## ПЛЕНАРНА СЕСИЯ PLENARY SESSION

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### ОПАШКАРСКА ИКОНОМИКА LAGGING BEHIND ECONOMY

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GDP per capita in Bulgaria has been systematically lagging behind the corresponding indicator for former member states of the Council for Mutual Economic Assistance, which later joined the EU. Bulgaria's economic problems are somewhat traditional and remain unresolved. Bulgaria is the most corrupt country in the EU. Legislation is unsustainable, chaotic and ineffective. The National Assembly often disregards the operation and requirements of its own laws. Bulgaria systematically maintains one of the lowest ratios of accumulation. The country is negligent in public investment and lags behind the other EU-countries. The overall regulatory and business climate in the country does not stimulate foreign capital inflow. A significant flight of local capital abroad has been observed. Bulgaria needs to maintain annual GDP growth rates in the range of 5-7% in order to be able to leave its last-ranking in the EU. The acceleration of economic development requires the raising of the population's general political and economic literacy, as well as improvement of the political infrastructure in accordance with modern standards. The functions and forms of macroeconomic policy should be reconsidered in accordance with modern standards, taking into account the impacts of our de facto membership in a monetary union.

**Keywords**: macroeconomic policy, cross border capital flows, institutional reforms;

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КАК БЪЛГАРИЯ МОЖЕ ДА ДОПРИНЕСЕ ЗА ЕНЕРГИЙНО РЕНОВИРАНЕ НА НЕДВИЖИМИТЕ ИМОТИ В ГЕРМАНИЯ

### HOW BULGARIA CAN CONTRIBUTE TO ENERGETIC REFURBISHMENT OF REAL ESTATE IN GERMANY

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"On 28th September 2010, the government of the Federal Republic of Germany set a political goal to achieve a ""nearly climate-neutral building stock by 2050"". Due to the long period up to 2050, an intermediate goal was set in 2019: Emission of climate-damaging gases in Germany must decrease by 55% by 2030 compared to 1990.

Up to now, however, Germany has only marginally come closer to this goal. According to the Federal Environment Agency, emissions of CO2 equivalents from the building sector in Germany in 2011 amounted to 128 megatons. In 2020 the emissions summed up to 120 megatons.

Thus, the target set for 2050 cannot be achieved with the current refurbishment rate.

More over many of the building materials currently used for energetic refurbishment can pollute the environment.

The obstacles and restraints that are the reasons for the fact that refurbishment of buildings does not take place more quickly and willingly are known. Not even governmental measures can significantly speed up the refurbishment of buildings.

But there is hope – and plants from Bulgaria may play a decisive role. Why and which plants may make significant contributions to the energy-efficient renovation of buildings in Germany is presented in this article."

**Key words:** climate change, building sector, refurbishing buildings, renewable resources, narrow-leaved cattail, profitability

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ПОТРЕБИТЕЛСКИЯТ ПРЕХОД КЪМ ЗЕЛЕНА ИКОНОМИКА: РОЛЯТА НА СЕРТИФИЦИРАНИТЕ ЕКОЕТИКЕТИ ОТ ТРЕТИ СТРАНИ

### CONSUMER TRANSITION TO A GREEN ECONOMY: THE ROLE OF THIRD-PARTY CERTIFIED ECOLABELS

José Luis Vázquez Burguete, Ana Lanero Carrizo

University of León, Spain

In order to reduce the asymmetry of knowledge between producers and consumers, many organizations promote the use of eco-labels certified by independent third parties, with the purpose of identifying those products or services that have minor impact on the environment throughout their entire life cycle. However, since there are currently a high number of ethical labels and claims and consumers are usually confused about their real meaning. This research is

intended to analyze whether consumers attribute organic properties to products identified by third-party certified ecolabels to the same extent that to other third-party certified sustainability labels and other non-certified organic claims. A survey study was carried out with a sample of 200 university business students and ANOVA analysis was used to verify differences in the meaning attributed to different labels. In general terms, the results of the study allow to conclude that consumers do not have a precise knowledge about the meaning of different sustainability dimensions certified by official seals, nor do they know how to differentiate them from non-certified advertising claims. One of the main practical implications of this work has to do with the critical analysis of the effectiveness of Community regulations on eco-labelling and green advertising claims.

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ПРИНОСЪТ НА ВЪЗОБНОВЯВАНЕТО НА МЕСТНИТЕ ИДЕНТИЧНОСТИ ЗА ПОСТИГАНЕ НА ЕВРОПЕЙСКА СОЦИАЛНО-ИКОНОМИЧЕСКА КОХЕЗИЯ

## THE CONTRIBUTION OF THE REEMERGENCE OF LOCAL IDENTITIES TO THE ACHIEVEMENT OF THE EUROPEAN SOCIO-ECONOMIC COHESION

Athanassios Gouridis

Head of the Technical Direction in the Municipality of Soufli, Greece

The paper attempts to approach the phenomenon of reemergence of the local identities in Europe during the last decades, applying it, as a case-study, on the European-border regions of the Greek and Bulgarian Thrace. Globalization, in fact, provoked fears in local communities for instability, dissolution and loss of identity, urging a reaction, targeting to consistency, tranquility and security, traced particularly in the reemergence of local identification. This recent approach is actively positive and creative, functioning in the frames set by the EU, simultaneously opposite to introversion, often connected to heterophobic past behaviors. The identity-building capacities are now built from the inside, enriched by their interdependent character, visualized through sustainable synergies on a horizontal, crossborder, trans-regional and trans-national level and a vertical one, functioning on fields such as culture, tourism, education, social inclusion, youth, green economy and training. Consequently, this new procedure potentially plays a crucial role in the planning and implementation of the European policies, which now abet communities, since it has been realized that local identities form not only a desirable, but an indispensable actor for the overall longevity, as well, so that local diversity contributes substantially to the European economic, social and territorial cohesion and integration.

