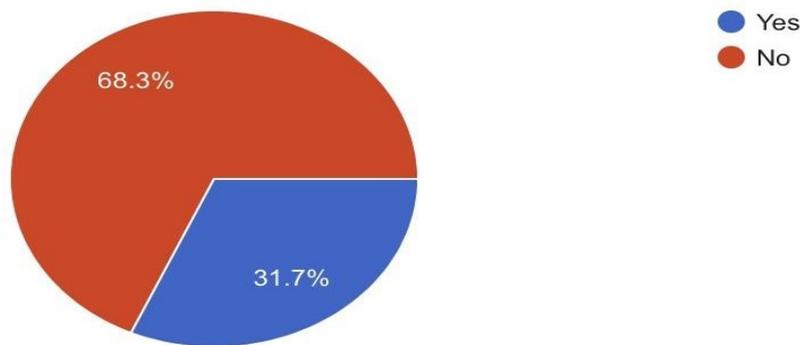


Figure 7: Tooth preparation: Out of 100 participants, 68.3% of the participants feel that they possess the skill for tooth preparation, the remaining 31.7% of the participants don't think that they possess enough knowledge for the same.

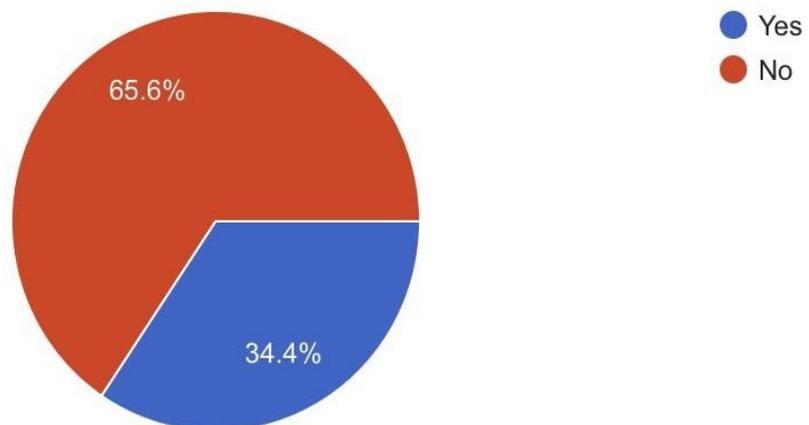
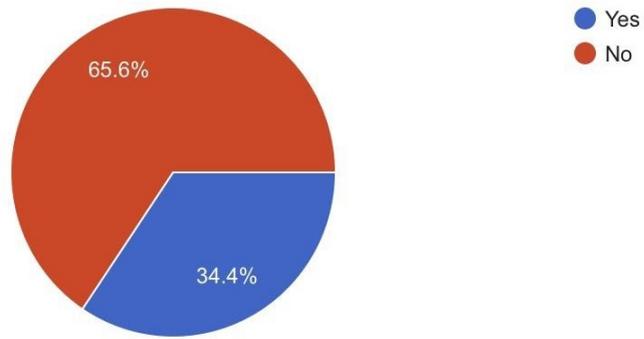
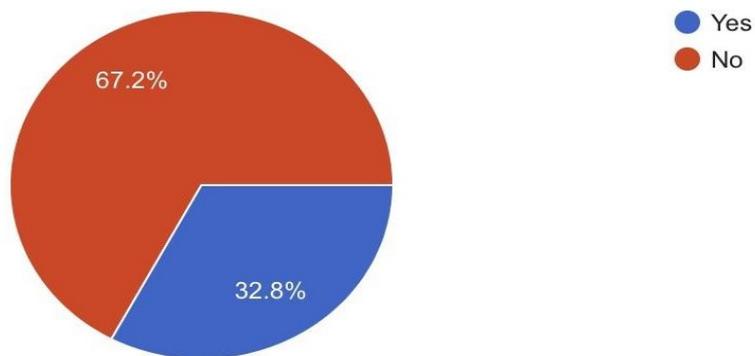


Figure 8: Impression materials and familiarity among students: Out of 100 participants, 65.6% of the participants feel that they are familiar and confident with the impression procedures and the remaining 34.4% don't feel the same.



