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Development of entrustable professional activities for dental educators: a modified Delphi study

[BMC Medical Education](#) • Article • Open Access • 2025 • DOI: 10.1186/s12909-025-08119-1 [Abu Bakar, Noraini](#)^{a, b} ; [Roslan, Nurhanis Syazni](#)^c ; [Yusoff, Muhammad Saiful Bahri](#)^d; [Hassan, Mohamed Ibrahim Abu](#)^e

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Abstract

Background: There is a growing need for Entrustable Professional Activities (EPAs) specifically tailored to health professions educators including dental educators, whose responsibilities extend well beyond clinical expertise. Despite the breadth and complexity of these responsibilities, the current literature lacks EPA frameworks that are explicitly designed to reflect the unique and multifaceted scope of practice of dental educators. **Objective:** The objective of this Modified Delphi study was to develop a validated and consensus-based set of EPAs for dental educators. **Methods:** A three-stage consensus-building approach was employed in this study: (1) identification of existing EPAs in the literature through a systematic scoping review; (2) two rounds of a Modified Delphi exercise conducted via online questionnaires; and (3) a final in-person consensus focus group discussion to refine and finalise the list of EPAs. A total of 40 EPAs were systematically identified through a scoping review of the literature. These EPAs were subsequently evaluated by a panel of 10

experts using a three-stage modified Delphi technique. Consensus was quantitatively define as median rating of ≥ 3 on a 4-point Likert scale, with an item-level Content Validity Index (i-CVI) of ≥ 0.8 . Open ended responses were thematically analysed. Results: In the first round, consensus was reached to eliminate 6 EPAs, 7 EPAs further consolidated to 2 EPAs, 12 EPAs were revised and 15 EPAs were accepted without revision. In the second round, a total of 81 EPAs, comprising 29 retained from the first round and 52 newly suggested EPAs, were reviewed. Consensus was reached to exclude 1 EPA. By the end of Round 2, 80 EPAs were brought forward to the third round, which was conducted as in-person focus group meeting. The final round resulted in the elimination of 6 EPAs and the consolidation of 9 EPAs into 3, culminating in the endorsement of 68 EPAs, which were systematically organized into 12 distinct domains. Conclusions: This study successfully developed a validated and consensus-based set of 68 EPAs tailored for dental educators, addressing a critical gap in the current literature. This set provides a foundational tool to guide professional development, performance assessment, and role definition of dental educator. © The Author(s) 2025.

Author keywords

Dental educator; Entrustable professional activities; Modified delphi

Indexed keywords

MeSH

Clinical Competence; Competency-Based Education; Consensus; Delphi Technique; Education, Dental; Faculty, Dental; Focus Groups; Humans; Surveys and Questionnaires

EMTREE medical terms

adult; article; consensus; content validity; Delphi study; exercise; human; Likert scale; medical profession; online questionnaire; professional development; scope of practice; scoping review; clinical competence; competency-based education; Delphi study; dental education; information processing; questionnaire

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