



Introduction

With rising esthetic demand in dentistry, all-ceramic restorations are increasingly considered as the material of choice due to their pleasing appearance and high biocompatibility. However, there is limited data on the esthetic performance of all-ceramic restorations when comparing with existing restorations.

Purpose

The aim of this study was to assess prosthodontic residents' and dental students' perception on the esthetic of a single crown fabricated from monolithic and layered zirconia, and monolithic disilicate.

Materials and Methods

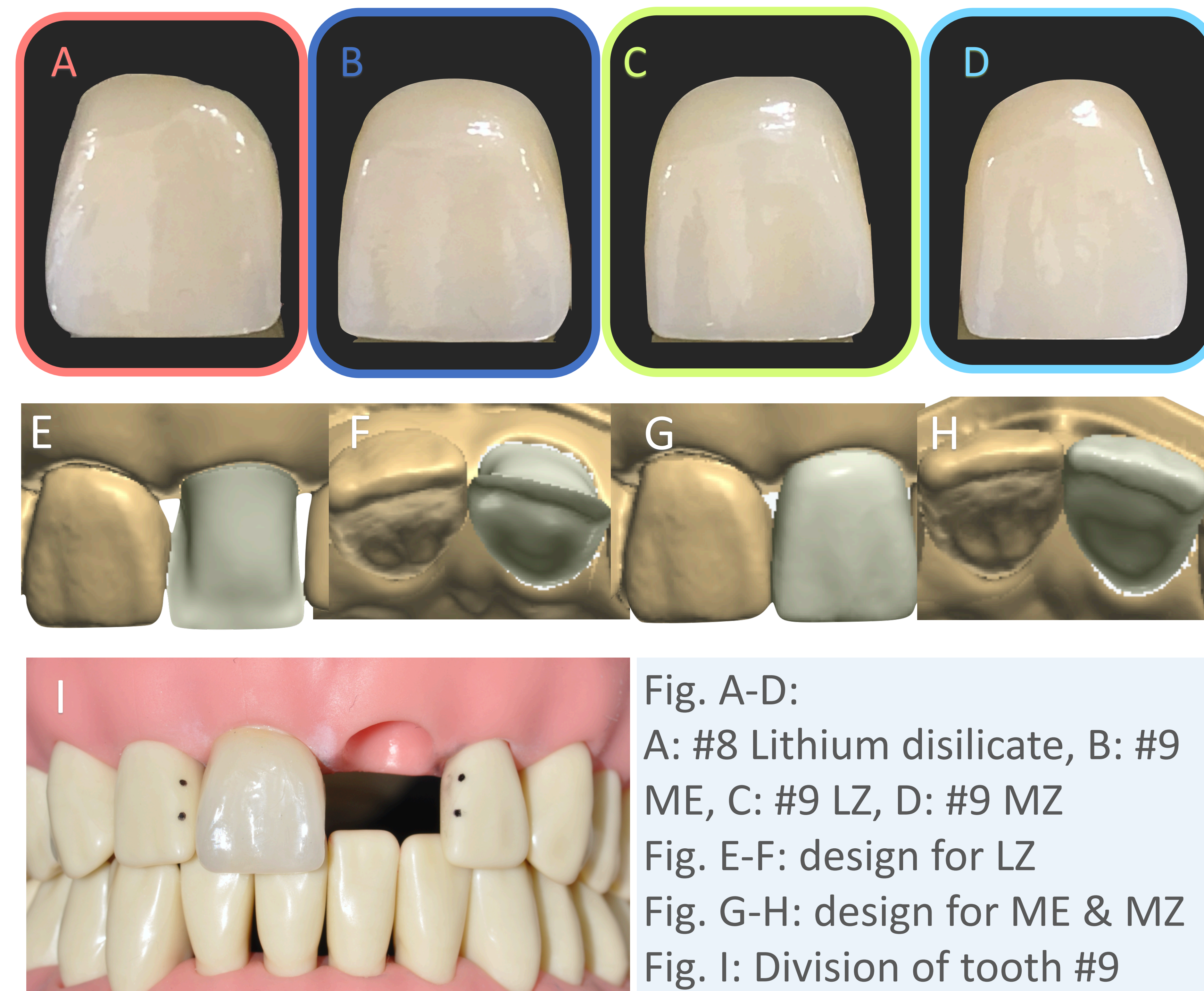
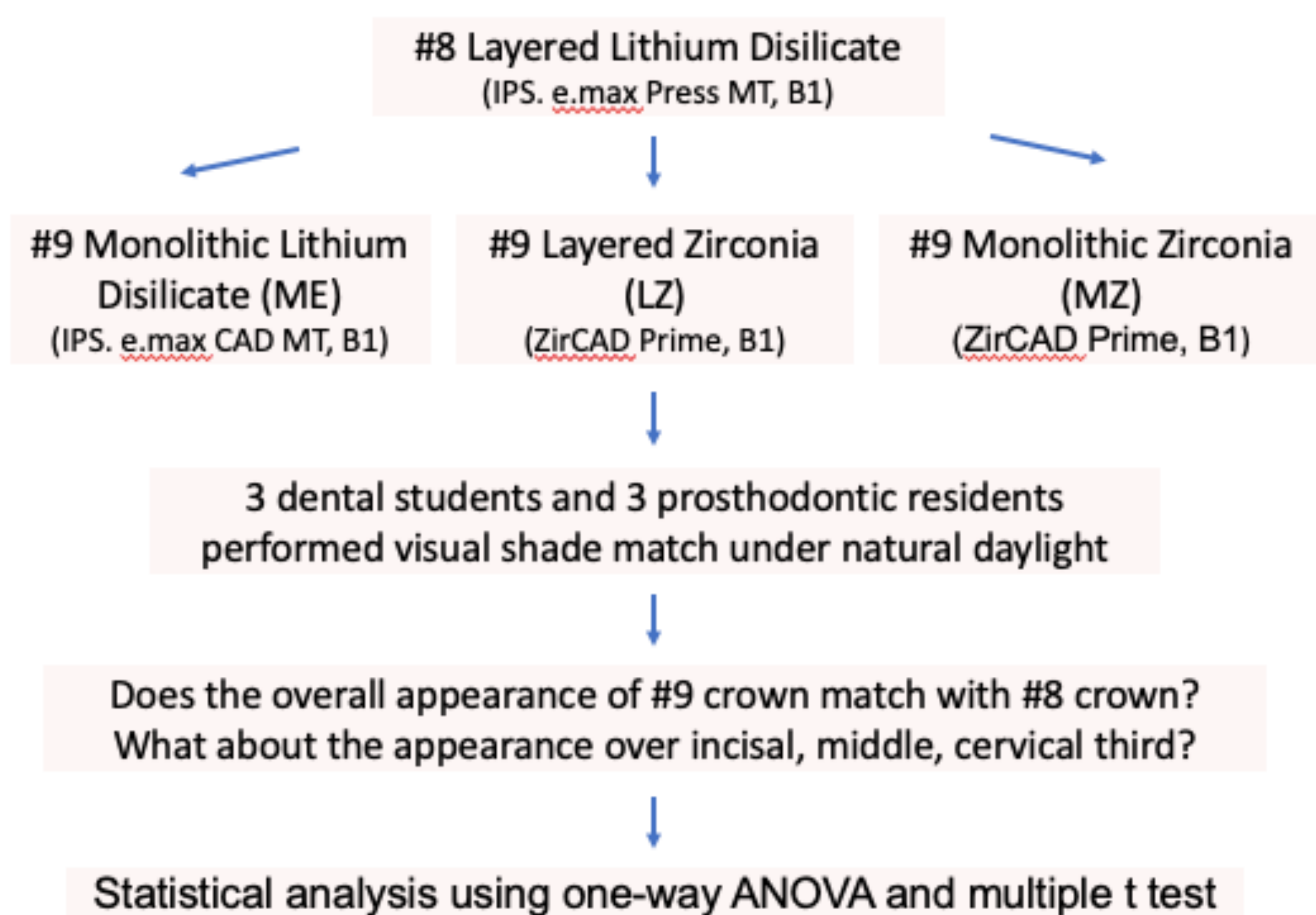
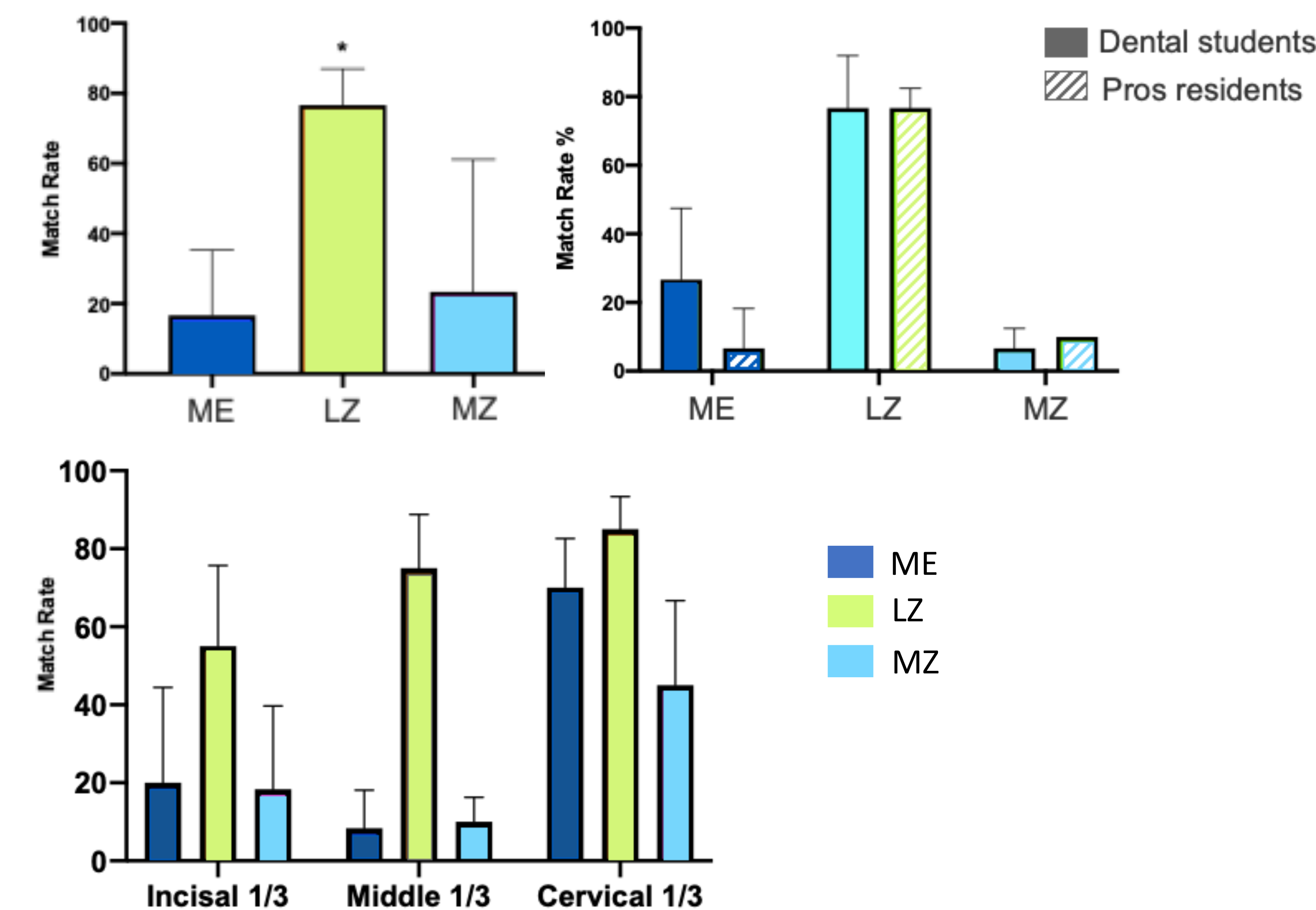


