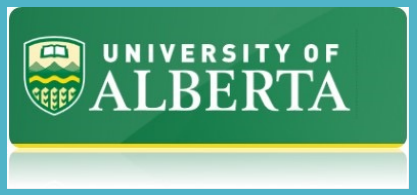
Dental Trauma Education: Challenges and Opportunities



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No Conflicts of Interest

ORIGINAL ARTICLE

Dental Traumatology WILEY

Dental trauma education among Canadian dental schools: A Nationwide survey of dental trauma educators

Zanib Kiani[1] | Paul V. Abbott[2] | Liran Levin[1]

Open access link to the paper:
https://onlinelibrary.wiley.com/doi/epdf/10.1111/edt.12834

ORIGINAL ARTICLE

Dental Traumatology WILEY

Dentists' knowledge of dental trauma based on the International Association of Dental Traumatology guidelines: An Australian survey

Nilesh Madhukant Jadav | Paul V. Abbott

Dental Traumatology

Dental Traumatology 2009; **25**: 490–493; doi: 10.1111/j.1600-9657.2009.00805.x

Dental practitioners' knowledge and implementation of the 2007 International Association of Dental Traumatology guidelines for management of dental trauma

Yehuda Zadik[1], Yael Marom[2], Liran Levin[3]

Abstract – *Aim*: To evaluate the knowledge, adoption, and diffusion rate of the 2007 International Association of Dental Traumatology guidelines among

ORIGINAL ARTICLE

WILEY Dental Traumatology

Dentists' knowledge of dental trauma based on the International Association of Dental Traumatology guidelines: A survey in South Brazil

Rafael Chies Hartmann[1] | Bárbara Romagna Rossetti[1,2] | Lucas Siqueira Pinheiro[2] | José Antonio Poli de Figueiredo[1,2] | Giampiero Rossi-Fedele[3] | Maximiliano S. Gomes[1,4] | Maristela Gutierrez de Borba[1]

COMPREHENSIVE REVIEW

Dental Traumatology WILEY

Global status of knowledge for prevention and emergency management of traumatic dental injuries in dental professionals: Systematic review and meta-analysis

Nitesh Tewari[1] | Farheen Sultan[1] | Vijay Prakash Mathur[1] | Morankar Rahul[1] | Shubhi Goel[1] | Kalpana Bansal[1] | Amrita Chawla[2] | Partha Haldar[3] | Ravindra Mohan Pandey[4]

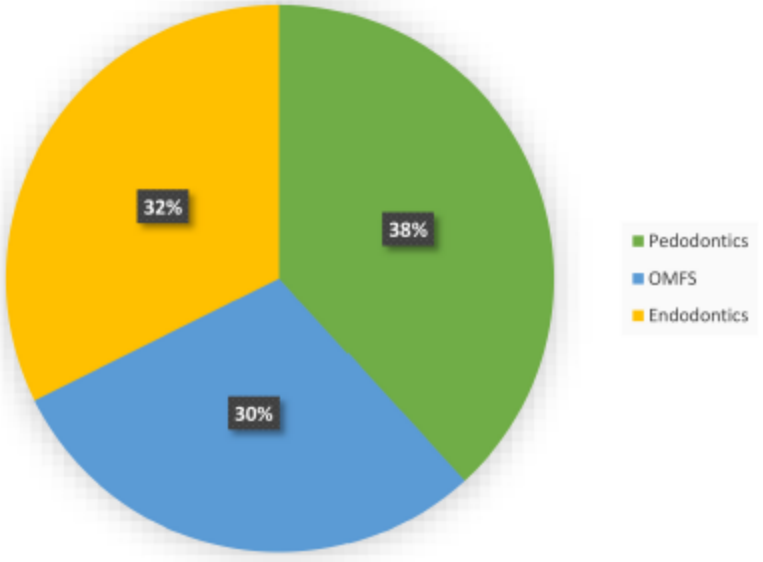

FIGURE 1 Distribution of the disciplines that are involved in teaching dental trauma to dental students in Canadian Dental Schools.

