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Transformation of the educational policy of a modern physical education and sports university: a reasoned position using the NGT and DELPHI methods

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We use this protocol and it's working

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Keywords: sports, education, DELPHI, sports university, globalization of sport, modern physical education, modern sport, academic training, international training standard, transformation of the educational policy, flexible combination of academic training, analyzing sports result, educational policy, athlete, sport, differentiated educational program, training specialist, implementation of online course, training process, university, sports result, practical class, updated curricula, policy transformation, innovation electronic educational resource, injury prevention, cultural mission value formation, biomechanics, practice scientific foundation, online course, electronic educational resource, practice, culture of health, training

Abstract

Why is the transformation of the educational policy of a modern physical education and sports university really important?

- Changing social demands

Society expects sports universities to train not only coaches but also specialists with knowledge in medicine, psychology, management, and digital technologies.

- Globalization of sport: International training standards require updated curricula to enable graduates to compete globally.

- Integration of science and practice

Scientific foundation: Modern sport increasingly relies on evidence-based medicine, physiology, and biomechanics.

Practical focus: Policy transformation enables the integration of fundamental research with applied problems—from injury prevention to optimization of training processes.

- Digitalization and innovation

Electronic educational resources: Implementation of online courses, simulators, and data analysis systems.

Big Data and sport: Training specialists skilled in working with digital technologies for monitoring and analyzing sports results.

- Individualization of learning

Different trajectories: Athletes, coaches, managers, and researchers require differentiated educational programs.

Balance of theory and practice: policy transformation allows for the flexible combination of academic training with practical classes and internships.

- Social and cultural mission

Value formation: the university becomes a platform for fostering a culture of health, fair competition, and anti-doping awareness.

Social integration: sport is an important tool for inclusion, disease prevention, and public health promotion.

Guidelines

Since the Delphi method (a type of collective brainstorming aimed at reaching consensus through a sequential process of five steps: 1) explanation, 2) idea generation, 3) idea recording, 4) discussion/refinement of ideas, and 5) idea voting) will be used, it will involve experts and does **not involve intervention or treatment**. The method will be explained in detail to the experts.

The study was approved by the management of the Federal State Budget Educational Institution of Higher Education "The Russian University of Sport "GTSOLIFK."

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1 Authors

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2 Methods

The Delphi method was used to reach a consensus of opinion among experts during the study. The CREDES (Conducting and REporting DELphi Studies) standards were used to ensure transparency and compliance with reporting requirements, as well as the ACCORD (ACcurate CONsensus Reporting Document) guidelines, which cover all consensus building methods. The Delphi method is recognized as an effective tool for reaching consensus among experts. Three rounds of the Delphi method were planned, with the possibility of increasing their number if the need for additional iterations arose. In accordance with the ACCORD provisions (paragraph M6), a modified nominal group technique (NGT) was used during the first stage of the Delphi method to generate consensus building elements. NGT serves as a tool for collecting both quantitative and qualitative data during a series of participatory workshops. This method, a variation of collective brainstorming, aims to achieve consensus through a sequential process of five steps: 1) explanation, 2) idea generation, 3) idea recording, 4) discussion/refinement of ideas, and 5) idea voting. NGT is based on the principle of democratic discussion and consideration of each participant's opinion, which facilitates the formation of balanced and informed decisions. Traditionally, these steps are completed during a single face-to-face meeting; however, modified approaches have been described that implement these steps across multiple meetings.

3 First Delphi Round

The NGT modifications used in this study included conducting the NGT over five separate meetings using a hybrid delivery model. Three meetings were devoted to the first four stages of the NGT, which focused on idea generation, idea recording, and group discussion. All three meetings had the same format. All participants who attended the first three meetings were then invited to the final stage of the NGT—voting and ranking ideas. This approach allowed the researchers to consolidate all ideas expressed during the first three meetings and develop voting rules for the final round.

4 Participants

It is well known that suitable participants for the NGT are individuals with relevant experience and knowledge in the issues under consideration. Previous studies have recommended that each NGT group include between five and twelve participants [Riley-Bennett], while other researchers recommend no more than twenty participants per group [Vahedian-Shahroodi]. For this reason, NGT participants were divided into groups

of 12, with an equal proportion of individuals with experience in higher education institutions. Each of the resulting groups focused on developing questions related to either the transformation of educational policy or the transformation of research activities at RUS "GTCOLIFK".

