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ORIGINAL ARTICLE

Experts' consensus over key components of online learning environments in medical education: a modified e-Delphi study

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ABSTRACT

Objectives: To achieve expert consensus on the essential components for effective online learning environments in medical education using a modified e-Delphi approach.

Methods: A purposive sampling strategy was used to recruit 18 professionals from seven countries, including medical educationists, instructional designers, and health professions faculty, all with minimum two years of experience in technology-enhanced learning environments. Two Delphi rounds were conducted online, where experts rated nine components and 25 subcomponents using a 4-point Likert scale for appropriateness and applicability. Statistical analysis included descriptive statistics (mean, standard deviation) and Friedman's non-parametric rank correlation test, with ≥75% agreement set as the consensus threshold.

Results: Fifteen out of 18 experts participated (response rate: 83.3%) and evaluated nine components and 24 subcomponents for appropriateness and applicability. Consensus was achieved across all components, with "Institutional Support" (3.6±0.50) and "Digital Capability" (3.6±0.51) receiving 100% agreement, while "Learning Facilitator" had the lowest score (3.2±0.51; 86.7% agreement). Expert feedback led to refinements in definitions and nomenclature, e.g. renaming "Pedagogical Practices" to "Cybergogical Practices" for better conceptual clarity. Friedman test showed no significant differences in rankings ($p > 0.05$), confirming consensus. The finalized framework supports curriculum design, faculty development, and policymaking.

Conclusion: Modified e-Delphi study established a consensus-driven framework for optimizing online learning in medical education. By refining key components-Digital Capability, Cognitive Enhancement, and Cybergogical Practices-it enhances clarity in e-learning terminology and supports curriculum design, faculty development, and policymaking. With strong expert agreement, it ensures adaptability in hybrid education while paving the way for future research and innovation.

Keywords: Online Education (MeSH); Education, Distance (MeSH); Online Learning (MeSH); Medical Education (MeSH); Education, Medical (MeSH); Delphi Technique (MeSH).

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INTRODUCTION

In recent years, online learning within medical education has seen unprecedented growth, propelled by technological advancements and the ubiquity of internet access. According to the World Health Organization (WHO), the demand for e-learning in medical education increased by over 50% during the COVID-19 pandemic, reflecting a shift toward digital learning solutions in health professions education (WHO, 2021). This digital shift has enabled health professionals and medical students to transcend traditional classroom boundaries, embracing flexible and accessible educational opportunities settings.[1] Online learning environments in medical education offer a range of advantages, including flexible scheduling, broad accessibility, and diverse interactive resources. These platforms empower learners to absorb knowledge and develop skills at their own pace, highlighting the educational environment's role in influencing student motivation, psychological well-being, and overall learning capacity. Furthermore, the online learning environment shapes curriculum delivery, social support mechanisms, teaching strategies, and institutional culture and norms, particularly pertinent in online contexts.

Despite their potential, online learning environments in medical education face challenges from a lack of consensus on their key components in terms of curriculum standardization, student engagement and instructional efficacy.[2] For instance, while some institutions emphasize digital literacy as a core competency, others prioritize technological usability, creating inconsistencies in implementation strategies. These discrepancies lead to varying levels of student preparedness, inequitable access to resources, and fragmented learning experiences. Effective curriculum design, instructional strategies, assessment methods and technological

infrastructure necessitate harmonization to ensure a cohesive and productive learning experience. Disparities in stakeholder perspectives, encompassing educators, administrators, and subject matter experts, exacerbate these challenges, leading to potential conflicts over online learning priorities and components.[3,4] Establishing a consensus on the components of online learning environments is imperative to address these issues.

While prior research has explored various dimensions of online learning, there remains a critical gap in establishing a standardized framework that integrates key components essential for effective digital learning in medical education. Existing studies have predominantly focused on individual aspects such as student engagement strategies, technological usability and digital literacy but few have attempted to consolidate these factors into a comprehensive model systematically.

Moreover, despite the growing recognition of the need for institutional support and faculty training in digital learning, there is limited consensus on how these elements should be prioritized and implemented in diverse medical education settings without a structured framework that identifies and ranks these key components.[5] Institutions struggle to design effective online curricula that align with both pedagogical best practices and technological advancement.