**Figure 9: Aware of the impression materials: Out of 100 participants, 65.6% of the participants feel that they are well aware of the impression materials and the remaining (34.4%) don't feel the same.**



**Figure 10: Survey useful for the students: Out of 100 participants, 67.2% of the participants feel that this survey was useful for them, and the remaining 32.8% participants don't feel the same**

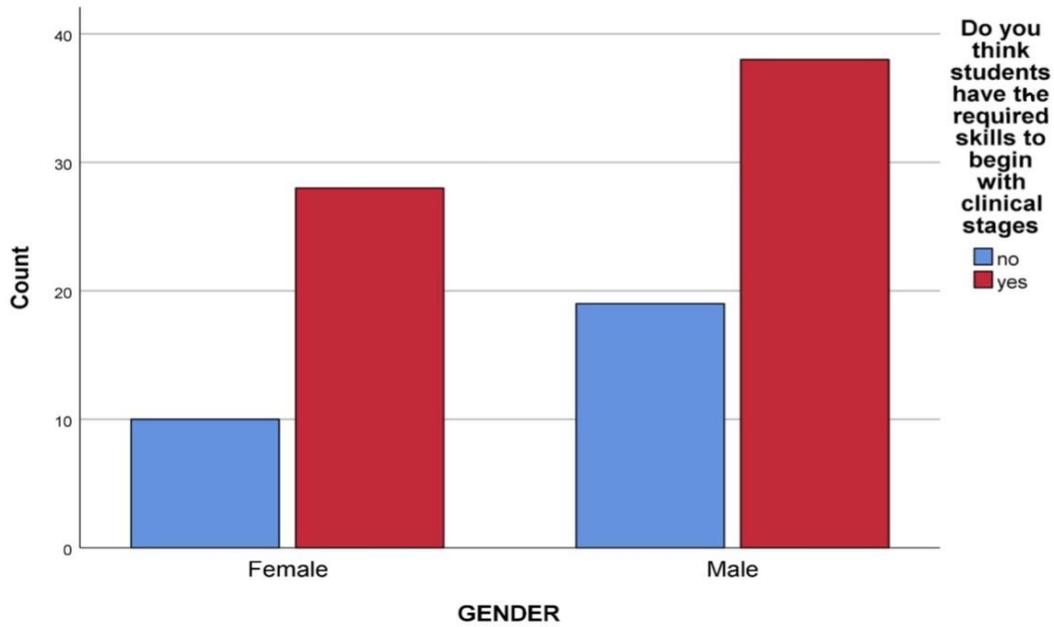


Figure 11: Bar graph representing chi square analysis between gender and whether the students have required skills to begin with clinical stages. X axis: gender y axis: frequency

There is no significant difference between male and female and their required skills to begin with clinical stages chi square analysis = 0.529 and p value = 0.467) statistically non significant