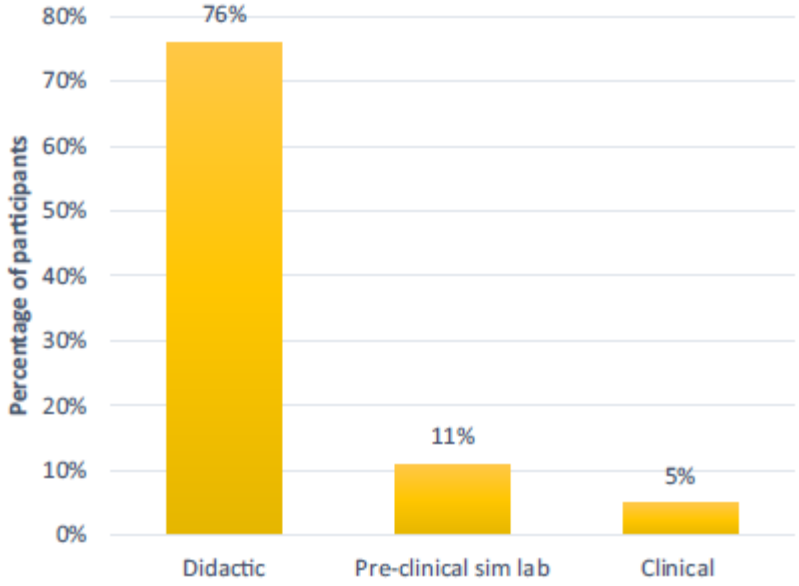

FIGURE 2 The percent of the 17 instructors from all Canadian dental schools as to whether they perceive that sufficient time is allocated to teaching dental trauma in the didactic, pre-clinical simulation laboratory, and clinical components.

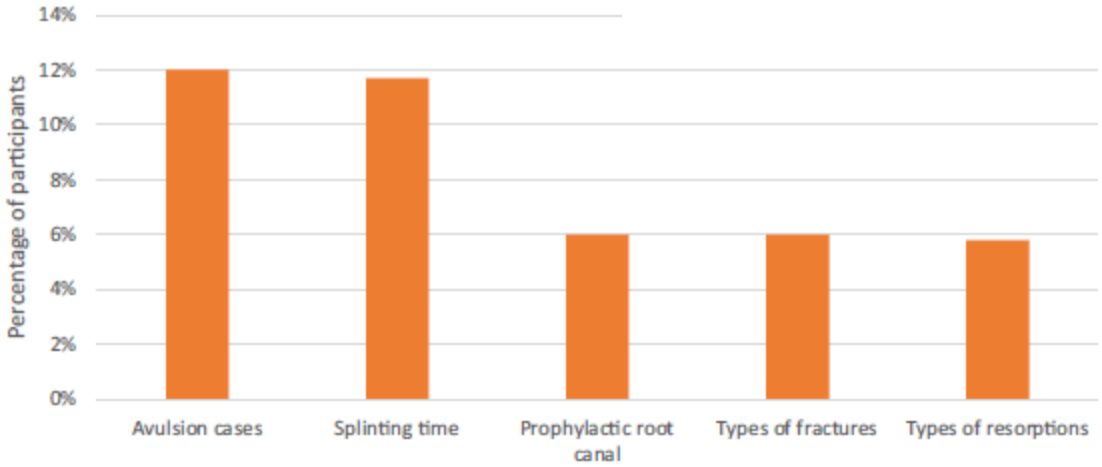

FIGURE 3 Aspects of dental trauma management with the most common mistakes that students make in their final examinations as reported by the instructors.

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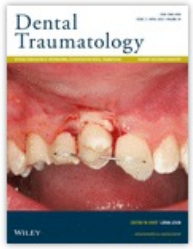

Zanib Kiani[1] | Paul V. Abbott[2] | Liran Levin[1]

TABLE 1 Suggestions and challenges in dental trauma education as reported by the participants.

Suggestions for improvements	Challenges in dental trauma education
• Separate subject dedicated to dental trauma	• Demographics of the patient population
• Extending the hours of lectures	• No affiliation of the university with trauma centers
• More time for discussion with the students	• Difficulty to deliver concepts without clinical demonstration
• All universities should work together on teaching the same curriculum	
• Add hands-on component such as splinting, restoration of broken teeth, and replantation of avulsed teeth	
• More questions in the final examination	
• More clinical scenario-based assessments	
• Add OSCE stations for better testing	
• More clinical exposure	

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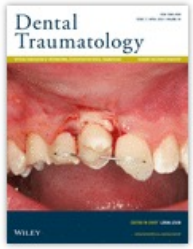