To address this gap, this study was planned to establish expert consensus on the key components of online learning environments in medical education through a modified e-Delphi technique. By systematically evaluating and ranking these components, the research provides a structured road map for institutions to enhance their digital learning strategies and adapt to the evolving needs of learners and educators. The findings will contribute to evidence-based policy development in the form of faculty training programs and support the creation of standardized guidelines for digital learning implementation and medical education.

This study is particularly timely and relevant given the increasing reliance on digital education in post-pandemic areas where medical schools worldwide are transitioning towards hybrid and fully online learning models by defining and prioritizing. Essential elements of online learning environments this research seeks to bridge the existing gaps and facilitate a more cohesive student centered and effective approach to digital medical education.

METHODS

Research design: This study was a modified e-Delphi study utilizing the 4-step process presented by Nasa, Jain, and Juneja,[6] i.e. expert panel selection, content identification, data collection via Delphi rounds and determining closing criteria for rounds.

Participants: The panel for this study comprised carefully selected professionals, including medical educationists, medical teachers, educational technologists, and instructional designers.

Selection criteria required: (a) a minimum of two years of experience in technology-enhanced learning in medical education, (b) willingness to participate in multiple Delphi rounds, and (c) proficiency in electronic communication for effective online collaboration.

Eighteen selected professionals meeting the eligibility criteria were invited to participate in the modified e-Delphi study. Although studies fail to reach a consensus about an appropriate number of experts in Delphi rounds, an acceptable size of 10 experts can be appropriate in a Delphi study, depending on the purpose of the research and the resources available.[7] The sample size of 18 was chosen to ensure a balance between diversity of expertise and manageability of the consensus process while considering the experts' dropout rates over a series of rounds that the study may demand.

The recruitment process involved sending email invitations to eligible participants, followed by follow-ups through WhatsApp to clarify queries and encourage participation. This dual approach aimed to enhance response rates and ensure engagement from experts across different geographical regions and professions.

Participants' identities remained anonymous to ensure unbiased judgment and encourage free expression of opinions. Among the 18 invited experts, 15 responded, yielding an 83.3% response rate. Notably, all 15 experts from seven countries (Pakistan, Iran, Malaysia, Kuwait, Egypt, the

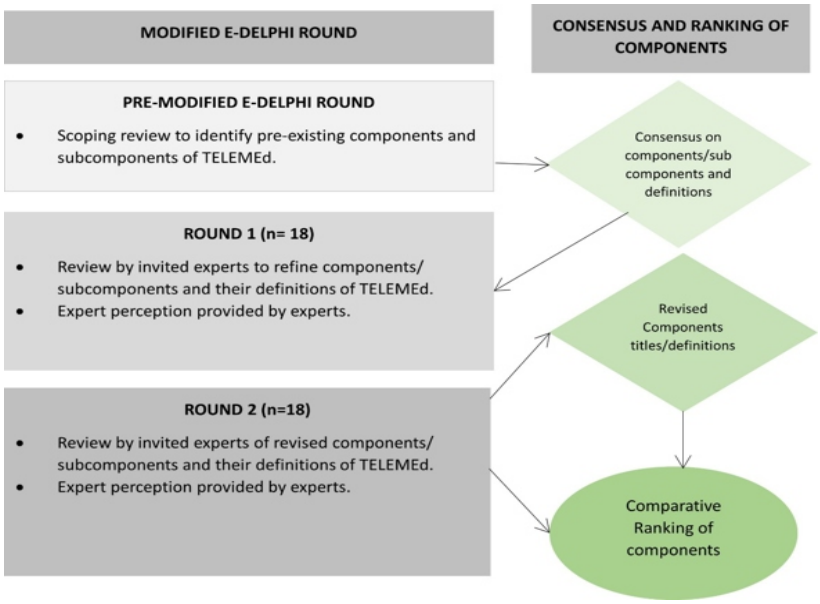

Figure 1: Flowchart showing the process of modified e-Delphi rounds.

United States and Canada) remained engaged throughout the Delphi rounds, achieving a 100% retention rate.