Fig. A-D:
A: #8 Lithium disilicate, B: #9 ME, C: #9 LZ, D: #9 MZ
Fig. E-F: design for LZ
Fig. G-H: design for ME & MZ
Fig. I: Division of tooth #9

Results

	ME	LZ	MZ
Overall (%)	16.67 ± 18.62	76.67 ± 10.33	23.33 ± 37.77
Dental students (%)	26.67 ± 20.82	76.67 ± 15.28	6.67 ± 5.77
Pros residents (%)	6.67 ± 11.55	76.67 ± 5.77	10.00 ± 0.00



Conclusions

- The overall shade match performance revealed that the LZ group demonstrated significant better shade match to the existing layered lithium disilicate crown.
- There is a significant better match rate among different type of restorations in middle third.

References

- Brewer JD, Wee A, Seghi R. Advances in color matching. Dent Clin North Am 2004;48:341-58.
- Dudea D, Gasparik C, Botos A, Alb F, Irimee A, Paravina RD. Influence of background/ surrounding area on accuracy of visual color matching. Clin Oral Invest 2016;20:1167-1173.
- Chu SJ, Trushkowsky RD, Paravina RD. Dental color matching instruments and systems. Review of clinical and research aspects. J Dent. 2010;38 Suppl 2:e2-16.

- All layered crowns use IPS. e.max Ceram as veneering material.
- All crowns are stained and glazed with MiYO Liquid Ceramic from Jensen Dental.