Key words: Local identities, globalization, communities, cohesion, synergies, extroversion, integration

#### СЕКЦИЯ 1:

### РАЗВИТИЕ И УПРАВЛЕНИЕ НА РЕГИОНИТЕ В ПРЕХОДА КЪМ ЗЕЛЕНА ИКОНОМИКА

#### **SECTION 1:**

REGIONAL DEVELOPMENT AND GOVERNANCE IN THE TRANSITION TO A GREEN ECONOMY

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РАЗВИТИЕ НА ПЕРИФЕРНИ РЕГИОНИ В КОНТЕКСТА НА ПАРАДИГМАТА ЗА БИОИКОНОМИКА **DEVELOPMENT OF PERIPHERAL REGIONS IN THE CONTEXT OF THE BIOECONOMY PARADIGM** Yuliana Yarkova, Blaga Stoykova, Nedelin Markov

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

One of the persistent problems of the socio-economic development of a number of European regions is the continuing trend of dominant "center-periphery" relations. EU cohesion policy is expected to deliver results through national policies and programs, including targeted support for lagging regions. To date, the question is not simply whether national measures have the expected impacts, but whether policy and practice priorities reflect current goals for tackling current challenges and technological advances. The aim of this study includes: to identify the trends in the development of one of the typical peripheral regions in Bulgaria - Strandzha-Sakar and the structure of the regional economy; to find out if the leading factor of the identified trends is the trajectory of national economic development; the perspectives of regional bioeconomic development. The methods used are: quantitative methods of diagnostic analysis of objective statistical data, statistical and economic analyzes, subjective assessment of current practices, as well as an desk method for synthesis of accessible documentary information. The results show that good practices, as well as the identified potential, can be sustained through support measures at national and local level. In conclusion, it can be emphasized that despite the available potential, the regional ecosystem does not reflect the necessary environment to intensify the desired processes.

**Key words:** peripheral regions, politics, Bulgaria, bioeconomy

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СПРАВЕДЛИВИЯТ ПРЕХОД НА ЕВРОПЕЙСКИЯ ЗЕЛЕН ПАКТ И РАЗВИТИЕТО НА РЕГИОНИТЕ С ИНТЕНЗИВЕН ВЪГЛЕДОБИВ (ПРИМЕРЪТ НА КОМПЛЕКС "МАРИЦА-ИЗТОК" – БЪЛГАРИЯ)

A JUST ENERGY TRANSITION OF THE EUROPEAN GREEN DEAL AND THE DEVELOPMENT OF REGIONS WITH INTENSIVE COAL MINING (EXAMPLE OF MARITSA EAST COMPLEX – BULGARIA)

Yuliana Yarkova, Dobri Yarkov, Stoyanka Tsacheva

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A just energy transition is an opportunity to drive a very important process of transformation of the traditional linear, waste holding economy based on fossil fuels and polluting transport to a new type of economy, driven by the circularity bio-, RES economics paradigm and environmentally responsible transport. The purpose of this study is to contribute to the identification of the direction, factors and mechanisms of the energy transition in the Marishki Basin – Bulgaria, as well as to formulate proposals related to the development of territorial plans for a just transition and the integrated development plans of the municipalities. The methods that have been applied to achieve the purpose of the research are qualitative – desk research (search for general information about the object and the subject of the research – offline and online) and an in-depth interview with leading experts (regarding the process of transition and transformation of the Maritsa East complex). In addition to subjective expert assessments, objective statistical data for the region and for the Maritsa East complex were used for the needs of the research. The object of transformation is not just the Maritsa East complex, but the economic system of the region - administrative region of Stara Zagora (NUTS 3), the municipalities where the open pit mines and energy complexes are located, as well as other municipalities from which the workforce of the energy complex is. The present work summarises the views of the leading experts and makes suggestions regarding the future economic development of the region concerned and its energy transition. The approach must be strategic - long-term and holistic, with responsible thinking and care for future generations.

**Key words:** European Green Deal, energy transition, regional economic development, coal mining regions

СЪВРЕМЕННИ ПРЕДИЗВИКАТЕЛСТВА ПРЕД КЛЮЧОВИ СОЦИАЛНО-ИКОНОМИЧЕСКИ СЕКТОРИ СОЦИАЛНИ ПРЕДИЗВИКАТЕЛСТВА В УСЛОВИЯТА НА ЦИФРОВА ТРАНСФОРМАЦИЯ

#### SOCIAL CHALLENGES IN THE CONDITIONS OF DIGITAL TRANSFORMATION

Veneta Gaydardzhieva

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The development of digital technologies and their penetration into all spheres of economic and social life necessitates a rethinking of the approach to exploiting their exceptional potential for increasing the competitiveness of the Bulgarian economy, strengthening the supply and demand and efficiency of public services, and successfully dealing with major social challenges.

In the report we will focus on some of the most important challenges for the digital transformation for society - modern infrastructure, adequate education and training, adaptation of the labor market, improving the quality of public services, territorial development, etc. We will study the regulatory framework and trends for the development of these important processes in the EU and Bulgaria with a horizon of 2030 and will make the relevant conclusions and recommendations.

**Key words:** social challenges, digital transformation, territorial development, public services, public administration."

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ПРОИЗВОДСТВО НА ПРОДОВОЛСТВЕНИ ПРОДУКТИ И НАЦИОНАЛНА ПРОДОВОЛСТВЕНА СИГУРНОСТ: СЪСТОЯНИЕ, ПРОБЛЕМИ И ПЕРСПЕКТИВИ

FOOD PRODUCTION AND NATIONAL FOOD SECURITY: STATUS, PROBLEMS AND PERSPECTIVES Darina Ruscheva, Sasha Grozdanova

Economic Research Institute, BAS, Sofia, Bulgaria

Food production in agriculture and food industry in Bulgaria has a great importance for the food resources formation of the country of which mostly depends the national food security. The status and challenges to the insurance of the population with food products is related to the stability of the national resources for the availability of basic food products. In this regard, in current paper there have been used the approaches for assessment of the current status of the food production, the main problems are identified and there have been substantiated guidelines for the development of the food production in the context of Bulgaria's membership in the EU. There have been outlined the critical moments and identified the main problems, related to the provision of food products to the population, where the reliability of national resources has a negative effect over the degree of food independence of the country, which as a component of the food security is also a component of the national security of the country.

**Key words:** food production, sources, food security

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РАВНИЩЕТО НА ИКОНОМИЧЕСКО РАЗВИТИЕ КАТО ФАКТОР ФОРМИРАЩ РЕГИОНАЛНИ РАЗЛИЧИЯ

# THE LEVEL OF ECONOMIC DEVELOPMENT AS A FACTOR SHAPING REGIONAL DISPARITIES Stoyan Totev

Economic Research Institute, BAS, Sofia, Bulgaria

The results of some empirical studies within the EU determining the relationship between the achieved level of economic development and the specific economic structure on the one hand and the magnitude of intra-regional differences on the other are presented and analyzed. Based on comparative analysis, the expected evolution of the regional disparities in Bulgaria are defined. The possibilities for pursuing a targeted policy for achieving regional economic convergence have been assessed.

