Original Article

Expert Consensus on Compassionate Care and Empathy Education: An e-Delphi Study for E-Learning Course Development

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Abstract

Introduction: Compassion and empathy are recognized as essential competencies in healthcare, contributing to therapeutic relationships, patient satisfaction, and professional resilience. Despite their importance, structured educational interventions on these topics remain limited. Digital learning offers scalable opportunities to address this gap, yet consensus is lacking on which themes should form the foundation of compassion and empathy education.

Aim: The aim of this study was to establish expert consensus on the essential units to be included in the development of an e-learning course on compassionate care and empathy in healthcare education.

Material and Methods: A two-round e-Delphi study was conducted between February and June 2025 with a panel of five experts from Greece representing nursing, medicine, psychology, and allied fields. In the first round, experts evaluated 15 items across five thematic areas, which were developed through a targeted literature review. In the second round, revised items were re-assessed based on feedback. Consensus was defined as mean and median ≥4.00, interquartile range ≤1.00, and ≥70% agreement.

Results: Consensus was achieved on 13 of 15 proposed items across five thematic sections. Endorsed items included compassionate care in healthcare, comparative analysis of compassion and empathy, biomedical models and empathy in healthcare, reflective practices, simulations and role-playing, application of compassionate care in everyday clinical practice, mindfulness, self-compassion in professional burnout, resilience and self-care, digital tools, narrative medicine, and creative applications such as cinema, storytelling, cartoons, and games. Two items—"Historical Evolution of Compassionate Care in Healthcare" and "Managing Stressful Situations and Emotions and the Role of Communication"—did not meet consensus thresholds and were excluded. Reliability analyses indicated acceptable agreement (ICC = .76) in Round 2.

Conclusions: This Delphi study achieved consensus on the majority of proposed units, validating educational content for an e-learning course on compassionate care and empathy. The results establish a consensus-based framework for developing evidence-informed, clinically relevant digital training and offer guidance for its future implementation, evaluation, and cross-cultural adaptation

Keywords: compassionate care, empathy, e-delphi study, expert consensus, healthcare education, digital learning

Introduction

Compassion and empathy are increasingly recognized as foundational elements of effective healthcare delivery. Patients distinguish compassion from sympathy and empathy, emphasizing that compassion not only encompasses emotional understanding but also adds altruistic motivation and concrete action to alleviate suffering, aligning with the view that compassionate care extends beyond technical competence to genuine responsiveness to patients' distress (Sinclair et al., 2017). Empathy, closely related yet distinct, is the cognitive and affective capacity to perceive and resonate with the feelings and perspectives of others (Hojat, 2016). Systematic reviews highlight the effectiveness of empathy and compassion training, recommending the integration of empathic communication into curricula through longitudinal, experiential, and reflective approaches, while also emphasizing the importance of patient involvement in both education and research (Byrne et al., 2024).

Empirical studies have consistently shown a decline in empathy among medical students and residents, particularly during the clinical training phase, where the pressures of practice and the influence of the hidden curriculum become most evident. This decline reflects a broader imbalance in healthcare education, which often prioritizes biomedical knowledge and procedural skills over psychosocial and relational competencies, raising concerns about the ability of future professionals to maintain compassionate attitudes in demanding environments (Neumann et al., 2011; Hojat, 2016). Healthcare systems worldwide are increasingly challenged by burnout, emotional fatigue, and depersonalization among clinicians—conditions that compassionate care education could help mitigate. By removing barriers to the innate compassion that most healthcare professionals bring to their work, both individually and collectively, we can reduce burnout, improve workforce well-being, and advance the triple aim of enhancing patient experience and health outcomes while lowering costs (Lown, 2015).

Calls for reform in healthcare education emphasize the need for structured curricula that cultivate compassion and empathy alongside technical expertise. Systematic reviews suggest that well-designed interventions can reduce stress and anxiety (Abulfaraj et al., 2024). Yet, there is limited consensus on which thematic areas should form the foundation of such courses.

