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Analysis of trends in pedagogy and psychology: implementation of globalization solutions

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Abstract: The modern development of psychology and pedagogy, which are considered as closely interconnected sciences, is characterized by the trends affected by intensive globalization processes. Therefore, the purpose of the article is to analyze these trends in order to find the applicable solutions in the field and to implement them as appropriate mechanisms for improvement of scientific and educational activities. To analyze modern pedagogy and psychology and their trends, to study the practices of implementation of global solutions we used qualitative (review of scientific and methodical literature, scientific description, interviewing, holistic analysis, description, synthesis of research results and deduction) and quantitative approaches to research (analysis of statistical data and structural analysis). The research revealed that a great number of articles concern the problems of impact of globalization phenomenon upon the educational process and social sciences paying attention towards challenges in modern pedagogy and psychology. The current literature review is based upon the analysis of 38 recent works published between 2018-2023 in internationally indexed journals. The empirical research was conducted among 36 scientific and educational professionals in Ukrainian educational institutions in the first semester of 2022-2023 academic year. The findings showed that the trends in modern pedagogy and psychology exist in general and specific patterns where general trends are typical for both fields and influence upon their transformations equally but specific trends include patterns that characterize one of these sciences and consequently create peculiar approaches. On the basis of the results of the survey, there are specific groups of solutions that can be implemented in three levels: management, organizational, and individual. The analysis of respondents' answers and the quantitative data proved that implementation of solutions may lead to the enhancement of psychological and pedagogical science and improve the efficiency of educational process within the Ukrainian institutions.

Keywords: globalization, psychology, pedagogy, trends, integration, internationalization, innovation

Introduction

Globalization is one of the main tendencies of the world development since it causes a number of significant economic, political and cultural changes. At the same time, globalization directly influences upon the countries that get globally interconnected and, therefore, the world becomes more integrated via policies and structural programmes (Atta Quainoo et al., 2022).

It extends cultural and information contacts across nations, affects management, industries, trade, labour market, political formations, and other social institutions (Gu, 2021). Under a strong impact of globalization, the studies of social issues advance towards the new level that suggests reinforced integration and internationalization of national systems, development of new knowledge patterns. Weiland et al. (2021) emphasize that today there is a need for positive improvements within education including social and human sciences and the 2030 Agenda (United Nations, 2018) acknowledges education among one of transformative changes through Sustainable Development Goals. In this context globalization, as an essential process, touches upon all spheres of human life. Psychology and pedagogy are not exceptions and they are facing new stage of reformations and adaptation to modern world tendencies. They both are characterized by orientation towards harmonization of objectives, visions, content and procedural instruments according to the international standards.

The sphere that is responsible for human behaviour as psychology is the study of human behaviour and pedagogy deals with the modification of human behaviour are considered as strategic fields of social life because they cause the changes within the community and affect the improvement of human capital. Today, the range of research concerning pedagogy and psychology extends beyond the educational environment and are not limited to the problems of training, upbringing, or mental health support as it traditionally seemed.

Therefore, pedagogy and psychology are closely related and interconnected as some areas of psychological science (pedagogical and age psychology in particular) are linked to teaching methodology and didactics. At the same time, pedagogy widely used the knowledge about psychological principles of learning. Moreover, strengthening of connections between these two sciences create positive conditions for introduction of efficient pedagogical practice, invention of applicable modern teaching technologies and encourages of personality development. These fields both substantiate and forecast the character and possible interaction between generations in order to preserve further enhancement of humanity as well as its culture and, accordingly, they should be studied inseparably.

At the same time globalization and integration are necessary processes as contribute to scientific advancements and human development. Also, they have a positive effect on the system of education and training of future experts specifying modernization of social and human sciences, strengthening education system, and forming favourable conditions for implementation of innovations and further human development.

Research Problem

Atta Quainoo et al. (2022) confidently declare that interrelation between globalization and social and human sciences has become one of the most discussed issues in literature and political agendas. Both psychology and pedagogy have an important place in shaping the community or globalization and global activities have a great impact upon psychological and pedagogical concepts and forms of knowledge management worldwide.

Obviously, psychological and pedagogical sciences overcome significant changes as traditional knowledge paradigm ceases to be principal concept or thought pattern because of its inability to realize scientific tasks in the global dimension. Accordingly, there is an urgent need to analyze the current trends in psychology and pedagogy under impact of globalization in order to build efficient scientific process and to take advantages of their transformations.

Research Focus

Gradual development of human society, orientation towards personality improvement and self-actualization, enhancement of abilities among professionals to acquire new knowledge and making creative or innovative decisions within professional activities mean solution of complex problems of pedagogy and psychology. And today, the importance of their analysis is determined a number of factors related to globalization phenomena like socio-economical changes, security situation, political transformation, conditions of labour market, education reforms, implementation of innovations, organization of management systems (Zajda, 2020). Globalization process is often described as the increasing interconnectedness and interdependence between local, national, and international systems (Lee & Stensaker, 2021) and, therefore, it affects pedagogy and psychology through various channels.

The findings show that trends in modern pedagogy and psychology exist in a complex structure which comprises two groups of patterns: general and specific. General trends are typical for both fields and influence upon their transformations equally. They include: liberalization, integration, terminology unification, digitalization, implementation of applied aspects of scientific knowledge, extensive use of artificial intelligence (AI). Specific trends include patterns that characterize one of these sciences and consequently create peculiar approaches. Modern pedagogical trends include curricular content changes, implementation of cross-curricular approaches, development of new skills among students, including professional competency, harmonization and standardization, use of new teaching technologies and methods, life-long learning and informal education, situational leadership, e-learning, and popularization of global education. At the same time the development of psychology is characterized

by implications for westernizing psychology, development of “global psychology”, emergence of different mental states, integrative psychology. Figure 1 shows the classification of modern trends in pedagogy and psychology under influence of globalization.