Key words: Economic level; Regional disparities; Economic structure; Regional policy

НЕОБХОДИМОСТ ОТ ПРОВЕЖДАНЕ НА ЦЕЛЕНАСОЧЕНИ ПОЛИТИКИ ЗА РЕГИОНАЛНО РАЗВИТИЕ В АДМИНИСТРАТИВНИТЕ ОБЛАСТИ СЛИВЕН И ШУМЕН, В КОНТЕКСТА НА РЕГИОНАЛНОТО ИКОНОМИЧЕСКО РАЗВИТИЕ

# NEED TO IMPLEMENT TARGETED REGIONAL DEVELOPMENT POLICIES IN THE ADMINISTRATIVE DISTRICTS OF SLIVEN AND SHUMEN, IN THE CONTEXT OF REGIONAL ECONOMIC DEVELOPMENT

Kamen Petrov

University of national and world economy, Sofia, Bulgaria

The spatial characteristics of two adjacent districts in the eastern part of Bulgaria, such as the districts of Shumen and Sliven, are presented. The needs for targeted regional policies for the regional development of both areas have been identified. The points of contact between them are outlined, as well as an analysis of their demographic potential. Their potential in terms of regional connectivity in the north-south strand, as well as infrastructure opportunities for the promotion of regional economic development, has been considered. The spatial characteristics of two adjacent districts in the eastern part of Bulgaria, such as the districts of Shumen and Sliven, are presented. The needs for targeted regional policies for the regional development of both areas have been identified. The points of contact between them are outlined, as well as an analysis of their demographic potential. Their potential in terms of regional connectivity in the north-south strand, as well as infrastructure opportunities for the promotion of regional economic development, has been considered. The guidelines and opportunities for conducting policies that can have a positive impact on the development of both areas are outlined.

**Key words:** areas, spatial, district, regional policies, regional development, demographic, regional economic, characteristic

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# ИЗМЕРВАНЕ ЕФЕКТИТЕ В РАЗВИТИЕТО НА РЕГИОНИТЕ В БЪЛГАРИЯ MEASURING THE EFFECTS IN THE DEVELOPMENT OF THE REGIONS IN BULGARIA Ventsislav Perkov

Academy Of Economics "D. A. Tsenov", Svishtov, Bulgaria

The aim of the study is to measure the effects in the economic development of the regions in Bulgaria. To achieve this goal, Eurostat data for the period 2010-2018 were used for the following indicators by NUTS 2 regions: Gross domestic product (GDP) at current market prices, Employment (thousand hours worked), Gross fixed capital formation, Compensation of employees, Unemployment by educational attainment level, Population and Households with access to the internet at home. The methodological framework of the study covers the use of the following statistical methods: stepwise regression, panel regression with fixed and random effect. The results of the study focus on the interpretation of the established cross-sectional and time-series effects. In this aspect, the best model for measuring the effects can be highlighted as the main conclusion.

**Key words:** GDP by regions, economic indicators by NUTS 2, stepwise regression, panel regression, fixed effect model, random effect model

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# МЕТОДИЧЕСКИ ВЪПРОСИ ПРИ ПРОУЧВАНЕ НА ЕЛЕКТРОННОТО УПРАВЛЕНИЕ В РЕПУБЛИКА БЪЛГАРИЯ

# METHODOLOGICAL ISSUES IN THE STUDY OF E-GOVERNMENT IN THE REPUBLIC OF BULGARIA Katya Kirilova

University of National and World Economy, Sofia, Bulgaria

Purpose. The digital transformation of processes and services is a priority for the Bulgarian society and economy. This is especially true in the context of a global pandemic. Online work and training require state and municipal administration to provide additional efforts for digitalization. In this context, the main methodological issues in the study of the e-government system in the Republic of Bulgaria will be presented. Methods. The applied methods are related to: analysis and evaluation of the applicable regulatory framework; analysis of the possible technological solutions for conducting surveys among the municipal administration; methods related to the possibilities for statistical analysis of the obtained results. Results. The main results are in the direction of clarifying the applicable methodological and technological tools for studying the degree of development of the e-government system. Conclusions. The

conclusions are in the direction of the achieved methodological and technological readiness for conducting a survey in the local administration.

Key words: e-government, digitalization, digital administrative services, online research

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# СЪСТОЯНИЕ НА ДИГИТАЛНИТЕ АДМИНИСТРАТИВНИ УСЛУГИ В РЕПУБЛИКА БЪЛГАРИЯ STATUS OF DIGITAL ADMINISTRATIVE SERVICES IN THE REPUBLIC OF BULGARIA Katya Kirilova

University Of National And World Economy, Sofia, Bulgaria

Purpose. Digital administrative services are an essential component of the e-government system. They provide to citizens and businesses opportunities to facilitate contacts with the administration. To be developed and used, they need to be designed very carefully in advance. For this purpose, in most cases, modeling and reengineering of the main work processes is done. In this context, the study aims to present some of the results of a survey conducted among a sample of municipalities in the Republic of Bulgaria. Methods. The applied methods are related to: preparation and conducting of an online survey; methods related to data collection and storage by the respondents; statistical methods for analysis of the obtained results. Results. The main results represent the degree of development of digital administrative services in the Republic of Bulgaria. They were obtained from the survey. Conclusions. The conclusions are in the direction of clarifying the degree of development of digital administrative services.

Key words: e-government, digitalization, digital administrative services, online research

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ПРЕДИЗВИКАТЕЛСТВА ПРЕД УПРАВЛЕНИЕТО РАЗВИТИЕТО НА ГАБРОВСКА ОБЛАСТ В КОНТЕКСТА НА ПРЕХОД КЪМ ЗЕЛЕНА ИКОНОМИКА

## CHALLENGES FACING DEVELOPMENT MANAGEMENT OF GABROVO DISTRICT IN CONTEXT OF GREEN ECONOMY TRANSITION

Nikolay Tsonkov

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Gabrovo district is one of the administrative areas with very low level of socio-economic development in Bulgaria. The effects from this negative tendency is non balanced demographic structure, high age of domestic population and fast decrease of population number. In other side Gabrovo has good performance in European funds absorption. In 2020 European union has adopted The Green Deal. It is important to underline that EU starts the new program cycle 2021 - 2027.

The aim of this research is to analyze socio-economic terms in Gabrovo district and to point out challenges for the region development and management in the context of The Green Deal. The author will uses a complex of different approaches and methods as system and spatial approaches and comparison, descriptive and analytical methods. The expected results from the research is defining problems and opportunities for Gabrovo district green development and management.

Main conclusions are:

- 1. Knowledge management enforcement for better processes' management
- 2. Gasification of municipalities in Gabrovo administrative area
- 3. Improvement of relation among resources financing regulation for green economy enforcement
- 4. Agglomeration improvement Gabrovo Sevlievo
- 5. Proactive local policy for green energy, innovation, waste and business adoption and management.