Data collection

Content identification: A scoping review did content identification to identify existing components in online learning environments in medical education. The thematic analysis led to the proposed technology-enhanced learning environment in medical education (TELEMEd) framework encompassing nine broad components, 25 sub-components and 74 elements of an effective online learning environment in medical education.[8]

The components were: (1) Cognitive Enhancement, (2) Content Curation, (3) Learning Facilitation, (4) Pedagogical Practices, (5) Learning Characteristics, (6) Technological Usability, (7) Digital Capability, (8) Social Representations, and (9) Institutional Support

Delphi rounds: This study was planned to have at least two Delphi rounds, with the addition of a third round if needed. During round 1, experts were provided with a list of components and relevant sub-components along with their proposed definitions. These definitions were developed through a rigorous multi-step process, beginning with a comprehensive scoping review of existing literature on technology-enhanced learning environments in medical education.

To ensure clarity and relevance, the identified components and definitions were reviewed by a panel of senior researchers before being presented to the Delphi participants. This preliminary expert review served as an informal pilot test to refine working, improve conceptual accuracy and align definitions with contemporary educational frameworks.

In Round 1, the experts critically appraised the appropriateness and applicability of nine components and 24 subcomponents in current online learning environments. Using a 4-point Likert scale (1=Totally Disagree, 2= Disagree, 3=Agree, 4=Strongly Agree), they provided ratings and open-ended comments to justify their agreement or disagreement via a Google Form https://forms.gle/NVVZTWyJLfvHBizo6.

Experts also provided input on proposed definitions for each component and subcomponent of the online learning environment. Based on their suggestions, the nine components and their definitions were revised to improve accuracy, clarify terminology, and ensure conceptual alignment. These refinements, made before proceeding to Round 2, ensured that the finalized components reflected expert consensus and best practices in online medical education.

After analysis of the rating and feedback provided in round 1, the revised components and subcomponents with definitions were again sent to experts via Google form to obtain agreeability in round 2 of the modified e-Delphi study https://forms.gle/9FYPU3qMasMXMzAY7. Finally, once agreeability was achieved, the experts were also asked to rate the agreed components in the degree of importance of online learning environments in medical education. Figure 1 shows a flowchart showing a process of modified e-Delphi rounds.

Ethical considerations: The study was conducted between March 2022 to August 2022, after obtaining approval from the Human Research Ethics Committee (USM/JEPeM/ 21050350).

Data analysis

Closing criteria: The data analysis for this modified e-Delphi study involved both quantitative and qualitative approaches to ensure a comprehensive evaluation of experts across the rounds. Quantitative analysis was conducted using descriptive analysis, including means and standard deviations, to assess trends in agreement level. A consensus of 75% or more was kept as a cut-off for agreeability among experts as a priority. Any component/ subcomponent with 100 per cent agreeability was marked as a quality indicator.[9] All ratings were measured in means and standard deviation using SPSS 26.0 software. Non-parametric rank correlation test (Freidman's test) was used to detect the presence of rank patterns. A p-value of greater than 05 indicated that consensus has been achieved. If it was less than 0.05, then there is a need for the experts to develop a consensus.[10]

In addition to the statistical approach, qualitative analysis was performed to interpret open-ended responses and expert feedback. A thematic content analysis of open comments was used in refining definitions, improving nomenclature and enhancing conceptual clarity. Expert comments were coded based on their nature, whether indicating agreement, disagreement, or suggested modifications, with a focus on pinpointing key points of contention or areas requiring further clarification.

RESULTS

Of 18 invited experts, 15 responded to give input, making a response rate of 83.33%. Table I shows the demographic data of the expert panelists in Delphi rounds.

Modified e-delphi round 1 results:

Mean ratings for appropriateness and applicability in round 1: Fifteen experts rated the nine components and 24 subcomponents of online learning environments in medical education for their appropriateness and applicability to Practice. Table II shows mean ratings for components and subcomponents of online learning environments for appropriateness and applicability to practice.

The highest-rated components of the online learning environment belonged to "Institutional Support", and "Digital Capability. On the other hand, experts rated "Learning Facilitator" the least followed by "Social Representation"

Next the researcher calculated percentage relevance of components and subcomponents in online learning environments as rated by the expert panel. There was 100% agreement among experts for 8 out of 9 components and subcomponents of 2