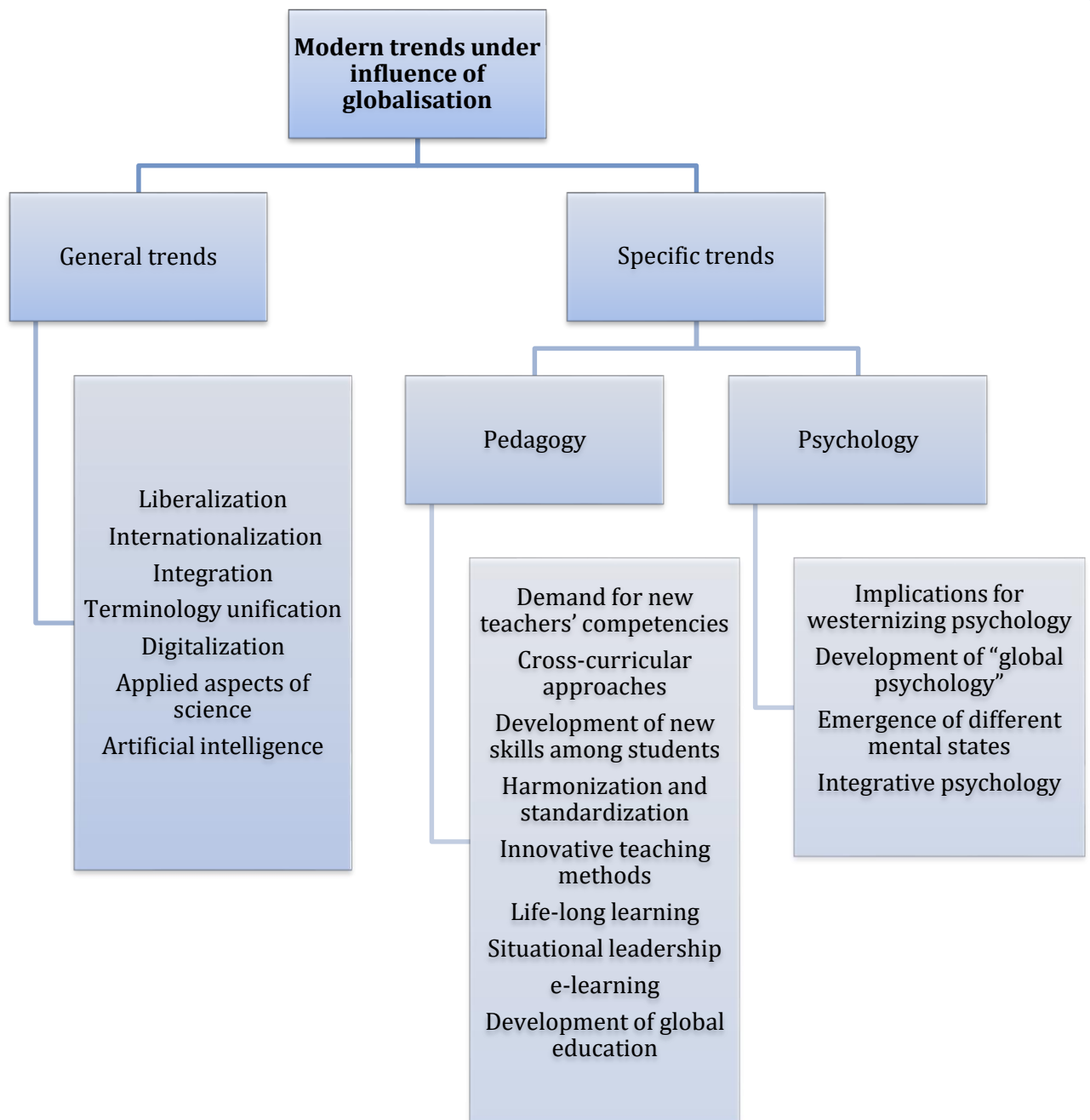
To accelerate the progress in social and human sciences, to make research more efficient and more applicable, to enhance the process of future specialists and to organize the educational process more productively despite internal and external challenges, it is necessary to analyze general and specific trends in pedagogy and psychology in details.

Liberalization concerns the removal of restrictions, in economic context in particular, and forms individualized version of modern educational and social institution. Liberal institutional policy regards the right to choose teaching technologies or methods and the possibility to conduct research on any topic within the frames of ethics of academic community and international practices without outside influence (Brooks & Weber, 2022). Internationalization deals with international cooperation and collaboration to facilitate the new conditions and their consequences considering the individual situation of any given university (Ge, 2022).

In the context of education, the introduction of the Bologna Process of standardization and the development of the European Higher Education Area is the example of internationalization (Tight, 2022). Internationalization concerns internationalization concerns recognizing the variations research approaches, norms, conceptual structures and interaction models. Besides, the role of American Psychological Association (APA), implementation of its research standards and style facilitates internationalization within psychology (Clinton, 2018).

Figure 1

Classification of modern trends in pedagogy and psychology under influence of globalization



Source: author's own development on the basis of literature review

Integration is a common scientific notion and regarding psychological and pedagogical knowledge it means interrelation and convergence of structural components that brings increasing their complexity, generalization and stronger ties (Atta Quainoo et al., 2022, Feng, 2022). We found that integration exists in three tiers (Chesley et al., 2018, Saurykova et al., 2018). The first one represents interdisciplinary integration within the educational process when disciplines related to pedagogy and psychology are taught on the basis of a holistic approach. The second tier means the synthesis of psychology and pedagogy into one science like "Psychological pedagogy", "Organizational psychology", "Basics of psychology and pedagogy", or "Educational psychology". And the third tier refers to relevance of integration and provides the fundamentals of comprehensive psychological and pedagogical knowledge.

Terminology unification is closely related to internationalization and integration trends. It relates to harmonization of national and international terminological systems resulting in creation of common

database (Shah & Campus, 2021, Torres Ricaurte et al., 2018). At the same time, the process of interlanguage unification facilitates multilateral research and international cooperation.