5 **Expert**

All study activities were overseen by a key expert, who served on the study steering committee. This expert played a key role in planning, conducting, and debriefing the collaborative program design meetings. Having an expert on the steering committee ensured that the study procedures were followed as planned from the outset.

Additionally, the expert helped explain the study to participants and played a role in organizing the group's work.

6 **Second Delphi Round**

According to ACCORD (item M1), experts will discuss the resulting list after the first round and jointly develop a protocol for the second and third rounds. The protocol for the second and third rounds will be developed before the start of these rounds and will remain unchanged both during and after these stages, in accordance with PRISMA-P (Preferred Reporting Items for Systematic Review and Meta Analysis Protocols (PRISMA-P)) [Shamseer].

Protocol references

- Vahedian-Shahroodi M, Mansourzadeh A, Shariat Moghani S, Saeidi M. Using the nominal group technique in group decision-making: A review. *Medical Education Bulletin*, 2023, 4(4), 837-845. doi: 10.22034/meb.2024.434656.1090.
- McMillan SS, King M, Tully MP. How to use the nominal group and Delphi techniques. *Int J Clin Pharm*. 2016 Jun;38(3):655-62. doi: 10.1007/s11096-016-0257-x.
- McMillan SS, Kelly F, Sav A, Kendall E, King MA, Whitty JA, Wheeler AJ. Using the nominal group technique: how to analyse across multiple groups. *Health Serv Outcomes Res Method*. 2014;14(3):92-108. doi:10.1007/s10742-014-0121-1.
- Riley-Bennett F, Russell L, Fisher R. An example of the adaptation of the Nominal Group Technique (NGT) to a virtual format (vNGT) within healthcare research. *BMC Med Res Methodol*. 2024 Oct 15;24(1):240. doi: 10.1186/s12874-024-02362-8.
- Potter M, Gordon S, Hamer P. The nominal group technique: a useful consensus methodology in physiotherapy research. *New Zealand J Physiother*. 2004; 32:126-30.
- Nair R, Aggarwal R, Khanna D. Methods of formal consensus in classification/diagnostic criteria and guideline development. *Semin Arthritis Rheum*. 2011 Oct;41(2):95-105. doi: 10.1016/j.semarthrit.2010.12.001.
- MacPhail A. Nominal group technique: a useful method for working with young people. *British Educational Research Journal*. 2001 Apr 1;27(2):161-70. doi:10.1080/01411920120037117.
- Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. *Qual Health Res*. 2005 Nov;15(9):1277-88. doi: 10.1177/1049732305276687.
- Lindgren BM, Lundman B, Graneheim UH. Abstraction and interpretation during the qualitative content analysis process. *Int J Nurs Stud*. 2020 Aug;108:103632. doi: 10.1016/j.ijnurstu.2020.103632.
- Rapport F. Summative analysis: A qualitative method for social science and health research. *International Journal of Qualitative Methods*. 2010 Sep;9(3):270-90. doi:10.1177/160940691000900303.
- Thier M, Mason DP. Breaking ranks? Differentiating nominal group technique scoring approaches for consensus and prioritization. *International Journal of Research & Method in Education*. 2019 Aug 8;42(4):428-41. doi:10.1080/1743727X.2018.1533938.
- Levites Strekalova YA, Nelson JD, Weber HM, Wang X, Midence SM. Application of the Delphi method to the development of common data elements for social drivers of health: A systematic scoping review. *Transl Behav Med*. 2024 Jun 27;14(7):426-433. doi: 10.1093/tbm/ibae020.
- Jünger S, Payne SA, Brine J, Radbruch L, Brearley SG. Guidance on Conducting and REporting DElphi Studies (CREDES) in palliative care: Recommendations based on a methodological systematic review. *Palliat Med*. 2017 Sep;31(8):684-706. doi: 10.1177/0269216317690685.
- Bell DR, Snedden TR, Biese KM, Nelson E, Watson AM, Brooks A, McGuine TA, Brown RL, Kliethermes SA. Consensus Definition of Sport Specialization in Youth Athletes Using a Delphi Approach. *J Athl Train*. 2021 Nov 1;56(11):1239-1251. doi: 10.4085/1062-6050-0725.20.
- Naisola-Ruiter V. The Delphi technique: a tutorial. *Research in Hospitality Management*. 2022 Aug 22;12(1):91-7. doi:10.1080/22243534.2022.2080942.
- Shamseer L, Moher D, Clarke M, Gherzi D, Liberati A, Petticrew M, Shekelle P, Stewart LA. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. *Bmj*. 2015 Jan 2;349. doi:10.1136/bmj.g7647.

