Uluslararası İleri Doğa Bilimleri ve Mühendislik Araştırmaları Dergisi
Sayı 8, S. 439-450, 2, 2024

Araştırma Makalesi

IJANSER
https://as-proceeding.com/index.php/ijanser
ISSN: 2980-0811

International Journal of Advanced Natural Sciences and Engineering Researches
Volume 8, pp. 439-450, 2, 2024

Research Article

An analyses of Albanian pre-university education system, and the missing surveys

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(Received: 11 March 2024, Accepted: 12 March 2024)

(4th International Conference on Innovative Academic Studies ICIAS 2024, March 12-13, 2024)

ATIF/REFERENCE: Kosova, R., Bushi, F., Kapçiu, R., Culhaj, F. & Kosova, A. M. (2024). An analyses of Albanian pre-university education system, and the missing surveys. *International Journal of Advanced Natural Sciences and Engineering Researches, 8(2), 439-450.*

Abstract – The education system in Albania has undergone significant transformations in recent decades, reflecting the country's efforts to modernize and align with international standards. Albania's education system has evolved substantially since the end of communist rule in the early 1990s. Reforms have aimed to expand access to education, improve the quality of teaching and learning, and enhance the relevance of the curriculum to meet the needs of a changing society. Reforms have outlined ambitious goals for improving educational attainment, enhancing teacher training, and promoting lifelong learning opportunities. However, despite progress in various areas, there remains a gap in the availability of comprehensive and up-to-date surveys that provide insight into the effectiveness and challenges of the education system. While some data on enrolment rates, literacy levels, and infrastructure are available, there is a lack of systematic surveys that provide detailed insights into the quality of education, learning outcomes, and the socio-economic factors influencing educational attainment. Surveys that capture the perspectives of students, teachers, parents, and other stakeholders are essential for understanding the challenges facing the education system and identifying areas for improvement. One area where surveys are notably missing is assessing the effectiveness of teaching and learning practices. Additionally, surveys that examine the availability and quality of educational resources, such as textbooks, technology, and facilities, are essential for ensuring equitable access to education. This paper aims to present the education system problems in Albania and highlights the absence of critical surveys needed to inform evidence-based policymaking and improve educational outcomes.

Keywords – Survey, Missing, Data, Education, Textbook, Teachers, System.

I. INTRODUCTION

Social surveys serve as invaluable tools in social research, enabling researchers to gather systematic data about various aspects of society. Surveys play a crucial role in understanding social phenomena, identifying trends, and informing policy decisions. The primary purpose of social surveys is to collect data on social attitudes, behaviours, and characteristics of populations. These surveys aim to address research questions related to societal issues, such as health, education, employment, inequality, and public opinion. By

systematically gathering information from individuals or groups, social surveys provide insights into the complexities of social life, helping researchers understand the underlying causes and consequences of various social phenomena [1].

Social surveys can be classified based on various criteria, including the mode of administration, the timing of data collection, the scope of research, and the sampling method used. Regarding the mode of administration, surveys may be classified as face-to-face surveys, telephone surveys, mail surveys, or online surveys. The timing of data collection can classify surveys as cross-sectional, longitudinal, or panel surveys, depending on whether data are collected at a single point in time or over multiple time periods. In terms of scope, surveys may be national, regional, or local, depending on the geographic coverage of the study. Finally, surveys may use probability sampling or non-probability sampling methods to select participants, affecting the generalizability and reliability of the findings [2].

Social surveys offer numerous benefits for researchers, policymakers, and society as a whole. Firstly, surveys provide a systematic and efficient way to collect data from large and diverse populations, allowing researchers to generalize findings and identify trends within the broader society. Surveys also enable researchers to explore relationships between variables, test hypotheses, and generate new knowledge about social phenomena [3].

Additionally, social surveys can inform policy decisions by providing evidence-based insights into societal issues, guiding the development and implementation of interventions to address social problems. Moreover, surveys can give a voice to marginalized or underrepresented groups, allowing their perspectives and experiences to be heard and considered in policymaking processes. Furthermore, social surveys promote transparency and accountability by providing a basis for monitoring and evaluating the effectiveness of social policies and programs [4].