Compassion and empathy are complex, multidimensional constructs (Kotera et al., 2024; Jami et al., 2024). Designing educational modules requires reconciling diverse perspectives, incorporating theoretical knowledge with practical strategies, and ensuring adaptability across learning environments. Traditional curriculum design methods, which often rely on small expert panels or single-institution perspectives, may not adequately capture the breadth of expertise required to establish broadly acceptable content. Recent methodological discussions further emphasize that Delphi studies should be reported with greater rigor, including clear a priori definitions of consensus and explicit threshold values, following a CONSORT-like framework (Diamond et al., 2014).

In this context, the Delphi method emerges as a particularly suitable approach. Originally developed to forecast future trends, it has evolved into a well-established technique for achieving expert consensus on complex and context-sensitive issues. When applied systematically and rigorously, Delphi can contribute significantly to broadening knowledge in nursing and healthcare education, although key considerations regarding problem identification, researcher expertise, and data presentation must be carefully addressed (Hasson et al., 2000). Its iterative rounds, structured feedback, and anonymity reduce the influence of dominant individuals and enable balanced participation. By systematically refining opinions across successive rounds, Delphi allows for convergence on prioritized themes and the validation of educational content through collective expertise (Keeney et al., 2011).

Several studies have demonstrated the utility of Delphi in curriculum development within healthcare education. For instance, it has been applied to identify empathy educational model (Zhu et al., 2021). Such applications underscore Delphi's capacity to bridge evidence gaps, integrate multidisciplinary

viewpoints, and produce content frameworks that are contextually relevant and widely accepted. However, Delphi remains underutilized in the systematic design of curricula targeting compassion and empathy, particularly in digital learning settings.

The integration of digital platforms in healthcare education offers additional opportunities and challenges. Evidence from systematic reviews indicates that online eLearning is at least equivalent, and in some cases superior, to traditional learning in terms of knowledge and skill acquisition, while maintaining comparable levels of learner satisfaction (George et al., 2024). These findings, combined with the inherent scalability and flexibility of digital environments, support its use for compassion- and empathy-focused education. They also enable the incorporation of innovative pedagogical strategies such as simulations, role-playing, and narrative medicine tools, which have been shown to be effective strategies for fostering empathy in healthcare education (Badawy & Shaban, 2025). Nevertheless, the effectiveness of digital interventions depends on the clarity, coherence, and evidence base of the underlying content. Without structured consensus on what should be taught and how it should be prioritized, digital modules risk being fragmented or misaligned with learner needs.

Given these considerations, the present study employed a Delphi methodology to establish expert consensus on the specific units to be included within thematic areas of a course on compassionate care and empathy, designed for delivery through an online educational platform using digital tools. The objectives were threefold: (1) to identify relevant units based on expert input, (2) to refine and prioritize these units through iterative rounds of feedback, and (3) to finalize a consensus-driven set of units that can form the foundation of a digital training course in compassion and empathy. By integrating the rigor of the Delphi process with the scalability of e-learning, this study contributes to the development of structured, evidence-informed approaches for cultivating compassionate care and empathy among healthcare students.