Table I: Demographic data of expert panelists in modified e-Delphi rounds

Demographic data		Number of Experts (n=15)	Percentage
Age (years)	25-34	3	20
	35-44	4	26.6
	45-54	4	26.7
	55-60	4	26.7
Gender	Male	9	60
	Female	6	40
Profession	Health Professions Educationist	7	46.6
	Medical Teacher	4	26.7
	Instructional Designer / Educational Technologist	4	26.7
Designation	Professor	3	20
	Associate Professor	4	26.7
	Assistant Professor	2	13.3
	Lecturer	2	13.3
	Director	2	13.3
	Consultant	1	6.7
	Coordinator	1	6.7
Institutional Affiliation	Public	7	46.6
	Private	8	53.4
Workplace Country	Canada	1	6.7
	Eygpt	1	6.7
	Iran	1	6.7
	Malaysia	1	6.7
	Pakistan	9	60
	Saudi Arabia	1	6.7
	Kuwait	1	6.7
	United States of America	1	6.7
Work Experience (years)	0-5	1	6.7
	6-10	4	23.3
	11-15	2	13.3
	16-20	3	20
	>20	5	33.3
Experience In online education (years)	0-5	11	73.3
	6-10	1	6.7
	11-15	1	6.7
	16-20	1	6.7
	>20	1	6.7

out of 9 components. The remaining component, "Content Curation" reached 93.3% agreement along with subcomponents from 6 out of 9 components. Experts had least agreement in the subcomponents of "Content Curation" which was 86.67%.

A Friedman test for components showed that there was no significant difference between the rankings of the different components being evaluated ($p=0.993$) demonstrating consensus on identified components to be relevant to online learning environments in medical education has been achieved. Similarly, the Friedman test for sub-components showed no significant difference between the rankings of the different subcomponents being evaluated depicting consensus ($p = .986$).

Open comment analysis of round 1 comments: Experts gave open comments on the applicability of each component of the online learning environment in medical education where necessary and provided suggestions for improvement.

Cognitive enhancement: One expert (Expert 7) emphasized on the need for improvement in the definition: "Cognitive enhancement is the study of biochemical, physical, and behavioral factors and processes that aim to improve mental functioning. The definition given by you is needs to include such factors for completeness."

Other expert (Expert 15) suggested the inclusion of critical thinking in the definition: "... please include enhancement of critical thinking, which is not mentioned in the given definition."

Content curation: Experts agreed on revision of provided definition of "Content Curation" with suggestions.

Expert 7:" Content curation is the process of searching, reviewing, organizing, and presenting content about a specific subject. (I have tried to keep this definition in line with literature search, review and organization)".

Further, expert suggested revision in definitions of subcomponents-"content organization" and "content selection."

Table II: Mean ratings for components and subcomponents of online learning environments for appropriateness and applicability to practice

Appropriateness and applicability to practice	Mean Rating + SD (Out of 4)	
	Components	Subcomponents
Institutional Support	3.6 + 0.50	3.53 + 0.64
Digital Capability	3.6 + 0.51	3.46 + 0.63
Pedagogical Practices	3.53 + 0.51	3.47 + 0.63
Cognitive Enhancement	3.53 + 0.51	3.40 + 0.63
Learner Characteristics	3.46 + 0.51	3.53 + 0.51
Content Curation	3.46 + 0.63	3.33 + 0.72
Technological Usability	3.46 + 0.51	3.33 + 0.61
Social Representation	3.4 + 0.51	3.4 + 0.63
Learning Facilitator	3.2 + 0.51	3.46 + 0.51

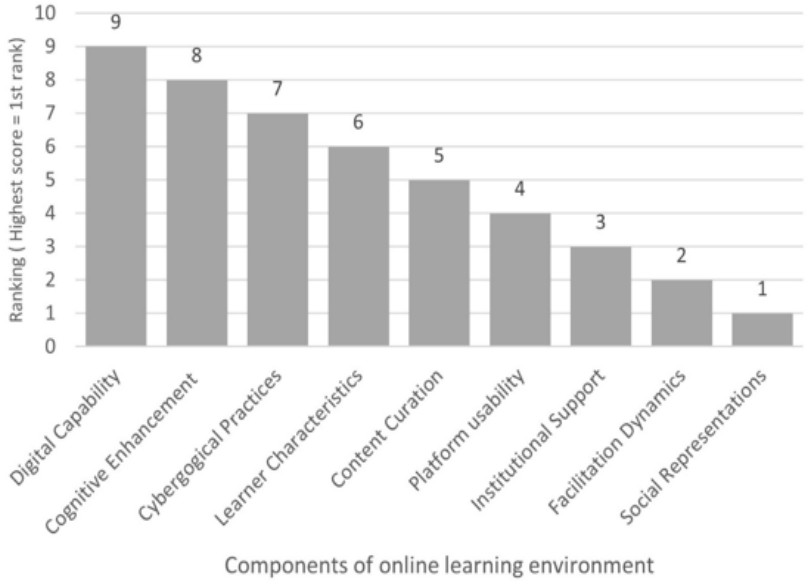

Figure 2: Ranking of components of online learning environments in Health Profession Education.