**Key words:** Gabrovo district, green economy, regional development, regional management, knowledge management

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БИОИКОНОМИКАТА КАТО ИНОВАТИВЕН ПОДХОД ЗА РАЗВИТИЕ НА СЕЛСКИТЕ РАЙОНИ В КОНСТЕКСТА НА ОСП НА ЕС

# BIOECONOMY AS AN INNOVATIVE APPROCH TO RURAL DEVELOPMENT IN THE CONTEXT OF COMMON AGRICULTURAL POLICY IN EU

Teodorina Turlakova

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Bioeconomy is an innovative approach in the economy of the region, aimed at integrating the available natural and labor resources, production facilities, the achievements of science in the field of innovation technologies related to the production of material goods, the conversion of production and energy in the direction of fuller utilization of organic and mineral sources as a raw material resource for achieving sustainable development in the field of production and consumption, stable economic development and growth living standards of the population while protecting the environment and resources. The aim of the report is to analyze the possibilities for applying the bioeconomy in rural areas through research and innovation, stimulating private investment, developing new value chains and engaging stakeholders. The role of the CAP in supporting and financing activities of the bio and circular economy models is argued.

**Key words:** Bioeconomy; CAP; circular economy; environment; resources

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УСПЕШНО РАЗВИТИЕ НА СЕЛСКИТЕ РАЙОНИ В СЕВЕРОИЗТОЧНА БЪЛГАРИЯ ЧРЕЗ СЪЗДАВАНЕ И ВНЕДРЯВАНЕ НА СОФТУЕРЕН ПРОДУКТ ЗА ПРОИЗВОДИТЕЛИ НА МЛЯКО И МЛЕЧНИ ПРОДУКТИ SUCCESSFUL DEVELOPMENT OF RURAL AREAS IN NORTHEASTERN BULGARIA BY CREATING AND IMPLEMENTING A SOFTWARE PRODUCT FOR MILK AND DAIRY PRODUCERS

Gergana Slavova, Stojco Stoev

University of Economics, Varna, Bulgaria

A large portion of the territory of Bulgaria, more than 80%, falls within the so-called rural areas. The situation is similar with the European Union, with more than 85% of its territory falling within these specific areas, whereas rural areas in the United States of America encompass more than 90% of the territory of the states. Naturally certain nuance differences exist in the definitions that different countries in the world use to define an area as a rural area and this report reviews these specifics. One of the main features of rural areas globally is that they are predominantly linked to the development of agrarian business and the processing operations related thereto. A portion of these particular activities are related to the development of livestock breeding and the production of milk and dairy derivatives. The purpose of this report is to encompass and analyze the advantages of the creation, the implementation and approbation of software product in the production and processing of milk and dairy products in Northeastern Bulgaria. Methods used: deduction, induction, programming, method of analysis and synthesis. Several main conclusions have been made in the scientific report, with the general conclusion being that on the basis of the computer program developed and implemented in practice, an easier method of work is ensured, while taking into account the specific pre-production and production processes, as well as processing operations in the area of dairy production and the creation of complete dairy products with added value. The developed specialized information system in the area of milk production and processing of dairy products encompasses all important elements, inherent to the pre-production, production and commercial processes. This includes the specific criteria for 18 categories of milk with specific characteristics, type and quality.

An important functionality of the computer program is that it summarizes monthly results. Based on these monthly results specific decisions are taken regarding the received monthly results as regards to the differences between the purchased and the sold milks with the purpose of minimizing specific losses.

Key words: rural areas, software product, computer program, milk and dairy products

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РАЗПРЕДЕЛЕНИЕ НА ПРАВОМОЩИЯТА МЕЖДУ ВЛАСТИТЕ ПРИ ПРЕДОСТАВЯНЕ НА ПУБЛИЧНИ УСЛУГИ В ЕС

RESPONSIBILITIES DISTRIBUTION BETWEEN DIFFERENT LEVELS OF GOVERNMENT FOR PUBLIC SERVICES DELIVERY IN EU COUNTRIES

Emil Mutafov

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The main goal of the article is to review and analyze the pros and cons when public services are provided by different levels of government in EU countries. Methods such as analysis and synthesis, comparative method, mathematical and statistical are used for achieving the goal. The results will clarify the distribution of responsibilities for public services delivery in EU countries, which seek to fully cover the principle of subsidiarity stated in the European Charter of Local Self-Government. Transferring more powers will lead to new responsibilities for local government and it needs to be more effective, as larger municipalities would be able to cover all requested faster and better. The conclusions are related to the more efficient and effective distribution of public services between different levels of government.

**Key words:** Public services, decentraliazation, government

ОКОЛНА СРЕДА И ЗДРАВОСЛОВНИ ЖИЗНЕНИ СТИЛОВЕ: СТРУКТУРНИ И ИНТЕРСЕКЦИОНАЛНИ АСПЕКТИ НА ЗДРАВЕТО И БОЛЕСТТА В МЕДИЦИНСКАТА СОЦИОЛОГИЯ

## ENVIRONMENT AND HEALTH LIFESTYLES: STRUCTURAL AND INTERSECTIONAL ASPECTS OF HEALTH AND ILLNESS IN MEDICAL SOCIOLOGY

Nadezhda Georgieva-Stankova

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Goals and Methods: The paper traces the effects of the environment and other structural factors on individual health and illness, as analysed theoretically by Medical Sociology. More particularly, it focuses on the interplay between structural factors in sociology and individual agency, i.e. the extent to which one's health is a matter of personal choice or affected by macrosocial factors, such as living conditions, social status, race/ethnicity, gender, age and etc. Results and conclusions: An imaginary debate between an expanded economic view on health (Becker 1979) and a sociological perspective (Cockerham 2013) will be staged to weigh out different standpoints and the insistence on the primacy of either of the factors. William Cockerham's health lifestyles (Cokerham 2013) will be analysed (an extension of the traditions of Max Weber and Pierre Bourdieu), as an interplay between life chances and life choices, stressing the primacy of structural factors, without disregarding individual agency, however, within the confines of particular structural restrictions. The intersectionality of structural factors will be examined and their overall mutual reinforcement and re-definition. Finally, a claim will be made for the need to connect environmental health with preventive medicine (Hall 1990).