Materials and Methods

Study Design: This study employed a two-round e-Delphi survey between February 2025 and June 2025 to achieve expert consensus on the development of an e-learning course on compassionate care and empathy education. The Delphi method is a widely applied research tool in the health sciences as it supports decision-making by gathering collective expert perspectives and synthesizing their knowledge to establish consensus on a given issue (Nieuwenhuijze et al., 2014). The Delphi technique represents a qualitative research strategy particularly useful in situations where empirical data are scarce and objective, quantifiable indicators are insufficient to address the topic under investigation (Hasson et al., 2000; Donohoe & Needham, 2009). The Delphi approach consists of administering questionnaires across multiple iterative rounds to a group of experts who remain anonymous. The primary objective is to achieve consensus on key research topics and issues of relevance to the scientific community. In the initial stage, experts are presented with a structured questionnaire and asked to provide their assessment of a series of questions or recommendations. Following the analysis of their input, the survey is revised to incorporate their suggestions and redistributed for further evaluation. This iterative procedure continues until the experts' perspectives gradually converge, leading to a stable and shared consensus (Shang, 2023). Recent evidence suggests that the e-Delphi approach follows procedures similar to those of the conventional Delphi technique. Its key advantage lies in the online format, which enables researchers to recruit experts internationally and allows participants to provide input at their convenience, free from strict time or location restrictions (Bownes et al., 2023). In the present study, the e-Delphi methodology was applied to support efficient data collection and analysis. Experts were periodically reminded to complete their questionnaires in each round, a process that helped secure high participation rates. Their involvement was entirely voluntary, and all responses were kept anonymous to ensure that judgments reflected independent perspectives, free from the influence of other panel members.

Participants: The e-Delphi panel consisted of five experts from Greece, selected to represent a multidisciplinary background relevant to healthcare and education. The panel included two nurses, one physician, one mathematician, and one psychologist. The selection of panel members followed a purposive sampling strategy, consistent with the principles of the Delphi approach, which emphasize that participants are not drawn randomly but are intentionally chosen as "knowledgeable experts" possessing relevant subject-matter expertise (Keeney et al., 2006). All participants held doctoral degrees (PhD). Regarding academic positions, two were associate professors, two were full professors, and one was a researcher. The gender distribution was two males and three females. The mean age of participants was 53.8 years (SD = 12.4). On average, participants reported 25.6 years (SD = 9.5) of professional experience, of which 23.2 years (SD = 11.4) were within their specific fields. The e-Delphi study was coordinated by a male nurse, aged 30, who was a doctoral candidate (PhDc) with seven years of professional experience, all of which were in the relevant field (Table 1).

Procedure: The e-Delphi process consisted of two structured online rounds. In Round 1, experts rated their level of agreement with 15 proposed items, organized into five thematic areas derived from an extensive literature review (pre-stage). The five overarching thematic domains of the e-Delphi study were predetermined by the framework of the project. To further operationalize these domains, a focused literature review was conducted in order to identify relevant concepts, theories, and educational approaches. This review informed the development of three proposed units within each thematic domain, resulting in a total of 15 items (Table 2). These items formed the basis of the structured questionnaire distributed to the expert panel in Round 1 of the e-Delphi process. Participants indicated their level of agreement using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The Likert scale is a widely utilized rating scale for measuring unobservable constructs, such as attitudes, opinions, or perceptions through a structured response format (Joshi et al., 2015). After Round 1, aggregated statistical feedback was shared with panelists, allowing them to reconsider and revise their responses in Round 2. Items that did not meet the consensus criteria in the first round were re-evaluated in Round 2 to reach a final decision. Consensus was defined a priori as meeting all of the following criteria across both rounds: mean (M) $\geq$ 4.00, median (Md) $\geq$ 4.00, interquartile range (IQR) $\leq$ 1.00, and at least 70% of panelists rating the item 4 or 5.

Data Analysis: Responses were recorded and categorized by thematic domain, item, and round. Descriptive statistics included the mean (M), median (Md), interquartile range (IQR), and percentage agreement. Reductions in IQR and stabilization or increases in the median between rounds were interpreted as evidence of strengthened consensus.

Inferential statistics were applied to assess the robustness of agreement. The Wilcoxon signed-rank test was used to examine differences between rounds at a significance level of $\alpha = .05$. Spearman's Rho correlation coefficient was calculated to assess consistency in expert ratings, with values greater than .600 considered statistically significant. The Intraclass Correlation Coefficient (ICC) was used to evaluate internal consistency, with a threshold of .75 indicating acceptable reliability. The results supported the conclusion of the process after Round 2 without the need for additional rounds. To provide a clear overview of the methodological steps undertaken, a flowchart of the e-Delphi process is presented below (Figure 1). The diagram summarizes the key stages of the study, beginning with the preparatory phase (pre-stage), followed by the two iterative e-Delphi rounds, and concluding with the final analysis and consensus confirmation. This visual representation highlights the structured and cyclical nature of the e-Delphi method, where expert feedback is progressively refined until consensus is achieved. All descriptive and inferential statistical analyses (means, medians, interquartile ranges, Wilcoxon signed-rank test, Spearman's Rho, and intraclass correlation coefficient [ICC]) were performed using IBM SPSS Statistics V.30.