Pedagogical practices: There was agreement on provided definition of this component. However, experts suggested change in nomenclature for this component.

Expert 8: "Instead of Pedagogical, can we have a different term which is more used in current E-Learning vocabulary".

Digital capability: There were minimal comments related to "Digital Capability." One expert suggests using "Digital World" instead of "Digital Society" in the definition.

Expert 7: " Use term "Digital world" instead of "society".

In the subcomponents, experts suggested improvement in definition of "ICT proficiency".

Technological usability: There were no specific comments for improvement are provided for definition of this component. However, change in nomenclature was suggested.

Expert 8: "…. May be platform utility."

Learning facilitation: Experts offered feedback on the component "Learning Facilitator." Suggestions include considering alternative titles such as "Facilitator's" or "Facilitation Dynamics" to encompass the broader scope of the role.

Expert 6: "Title could have been 'Facilitator's or Facilitation Dynamics' as Learning Facilitator sounds like getting to know about facilitator persona and attributes."

Modified e-delphi round 2 results:

Percentage agreement on revised definitions and nomenclature of selected components and subcomponents in Round 2: Experts rated for agreeability for revised definitions of selected components and subcomponents of online learning environments. There was 100% agreement on revised definitions of Content Curation and Content organization and for revised nomenclature of three components (Pedagogical Practices to be changed to Cybergogical Practices Technological Usability to be changed to Platform Usability Learning Facilitator to be changed to Facilitation Dynamics).

Open comment analysis of round 2 comments: All experts opined that the finalized components and sub-components of online learning environments were adequate.

Ranking of finalized components on online learning environments: Experts ranked each finalized component in terms of its importance in an effective online learning environment (Figure 2). Digital Capability was ranked first in online learning environments followed by Cognitive Enhancement and Cybergogical Practices. Social representations were ranked the lowest by experts in online learning environments, followed by facilitation dynamics and platform usability.

Finalized definitions of components of online learning environments: Table III below shows approved and finalized definitions for agreed components of online learning environments in medical education in this modified e-Delphi study.

DISCUSSION

The modified e-Delphi aimed to

Table III: Finalized definitions of key components of online learning environments

Name	Finalized Definition
Cognitive Enhancement	Cognitive enhancement can be defined as a strategy used by healthy individuals to enhance cognitive abilities such as learning, memory, attention, thinking or vigilance.
Content Curation	Content curation is the process of searching, reviewing, organizing, and presenting content about a specific subject from multiple sources in a context that is relevant to a particular audience.
Learner Characteristics	Learner characteristics is a concept that revolves around how the student learning experience is influenced by personal, social, cognitive, and academic elements.
Cybergogical Practices	Cybergogical practices refer to learning activities in a virtual learning environment for the advancement of cognitive, emotional, and social learning of the students.
Digital Capability	Digital capabilities are referred to as the skills, knowledge and understanding which help someone to live, learn and work in a digital world.
Platform Usability	It refers to the capacity of a platform to provide a condition for its users to perform the tasks safely, effectively, and efficiently while enjoying the experience.
Facilitation Dynamics	Facilitation dynamics refer to the processes of assisting learners reach their goals and encouraging social interaction between themselves and their facilitators.
Social Representations	Social representations are referred to be "a system of values, ideas and practices" concerted through interactions between individuals, groups, institutions, and the media.
Institutional Support	Institutional support refers to the organizational active engagements in the form of policies, regulations, and support systems that motivate stakeholders to use online learning environments effectively.