The next trend in modern pedagogy and psychology refers to digitalization that profoundly altered the objectives of professional training and the instruments of their achievement. Digitalization leads to complete transformations of educational process and knowledge acquisition (Douse & Uys, 2018). Digitalization provides an access to information and suggests using information and communication technologies (ICTs) more extensively (Røe et al., 2022). Further it leads to enhancement of efficiency of educational process and orientation towards students' needs (García-Gutiérrez et al., 2021). Digitalization also changes conventional teaching methods and forms into innovative one that require ICTs and modernization of interaction methods with the use of a number digital tools (Pettersson, 2021, Sart et al., 2022). On the one hand, digital transformation simplifies the educational process and advances it but on the other hand, it embraces new challenges for psychological and pedagogical science like building new competencies, development of relevant methodical materials and implementation of digital courses.

Under the impact of globalization processes all the sciences require adoption of applied aspects to find solutions to actual problems like development of professional competency and integrative readiness of future specialists (Predyk et al., 2020). Applied character of psychological and pedagogical knowledge is characterized by a combination of interrelated and interdependent components: conceptual, content, technological, and diagnostic (Segarra & Tillery, 2018) that allow select appropriate approaches, models, and methods of scientific, educational, and production activities.

Some recent findings (Ouyang & Jiao, 2021) show that the use of AI has become a popular trend in psychology and pedagogy. AI, being a set of instruments to collect and adapt data and further generate new solutions or conclusions (Vázquez-Cano, 2021), opens new opportunities, potentials as well as new practices and techniques (Kasepalu et al., 2022). Moreover, AI platforms help develop the algorithms for modeling human activities and solving complicated tasks. Table 1 shows the analysis of specific trends in modern pedagogy and psychology under impact of globalization on the basis of literature review.

Table 1

Analysis of specific trends in modern pedagogy and psychology under impact of globalization

Name of the trends	Its characteristics	Authors
Pedagogy		
Demand for new teachers' competencies	Due to change of educational environment, teachers must possess high level of communicative skills, facilitation abilities, information literacy, digital competency and readiness innovations	Auziņa (2018) Canli and Demirtaş (2018) Khera (2022)
Curricular content changes	Adaptation of educational programmes to students' needs and requirements of labour market	Zajda (2020)
Implementation of cross-curricular approaches	Implementation of ideas of global dimension like globalization, national and cross-cultural identity, democracy, human rights, equality, inclusion, peace, security, and sustainability development	Dichek et al. (2021)
Development of new skills among students, including	Development of professional competency and additional skills like native and foreign language competency, communication and teamwork skills, creativity, critical thinking skills, digital literacy,	Auziņa (2018) Canli and Demirtaş (2018)

professional competency	entrepreneurial skills, cultural and cross-cultural awareness	
Harmonization and standardization	Coordination and harmonization of education policies and education standards, curricular contents, learning outcomes assessment	Zajda (2020) Vera and Zapata-Jaramillo (2022)
Implementation of new teaching methods	Use of innovative teaching methods based on interactivity and collaborative work, student-centered approach, use of ICTs	Khera (2022) Khan and Afaqi (2019)
Development of life-long learning and informal education	Spread due to the necessity to adaptation of education to globalization and informatization processes and requirement to renew knowledge and skills gradually	Ergashev (2020)
Introduction of situational leadership	Formation of situational leadership as an ability to make decisions considering the situation and context surrounding the particular issue	Khan and Afaqi (2019)
Use of e-learning	Delivery of open access to educational, creation of open and participatory pedagogy due to the use of ICTs	Røe et al. (2022) Khera (2022) Ergashev (2020)
Development of global education	Increasing need for intercultural knowledge and communication skills; Training students to international adaptation	Canli and Demirtaş (2018)
Psychology		
Change in identity research	Globalization brings transformation in identity vanishing cultural distinctions and develops bicultural or polycultural personality	Ozer (2019) Grimalda et al. (2018)
Implications for westernizing psychology	Spread of western studies and implementation of monological scientific discourse	Ozer (2019)
Development of “global psychology”	Implementation of universal scientific approaches and methods	Grimalda et al. (2018)
Emergence of different mental states	Mental states caused the process related to globalization like migration, urbanization, or industrialization	Grimalda et al. (2018)
Integrative psychology	Combination of different theoretical approaches to psychological studies such as quantitative and qualitative research methodology, multi-theoretical and mixed-methods approach	Grimalda et al. (2018) Krishnan (2022)

Source: author's own development on the basis of literature review

The comprehensive verification of trends in pedagogy and psychology is essential for implementation of global solutions and enhance the efficiency of professional training of future specialists, improve the quality of research related to psychological and pedagogical sciences, and positively impact upon human community development under new conditions of globalization processes.

Research Aim and Research Questions

The purpose of the article is to analyze trends in modern pedagogy and psychology to find the applicable solutions and to implement them as appropriate mechanisms and methods for improvement of scientific and educational activities.

The article objectives concern the following:

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- to conduct a close-open survey among scientific and educational professionals in Ukrainian educational institutions to analyze the most common trends in modern pedagogy and psychology;
- to classify trends in modern pedagogy and psychology under the influence of globalization phenomena;
- to outline the most applicable solutions within the frames of development of psychological and pedagogical sciences affected by globalization processes.

Research Methodology

General Background

To analyze the trends of modern pedagogy and psychology and to study the practices of implementation of global solutions we used qualitative and quantitative approaches to research. Qualitative methodology include: review of scientific and methodical literature, scientific description, interviewing, holistic analysis, description, synthesis of research results and deduction. Quantitative methods are used to process data collected during the close-open survey and refer to the following: analysis of statistical data and structural analysis.

Sample / Participants / Group

The survey was conducted among 36 scientific and educational professionals in Ukrainian educational institutions teaching the disciplines related to psychological and pedagogical sciences or are involved in research in this field. We organized the questionnaire of scientific and educational professionals online through Google forms. Also, we carried out the face-to-face interviews with some individuals to obtain more accurate data on the problem. The respondents were informed about the survey and agreed to participate voluntarily. Appendix A shows the survey respondents' profiles including field of their professional interest, experience, education, students' level they teach, and type of responsibilities they are involved in the workplace the most (conducting or supervision research, development of documents, lecturing, or practical training).