Ethical Considerations: All participants provided informed consent electronically prior to participation. Responses were anonymized, and confidentiality was maintained throughout the process. Experts

were informed of their right to withdraw at any stage.

Results

Round 1

In the first round of the e-Delphi analysis, two items within the domain Introduction to Compassionate Care—namely "Compassionate Care in Healthcare" and "Comparative Analysis of Compassionate Care and Empathy"—achieved full consensus (100% agreement). By contrast, the item "Historical Evolution of Compassionate Care in Healthcare" reached only 60% agreement, falling below the threshold.

Within the second domain, Theoretical and Therapeutic Approaches to Compassion and Empathy, all three proposed items showed strong endorsement from the panel, with agreement levels of 80% or higher.

For the third domain, Practicing Compassionate Care in Everyday Clinical Work, consensus was unanimous (100%) for "Application of Compassionate Care in Everyday Clinical Practices" and "The Role of Mindfulness in Clinical Practice." However, the item "Managing Stressful Situations and Emotions and the Role of Communication" again failed to meet the threshold, with only 60% agreement.

In the fourth domain, Training Healthcare Professionals and the Healthcare Team for Self-Care and Resilience Against Compassion Fatigue, consensus was unanimous across all items (100%), highlighting the experts' strong support for the role of self-compassion, resilience, and the integration of digital tools in addressing professional burnout.

Finally, in the fifth domain, Contemporary Creative Applications of Narrative Medicine in Healthcare, all items—including cinema, games, and storytelling—achieved full consensus (100%), underscoring the perceived value of narrative-based and creative approaches.

Reliability analysis indicated that the Intraclass Correlation Coefficient (ICC) for Round 1 was marginally below the acceptable cut-off (ICC = .63), suggesting some variability in expert ratings at this stage. Based on these findings, it was deemed necessary to re-evaluate the two items that did not reach consensus ("Historical Evolution of Compassionate Care in Healthcare" and "Managing Stressful Situations and Emotions and the Role of Communication") in a second Delphi round. Detailed descriptive statistics for all items in Round 1 are presented in Table 3.

Round 2

In the second round of the e-Delphi study, full consensus (100% agreement) was again observed within the first thematic domain for the items "Compassionate Care in Healthcare" and "Comparative Analysis of Compassionate Care and Empathy." In contrast, the item "Historical Evolution of Compassionate Care in Healthcare" remained below the threshold, with only 60% agreement.

Within the second thematic domain, all three items—"Biomedical Models and Empathy in Healthcare," "Reflective Practices and the Role of Compassionate Care in Therapeutic Approaches," and "Simulations and Role-Playing for the Development of Empathy"—exceeded the 70% consensus threshold, each endorsed by 80% of the experts.

For the third domain, "Application of Compassionate Care in Everyday Clinical Practices" reached unanimous agreement (100%), while "The Role of Mindfulness in Clinical Practice" was accepted by 80% of participants. By contrast, "Managing Stressful Situations and Emotions and the Role of Communication" remained at 60%, failing to achieve consensus.

In the fourth domain, all three items—"Techniques and the Importance of Self-Compassion in Professional Burnout," "Developing Resilience and Self-Care in Healthcare Professionals," and "Digital Tools, Narratives, and Their Impact on Healthcare"—were fully endorsed by the panel (100% agreement).

Similarly, in the fifth domain, full consensus was reached for "The Role of Cinema and Narrative Medicine in the Development of Empathy" and "Use of Storytelling in Clinical Practice" (100%), while "Games and Animated Media as Educational Tools" was endorsed at 80%.