The benefits of social surveys extend beyond academia, impacting policymaking, social change, and societal well-being. As society continues to evolve, social surveys will remain essential for monitoring social trends, identifying emerging issues, and advocating for positive change [5-6].

Surveys provide valuable data about the population's needs, opinions, and experiences. This information helps policymakers develop and implement effective policies in various areas like healthcare, education, infrastructure, and social welfare [7].

Surveys allow individuals to voice their opinions on various issues, giving policymakers and organizations a better understanding of public sentiment. This can be particularly important for identifying areas of concern and ensuring that policies reflect the needs of the people, such as political system, parliamentary life, election reforms, political debates, and many other political and social concerns [8-10]. Regularly conducted surveys can help track progress towards achieving specific goals or objectives. By comparing data over time, policymakers can assess the effectiveness of interventions and identify areas where further action is needed [11].

Surveys can target specific areas of local government performance such as spending, infrastructure, public safety, health services, transport, quality of tourist services in touristic destinations, responsiveness to citizen concerns [12-14].

Surveys help knowing and assessing the academic services on education Institutions, preuniversity education system or university education [15]. They capture the perspectives of students, faculty, staff, and citizens about most important topics that need to be monitored assessed regularly such as spending, board performance, transparency, or topics related to daily life, students' performance and problems, career promotion, courses quality, career services, academic standards, or campus life [16-17].

The effectiveness of surveys depends on various factors like:

- Survey design: A well-designed survey with clear and unbiased questions is crucial for obtaining reliable data.
- Sampling: Selecting a representative sample of the population ensures that the survey results reflect the views of the entire population, not just a specific subgroup.
- Data analysis: Accurately interpreting and analysing the collected data is essential for extracting meaningful insights.

II. MATERIALS AND METHODS

A survey scale represents a set of answer options, either numeric or verbal that cover a range of opinions on a topic. It's always part of a closed-ended question (a question that presents respondents with pre-populated answer choices. A survey scale uses a 5 or 7-point scale, sometimes referred to as a satisfaction scale, that ranges from one extreme attitude to another.

Ordinal scale and interval scale are commonly used types of scale surveys.

Ordinal Scale is a variable measurement scale that presents the answers in an ordered manner. The scale is presented in the natural order, but the intervals between the scale are not fixed. An example of ordinal scale is the following question:

Likert Scale is a very popular and useful type of survey scale [18]. Frequently referred to as the satisfaction scale due to its suitability in measuring satisfaction, these scales ask a question like "how happy were you with our service?" İt offers a scale from "very happy" to "very unhappy" with a scale of three, five or seven points used.

Likert scales are quite popular because they are one of the most reliable ways to measure opinions, perceptions, and behaviors. Likert scale questions are used in many different types of surveys, such customer services, opinions about new regulations, how your employees feel about their work or what customers think about the latest product.

Customer satisfaction: A typical customer satisfaction survey uses an ordinal scale that allows users to rank their opinions. A 5-point Likert scale asks customers to specify their levels of agreement with a statement, from high to low with one neutral option in the middle.

Employee engagement: Likert scale responses can also be a useful tool for checking in with employees. By adapting the same 5-point Likert scale to employee issues, companies can keep tabs on employee engagement and sentiment.

Professional event feedback: Marketers or event professionals can use a 5-point Likert scale to collect valuable feedback on the success of their events. A post-event survey can use a variety of Likert scale responses to evaluate the overall event experience, the possibility of the participant to attend again, or the importance of location.

Surveys in Albania

Many polls were conducted after the 90s in Albania with the aim of getting to know public opinion on very important topics of Albanian society, democracy, political issues, the political system, political parties, political leaders, local government, performance of administration [19]. İnstitutions such as Universities also regularly conduct surveys for topics such as lectures' performance, academic services, students' problems and other issues [20]. Several national or local surveys conducted in Albania are:

1. Natıonal Survey of Albanıa

The survey was conducted on behalf of the International Republican Institute's Center for Insights in Survey Research by IDRA Research & Consulting [21]. Data was collected between November 17 to December 12, 2023, through Personal Interviewing technique, administered through face-to-face interviews in respondents' homes.