Instrument and Procedures

The survey was carried out in the first semester of 2022-2023 academic. The scientific and educational professionals were interviewed online in two stages to obtain the data on the problem. The first stage suggests filling in the form that contained closed questions that referred to the spread of trends in modern pedagogy and psychology. The choice of trends was based on the literature review Appendix B shows the form with closed questions used during the survey. The second stage referred to open questionnaire when the scientific and educational professionals had to describe positive and negative features caused by the trends studied. Appendix C shows the form for open survey.

Data Analysis

To analyze the trends in modern pedagogy and psychology as well their positive or negative features we studied the data obtained very carefully. The answers of the respondents were shown in the diagrams of the following sections. Also, they became the basis for the development of recommendations for implementation of actual solutions in the educational process.

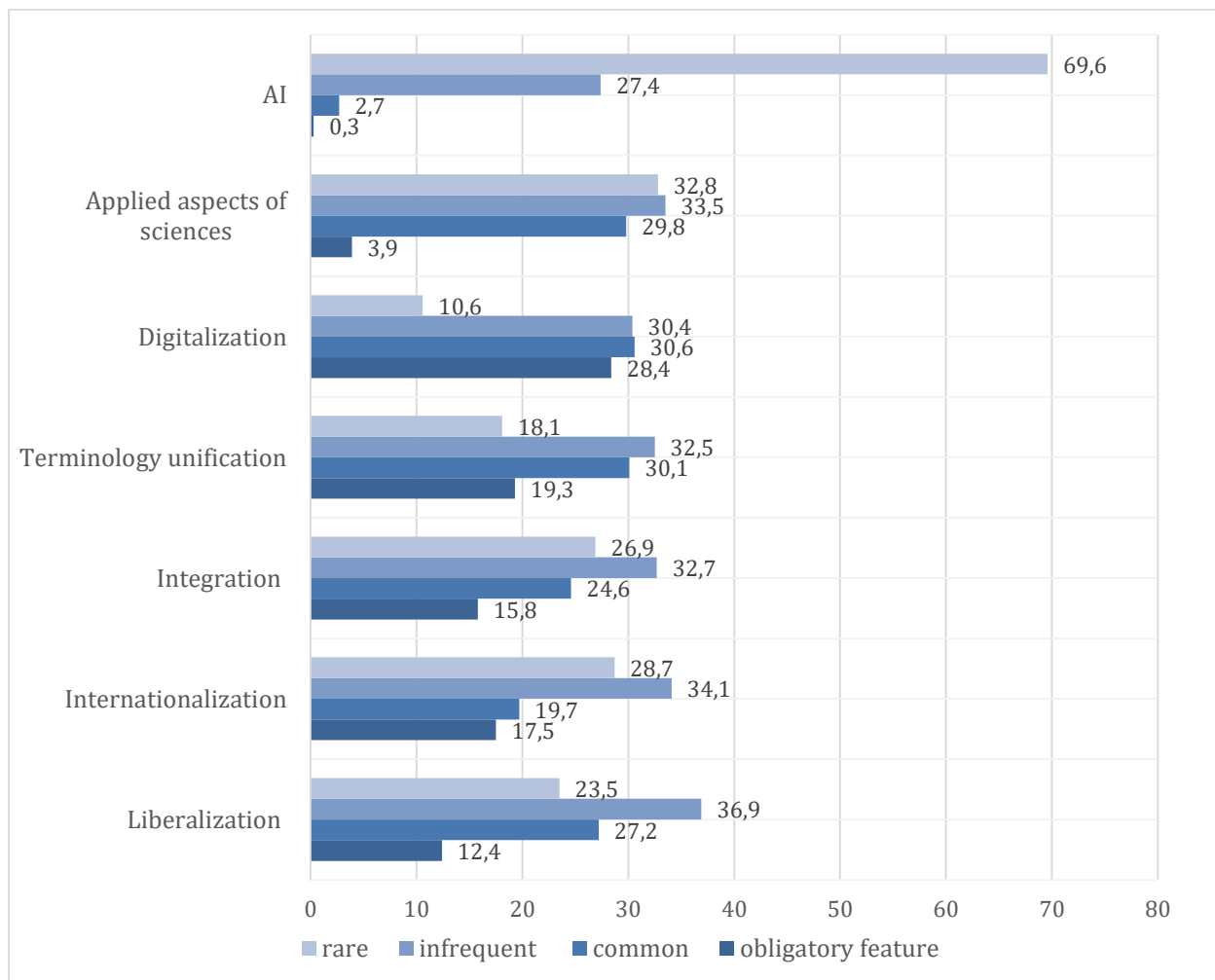
Research Results

The findings showed that the scientific and educational professionals experience many of the trends within the educational activities. Figure 2 demonstrates the results of the closed questionnaire on general trends. It proves that the most common general trends in modern pedagogy and psychology

are the following: digitalization and use of ICTs (28,4 % of teaching professionals consider them an obligatory feature of the education process), terminology unification (19,3 %), internationalization (17,3 %), and integration (15,8 %). At the same time, pedagogues and psychologists admit that liberalization, implementation of applied aspects of sciences, and use of AI are less common for the Ukrainian educational institutions. The results show that 12,4 % of scientific and educational professional consider liberalization an obligatory feature of changes within pedagogy and psychology, implementation of applied aspects of sciences – 3,9 % and use of AI – only 0,3%