Reliability testing indicated that the Intraclass Correlation Coefficient (ICC) improved to .76 in Round 2, reaching marginally acceptable levels and suggesting stronger consistency across expert ratings.

Taken together, these findings show that while the vast majority of items achieved acceptable or full consensus, two items—"Historical Evolution of Compassionate Care in Healthcare" and "Managing Stressful Situations and Emotions and the Role of Communication"—continued to fall below the 70% threshold and were therefore rejected from the final framework. Comprehensive results for Round 2, including descriptive measures and agreement percentages, are also summarized in Table 3.

Overall Consensus

When combining the results of Rounds 1 and 2, consensus was achieved on 13 of the 15 proposed items across the five thematic domains. Two items—"Historical Evolution of Compassionate Care in Healthcare" and "Managing Stressful Situations and Emotions and the Role of Communication"—failed to meet the predefined thresholds and were excluded.

Descriptive statistics showed stable or improved mean and median values between rounds, while reductions in the interquartile range indicated strengthened consensus. The Wilcoxon signed-rank test confirmed statistically significant consistency between rounds for almost all items, with the exception of "Managing Stressful Situations and Emotions and the Role of Communication," which showed a significant increase in agreement in Round 2 ($p < .05$). Spearman's Rho values exceeded .600 across items, suggesting acceptable correlations between rounds. Finally, the Intraclass Correlation Coefficient (ICC) improved from .63 in Round 1 to .76 in Round 2, reflecting acceptable reliability of expert ratings.

Taken together, these findings demonstrate that the majority of items met consensus criteria, validating their inclusion in the final framework, while two items did not achieve sufficient agreement and were therefore excluded. An overview of combined findings across both rounds is provided in Table 3.

Table 1: Participants of the Delphi study

Country (n)	Profession (n)	Education	Academic Position
Greece (5)	Nurse (2) Physician (1) Mathematician (1) Psychologist (1)	PhD (5)	Associate Professor (2) Professor (2) Researcher (1)
Gender (n): Male (2), Female (3) Age: 53,8 ± 12,4 Working experience: 25,6 ± 9.5 Working experience in the specific field: 23,2 ± 11.4			
Delphi study co-ordinator:	Gender: Male, Age: 30, Profession: Nurse, Education: PhD (c), Working experience: 7, Working experience in the specific field: 7		

Table 2. Delphi analysis table according to Round 1 (R_1) and round 2 (R_2) – Percentage of agreement %; Descriptive statistics of mean value (*M*), standard deviation (*SD*), median (*Md*) and interquartile range (*IQR*); Spearman's *Rho* non-parametric correlation coefficient; Wilcoxon signed rank test significance *p*; Consensus decision – Thematic areas – "How much do you agree with the structure and proposed thematic units".

1st thematic area "Introduction to Compassionate Care"	%R_1	%R_2	MR_1 (SD)	MR_2 (SD)	MdR_1	MdR_2	IQRR_1	IQRR_2	*Rho*	*p*	Consensus
Compassionate Care in Healthcare	100.0%	100.0%	4.60 (.55)	5.00 (.00)	5.00	5.00	1.00	.00	1.00	>.*05*	**Consensus**
Historical Evolution of Compassionate Care in Healthcare	60.0%	60.0%	3.60 (1.14)	3.60 (1.00)	4.00	4.00	1.00	1.00	1.00	>.*05*	**No Consensus**
Comparative Analysis of Compassionate Care and Empathy	100.0%	100.0%	4.60 (.55)	5.00 (.00)	5.00	5.00	1.00	.00	1.00	>.*05*	**Consensus**