The total sample consisted of 1,798 Albanian citizens, aged 18 and older, in several cities, Durres, Tirana, Elbasan, Berat, etc. The sampling frame was based on the Albania Census 2011 data [19]. The response rate was 54 percent. The margin of error for each oversampled county does not exceed ±5.0 points at the 95% confidence level.

Some of the questions were, table 1-3:

Table 1. Our country is heading in the right or wrong direction.

Answers	February 2023	December 2023
In the right direction	46%	58%
In the wrong direction	495	39%
Don't know/Refused	5%	35

Table 2. Evaluate the prevailing mood of our country's population.

Answers	February 2023	December 2023
Belief that the future will definitely be better	16%	21%
Hope that the future will be somewhat better	46%	46%
Not much hope for a better future	17%	18%
Apathy, belief in fate	1%	2%
Insecurity, worry, fear for the future	9%	7%
Total disappointment, disbelief in any improvement	10%	7%
Don't know/Refused	<1%	<1%

Table 3. The first important problem facing your municipality today, and the second.

Topics	February 2023	December 2023
Economy—cost of living, high prices	68%	63%
Economy—unemployment	54%	40%
Corruption	13%	16%
Migration	10%	12%
Infrastructure	13%	11%
Roads	9%	9%
Healthcare	5%	8%
Crime/Public Safety	2%	6%
Water	6%	5%
Electricity	3%	4%
Garbage	1%	3%
Traffic	3%	3%
Other		
No problem		
Don't know/Refused		

2. Albanıan Securıty Barometer (ASB)

The national survey was conducted in May 2022. The survey was focused on five main themes.
1) Demographic Information
2) Security Threats
3) Collaborative Security
4) Gender Security and Equality
5) Corruption and Anticorruption

The questionnaire used for this survey is comprised of 119 multiple choice questions, of which 6 are demographic [22]. A multi-layered random sample of 1110 adults were used for the survey. In the first layer, questionnaires were proportionally distributed among 61 municipalities of Albania based on their adult population. In the second layer, observations were proportionately distributed among urban/suburban and rural areas within each municipality, to mirror the Albanian population distribution. The purpose of this multi-layered sampling approach was to achieve an accurate geographic and demographic representation of Albania's adult population while maintaining a sampling error lower than ± 2.9% for the full sample. The margin of statistical error for the male and female portion of the sample is calculated at ±4.1%, ±3.9% for the urban representation of the sample, and at ±4.4% for the rural and suburban, figure 1,2.

Several questions and topics are:

1. Which is the most serious threat to our country' security?

2. Evaluate the influence of NATO, EU, OSCE on Albania's security?

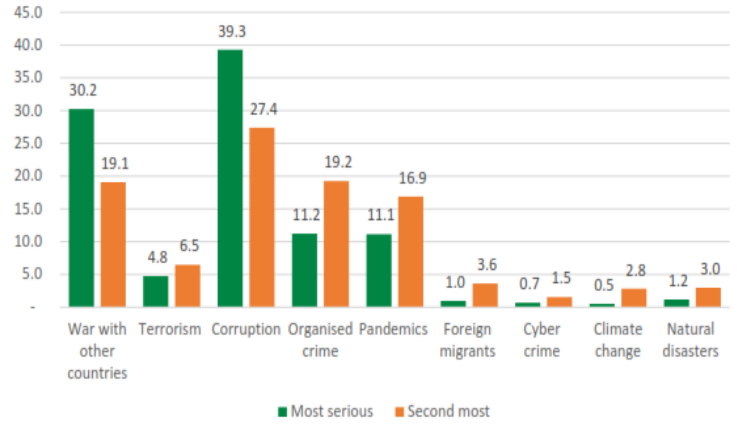

Fig. 1. Most serious security threats to Albania.