Figure 2

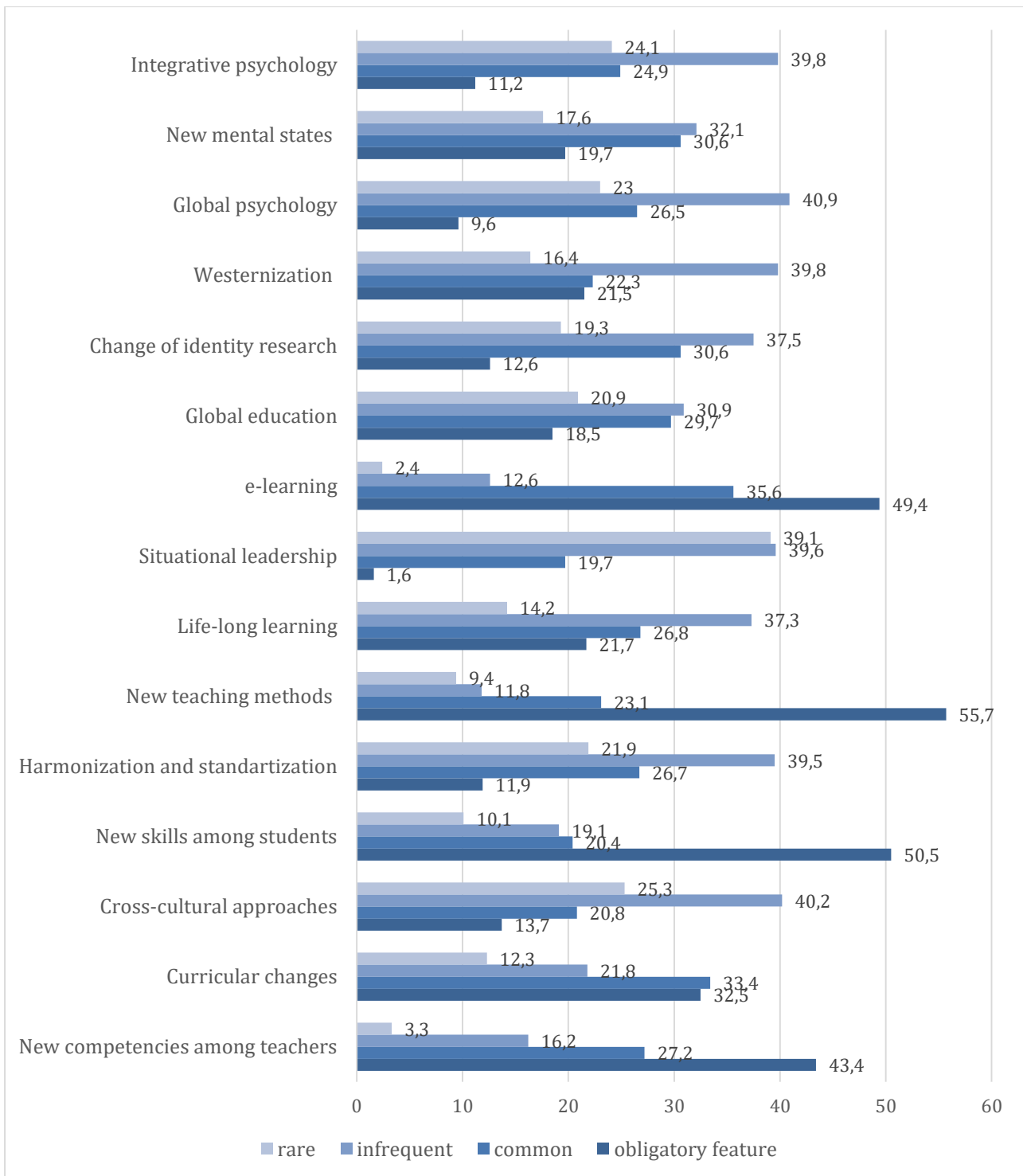
The analysis of general trends in modern pedagogy and psychology (based on the closed questionnaire)



Source: author's own development based on the survey results

Figure 3

The analysis of specific trends in modern pedagogy and psychology (based on the closed questionnaire)



Source: author's own development based on the survey results

Figure 3 shows the findings concerning specific trends in modern pedagogy or psychology. We see that implementation of new teaching methods means obligatory trend for 55,7 % of scientific and educational professionals, development of new skills for successful educational activities – 50,5 %, e-learning – 49,4 %, development of new competencies among teachers – 43,4 %, introduction of curricular changes - 32,5 %, westernization of psychological concepts and research results– 21,5 %, use of life-long learning and information education – 21,7 %, emergence of new mental states caused by changes in community development 19,7 %. Only 12,6 %, consider change of identity research the less common trends, 9,6 % – the spread of global psychology, 11,2 % - application of concepts of integrative psychology within the educational process and scientific investigations, and only 1,6 % of pedagogues

and psychologists are sure that formation of situational leadership skills among future learners is an important trend.

At the same time while analyzing the trends in pedagogy and psychology in details and we found that they bring more advantages than disadvantages according to the scientific and educational professionals. The advantages are related to improvement of educational process, enhancement of participation in international research projects, implementation of unified concepts and terminology that simplifies the studies. Also, advantages concern formation of professional competence or professional expertise among teachers due to spread of innovative technologies and methods. Disadvantages are comparatively rare and they deal with implementation of requirements to acquire new competencies, undergo advanced training, or updating administrative documents and methodical materials. Besides, some trends, like the use of AI, may bring to violations of academic virtues and refusal from written tasks in future. Table 2 shows the analysis of positive and negative features of common trends in pedagogy and psychology.

Table 2

The analysis of features of common trends in pedagogy and psychology (based on the open questionnaire)

Positive features according to scientific and educational professionals	Negative features according to scientific and educational professionals
General trends	
Typical for both pedagogy and psychology	
1) Liberalization	
Possibility to choose own teaching technologies and methods or to suggest own selective or optional course for students based on own expertise; Absence of outside influence while conducting the research project	Removal of economic limitations means lack of fundings for educational institutions at the state level
2) Internationalization	
Extension of international cooperation and collaboration: Creation of the European Higher Education Area; Introduction of internationally accepted research approaches interaction models	Necessity to update administrative documents and courseware; Requirement to possess high level of foreign language competency
3) Integration	
Interrelation between structural components of educational programme; Establishment of interdisciplinary links; Formation of integrated knowledge among students	Necessity to undergo additional training for scientific and educational professionals to teach integrated courses
4) Terminology unification	
Introduction of universal terms; Development of standards of pedagogical and psychological discourse	Requirement to have access to normative documents of international professional organizations like APA, etc.; Necessity to possess high level of foreign language competency
5) Digitalization and use of ICTs	
Extensive use of ICTs; Enhancement of students' motivation to learning; Fast information exchange; Simplification of educational process; Implementation of innovative teaching technologies and updating the educational process according to students' needs	Necessity to form digital literacy and information competency among teachers and students; Requirement to adopt educational programmes and methodical materials considering the use of ICTs
6) Extensive use of applied aspects of science	