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5 | CONCLUSIONS

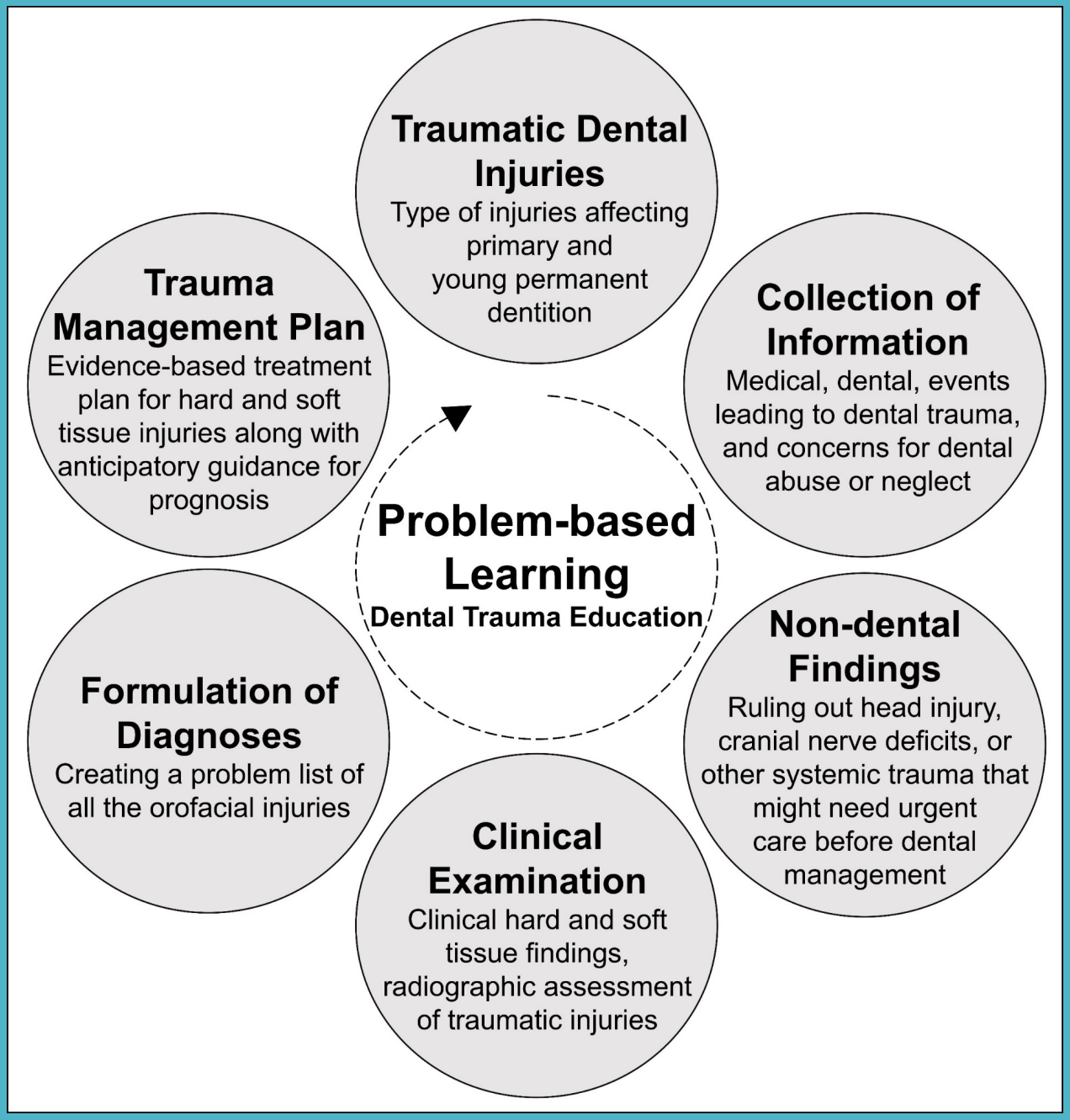
Dental trauma education remains a fragmented subject divided among several specialties; therefore, a great variation exists in teaching of dental trauma in the different universities in Canada, potentially jeopardizing the knowledge of future dentists and the well-being of their patients.

Additional clinical exposure along with unification within, and between, dental schools could result in a more coherent and a better presented dental trauma curriculum.