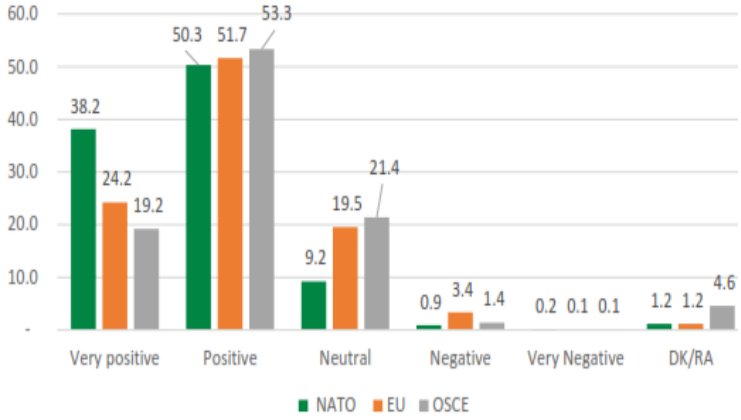

Fig. 2. İnfluence of NATO, EU, OSCE on Albania's security

3. Surveys on Albanian Education System

3.1.The factors that influence the selection of university

A survey about the factors that influence the selection of university was conducted in March 2015 [23]. The selected sample resulted with 1992 students that represented about 10% of the total student population distributed respectively and proportionally according the universities which according to survey research literature is excellent (a sample of 100 observations is considered as poor, 200 observations is a fair sample, 300 is a good sample, 500 is a very good sample and more than 1000 observations is an excellent sample), as a result the findings could be generalized very well for the total population. Through 5-point Likert scale students were asked to evaluate 43 factors in five main categories which are namely:
individual factors - 11 variables, characteristics of study - 11 variables, cost of studying and living - 6 variables,
location and environment - 9 variables, academic staff and support staff - 6 variables.

Students who participated in the survey estimated the most influential information sources in the decision-making process were:

- The parents with an average estimating of 3.5 points (out of 5),
- The students who actually attend the same department or are already graduated, sisters and brothers, peers, and high school teachers.

- Marketing communication used from the universities were classified where the most influential one resulted public relation appearing in the form of news about/from the university estimated with an average of 3.09 points (out of 5),
- Appearance in media of experts and academics, visits in departments/universities came up to be somewhat influential with 3.02 points.
- The websites of the universities/departments, materials provided to the new students, and online ads, introductory and informing videos online.

3.2.Traditional method versus modern method of teaching

The survey was conducted in six school in Elbasan city [24]. The population of the study were the teachers and the pupils of elementary school (Third, fourth, fifth classes) in Elbasan. The selected sample was chosen by chance (teachers from different schools in town) where public and non-public schools were included.

The results showed that about 48 % of the teachers use the motivating teaching method. The authoritarian method is used by 30 % and liberal and democratic methods are less used. To stimulate pupils 'active learning, about 60 % of the surveyed respond that they use pupil – centred teaching.

Teacher – centred teaching is used in about 30 %. Interactive methods and the methods where the pupil feel leader are the most liked ones. To stimulate autonomy and self-decision 40 % of the teachers offer the pupils total freedom in choosing and acting, 35% offer the pupils limited freedom, 20 % of the teachers decide themselves what choices the pupils should make. The traditional teaching methods are widely used in the second phase of the lesson, by about 60 % of teachers; figure 3,4.

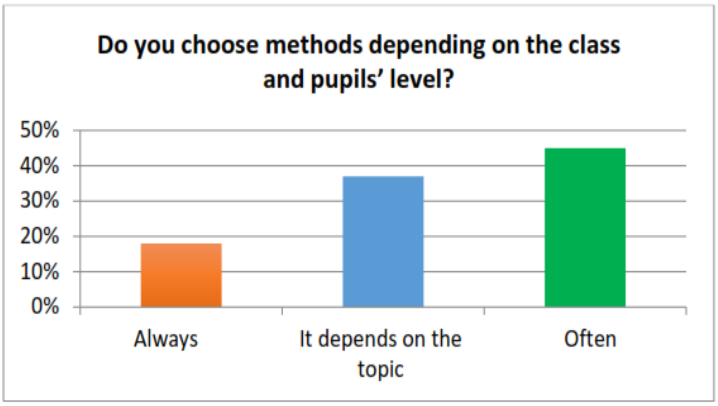

Fig. 3. Methods depended on class level.