2nd thematic area "Theoretical and Therapeutic Approaches to Compassion and Empathy"	%R_1	%R_2	MR_1 (SD)	MR_2 (SD)	MdR_1	MdR_2	IQRR_1	IQRR_2	*Rho*	*p*	Consensus
Biomedical Models and Empathy in Healthcare	80.0%	80.0%	4.40 (.89)	4.60 (1.00)	5.00	5.00	1.00	.00	.88	>.*05*	**Consensus**
Reflective Practices and the Role of Compassionate Care in Therapeutic Approaches	80.0%	80.0%	4.00 (.71)	4.00 (1.00)	4.00	4.00	.00	.00	1.00	>.*05*	**Consensus**
Simulations and Role-Playing for the Development of Empathy	80.0%	80.0%	4.20 (.84)	4.60 (1.00)	4.00	5.00	1.00	.00	.80	>.*05*	**Consensus**

3rd thematic area "Practicing Compassionate Care in Everyday Clinical Practice"	%R_1	%R_2	MR_1 (SD)	MR_2 (SD)	MdR_1	MdR_2	IQRR_1	IQRR_2	*Rho*	*p*	Consensus
Application of Compassionate Care in Everyday Clinical Acts	100.0%	100.0%	4.80 (.45)	5.00 (.00)	5.00	5.00	.00	.00	1.00	>.*05*	**Consensus**

The Role of Mindfulness in Clinical Practice	100.0%	100.0%	4.60 (.55)	4.80 (.00)	5.00	5.00	1.00	.00	.61	>.05	**Consensus**
Managing Stressful Situations and Emotions, and the Role of Communication	80.0%	80.0%	3.40 (1.82)	3.80 (2.00)	4.00	5.00	3.00	2.00	.95	**<.05**	**No Consensus**

4th thematic area "Training Healthcare Professionals and the Healthcare Team for Self-Care and Resilience Against Compassion Fatigue"	**%R_1**	**%R_2**	**MR_1 (SD)**	**MR_2 (SD)**	**MdR_1**	**MdR_2**	**IQRR_1**	**IQRR_2**	***Rho***	***p***	**Consensus**
Techniques and the Importance of Self-Compassion in Professional Burnout	100.0%	100.0%	4.60 (.55)	5.00 (.00)	5.00	5.00	1.00	.00	1.00	>.05	**Consensus**
Developing Resilience and Self-Care in Healthcare Professionals	100.0%	100.0%	4.80 (.45)	5.00 (.00)	5.00	5.00	.00	.00	1.00	>.05	**Consensus**
Digital Tools, Narratives, and Their Impact on Healthcare	100.0%	100.0%	4.60 (.55)	5.00 (.00)	5.00	5.00	1.00	.00	1.00	>.05	**Consensus**

5th thematic area "Contemporary Creative Applications of Narrative Medicine in Healthcare (Cinema, Games, and Cartoons) as Educational and Therapeutic Interventions"	**%R_1**	**%R_2**	**MR_1 (SD)**	**MR_2 (SD)**	**MdR_1**	**MdR_2**	**IQRR_1**	**IQRR_2**	***Rho***	***p***	**Consensus**

The Role of Cinema and Narrative Medicine in Developing Empathy	100.0%	100.0%	4.80 (.45)	5.00 (.00)	5.00	5.00	.00	.00	1.00>.05 **Consensus**
Games and Cartoons as Educational Tools	100.0%	100.0%	4.60 (.55)	4.80 (.45)	5.00	5.00	1.00	.00	1.00>.05 **Consensus**
Use of Storytelling in Clinical Practice	100.0%	100.0%	4.60 (.55)	5.00 (.00)	5.00	5.00	1.00	.00	1.00>.05 **Consensus**

Delphi Rounds	**Interclass Correlation Coefficient (ICC)**
Round 1 (R_1)	.63
Round 2 (R_2)	.76

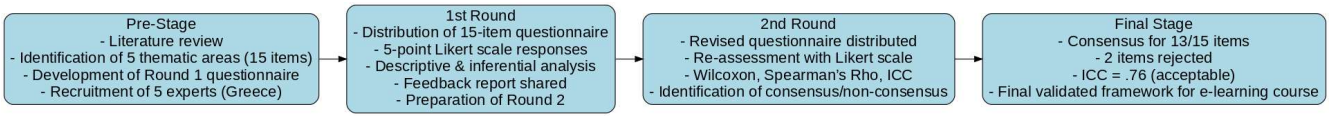

Figure 1. Methodological steps followed for the application of the "e-Delphi" process