Key words: environment, health lifestyles, Medical sociology, structure and agency, intersectionality

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ПАНДЕМИЯТА COVID-19 КАТО СЪВРЕМЕННО ПРЕДИЗВИКАТЕЛСТВО И ОПРЕДЕЛЯЩ ФАКТОР НА ПРИОРИТЕТИТЕ НА ГРАЖДАНИТЕ НА ЕС

### COVID-19 PANDEMIC AS A CONTEMPORARY CHALLENGE AND DETERMINANT OF EU CITIZENS' PRIORITIES

Daniela Pastarmadzhieva, Mina Angelova

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It is inevitable that the COVID-19 pandemic is a main contemporary challenge for key socio-economic sectors. It is a challenge mainly for the healthcare systems but its effects on the economies are rather significant as well. Furthermore COVID-19 has led to transformations in the values and priorities of the societies. Thus, the purpose of the current study is to identify the dynamics of the priorities of the EU citizens in the last five years. The object of the research is EU member states in the period 2016-2020. The focus is priorities of their citizens, measured by Eurobarometer. The methods include a secondary processing of quantitative data form Eurobarometer spring waves of 2016, 2017, 2018 and 2019 as well as the wave, performed in the Summer of 2020. The results show that there is a certain level of dynamics in the priorities of the EU citizens in the context of the COVID-19 pandemic and we can conclude that in general the priorities have remained the same, but the pandemic raised the concerns about the economic development, unemployment, and health.

Key words: COVID-19, European Union, Eurobarometer, citizens, priorities

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РОЛЯТА НА МЕСТНИТЕ ИНИЦИАТИВНИ ГРУПИ ЗА РАЗВИТИЕ НА СЕЛСКИТЕ РАЙОНИ В БЪЛГАРИЯ

### THE ROLE OF LOCAL ACTION GROUPS FOR RURAL DEVELOPMENT IN BULGARIA

Mariyana Shishkova

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Over the last decade, local action groups (LAGs) in Bulgaria have become key organizations supporting the implementation of projects important for rural development. Prerequisites for this are the unique characteristics of the LEADER / CLLD approach, which allow empowerment of the population, capacity building combined with providing access to financial resources, as well as building trust and accumulation of social capital.

The aim of this study is based on the analyses of the activities of LAGs in the country, to outline the challenges facing these organizations and to reveal their potential for sustainable development of rural areas. The case study method is

applied. The results of the study show a significant potential of LAGs to accelerate the socio-economic processes in rural areas.

**Key words:** LAGs, rural development, entrepreneurship

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ПОВТОРНОТО ИНВЕСТИЦИОННО ИЗПОЛЗВАНЕ НА "КАФЯВИ ПОЛЕТА" (BROWNFIELD) КАТО ИНСТРУМЕНТ ЗА ОГРАНИЧАВАНЕ ТЕРИТОРИАЛНОТО РАЗРАСТВАНЕ НА НАСЕЛЕНИТЕ МЕСТА В БЪЛГАРИЯ

# THE REINVESTMENT USE OF BROWNFIELDS AS A TOOL TO LIMIT THE TERRITORIAL EXPANSION OF SETTLEMENTS IN BULGARIA

Anna Gospodinova

University of Economics, Varna, Bulgaria

Purpose: The aim set by the author of the study is to consider the good European practices for the restoration and reuse of ""Brownfields"" and on this basis to outline the possibilities for the application of these practices in Bulgaria in order to limit the territorial expansion of settlements at the expense of nonurbanized areas.

Methods

The specifics of the researched problem determine as the most appropriate the following methods of scientific research: method of documentary analysis; method of comparison; analysis and synthesis.

Outcomes

The possibilities for reusing Brownfield in Bulgaria are emerging.

Conclusions

The reuse of the so called ""Brownfields"" combine the benefits of environmental, economic and social development by leading to more sustainable development of settlements, as well as reducing the use and construction of green areas and nonurbanized land for the construction of new buildings and infrastructure (social and technical).

Key words: Brownfields, Reuse, Settlements, Sustainable development, Nonurbanized areas

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"ЗЕЛЕНА АРХИТЕКТУРА" В ОБЩАТА СЕЛСКОСТОПАНСКА ПОЛИТИКА НА ЕВРОПА В ПЕРИОДА 2021-2027- ИДЕИ И НАСОКИ

## "GREEN ARCHITECTURE" IN THE COMMON AGRICULTURAL POLICY OF EUROPE IN THE PERIOD 2021-2027 - IDEAS AND GUIDELINES

Petia Branzova

Economic Research Institute, BAS, Sofia, Bulgaria

The aim of the report is to clarify the concept of "green architecture" in the context of the new CAP in the period 2021-2027. The methods used are analysis of the literature and official regulations of the EU and the Member States. The result is an outline of the ideas of "green architecture". The conclusion is focused on the future effect of it for the Member States of the EU.

**Key words:** Green Architecture, CAP, environment, agriculture, climate.

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АНАЛИЗ НА ИНФОРМАЦИЯТА ЗА ПОЗИЦИОНИРАНЕ НА КОМПАНИИ С ОПЕРАЦИИ В СОФИЯ И 24-ТЕ РАЙОНА НА СТОЛИЧНА ОБЩИНА

## ANALYSIS OF THE INFORMATION FOR POSITIONING OF COMPANIES WITH OPERATIONS IN SOFIA AND THE 24 DISTRICTS OF THE CAPITAL MUNICIPALITY

Maria Popova-Hristova

Sofia Investment Agency, Sofia, Bulgaria

Purpose of this study is to summarize the distribution of companies in different regions of the capital - by type of industry and the size of annual turnover of the enterprise. Information for 116 companies was analyzed. The study included companies with an annual turnover of up to EUR 50 million (93 companies), up to EUR 100 million (11 companies), up to EUR 250 million (also 11 companies), and with over EUR 250 million annual turnover. The presented data are from November 2020. Conclusion. The presented results outline the direction of development of the individual regions at the moment and enable potential investors to follow the development of the city.

Key words: Map of Industries: Head Offices in Sofia by Regions

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ВЪЗМОЖНОСТИ ЗА РАЗВИТИЕ НА ТРАНСПОРТНИТЕ ВРЪЗКИ МЕЖДУ РЕПУЛИКА БЪЛГАРИЯ И РЕПУБЛИКА СЕВЕРНА МАКЕДОНИЯ

### OPPORTUNITIES FOR DEVELOPMENT OF TRANSPORT CONNECTIONS BETWEEN THE REPUBLIC OF BULGARIA AND THE REPUBLIC OF NORTH MACEDONIA

Stanislav Stanev

Plovdiv University "Paisii Hilendarski", Plovdiv, Bulgaria

Purpose of the study

The transport infrastructure of the Republic of Northern Macedonia is mostly a legacy of Socialist Yugoslavia. The transport connections in the north-south direction are very well organized. The situation with the other - east-west direction is different. This is a challenge to the development of relations (including economic) with the Republic of Albania and the Republic of Bulgaria. Some of the reasons for the delay in transport connections are purely geographical, related to the peculiarities of the terrain.

The study examines the possibilities for the development of transport connections on alternative routes.

Research method

The study analyzes the issue from a purely geographical point of view.

Results

The research is aimed at the result for formulating recommendations for the development of alternative routes in the east-west direction.