Development of professional competence among students; Application of research results into practice of educational process	Requires carrying out time-consuming research; Involvement of many respondents for surveys and necessity to process big volumes of data; Requirement to conduct researches in different educational institutions simultaneously to obtain objective results
7) Introduction of artificial intelligence	
Possibility to collect data rapidly; Coping with difficult tasks related to text generation or modeling of human activities	Violation of academic virtue; Excessive use while performing individual projects; Necessity to change individual activities and exclude most of written tasks
Specific trends	
Typical for pedagogy	
8) Demand for new teachers' competencies	
Formation of teachers' readiness to new conditions of educational environment; Making educational process more efficient	Necessity to undergo regular advanced training
9) Curricular content changes	
Integration of educational programmes with students' needs and labour market requirements; Updating curriculum with internal and external factors of community development and technological advances	Requires work of big groups of professionals to update educational programmes and content for teaching disciplines
10) Implementation of cross-curricular approaches	
Makes international cooperation more effective; Involves participants from other nations to the research projects; Participation in international professional organizations	Requires understanding of foreign legal base; Demands knowledge of foreign language
11) Development of new skills among students, including professional competency	
Adaptation of educational process to students' needs and their future professional activities; Training future professionals to cope with challenges of dynamic community	Requirement to improve educational programmes on regular basis; Necessity to use additional equipment in the educational process, for engineering specialties in particular
12) Harmonization and standardization	
Implementation of universal educational standards	Exclusion of national specification in the educational process
13) Implementation of new teaching methods	
Implementation of innovative teaching methods; Formation of integrated professional competency and soft skills among students	Requires readiness of students to work in innovative manner; Necessity to improve the courseware on a continuing basis
14) Development of life-long learning and informal education	
Formation of professional competency among students; Preparation of learners to act in changing professional environment; Building expertise to use innovative equipment, methods, interaction models, communication strategies	Necessity to renew skills permanently; Formation of readiness to continuous learning among students
15) Introduction of situational leadership	
Formation of ability for innovative thinking and creative decision making	Requires introduction of new topics within the curriculum
16) Use of e-learning	
Creation of open education system; Formation of comfortable educational environment; Simplification of educational process	Inability to enhance communication and interaction skills among students; Demands extra time for development courseware; Requires digital competency among the participants of educational process

17) Development of global education	
Training students to work internationally	Removal of national specification from curriculum
Specific trends	
Typical for psychology	
18) Change in identity research	
Formation of international or global identity that can function under new conditions	An identity is studies only from one perspective
18) Implications for westernizing psychology	
Development of universal approaches in psychological science	Vanishing of cultural peculiarities
19) Development of “global psychology”	
Spread of international standards among psychological professionals	Spread of western studies and orientation towards single conceptualization of psychological research
20) Emergence of different mental states	
Improvement of studies; Development of new ideas and concepts	New mental states are caused by globalization processes
21) Introduction of integrative psychology	
Combination of different approaches and models of research	Research become more complicated and demand extra time for finalization

Source: author's own development based on the survey results

Discussion

The profound literature review and the findings of close-open survey show that modern pedagogy and psychology face a number of trends appeared under the impact of globalization. Mostly, these trends bring improvements within the education system, process of future specialists' training, and in models of conducting psychological or pedagogical research due to its harmonization, internationalization, terminology unification, or digitalization. But also, new patterns cause a number of difficulties for scientific and educational professionals related to the requirements to acquire new competencies, to introduce life-long education, to update methodical materials. To avoid the difficulties detected we consider the task to outline the most applicable solutions within the frames of development of psychological and pedagogical sciences very urgent. The global sustainable development is oriented towards creation of comprehensive, inclusive, and quality education with life-long learning opportunities (Xiang & Yan, 2020). This type of education concerns the all-round development of personality, cultivation of learners' talents, formation their readiness to dynamic professional environment and application of practical innovations (Xiang & Yan, 2020, Akbar et al., 2019). As a result, new trends change pedagogy and psychology influencing their content, approaches, methods, concepts, interaction models, instruments and algorithms of organization of regular activities. According to Zajda (2020), Dichek et al. (2021), and Paudel (2022) the solutions are implemented in three levels: management, organizational, and individual.

Management level refers to changes within the organization of efficient activities of educational institution (Gu, 2021, Zajda, 2020, Lee & Stensaker, 2021, Garg, 2022, Tight, 2022, Ge, 2022, Khan & Afaqi, 2019) and it includes: Provision of quality training of future specialists according to labour market requirements; Development of normative base in accordance with national legislation and international standards; Implementation of State standards of higher education and development of updated educational programmes; Harmonization of the curricular content with requirements of future professional activity and technological development of community; Organization of quality research activities and encourage implementation of scientific results within the educational process; Liberalization of pedagogical and research activities of scientific and educational professionals;

Organization of adequate assessment of learning outcomes on the basis of internationally accepted models and test systems; Extension of international links and initiating of multilateral scientific or scientific and educational projects.

Organizational level deals with improvement of educational process within the institution and implementation of innovative technologies or methods (Feng, 2022, Chesley et al., 2018, Douse & Uys, 2018, Røe et al., 2022, Canli & Demirtaş, 2018, Vera & Zapata-Jaramillo, 2022, Paudel, 2022). The level suggests implementation of the following solutions: Implementation of interactive models of teaching and collaboration methods; Extensive use of gamification and game-based approach; Application of ICTs for new material presentation, practical training, and assessment of learning outcomes; relevant use of e-learning and introduction of flipped classroom technology or blended learning within the educational process; implementation of universal terminology in the classroom; development of skills for independent learning and encouragement to use project-based learning, peer learning, cascade learning; focus on applied aspects of sciences and introduction of practice in curricular; vary teaching technologies and methods in the classroom; search for appropriate research topics to solve the problems of psychological and pedagogical science; understanding of principles of global psychology and global education; improvement of methodical materials on regular basis according to the requirements of labour market or technological advances.