Discussion

The present e-Delphi study sought to establish expert consensus on the specific units to be included in an e-learning course on compassionate care and empathy for healthcare students using digital tools. Through two iterative rounds, the analysis demonstrated strong agreement across the majority of items, thereby providing a structured and validated framework for the development of targeted educational content.

The findings revealed high consensus for 13 out of 15 proposed items, spanning five thematic domains. In particular, the themes "Compassionate Care in Healthcare", "Comparative Analysis of Compassionate Care and Empathy", "Application of Compassionate Care in Everyday Clinical Practices", and "Techniques and the Importance of Self-Compassion in Professional Burnout" achieved unanimous endorsement from the panel. These results underscore the centrality of both conceptual and practical approaches to compassion and empathy in the education of healthcare students.

Conversely, two items—"Historical Evolution of Compassionate Care in Healthcare" and "Managing Stressful Situations and Emotions and the Role of Communication"—failed to reach the consensus thresholds, despite showing partial acceptance. This outcome highlights the need to prioritize contemporary and practice-oriented content over historical or peripheral themes when designing curricula in this field.

Statistical analyses further reinforced these findings. The Wilcoxon Signed Rank test confirmed the stability of agreement across rounds for nearly all items, with the exception of "Managing Stressful Situations and Emotions and the Role of Communication", where modest improvements in agreement were noted in Round 2. Spearman's Rho coefficients exceeded .600 across all items, indicating acceptable correlations between phases, while the intraclass correlation coefficient (ICC = .76) demonstrated marginally acceptable reliability of expert ratings in the second round. Taken together, these results attest to the robustness of the consensus process.

The findings are consistent with prior Delphi studies conducted in healthcare education, which similarly emphasize the necessity of embedding empathy and compassion into training frameworks (Zhu et al., 2021). Previous consensus studies in related areas, such as a similar study by Li et al. (2022) also employed the Delphi method to construct a competency-based curriculum system for undergraduate nursing education in China. Delphi methodology is effective in aligning diverse perspectives and producing actionable educational guidelines (Johnson & Chan, 2023). Self-compassion is negatively associated with all dimensions of burnout and functions as a protective factor, which is consistent with the unanimous agreement in our e-Delphi study highlighting the importance of self-compassion, resilience, and narrative-based interventions in mitigating burnout and enhancing healthcare providers' well-being (Hashem & Zeinoun, 2020). Similarly, Five key pedagogical themes have been identified in the literature as effective strategies for fostering empathy in healthcare education: (1) simulation-based learning, (2) reflective practices, (3) narrative and storytelling approaches, (4) service-learning and community engagement, and (5) technology-enhanced interventions such as virtual reality. Across these approaches, most studies consistently reported significant improvements in students' empathy levels, highlighting the value of integrating diverse and innovative teaching methods into nursing education (Badawy & Shaban, 2025).

The limited support for the "historical evolution" item aligns with observations that learners often perceive such content as less directly relevant to clinical practice. Evidence from systematic reviews suggests that online eLearning is at least equivalent, and in some cases superior, to traditional learning in knowledge and skill acquisition, while maintaining learner satisfaction (George et al., 2014). However, its effectiveness is maximized when designed with conciseness and practical applicability in mind, as is often required in digital learning environments. Likewise, the partial acceptance of communication- and stress-management-related content suggests that while these topics are undeniably important, they may be perceived as sufficiently covered in broader psychosocial or professional development curricula.

Implications for Practice and Education

The finalized set of consensus-driven items provides a robust foundation for the design and implementation of an e-learning course on compassionate care and empathy using digital tools. By incorporating reflective practices, simulations, role-playing, narrative medicine, and self-compassion training, the course has the potential to foster both interpersonal competencies and resilience among healthcare professionals.