Conclusions

The conclusion of the study is that the lack of connectivity between the Republic of Northern Macedonia and the Republic of Bulgaria on the one hand and the Republic of Northern Macedonia and the Republic of Albania on the other can be overcome gradually by developing more routes to improve connections and economic environment regions."

Key words: Bulgaria Republic of North Macedonia, connections

### СЕКЦИЯ 2: БИЗНЕС РАЗВИТИЕ, ИНОВАЦИИ И КРЪГОВА ИКОНОМИКА **SECTION 2:**

#### BUSINESS DEVELOPMENT, INNOVATION AND CIRCULAR ECONOMY

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#### ИКОНОМИКА В СЯНКА И РЕГИОНАЛНО РАЗВИТИЕ

#### SHADOW ECONOMY AND REGIONAL DEVELOPMENT

Stefan Petranov, Radostina Ivcheva

Sofia university "St. Kliment Ohridski", Sofia, Bulgaria

The report examines the role of the shadow economy in regional development. It is argued that this economic phenomenon has a wider impact on economic development, going beyond the damage it does to public funds. Data from a national survey on the size of the shadow economy are analyzed, focusing on regional differences.

Goals: To analyze the phenomenon of the ""shadow economy"" in Bulgaria from a regional perspective.

Methods: Direct method - Representative survey

Results: Estimates for the size of the undeclared labor and for the most widely spread shadow practices at regional level. Conclusions: Proposals for policy measures aimed at tackling the problems of the shadow economy in Bulgaria.

**Key words:** shadow economy, regional development, envilope wages, undeclared work, informal labour.

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### ИКОНОМИЧЕСКИ ВЪЗДЕЙСТВИЯ НА КОВИД-19 КРИЗАТА: БЪЛГАРСКИЯ ОПИТ

#### ECONOMIC IMPACT OF COVID-19 PANDEMIC: CASE OF BULGARIA

Nikolay Sterev

University Of National And World Economy, Sofia, Bulgaria

"The COVID-19 has changing the business and has impacted the national economic system. As a result, not just the international trade has been reduced, but there is a sufficient change of the national and global value chains.

Thus, the COVID-19 pandemic has not equally impacted on different countries and sectors. Even though the full lockdown has been applied just for 3 months as the preliminary results shows the Bulgarian economy is moved on the back of the EU economies with decrease of 6% for the last years and some of the sectors was shrinking with more than 50% for the last year.

The paper analyses the internal change of the Bulgarian economic system and covers analysis of labour and innovation added value to the economic growth in Bulgaria. The analysis opposes the Economic growth before and during the COVID-19 crises. It will be a good starting point to analyse the national economic anti-pandemic measures.

The paper aims to analyse what was gone wrong and what was done good insight the Bulgarian economy as result of the COVID-19 pandemic's economy transformation. The analysis is good starting point for post-pandemic development measures that are needed for fast economic recovery in the next few years.

The paper is structured as follows: first, preliminary state of art of the economic changes in crises - represent summary of different economic changes during variety of crises; secondly, analysis of Bulgarian economy growth before and during the COVID-19 pandemic - represent analysis of structural elements' change of the growth as labour and innovations; thirdly, summary of national anti-pandemic's economic measures and analysis of their impact on the Bulgarian economic growth; conclusion - summary of the research results."

**Key words:** economic growth; COVID-19 impact; growth measures

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### ДЕТЕРЕМИНИРАЩИ ФАКТОРИ НА АСОРТИМЕНТНОТО ПРЕДЛАГАНЕ НА РИТЕЙЛЪРИТЕ

### DETERMINING FACTORS OF RETAILERS' ASSORTMENT SUPPLY

Simeonka Petrova

Academy of Economics "D. A. Tsenov", Svishtov, Bulgaria

In the age of digital technologies and a dynamic competitive environment, modern retailers are adopting innovative conceptual solutions for choosing a retail format - from independent retailers to the construction of supermarkets and hypermarkets. Conceptually, these management decisions aim to increase sales of the commodity

units included in the assortment, increase turnover, increase the economic profitability of the business, and ensure more complete satisfaction of consumer expectations.

The main purpose of this study is to conduct a theoretical and empirical study and analysis of the impact of the choice of retail format on the size of the range offered and on this basis to formulate appropriate conclusions and summaries. The study of the relativity between the format chosen by the retailers and the potential for forming and offering a certain size and composition of the assortment is carried out by analyzing an appropriate set of empirical data. To achieve this goal, specific research tasks are set: defining and systematizing fundamental theoretical statements about the potential determinants of the assortment of retailers; outlining a methodological framework for studying the interdependence between the choice of retail format and the size of the assortment; formulation and differentiation of more significant conclusions from the conducted theoretical-empirical research.

**Key words:** assortment, retailers, offered assortment, retail format, solutions for choosing a retail format

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ЗА НЯКОИ СПЕЦИФИКИ ПРИ ВНЕДРЯВАНЕТО НА МЕЖДУНАРОДНИ ПРАКТИКИ ЗА ТЕХНОЛОГИЧНИ ТРАНСФЕРИ НА БИОТЕХНОЛОГИЧНИ ИНОВАЦИИ /ПРИМЕРЪТ С БЪЛГАРСКАТА УНИВЕРСИТЕТСКА ПЛАТФОРМА "ВИТА ПЛЮС"/

OF SOME SPECIFICS IN IMPLEMENTATION OF INTERNATIONAL PRACTICES FOR TECH TRANSFERS OF BIOTECH INNOVATIONS /THE CASE OF THE BULGARIAN UNIVERSITY PLATFORM "VITA PLUS"/

Atanas Vladikov, Trayan Yosifov

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Biotechnological innovations are to dynamic processes, which include different sets of activities aimed at practical implementation of ideas and knowledge potential into successful production and market development. In this sense, creativity, innovations and development activities of the Bulgarian research centers and universities are taking the shape of being a critical link in the industrial-market chain for adding economic value on the basis of biotechnological innovations. The aim of the present study is to present interrelations and dependencies, characterizing technological transfer and innovations in the field of biotechnology, on which modern successful and international business endeavors stand upon. The research methods include analytical reviews of modern scientific literature in this direction and adjoining content analysis on directions, obstacles and benefits for creating a Bulgarian platform for transfer of biotechnological know-how to bio-based industries in bioeconomy. The results of the research are targeted at the formation of comparative analytical parameters and benchmark indicators for economic valuation of implementation of biotechnological solutions in the Bulgarian circular economy. The conclusions are related to derivation of a set of recommendations for formation of a new integrated approach to set a working model for technological transfer of University researches and solutions into real bio-based industrial production processes through the University platform "Vita Plus".