Educational intervention

Problem-based learning (PBL) model

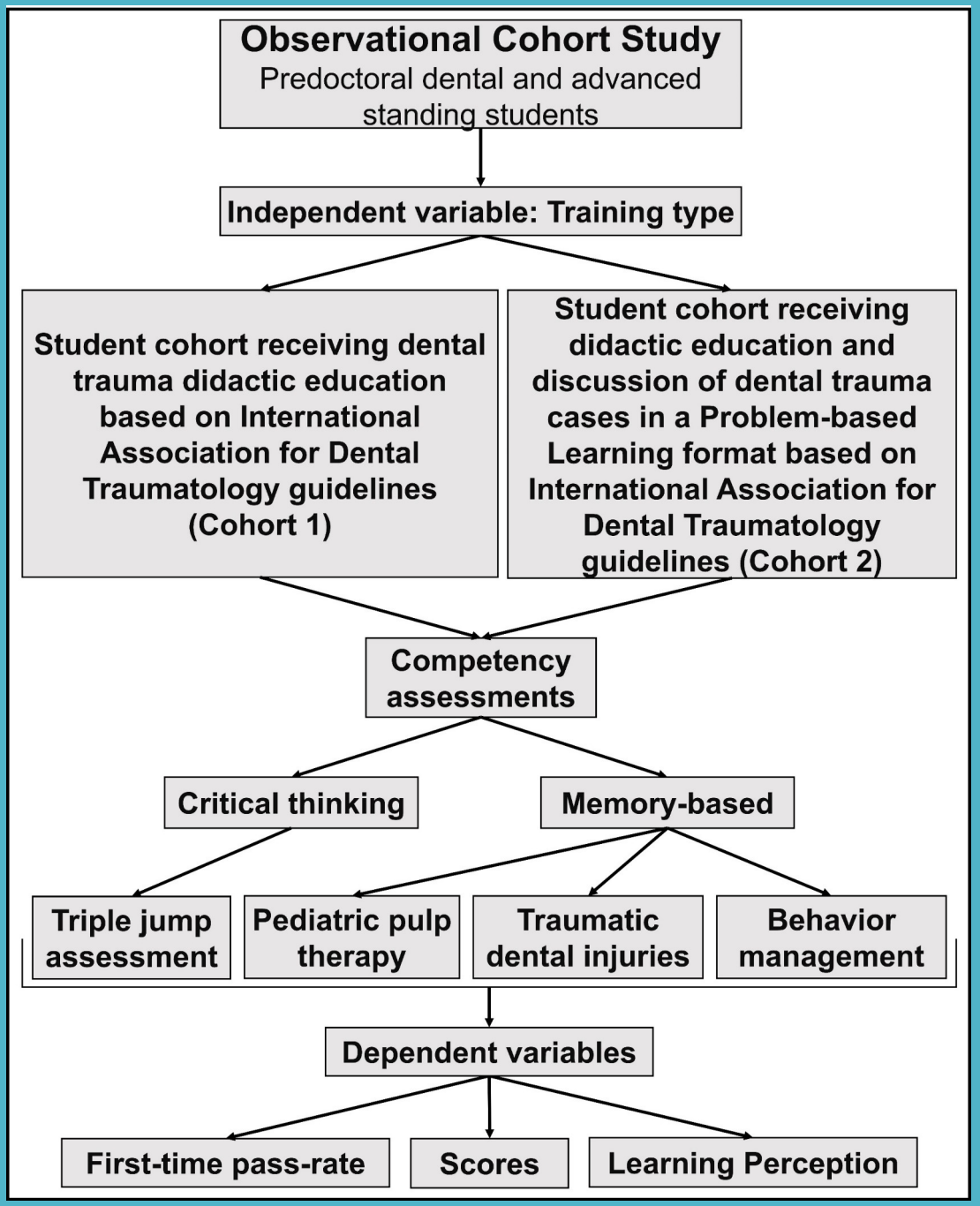
IADT guidelines



Study design

PDS: predoctoral dental students
ASP: advanced standing program students