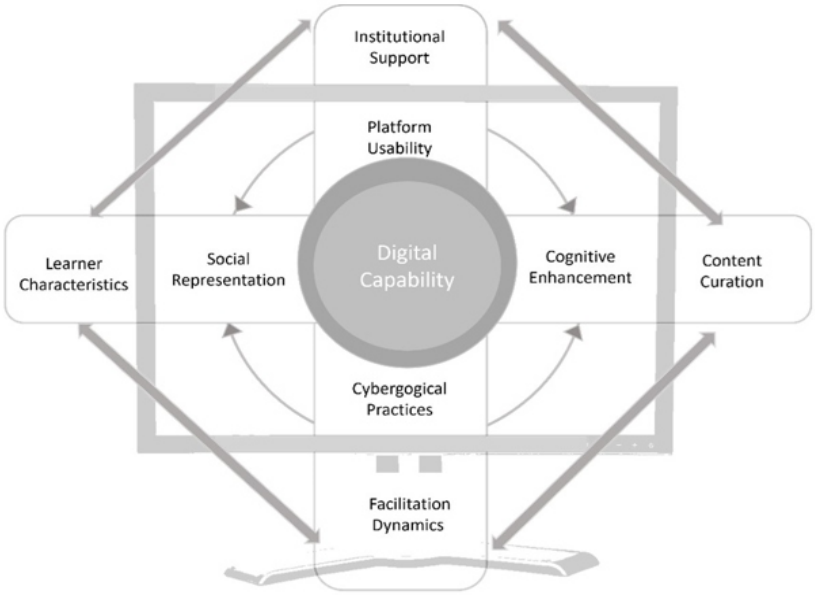

Figure 3: Finalized Key Components of Technology-enhanced learning environment in medical education (TELEMED) Framework.

establish consensus on functional components of online learning environments in undergraduate medical education and rank them according to their relative importance. The study engaged 15 experts from seven different countries (Pakistan, Iran, Malaysia, Kuwait, Egypt, the United States, and Canada) in both rounds, ensuring diverse opinions for this modified e-Delphi study. Moreover, these experts were selected from medical educationists, medical teachers, and instructional designers to obtain opinions from diverse professions involved in online medical education. The retention rate for these experts in the second round was 100% which is comparatively higher than the recommended rate of 80%.[11] Having the Delphi rounds online allowed the experts to review the study questionnaire at their own time and availability. Hunter KE, et al.,[12] also mention the advantage of online Delphi allowing participants to maintain anonymity and avoid any influence from other co-experts. Additionally, the modified Delphi provided the benefit of already identified functional components based on the scoping review and provided by the experts in the initial round of the modified e-Delphi study.[12]

The study developed 100% agreeability mixed method study discussed above, which reduced the time and effort to be for eight out of nine components of the "Technology Enhanced Learning Environment in Medical Education" Framework (TELEMED)[8] except "Content Curation" which had 93.33 % agreeability in comparison to the recommended criterion of 60% responding to any given response category.[11] Goodarzi et al.,[13] mentioned that having 100% agreeability quantifies that parameter as a 'quality indicator'. Hence with these results, it can be safely said that eight components were identified as quality components of the online learning environment in medical education. The researcher revised the definition of the remaining component "Content Curation" based on expert suggestion, after which 100% agreeability was achieved in Round 2, qualifying it to be a quality component after 2nd round. The Figure 3 below shows the nine components of the proposed TELEMED Model which was agreed upon by the Delphi experts for

its components.[8]

Out of the nine components, the components "Institutional Support" and "Digital Capability" were rated highest for appropriateness and applicability in online learning environments in medical education. Poon J, et al., emphasized on the need for efficient institutional resource management for effective online education.[14] The modified e-Delphi study further elaborated the aspects of institutional support in terms of having program standardization, disseminated online policies, rules and regulations, appropriate resource provision and staff training for online use of selected online platforms.

"Digital Capability" was the other component that was rated highest by the experts in Round 1 of this modified e-Delphi study. Much of the precious literature has talked about digital capability in terms of computer competence only. In fact, the OLES[15] and DELES[16], instruments designed to measure online learning environments, had asked participants about computer usage skills only. The Digi-MEE was developed with a postulation in mind whether just answering if a person had computer skills was enough or further focus should be made on the processes of using digital platforms, including demonstrating digital citizenship and digital wellness. Guraya et al,. [17] had similarly emphasized the need to develop medical professionalism in social media site usage for education while Forbes[18] proposed ethical practices by students on online educational platforms.