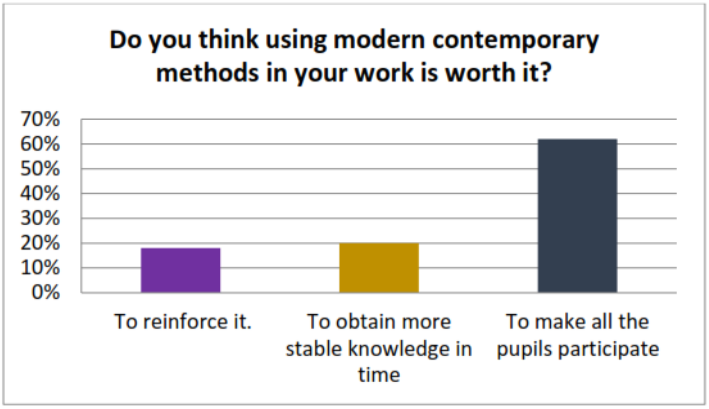

Fig. 4. The purpose of modern teaching methods

Nearly 40 % of the teachers say that new techniques in the class make the pupil more active and practical. While 30 % think that these techniques stimulate imagination, the other part think that these techniques distract pupils, 50 % of the teachers plan the lesson with the new techniques because they

consider them more effective and varied. The other part uses a mixture of these techniques and the traditional ones.

III. RESULTS: THE MISSING SURVEYS

The problems of the education system in Albania have never been fully addressed in any of the numerous discussions, TV debates, scientific articles, conferences, or surveys conducted by non-governmental organizations, parents' associations, or other Institutions.

Considering the social surveys as the best tool of knowing the real opinion of interested people, several topics to suggest may be:

Curriculum Improvement:

Discussions should address how effectively it prepares them for university entrance exams, performance and results. Is the content current and does it equip students with the necessary critical thinking, problem-solving, and technological skills required in the 21st century? Discussions around aligning the curriculum with the evolving demands of the job market and higher education are crucial [25].

Enhancing Student Engagement and Motivation:

Student engagement and motivation are essential for a successful learning experience. Discussions on fostering these can explore a variety of approaches. Does the current teaching pedagogy encourage active learning and participation? Are there opportunities for project-based learning, student-led initiatives, and interdisciplinary exploration? Discussions on integrating technology effectively to enhance the learning experience are also important [26].

Teacher Training and Professional Development:

Teachers are the backbone of any education system. Investing in their continuous development is crucial. Discussions should address the effectiveness of current teacher training programs in equipping educators with the latest pedagogical techniques, subject-matter expertise, and classroom management skills [27].

Assessment and Evaluation:

Discussions should address the appropriateness of current assessment methods. Exploring alternative assessment methods like portfolios, presentations, and self-reflection can also be beneficial. Additionally, discussions on how assessment data is used to inform instructional practices and identify areas for improvement are vital [28].

The Role of Technology:

Technology offers immense potential to transform education. Discussions on how effectively technology is integrated into the classroom should consider questions like: Are teachers adequately trained to utilize technology in a pedagogically sound manner? Is there equitable access to technology and reliable internet connectivity within schools? Exploring strategies for making the most of technology while ensuring it does not replace traditional methods of learning and critical thinking is important [29-30].

Strengthening Career Guidance and Counselling:

Helping students explore career options and make informed decisions about their future is essential. Discussions on the effectiveness of current career guidance and counseling services are needed. Do they provide students with a comprehensive understanding of diverse vocational pathways and opportunities for higher education? Exploring ways to connect students with professionals in different fields can also be beneficial in providing them with a clear understanding of career possibilities [31].