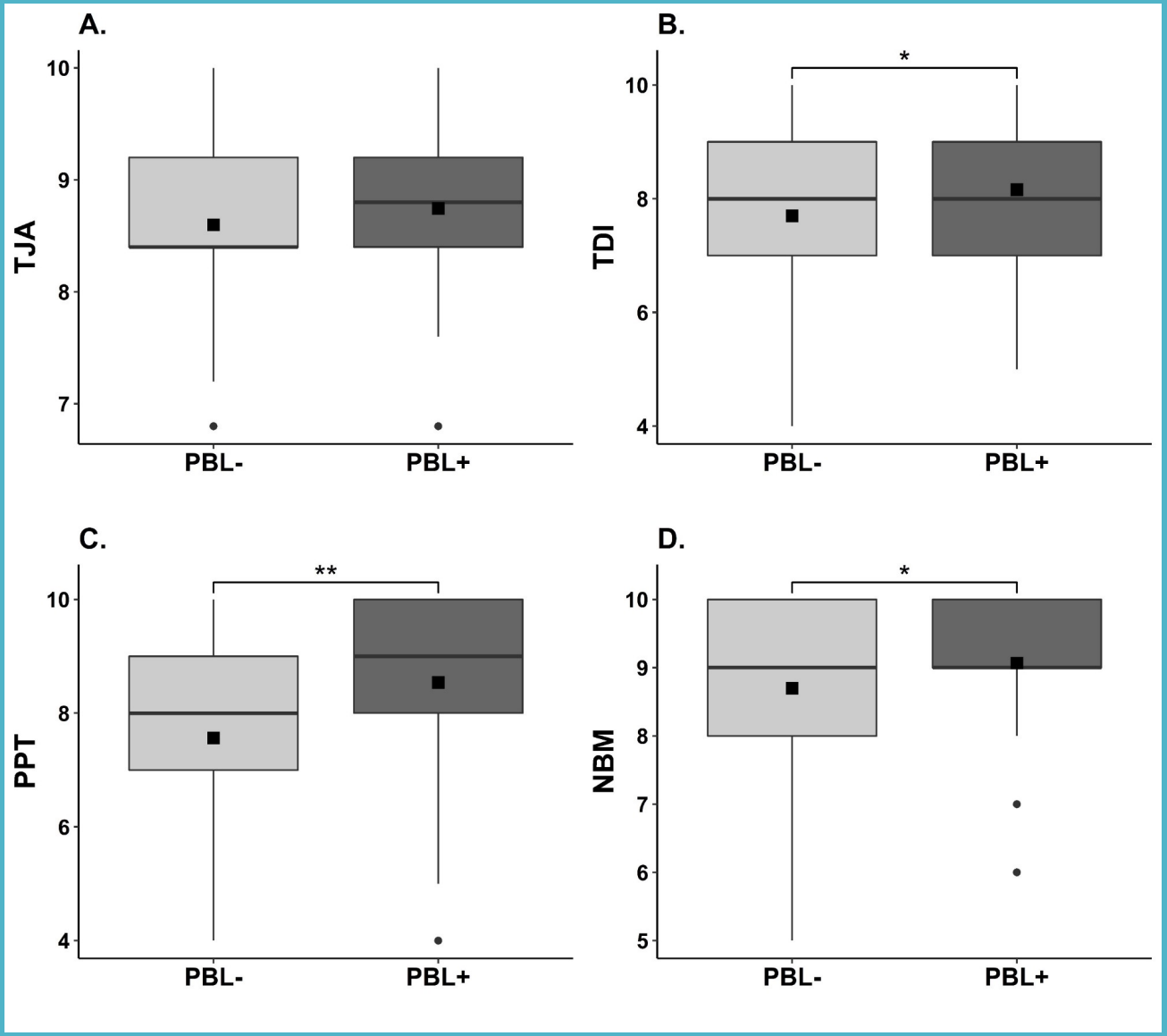
PDS and ASP students are enrolled in DDS awarding program. ASP enter the program at a later timepoint due to their advanced standing from non-US institution