Importantly, the integration of digital tools and creative applications (e.g., cinema, storytelling, games, and animated media) reflects a growing recognition of the value of innovative pedagogies in engaging learners and enhancing empathy development. These strategies align with global trends in healthcare education, which increasingly emphasize blended and experiential learning modalities.

The rejection of certain items should also be viewed constructively. By excluding content that failed to achieve consensus, the framework ensures that the course remains focused, clinically relevant, and aligned with the collective judgment of experts. This strengthens the potential impact and sustainability of the e-learning course.

Future Directions: Future research should expand on these findings by evaluating the effectiveness of the finalized course through pilot implementation and learner outcomes assessment.

Limitations: The e-Delphi panel was relatively small, which, although acceptable for highly specialized topics, reduces the generalizability of the findings. In addition, all experts were based in Greece, and while they represented diverse professional backgrounds, the lack of international perspectives may limit applicability across different cultural and healthcare contexts.

Conclusion: According to the above results of the e-Delphi analysis, the final round of the study revealed high levels of consensus for the vast majority of the items examined, with significant agreement percentages and estimated descriptive measures (mean,

median, and interquartile range) derived from the expert sample. Combining the results, it was estimated that in the first thematic domain, the items "Compassionate Care in Healthcare" and "Comparative Analysis of Compassionate Care and Empathy" both reached 100% agreement, indicating complete acceptance from all participants and thus the existence of consensus. In contrast, the item "Historical Evolution of Compassionate Care in Healthcare" recorded an agreement rate of 60%, which is below the required threshold for consensus, and was therefore rejected.

In the second thematic domain, the items "Biomedical Models and Empathy in Healthcare", "Reflective Practices and the Role of Compassionate Care in Therapeutic Approaches", and "Simulations and Role-Playing for the Development of Empathy" each achieved 80% agreement, thereby indicating consensus in all three cases, with experts recognizing the importance of these approaches.

Analyzing the third thematic domain, it was found that the item "Application of Compassionate Care in Everyday Clinical Practices" gathered 100% agreement, while the item "The Role of Mindfulness in Clinical Practice" recorded 80%. These percentages demonstrate strong consensus, whereas the item "Managing Stressful Situations and Emotions and the Role of Communication" was endorsed by only 60% of experts and, in combination with the corresponding descriptive measures (mean < 4.00), did not meet the criteria for consensus and was therefore rejected.

With regard to the fourth thematic domain, all items received unanimous acceptance from 100% of participants. Specifically, the items "Techniques and the Importance of Self-Compassion in Professional Burnout", "Developing Resilience and Self-Care in Healthcare Professionals", and "Digital Tools, Narratives, and Their Impact on Healthcare" all achieved complete agreement, clearly highlighting their value to the participants and confirming consensus for each of them.

Finally, in the fifth thematic domain, the items "The Role of Cinema and Narrative Medicine in the Development of Empathy" and "Use of Storytelling in Clinical Practice" were both recorded at 100% acceptance, while the item "Games and Animated Media as Educational Tools" reached 80% agreement, also within acceptable levels. Therefore, each of these items fulfilled the consensus criteria.

In conclusion, the present e-Delphi study significantly contributed to capturing and establishing the collective views of experts regarding the units under investigation. Through successive rounds and systematic data analysis, the domains where strong consensus exists, as well as those with limited agreement, were clearly identified. This process allowed not only the ranking and evaluation of items in a scientifically sound manner but also the exclusion of those that did not meet the consensus criteria, ensuring that the final conclusions are based on solid and commonly accepted positions. The importance of the method lies in its ability to provide a systematic, transparent, and iterative process through which different perspectives and expert experiences converge, leading to valid and reliable results. In this way, the e-Delphi analysis served as a decisive mechanism for strengthening the validity of the study, offering a robust basis for formulating proposals, practical applications, and future directions.

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