Survey 1. The Education System in Albania

1. In which category do you fall?
Student (Primary/Secondary/University) Teacher/Professor
Parent/Guardian
Other (Please specify)
2. How satisfied are you with the overall quality of education in Albania?
Very satisfied
Somewhat satisfied
Neutral

Somewhat dissatisfied
Very dissatisfied
3. How well do you think the current curriculum prepares students for the future workforce or further education?
Extremely well
Well
Somewhat well
Not very well
Not well at all
4. How effective are the current methods of teaching and learning in Albanian schools?
Highly effective
Effective
Somewhat effective
Not very effective
Not effective at all
5. How accessible are educational resources (textbooks, technology, etc.) for students across Albania?
Very accessible
Somewhat accessible
Neutral
Somewhat inaccessible
Very inaccessible
6. To what extent do you believe Albanian schools promote critical thinking and problem-solving skills?
To a great extent
To a considerable extent
To a moderate extent
To a limited extent
Not at all
7. How effective do you think the current system is in supporting students with disabilities or special needs?
Highly effective
Effective
Somewhat effective
Not very effective
Not effective at all
8. Do you feel there is a sufficient level of parental involvement in the education system?
Yes, to a great extent
Yes, to some extent
No, not really
No, not at all
9. Do you see opportunities for career development and professional training for teachers in Albania?
Many opportunities
Some opportunities
Few opportunities
Very few opportunities
No opportunities

Survey 2. Math Textbooks

1. Which grade level(s) of high school math do you primarily teach?
9th Grade
10th Grade
11th Grade
12th Grade

All Grades (9-12)

2. How satisfied are you with the overall clarity and organization of the current high school math curriculum?

Very satisfied
Somewhat satisfied
Neutral
Somewhat dissatisfied
Very dissatisfied

3. To what extent do you believe the curriculum provides enough time for students to adequately master key math concepts?

To a great extent
To a considerable extent
To a moderate extent
To a limited extent
Not at all

3. How satisfied are you with the difficulty level of the current math textbooks used in high school?

Very satisfied
Somewhat satisfied
Neutral
Somewhat dissatisfied
Very dissatisfied

4. How well do the math textbooks align with the objectives and content outlined in the curriculum?

Very well aligned
Somewhat aligned
Neutral
Somewhat misaligned
Very misaligned

5. How satisfied are you with the variety and quality of practice problems provided in the math textbooks?

Very satisfied
Somewhat satisfied
Neutral
Somewhat dissatisfied
Very dissatisfied

6. Do the math textbooks offer sufficient supplementary materials (e.g., online resources, activities) to enhance learning?

Yes, to a great extent
Yes, to some extent
No, not really
No, not at all

7. In your opinion, how well do the math textbooks cater to the diverse learning needs of students?

Very well
Somewhat well
Neutral
Somewhat poorly
Very poorly

8. Do you believe there is a need for additional professional development opportunities related to using the current math curriculum and textbooks? Yes, to a great extent

Yes, to some extent
Neutral
No, not really
No, not at all

Survey 3: STEM, IT, and programming

1. In which grade level are you currently enrolled? (9th, 10th, 11th, 12th)
2. To what extent do your current math and science courses incorporate IT, algorithms, or programming concepts?

Never
Rarely
Sometimes
Frequently
Always

3. How effective are these courses in helping you understand the connection between IT/programming and math/science?

Not effective at all
Somewhat effective
Neutral
Effective
Highly Effective

4. How well-equipped are your teachers with the knowledge and skills to teach IT/programming concepts relevant to math and science?

Not well-equipped
Somewhat equipped
Neutral
Equipped
Highly equipped

5. Do you believe that learning IT, and programming skills would be beneficial for your understanding of math and science?

Strongly disagree
Disagree
Neutral
Agree
Strongly agree

6. To what extent do your current STEM courses (Science, Technology, Engineering, and Math) incorporate IT, or programming concepts?

Never
Rarely
Sometimes
Frequently
Always

7. How effective are these courses in helping you understand the connections between IT/programming and the different STEM fields?

Not effective at all
Somewhat effective
Neutral
Effective
Highly Effective

8. How well-equipped are your STEM teachers with the knowledge and skills to teach IT/programming concepts relevant to their fields?

Not well-equipped
Somewhat equipped
Neutral
Equipped
Highly equipped

IV. CONCLUSION

Although Albania has implemented several reforms to improve its education system, challenges remain within pre-university education, particularly regarding teacher training, curricula, textbooks, integration of STEM subjects, IT, and the learning of computer programming languages.