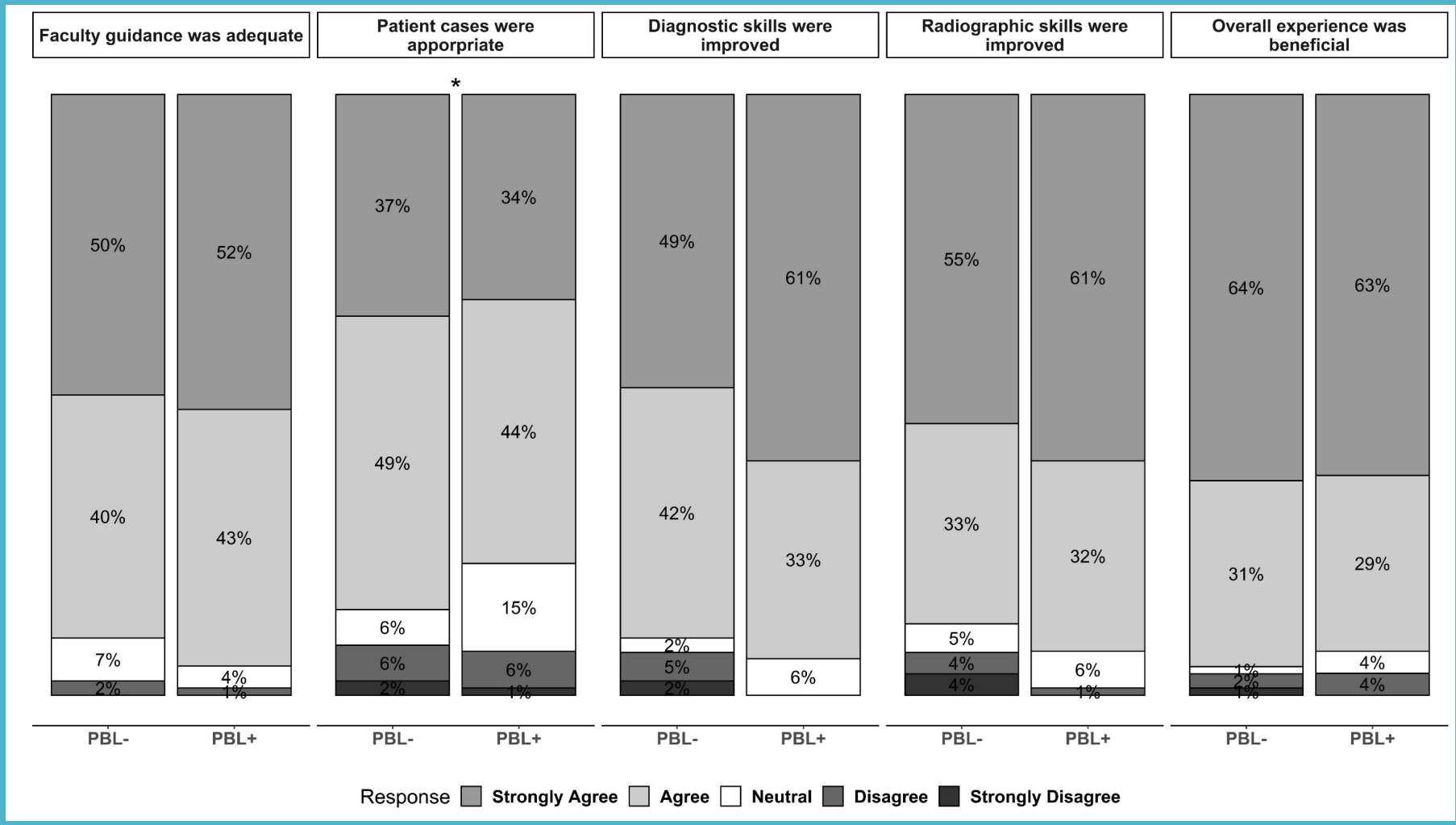
No difference between DDS and Advanced standing student scoring (N=120)

Assessment scores

- TJA: triple jump assessment
- TDI: traumatic dental injuries
- PPT: pediatric pulp therapies
- NBM: non-pharmacologic behavior management