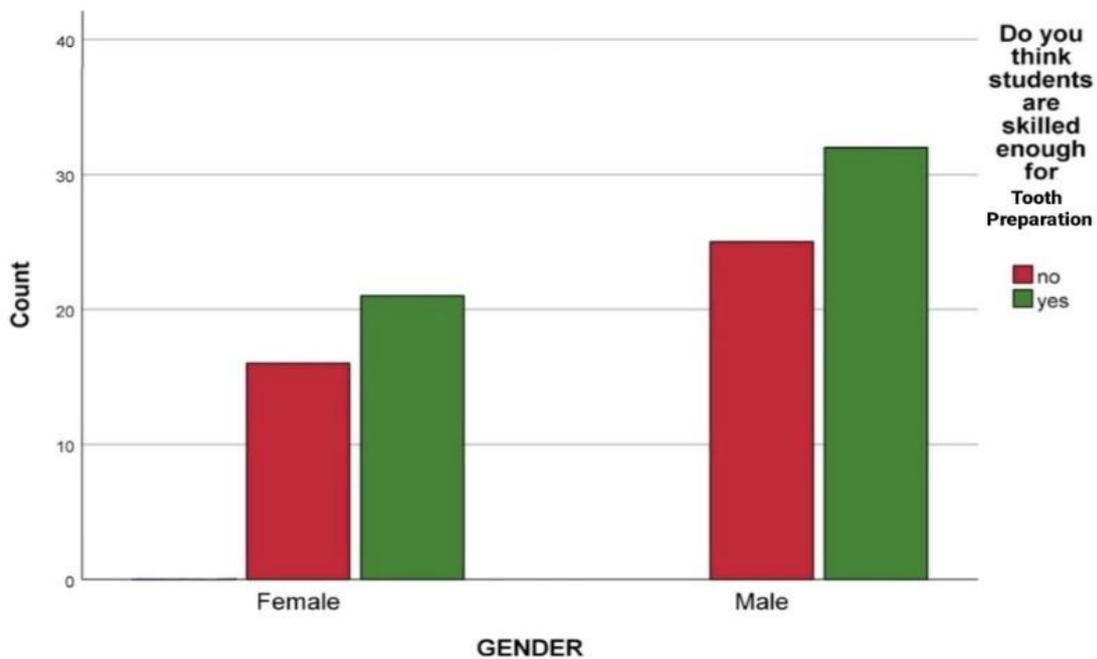


Figure 12: Bar graph representing chi square analysis between opinion based on gender on whether the students are skilled enough in tooth preparation. X axis : Gender, Y axis: Frequency

There is no significant difference between male and female and their skills in Tooth Preparation Chi square analysis = 1.519 and P value = 0.312) statistically non significant

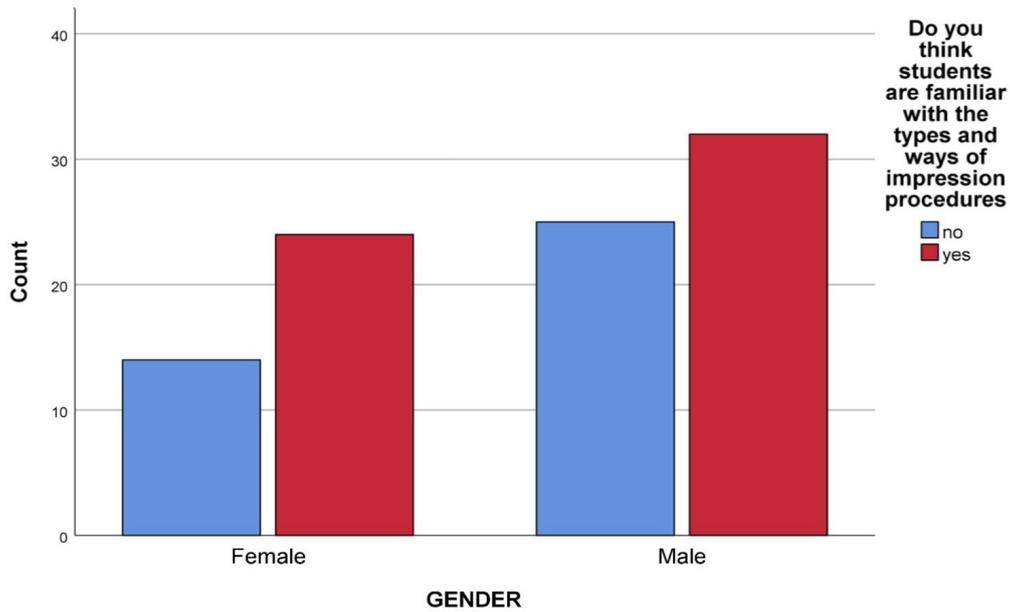


Figure 13: Bar graph representing chi square analysis between opinion based on gender and the student’s familiarity with the impression types and the materials used. X axis: Gender, Y axis: Frequency. There is no significant difference between male and female and their knowledge about the impression materials used. Chi square analysis = 0.464 and P value = 0.496) Statistically non significant