Individual level concerns the personality development of scientific and educational professionals as well as students (Auziņa, 2018, Canli & Demirtaş, 2018, Khera, 2022, Dichek et al., 2021, Grimalda et al., 2018, Akbar et al., 2019). The trends in pedagogy and psychology demand the building of new competencies and skills to be able to work in innovative environment. These qualities are the following: productivity, continuous development of universal qualifications, objectivity, collaboration skills, communication skills, foreign language knowledge, ability to participate actively within the educational process, readiness to independent research work, adoption of cross-cultural values, openness to innovations, ICT competence, digital literacy, information competency, critical thinking, readiness to use universal scientific concepts and interaction models, unified terminology, focus on applied aspects of sciences, implementation of student-centered education, extensive use the possibilities of life-long education and informal education in particular, advanced training on a continuous basis and improvement of teacher qualification, readiness to work in heterogenous teams, ability to develop the adequate knowledge and share them, orientation towards the result, relevant use of technological advances including AI.

Therefore, modern pedagogy and psychology face a number of trends under the impact of globalization processes. The trends are characterized by both positive and negative features. The solutions were outlined to enhance the development of psychological and pedagogical sciences and to increase the efficiency of educational process within the educational process. These solutions must be implemented by the institutions to organize their daily activities more effectively; by scientific and educational professional to plan teaching or research work, to develop methodological materials; or to reach objective findings while researching actual pedagogical or psychological problems.

Conclusions and Implications

The research proves that globalization is one of the main tendencies of the social community development and it causes a number transformations within psychological and pedagogical sciences. The findings show that pedagogy and psychology overcome significant changes as traditional knowledge paradigm ceases to be principal concept. It occurs mostly to the extension of globalization processes being described as the increasing interconnectedness and interdependence between system

components. The study reveals that globalization affects pedagogy and psychology through various channels.

We found that trends in modern pedagogy and psychology exist in a complex structure which comprises two groups of patterns: general and specific. General trends are typical for both fields and influence upon their transformations equally. They include: liberalization, integration, terminology unification, digitalization, implementation of applied aspects of scientific knowledge, extensive use of AI. Specific trends include patterns that characterize one of these sciences and consequently create peculiar approaches. Modern pedagogical trends include curricular content changes, implementation of cross-curricular approaches, development of new skills among students, including professional competency, harmonization and standardization, use of new teaching technologies and methods, life-long learning and informal education, situational leadership, e-learning, and popularization of global education. The development of psychology is characterized by implications for westernizing psychology, development of "global psychology", emergence of different mental states, integrative psychology.

To analyze the trends of modern pedagogy and psychology and to study the practices of implementation of global solutions we conducted the close-open survey among 36 scientific and educational professionals in Ukrainian educational institutions who teach the disciplines related to psychological and pedagogical sciences or are also involved in research in this field.

The findings showed that most common general trends in modern pedagogy and psychology are the following: digitalization and use of ICTs, terminology unification, internationalization, and integration. At the same time, pedagogues and psychologists admit that liberalization, implementation of applied aspects of sciences, and use of AI are less common for the Ukrainian educational institutions. In the context of specific trends extension in modern pedagogy or psychology, they include: implementation of new teaching methods, development of new skills for successful educational activities, e-learning, development of new competencies among teachers, introduction of curricular changes, westernization of psychological concepts and research results, use of life-long learning and information education, emergence of new mental states caused by changes in community development. At the same time the less common specific trends concern: change of identity research the less common trends, spread of global psychology, application of concepts of integrative psychology within the educational process and scientific investigations, and formation of situational leadership skills among future learners.

To respond to new challenges effectively, we outlined three groups of solutions that can be implemented in three levels: management, organizational, and individual. Management level refers to changes within the organization of efficient activities of educational institution. Organizational level deals with improvement of educational process within the institution and implementation of innovative technologies or methods. And individual level concerns the personality development of scientific and educational professionals as well as students. The findings show that implementation of solutions may lead to the enhancement of psychological and pedagogical science and improve the efficiency of educational process within the Ukrainian institutions involved in training of future pedagogues and psychologists.

Suggestions for Future Research

The future research will be focused on the detailed qualitative and quantitative analysis of specific trends in innovating pedagogy and psychology implications as well as on the in-depth understanding of their impact upon pedagogical or psychological education, formation of professional readiness among future professionals in order to act in a digital and globalized environment. Also, it is important

highlighting the changes within the content of pedagogical or psychological courses in different institutions of higher education based on the necessity to create an actual courseware. In addition, the study on the effect of these modifications upon the current state of formation of integrated professional competency of future experts in the fields is advisable. Considering the fact that the process of efficient training of future pedagogues and psychologists organization require a thorough comparison of past and present educational or methodical materials, the main attention will be drawn towards the investigation of educational components of syllabi of professional courses, the explanation of manifestation of trends in modern pedagogy and psychology, and the presentation of changes in indices of professional competency among future pedagogues and psychologists who undergo their professional training using new syllabi. It is expected to conduct an open survey among undergraduate students of pedagogical and psychological faculties in order to emphasize the improvements in the system of their professional training and to underline the gaps that may bring adverse effect in future. It is necessary to mention that the study may contain some limitation due to data collection in different institutions of higher education.