On the other hand, the component "Learning Facilitator" was rated the lowest in Round 1. This can indirectly point to indirect role of a medical teacher in promoting student-centered in an online environment. In an online environment, a teacher can facilitate learning by encouraging student participation and collaboration, offering timely feedback on assignments and assessments, and adapting teaching methods to cater to different learning styles.[19] Moreover, medical educators can create a supportive and inclusive online community where students feel comfortable asking questions and seeking help when needed. [20] Hence, it can be postulated that though educators are involved in online learning processes, most of the online learning experience is influenced by students' learning attitudes, motivations, and capability to use online learning environments. Similarly, Geng S et al., [21] demonstrated that students play a central role in their own education in the digital realm. Their willingness to actively participate, their ability to manage time effectively, and their motivation to delve into the course content are key factors in determining the success of online learning experiences. [22]

The second objective of the current study was to rank components according to their relative importance. The component Digital Indicator was the topmost-ranked component in online learning environments. The concept of digital capability must be understood fully by the teachers and the students to gain maximum benefit from online learning environments. [23] In the current era, online learning has transitioned from early adoption to mature implantation in many institutions, digital capability needs to be developed and nurtured in current era. [24] However, as the students from the Generation Z and Alpha generations join medical colleges, it is expected that much of these parameters may become 'automatic' in these students and perhaps this may warrant a need to revisit this component again. For example, currently, this digital capability does not encompass the use of artificial intelligence use by students, which has recently risen on the surface. [25]

The component of "Social Representations" was ranked the lowest by the expert despite reaching 100% agreeability in Round 1. This was contrary to previous studies performed by Oh et al.,[26] (2018) and Kreijns et al.,[27] who had emphasized on "social presence" in the form of communicating and interacting with each other and with the teacher. Low rank may be due to the addition of other components like cybergogical practices, and facilitation dynamics which also ensure 'presence' in other components-leaving communication and interaction part in the "Social representations. Overall, the ranking can also be used to develop a tool to measure online learning environments in medical education.It is advised to determine the frequency with which schizotypal personality disorder affects both men and women in our nation.

Limitations of the study and future directions

This modified e-Delphi study included 15 experts from 7 different countries and 3 professional groups belonging to both low and high-resource settings to cater to diverse opinions from these settings. Unlike the Delphi study, the modified Delphi study may lack the dynamics of group discussions, brainstorming, and immediate feedback that can foster consensus building and idea generation. A possible way to counteract this was to allow participants to comment in an open-ended comment column as used this in the study. Although the recruitment strategy maximized participation, a potential limitation lies in the reliance on purposive sampling, which may introduce selection bias by favoring experts already engaged with digital learning environments. Additionally, the use of electronic communication for recruitment may have excluded individuals with limited access to these platforms. Future studies may consider broadening recruitment methods, such as professional network referrals or institutional collaborations, to further diversify the expert panel.

Further studies could include the use of artificial intelligence in digital learning environments and analyze how experts achieve agreeability in its use by institutions, teachers as well and students.

CONCLUSION

This modified e-Delphi study establishes a comprehensive, consensus-driven framework for optimizing online learning environments in medical education. By incorporating expert insights from multiple disciplines, it highlights Digital

Capability, Cognitive Enhancement, and Cybergogical Practices as the most essential components for effective digital learning. The study also refines key terminologies to enhance clarity and alignment with modern e-learning methodologies. With high expert agreement and strong participant retention, the findings provide practical guidance for curriculum design, faculty training, and institutional policymaking. As medical education evolves toward hybrid and online models, this framework supports a structured, evidence-based approach, ensuring adaptability while also paving the way for future research and development in this evolving field.

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AUTHORS' CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under:

NKN: Conception and study design, acquisition of data, drafting the manuscript, approval of the final version to be published

SNHH: Analysis and interpretation of data, drafting the manuscript, critical review, approval of the final version to be published

IMI: Study design, acquisition of data, drafting the manuscript, approval of the final version to be published

ZFN & AHK: Analysis and interpretation of data, drafting the manuscript, approval of the final version to be published

MSBY: Conception and study design, drafting the manuscript, critical review, approval of the final version to be published

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

CONFLICT OF INTEREST

Authors declared no conflict of interest, whether financial or otherwise, that could influence the integrity, objectivity, or validity of their research work.

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DATA SHARING STATEMENT

The datasets generated and/or analyzed during the current study are available in the Google Drive Folder named "Supplementary Files- Achieving Consensus for components of online learning environment in medical education" which can be retrieved at the link below:
https://drive.google.com/drive/folders/1f0m7R0OH97RZicK3O1NpKMZ2DuuYyNfF?usp=drive_link