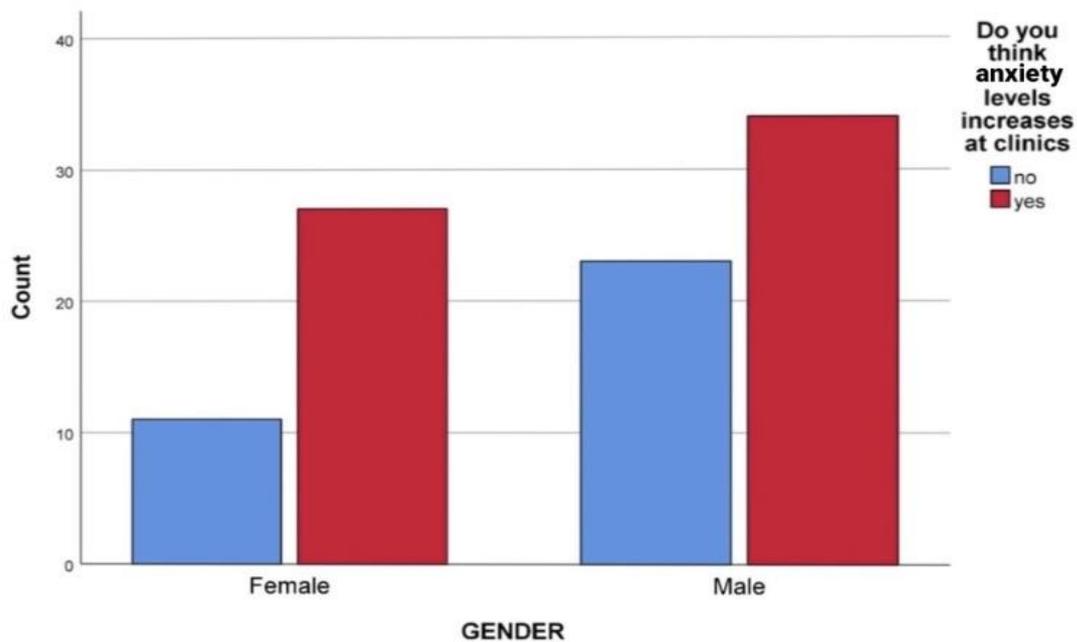


Figure 14: Bar graph representing chi square analysis between opinion based on gender and student’s anxiety levels. X axis: Gender, Y axis: Frequency There is no significant difference between male and female students and their anxiety levels faced during clinical procedures (Chi square analysis = 1.290 and P value = 0.256 ) Statistically non significant

From the results, when asked about required skills to begin with clinical stages around 65.6% of study population answered positively (**Figure 1**). According to this study, around 74.8% students are ready to treat patients [21, 22]. (**Figure 2**) represents the question that the preclinical students feel ready to treat patients about 64.6% answered positively (**Figure 2**). When asked about stress levels increases in clinics about 98.4% of the study population answered positively (**Figure 3**). In a previous study conducted by Scheven *et al.*, shows that the stress levels of the students were increased during clinical hours while treating patients [23-25]. (**Figure 4**) represents the question about student's ability to choose complete and partial dentures and around 75.9% answered positively (**Figure 4**). When asked about taking medical and family history of the patients around 72.4% are confident enough to take the information from the patients (**Figure 5**). An article says that around 85% of students are ready to fill the family history of their patients [26, 27]. **Figure 6** represents preclinical students have knowledge for the clinics about 96.7% answered positively (**Figure 6, 7**), represents that the preclinical students are skilled enough for grinding the teeth and around 68.3% students answered positively (**Figure 7**). According to this

article, around 68.9% students are ready to grind the teeth [28, 29]. When asked about the types of impression preclinical students know around 65.6% students answered positively (**Figure 8**). According to this article, around 73.2% students are aware of the impression materials [30] When asked about students' familiarity with the impression materials around 65.6% answered positively. **Figure 9, Figure 10** represents the survey was useful for the participants around 67.2% of the study population answered positively (**Figure 10**).

Although many protocols were followed to structure this study, certain limitations still exist, such as limited sample size and the study can be prone to research error, this study can be carried out in large populations in future to establish better insights of the students knowledge and skills.

## CONCLUSION

Within the limitations of the study following conclusions can be drawn,

The survey was done to know the awareness about dental students perceived preparedness to treat patients in clinicals after a pre clinical course. The skills and knowledge acquired by the students are pleasing after their preclinical exposure.

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