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Appendices

Appendix A

The survey respondents' profiles

Code	Field of professional interests	Experience	Education	Students' level	Types of activities
SP1	Psycholinguistics	5 years	PhD	Bachelor	Research Lecturing
SP2	Organizational psychology	13 years	Master	Bachelor	Practical training Development of documents
SP3	Comparative education	2 years	Master	Bachelor	Practical training
SP4	Theory of pedagogy Education research methodology	27 years	Doctor of Sciences	Master Post-Graduate Advanced training	Research Development of documents Lecturing
SP5	Teaching methodology	19 years	PhD	Advanced training	Development of documents Lecturing Practical training
SP6	Psychology and mental health support	7 years	Master	Bachelor	Practical training
SP7	Pedagogical sciences	9 years	PhD	Bachelor	Practical training
SP8	Professional training	11 years	PhD	Bachelor	Development of documents Practical training
SP9	Foreign language teaching	4 years	Master	Bachelor	Practical training
SP10	Teaching methodology	10 years	PhD	Master	Research Lecturing
SP11	Career management	5 years	Master	Bachelor	Development of documents Practical training
SP12	Pedagogical sciences	16 years	Doctor of Sciences	Master Post-Graduate	Development of documents Research
SP13	Innovative teaching technologies	8 years	PhD	Bachelor	Practical training

SP14	Digitalization	6 years	Master		Bachelor	Development of documents Practical training
SP15	Cloud technologies	2 years	Master		Bachelor	Practical training
SP16	Comparative education	11 years	Master		Bachelor	Development of documents Practical training
SP17	Educational environment	9 years	PhD		Bachelor	Practical training
SP18	Psychological sciences	15 years	PhD		Bachelor	Research Development of documents Lecturing Practical training
SP19	Professional competency	23 years	Doctor Sciences	of	Bachelor Master	Research Development of documents Lecturing
SP20	Soft skills	20 years	PhD		Bachelor Master	Research Development of documents Lecturing
SP21	Gamification ICTs	7 years	PhD		Bachelor	Development of documents Practical training
SP22	Psychological pedagogy	34 years	PhD		Master	Research Practical training
SP23	Age psychology	22 years	Master		Bachelor	Development of documents Practical training
SP24	Mental health	8 years	Master		Bachelor	Practical training
SP25	Social psychology	10 years	PhD		Bachelor Master	Development of documents Lecturing Practical training
SP26	Gender psychology	7 years	Master		Bachelor	Practical training
SP27	History of psychology and pedagogy	24 years	Doctor Sciences	of	Master Post-Graduate	Research Development of documents Lecturing
SP28	Educational management Leadership	12 years	PhD		Master	Research Lecturing Practical training
SP29	Higher education methodology	9 years	PhD		Bachelor	Development of documents Practical training
SP30	Foreign language teaching	6 years	PhD		Bachelor	Research Practical training
SP31	Theory of upbringing Inclusive pedagogy	15 years	PhD		Bachelor	Research Practical training
SP32	Continuous learning	19 years	PhD		Bachelor	Research Development of documents Lecturing

SP33	Pedagogical sciences	25 years	PhD	Master	Practical training Research Lecturing Practical training
SP34	ICTs Distance learning	18 years	Master	Master	Research Development of documents Lecturing Practical training
SP35	Organization of psychological research	16 years	PhD	Bachelor	Research Development of documents Lecturing Practical training
SP36	Applied psychology	11 years	PhD	Bachelor	Research Lecturing Practical training

Source: author's own development on the basis of survey results

Appendix B

The form with closed questions used during the survey

Based on your experience decide how extended are the following trends in modern pedagogy and psychology			
General trends			
Typical for both pedagogy and psychology			
1) Liberalization			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
2) Internationalization			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
3) Integration			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
4) Terminology unification			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
5) Digitalization and use of ICTs			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
6) Extensive use of applied aspects of science			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
7) Introduction of artificial intelligence			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
Specific trends			
Typical for pedagogy			
8) Demand for new teachers' competencies			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	
9) Curricular content changes			

a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
10) Implementation of cross-curricular approaches			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
11) Development of new skills among students, including professional competency			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
12) Harmonization and standardization			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
13) Implementation of new teaching methods			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
14) Development of life-long learning and informal education			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
15) Introduction of situational leadership			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
16) Use of e-learning			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
17) Development of global education			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
Specific trends			
Typical for psychology			
18) Change in identity research			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
19) Implications for westernizing psychology			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
20) Development of "global psychology"			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
21) Emergence of different mental states			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare
22) Introduction of integrative psychology			
a) very popular, obligatory feature	b) rather popular, common	c) neutral, infrequent	d) not popular, rare

Source: author's own development

Appendix C

The form used for open questionnaire

Describe positive or negative features you faced in modern pedagogy and psychology	
General trends	
Typical for both pedagogy and psychology	
1) Liberalization	
a) positive features	b) negative features
2) Internationalization	

a) positive features	b) negative features
3) Integration	
a) positive features	b) negative features
4) Terminology unification	
a) positive features	b) negative features
5) Digitalization and use of ICTs	
a) positive features	b) negative features
6) Extensive use of applied aspects of science	
a) positive features	b) negative features
7) Introduction of artificial intelligence	
a) positive features	b) negative features
Specific trends	
Typical for pedagogy	
8) Demand for new teachers' competencies	
a) positive features	b) negative features
9) Curricular content changes	
a) positive features	b) negative features
10) Implementation of cross-curricular approaches	
a) positive features	b) negative features
11) Development of new skills among students, including professional competency	
a) positive features	b) negative features
12) Harmonization and standardization	
a) positive features	b) negative features
13) Implementation of new teaching methods	
a) positive features	b) negative features
14) Development of life-long learning and informal education	
a) positive features	b) negative features
15) Introduction of situational leadership	
a) positive features	b) negative features
16) Use of e-learning	
a) positive features	b) negative features
17) Development of global education	
a) positive features	b) negative features
Specific trends	
Typical for psychology	
18) Change in identity research	
a) positive features	b) negative features
19) Implications for westernizing psychology	
a) positive features	b) negative features
20) Development of "global psychology"	
a) positive features	b) negative features
21) Emergence of different mental states	
a) positive features	b) negative features
22) Introduction of integrative psychology	
a) positive features	b) negative features

Source: author's own development