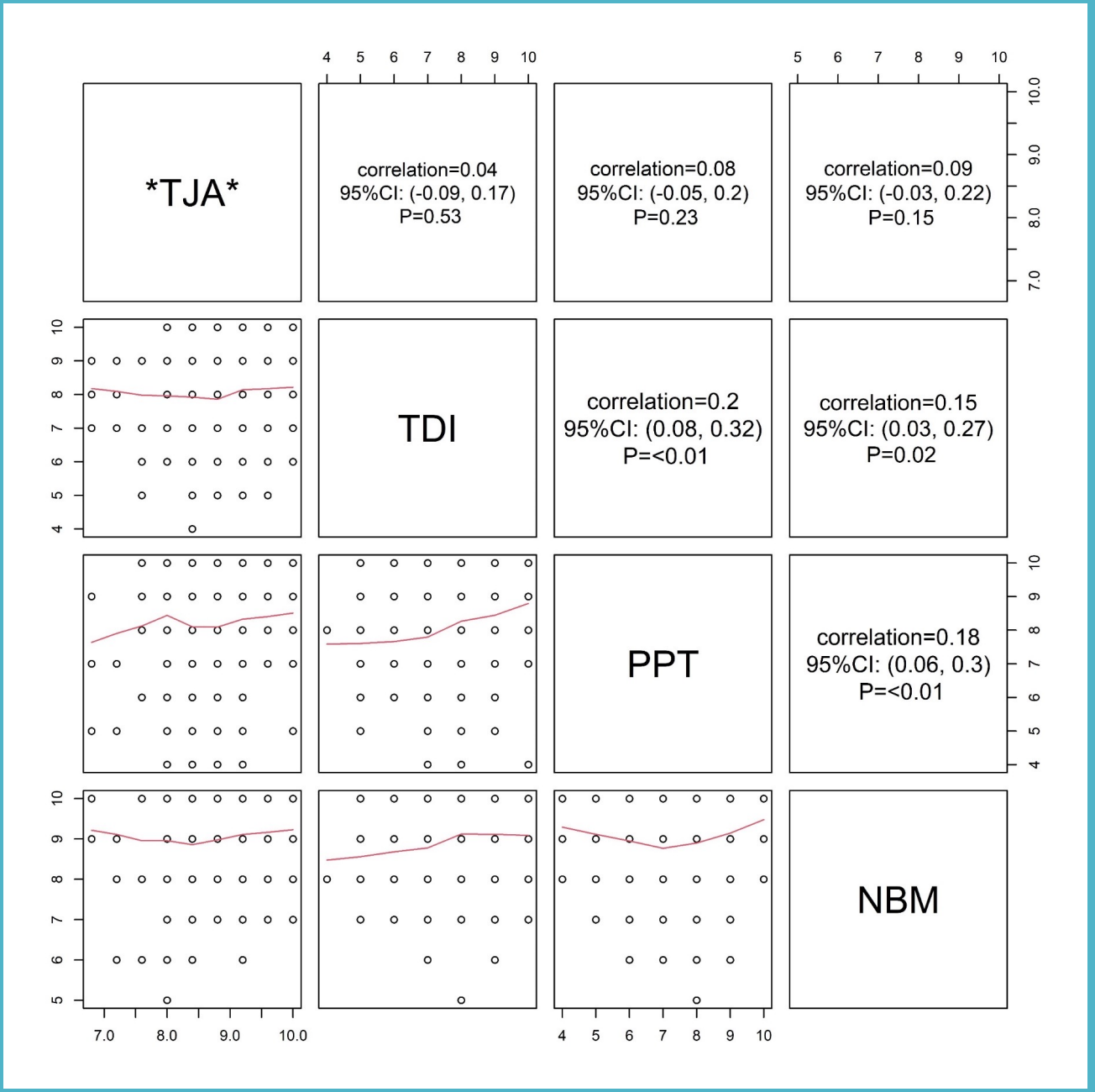


Learning assessment survey

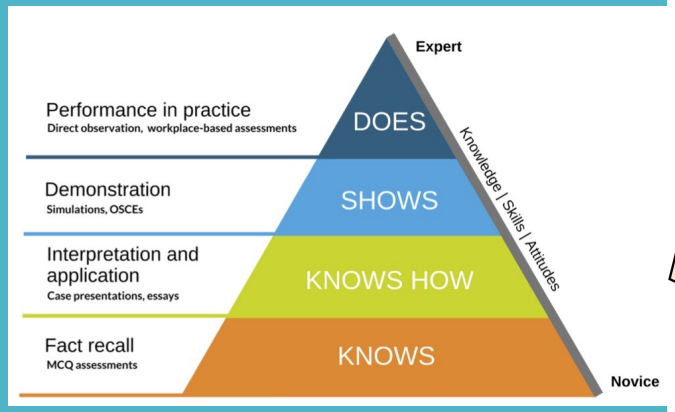


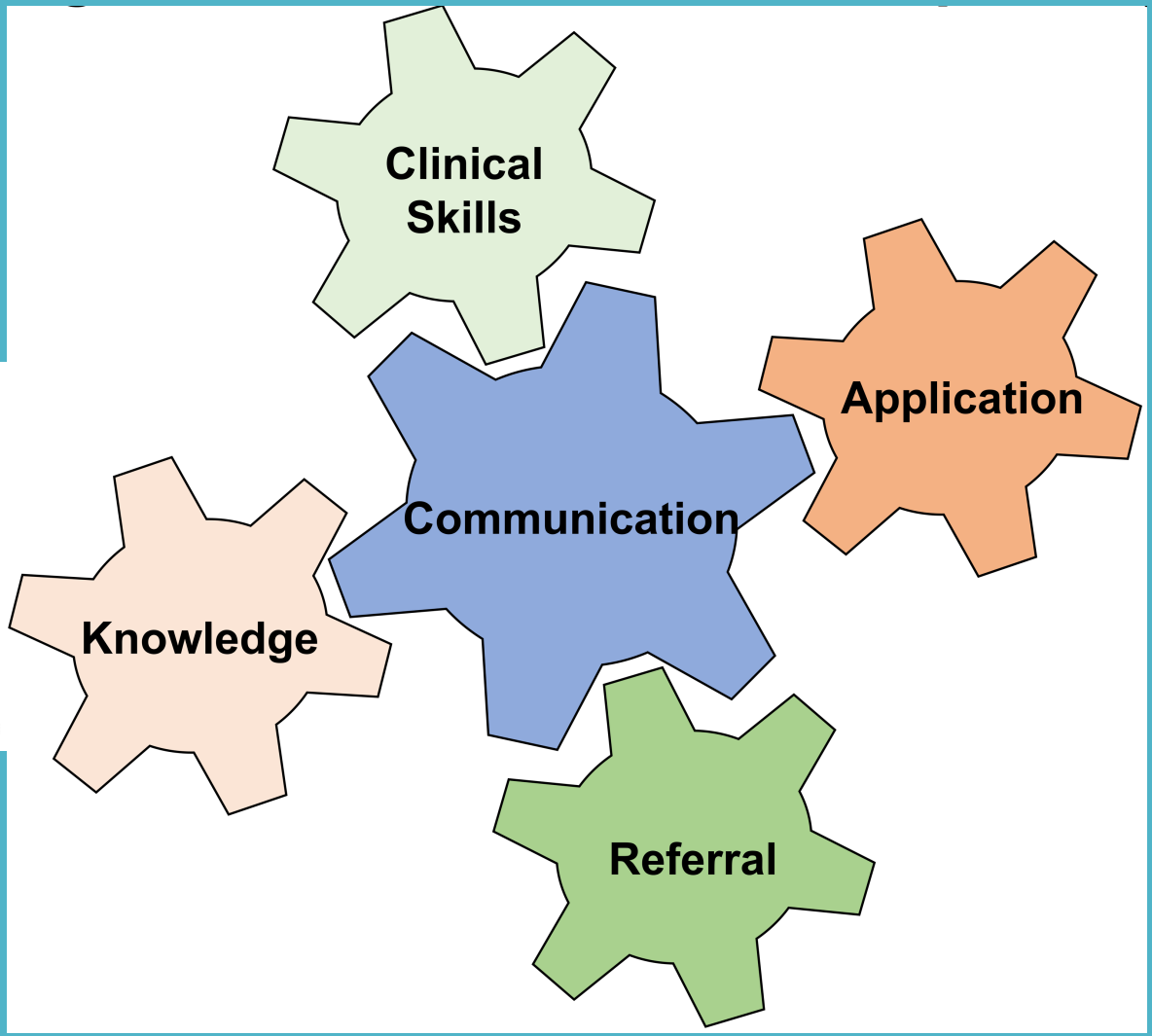
Recall-memory vs. Critical thinking

Correlation between recall memory-based vs. critical thinking assessments



Cogwheel model of competency



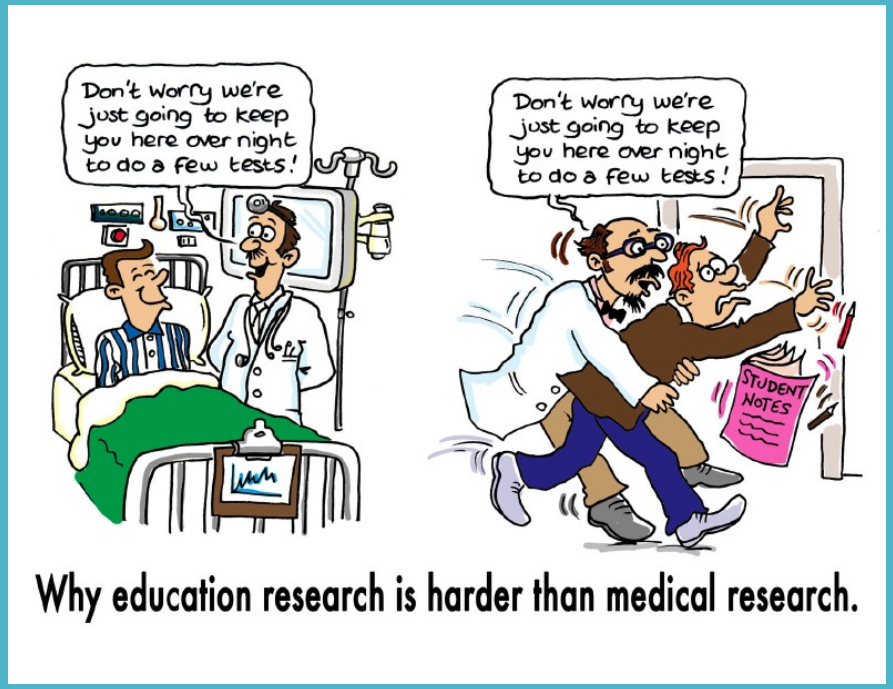


Highlights

- First study in TDI education involving PBL
- TJA has been used for PBL assessment
- Mixed-method evaluation (subjective and objective data)
- Recall vs critical thinking assessments

Limitations

- Solitary study
- Retrospective nature
- Comparing student cohorts
- No repeated measures
- Long-term retention?
- Clinical skills not evaluated
- Dunning–Kruger or Hawthorne effect



Take home message

Problem-based learning needs multi-modal assessment

Thank you! Questions?

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