Several topics are urgent to deal with:

Developing a more comprehensive STEM curriculum that integrates natural sciences, mathematics, IT, algorithms, and programming concepts.

Providing teachers with training and resources to enhance their knowledge and skills in IT and programming relevant to their STEM fields.

Encouraging project-based learning that utilizes IT tools and programming to solve real-world problems.

Social surveys, targeted at both students and teachers, are useful to gather valuable data on the current state of the education system and needed to be conducted regularly.

The surveys should address the level of teachers' engagement, school curricula, programs, textbooks, school infrastructure.

The surveys should address the level of students' motivation, performance, discipline, concerns, future orientation and perspectives,

By addressing these issues and implementing solutions, Albanian pre-university education can create a more engaging and effective learning environment and have successful students.

ACKNOWLEDGMENT

This publication was made possible with the financial support of the UAMD project "Developing Programs and Applications (Windows and Android) for Mathematics and Informatics problems during the teaching process to enrich and educate a creative programming culture." The content is the responsibility of the author, the opinion expressed in it is not necessarily the opinion of UAMD.

REFERENCES

1. Shrestha, N. (2021). Factor analysis as a tool for survey analysis. *American Journal of Applied Mathematics and Statistics*, *9*(1), 4-11.
2. Siraj-Blatchford, J. (2020). Surveys and questionnaires: An evaluative case study. In *Doing early childhood research* (pp. 223-238). Routledge.
3. Kume, A. (2014). Referendums–analysis and assessment of the Albanian legislation. *Interdisciplinary Journal of Research and Development*, *1*(1).
4. Kume, A. (2022). Analysis of the integrity index for parliamentary elections in the Albanian developing representative democracy. *Journal of Liberty and International Affairs*, *8*(2), 75-86.
5. Pacukaj, S., Brajshori, B., & Deda, E. (2021). Gender Equality, a Priority for the Social, Economic, Political and Educational Development of a Country: The Case of Albania. *Journal of Educational and Social Research*, *11*(5), 253.
6. Haska, E., & Kume, A. (2021). Investigation of Students' Attitudes Towards Entrepreneurship, Career Path Abroad and Their Life Satisfaction.
7. KAYA, M., & Saleem, A. M. (2023). Predictive Analysis in E-commerce: Utilizing Data Mining Techniques to Forecast Customer Purchasing Behavior. *International Journal of Advanced Natural Sciences and Engineering Researches (IJANSER)*, *7*(11), 194–200. https://doi.org/10.59287/as-ijanser.583
8. Kume, A., & Lirëza, L. (2023). Comparative Analysis and Reflection on Electoral Processes in the Balkan Countries Period 2011-2021. *Interdisciplinary Journal of Research and Development*, *10*(1), 41-41.
9. Kume, K. A. (2022). Analysis of the Albanian legislation and perceptions of voters relevant to the quality of citizens representation in local government bodies. *European Journal of Economics, Law and Politics*, *9*(4), 1-17.
10. Kiri, L. (2023). Internal migration, origin, size and typology of migration factors in the Durres region. *International Journal of Advanced Natural Sciences and Engineering Researches (IJANSER)*, *7*(11), 393–398. https://doi.org/10.59287/as-ijanser.648
11. Hajrulla, S., Ali, L., Hajrulla, D., Lino, V., & Hajrulla, G. (2023). Scientific Results Using Statistical Data on Economic Studies. *International Journal of Advanced Natural Sciences and Engineering Researches (IJANSER)*, *7*(11), 33–37. https://doi.org/10.59287/as-ijanser.56
12. Kosova, R., Subashi, D. X., Halidini, D. Q., & Kullolli, T. (2023). MCDA for evaluating the competitiveness of tourist destinations in Albania. *International Journal of Advanced Natural Sciences and Engineering Researches (IJANSER)*, *7*(11), 95–102. https://doi.org/10.59287/as-ijanser.569