**Key words:** technological transfer, biotechnological innovations, bioeconomy

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МОДЕЛИРАНЕ НА ПУБЛИЧНО-ЧАСТНИ ПАРТНЬОРТВА ЗА НАСЪРЧАВАНЕ НА КОНКУРЕНТОСПОСОБНОСТТА НА МАЛКИТЕ И СРЕДНИ ПРЕДПРИЯТИЯ В БЪЛГАРСКАТА КОЗМЕТИЧНА И ПАРФЮМЕРИЙНА ИНДУСТРИЯ

PUBLIC-PRIVATE PARTNERSHIP MODELLING TO FOSTERING COMPETITIVE PERFORMANCE OF SMALL- AND MEDIUM-SIZED ENTERPRISES IN THE BULGARIAN COSMETICS AND PERFUMERY INDUSTRY

Atanas Vladikov, Petar Raychev

Plovdiv University "Paisii Hilendarski", Plovdiv, Bulgaria

This paper is focused on presenting possible models for public-private partnership /PPP/ to promote competitiveness of small- and medium-sized enterprises /SMEs/ in the Bulgarian cosmetics and perfume industry. The aim of the paper is to study market performances of the SMEs in this sector and to offer successful transition model to PPP with Universities and research centers, which have concentrated investment resources to offer new biotechnological schemes for creation of new cosmetics and perfumes. The research methods include a study of classical models of SME competitiveness to offer adequate models for the transition to PPP to build competitive organic production within a

circular economy and the "Green Deal" of the EU. The results of the research are aimed at orienting SMEs to adopt ideas for investing in new biotechnological equipment and intensive partnerships with public structures of the Bulgarian scientific environment - institutes, centers and Universities, as bearers of research potential for testing and implementation of new industrial solutions in the Bulgarian cosmetics and perfume industry during the programming period 2021-2027. The conclusions are related to the derivation of a body of recommendations for application of an adequate for the Bulgarian reality model of PPP for Bulgarian SMEs in the field of cosmetics and perfumes.

**Key words:** public-private partnership /PPP/, small and medium-sized enterprises /SMEs/, cosmetics and perfume industry, circular economy, green deal

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# ПРИЛОЖЕНИ АСПЕКТИ НА ИНВЕСТИЦИИ В ИНОВАЦИИ В БЪЛГАРСКИ ПРЕДПРИЯТИЯ **APPLIED ASPECTS OF INVESTMENT IN INNOVATION IN BULGARIAN COMPANIES**Dimitar Blagoev

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Investment and innovation have traditionally been seen as interconnected areas of activity. Clarifying this relationship in the business practice of Bulgarian companies is an interesting task, from a scientific and applied point of view. The intensity of innovation resulting from the dynamics of the global economy also implies pressure on companies to make more and more investments in new products, new technologies, new working methods and managements, etc. At the same time, not all innovative technologies and/or products are characterized by the necessary cost-effectiveness. This requires companies to apply appropriate methods for assessing the profitability of investments in innovation, as well as methods for assessing the risk of such investments. The purpose of this article is to investigate the practice of Bulgarian companies (based on a limited range of researched but completely randomly distributed) in applying approaches and methods for assessing the effectiveness of investments in innovation. To achieve the main objective, methods such as: literary review, observation, survey, two-dimensional statistical distribution, analysis and synthesis of primary information, comparative analysis, expert evaluation, etc. are used. In conclusion, some summaries of good practices and recommendations for increasing the effectiveness of these processes in the practice of companies are given.

Key words: Innovation, Investment, Growth, Firm, Efficiency, Indicators

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АД ХОК ПОДХОД НА УПРАВЛЕНИЕ НА РАЗХОДИТЕ В УСЛОВИЯТА НА COVIDIZATION НА ИКОНОМИКАТА

### AD HOC APPRAOCH OF COST MANAGEMENT DURING THE TIME OF COVIDIZATION OF THE ECONOMY

Radko Radev, Alexsandar Naydeniv

University Of National And World Economy, Sofia, Bulgaria

This article aims to present the ad hoc approach in cost management taken by the companies under the conditions formed as a result of COVIDization of economy. Taking into account the uniqueness of the situation caused by COVID-19 emergency measures the term COVIDization of the economy interpreted. In general, it means complex changes in the PESTEL environment, conditioned by the global health crisis. For the majority of companies, these changes had an adverse effect. For others, it was neutral or favorable. The onset of the first wave of COVID-19 found most companies unprepared, with planned levels of revenue, cost and profit. In the face of a sharp change in revenue levels, firms had to respond ad hoc to meet these challenges. The publication presents Ad hoc approach of cost management as a theoretical statement. The effects on the revenues of the first wave of COVIDization and the ad hoc actions taken by the companies about their costs are presented. In support of the need to consider this approach are the two new COVID waves that followed. For the purposes of the current publication, the results of two studies conducted by the SRC "Innovation and Competitiveness (U2B)" at the beginning of the pandemic in 2020 and in April-May 2021 were used.

**Key words:** COVIDization, Ad hoc approach of cost management, strategy, revenue decline, crisis management

# КРЪГОВАТА ИКОНОМИКА КАТО ЕЛЕМЕНТ НА ЗЕЛЕНАТА ТРАНСФОРМАЦИЯ В БЪЛГАРИЯ THE CIRCULAR ECONOMY AS AN ELEMENT OF GREEN TRANSITION IN BULGARIA

Vania Ivanova

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The transition towards a circular economy requires fundamental changes to production and consumption systems. Circular economy is a closed cycle covering each of the three areas: the supply and responsible choice of the producers, the demand and the consumer behavior and the waste management. In order to successfully meet the EU's resource efficiency targets by 2030, the transition to a circular economy model should become a state priority. This implies that the concept should be expanded not only to waste reduction and recycling, but also to the disruption of the dependence between economic growth and waste production. The purpose of this paper is to analyze how far in Bulgaria is done the transition to a circular economy model, while making a comparison with the EU and to prove the need for an accelerated implementation of adequate measures on the part of public authorities to promote such a change. This work is based on a descriptive analysis of secondary data on the performance of the selected indicators of circular economy and sustainable development and comparative analysis within the EU. The analysis shows the presence of a certain delay compared to the EU average indicators as well as unused opportunities not only related to more efficient use of resources, but also to a radical change in the business model. The conclusions reached indicate the existence of a number of obstacles that delay the transition to a model of a real circular economy. This calls for accelerating the reform of eco-fiscal and innovative government policies. The added value of the article is not only the analytical consideration of the problems, but mostly in drawing up recommendations for future measures.