13. Kosova, R., & Sinaj, V. (2020). SERVICE QUALITY AND HOTEL CUSTOMER SATISFACTION: A CASE STUDY FROM DURRES, ALBANIA. *Annals of'Constantin Brancusi'University of Targu-Jiu. Economy Series*, (6).
14. Kosova, R., Halidini, D. Q., Xhafaj, E., Gjikaj, N., & Kosova, A. M. (2023). Assessing tourism service quality in Albania: A 5-scale Likert survey analysis and interpretation with SPSS.
15. Kosova, A. G. R. The Performance Of University Students And High School Factors. Statistical Analyses And ANCOVA.
16. Hajrulla, S., Hajrulla, D., Lino, V., & Stojani, T. (2023). Statistical Data on Risk Management in University. Overview of Numerical Results. *International Journal of Advanced Natural Sciences and Engineering Researches (IJANSER)*, *7*(11), 13–19. https://doi.org/10.59287/as-ijanser.558
17. Kosova, R., Sinaj, V., Scarelli, A., Kosova, A. M., & Stana, A. (2017). Academic staff performance evaluation, using decision analyses method and application. http://dx.doi.org/10.33107/ubt-ic.2017.124
18. Likert, R. (2017). The method of constructing an attitude scale. In *Scaling* (pp. 233-242). Routledge.
19. Gjana, A., & Kosova, R. Traditional Class, and Online Class Teaching. Comparing the Students Performance Using ANCOVA. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 14806-14811.
20. Habilaj, E., & Osmanaj (Zeqirllari), R. (2023). Monitoring Physics Education Curricula through the teachers perspective. *International Journal of Advanced Natural Sciences and Engineering Researches (IJANSER)*, *7*(10), 423–426. https://doi.org/10.59287/as-ijanser.390
21. NATIONAL SURVEY OF ALBANIA: https://www.iri.org/wp-content/uploads/2024/02/Alb-2023-Public-Survey-Final.pdf
22. Dyrmishi, A., Zaloshnja, E., Alaattin, O. Z. D. E., Design, A., & Rowland, M. (2021). Albanian Security Barometer: National Survey 2020. *Center for the Study of Democracy and Governance, Tirana*. https://library.fes.de/pdf-files/bueros/albanien/16038.pdf
23. Manoku, E. (2016, September). A factorial analysis of informacion sources that influence university choice in Albania. In *CBU International Conference Proceedings* (Vol. 4, pp. 223-228).
24. Balliu, V. (2017). Modern teaching versus traditional teaching-Albanian teachers between challenges and choices. *European Journal of Multidisciplinary Studies*, *2*(4), 20-26.
25. Papajani, A. (2021). Curriculum reform in pre-university education in Albania. *Polis*, (20), 7-19.
26. Pepkolaj, L., Arnal-Palacián, M., Begué, N., & Prahmana, R. C. I. (2024). Demotivating factors in teaching mathematics: A study of Albanian teachers. *Infinity Journal*, *13*(1), 27-44.
27. Kosova, R., Thanasi, T., Mukli, L., & Përllumbi, L. N. (2016). Traditional mathematics and new methods of teaching through programming together with students.
28. Kosova, R., Kapçiu, R., Hajrulla, S., & Kosova, A. M. (2023). A Reviеw of Mathematical Conjectures: Exploring Engaging Topics for University Mathematics Students. *International Journal of Advanced Natural Sciences and Engineering Researches (IJANSER)*, *7*(11), 180-186.
29. Stana, A., Toti, L., Kosova, R., & Prodani, F. (2019). FUTURE OF DURRES: SMART CITY AND SMART UNIVERSITY. *European Journal of Engineering and Technology Vol*, *7*(6).
30. Stana, P. E. A., Toti, P. E. L., Kosova, P. R., & Prodani, P. F. (2023). The Future of Durrës-Smart University& Smart City. *Journal of Survey in Fisheries Sciences*, *10*(2S), 1971-1981.
31. Kruja, D., Ha, H., & Tabaku, E. (2021). Students' perception and satisfaction of services provided by public and private higher education institutes: a case study in Albania. *International Journal of Quality and Service Sciences*, *13*(3), 359-380.