Key words: circular economy; resource productivity; waste management; green transformation, Bulgaria; EU

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КОНКУРЕНТОСПОСОБНОСТ НА ТЕКСТИЛНАТА И ШИВАШКАТА ПРОМИШЛЕНОСТ НА БЪЛГАРИЯ СЛЕД ПРИСЪЕДИНЯВАНЕТО Й КЪМ ЕВРОПЕЙСКИЯ СЪЮЗ И ПО ВРЕМЕ НА ПАНДЕМИЯТА ОТ КОВИЛ-19

### COMPETITIVENESS OF THE TEXTILE AND CLOTHING INDUSTRY IN BULGARIA AFTER THE EU ACCESSION AND IN TIMES OF COVID-19 PANDEMIC

Paskal Zhelev

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"The textile and apparel (T&A) industry is a typical low-technology, labor-intensive, footloose industry that is located in countries with low wage levels. With joining the EU, continuous economic development and raising living standards the comparative advantages of Bulgaria in the T&A industry based on low production costs are gradually eroding. However, the recent COVID-19 pandemic has demonstrated the importance of preserving industrial capabilities in the industry and not being fully dependent on foreign imports of essential textile products in times of external shocks. Therefore, it is interesting to see how has the international competitiveness of Bulgaria in trade with textiles and apparel evolved after the EU's accession. Furthermore, what is the impact of the Corona crisis on the Bulgarian T&A producers and what is their response to it. Some companies managed to convert to the production of PPE, others started to prepare for a renewal process of innovative green transition.

The aim of the paper is to analyze the dynamics of Bulgaria's comparative advantages in the T&A industry on the global market during the last decade. The methodology used is based on traditional trade indicators, comparative analysis with another EU member state and a case-study. "

**Key words:** comparative advantages, export, textiles, apparel, manufacturing, pandemic, innovation

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ПРИЛОЖЕНИЕ НА АНАЛИТИЧНОСТ НА ДАННИ ЗА ПРОУЧВАНЕ НА ДИГИТАЛНИТЕ АДМИНИСТРАТИВНИ УСЛУГИ В Р БЪЛГАРИЯ

# APPLICATION OF DATA ANALYTICS FOR RESEARCH OF DIGITAL ADMINISTRATIVE SERVICES IN BULGARIA

Plamen Milev

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PURPOSE. The article examines issues on the topic of digital administrative services in Bulgaria. In this sense, the paper presents the opportunities for application of data analytics, which are suitable for research of this type of services. In this case, the article uses data from online media content on the researched topic. The main purpose of the article is to apply opportunities for data analytics and to present the relevant analysis on the topic of digital administrative services in Bulgaria. METHODS. To achieve its goal, the article uses various scientific methods, including study, analysis, research, modeling and experimentation. RESULTS. The results of this paper support the main hypothesis of the study, namely defining the benefits of applying data analytics to research the media positioning of digital administrative services in Bulgaria. CONCLUSIONS. In conclusion, the paper points out the opportunities for improvement of the research in the subject area with the application of the respective data analysis.

Key words: Internet, data model, analytics, digital services, web content

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ВЪЗМОЖНОСТИ ЗА РАЗРАБОТВАНЕ НА ДИНАМИЧНИ УЕБ ИНТЕРФЕЙСИ В ИНФОРМАЦИОННА СИСТЕМА ЗА НАУЧНОИЗСЛЕДОВАТЕЛСКИ ПРОЕКТИ

# OPPORTUNITIES FOR DEVELOPMENT OF DYNAMIC WEB INTERFACES IN AN INFORMATION SYSTEM FOR RESEARCH PROJECTS

Plamen Milev

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PURPOSE. This article examines issues, related to the development of software solutions for project management. In this sense, the paper presents features of an information system for research projects. The realization of a dynamism of some of the user interfaces is a relevant issue for these software solutions. The main purpose of the article is to explore the opportunities for realization of such behavior and to present the relevant models for development of dynamic web interfaces in the information system through server-side implementation. METHODS. To achieve its goal, the article uses various scientific methods, including study, analysis, research, modeling and experimentation. RESULTS. The results of this paper support the main hypothesis of the study, namely defining the benefits of development of dynamic web interfaces using server-side implementation. CONCLUSIONS. The conclusion highlights the opportunities for improvement of user experience in the information systems in the subject area through the application of the researched approach.

Key words: Web, information system, user interface, software development, project management

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ЕФЕКТИВНОСТ НА РАЗХОДИТЕ И НА ПЕЧАЛБАТА: НА ПРИМЕРА НА БЪЛГАРСКАТА ХОТЕЛСКА ИНДУСТРИЯ

#### COST AND PROFIT EFFICIENCY: THE CASE OF BULGARIAN HOTEL INDUSTRY

<u>Dora Doncheva</u>, <u>Dimitrina Stoyancheva</u>

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

The aim of current paper is to analyse and estimate the Bulgarian hotel industry efficiency, focusing on cost and profit efficiency. We attempt to examine whether service quality, as well as tourism specialization affect hotel industry efficiency. By using the Battese and Coelli (1995) model this study applies a Stochastic frontier analysis with 309 Bulgarian hotels analysed for the period of 10 years (2008-2017). The methodology allows to be estimated the efficiency level and influencing factors, as well as to decompose the error into both, random and inefficiency error. The results showed that tourism specialization has bilateral effect on overall efficiency and higher category has negative impact on cost efficiency. Finally, hotel management implications are discussed.

**Key words:** service quality, tourism specialization, translog function, stochastic frontier analysis, tourism industry

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ПРЕГЛЕД НА СЪЩЕСТВУВАЩИТЕ СОФТУЕРНИ РЕШЕНИЯ ЗА ДИГИТАЛИЗАЦИЯ НА ПРОЦЕСИТЕ В ЖИВОТНОВЪДСТВОТО

OVERVIEW OF EXISTING SOFTWARE SOLUTIONS FOR DIGITALISATION OF PROCESSES IN LIVESTOCK FARMING

#### Konstantin Stoyanov, Georgy Zhelyazkov, Nikolay Penev

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

Digitalisation has already been largely seen as a key competitive advantage for all enterprises regardless of their economic sector or field of activity. Traditional economic activities such as agricultural and livestock farming have not been left out from those innovative approaches. The article will focus on the general framework in terms of available products targeting medium and large enterprises in livestock farming addressing their needs for digitalisation and automation of processes. The authors include an overview of existing software solutions for the Bulgarian market. Additional comparative analysis of available products, developed for livestock farming companies, will be drawn, emphasizing on the tools and different options they provide, in terms of adaptability, integration easiness and benefits for companies.

**Key words:** management decisions, process automation, livestock farming

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СЪВРЕМЕННИ ПРЕДИЗВИКАТЕЛСТВА ПРЕД УСТОЙЧИВОТО РАЗВИТИЕ НА ТУРИЗМА В НАЦИОНАЛНИТЕ КУРОРТИ НА БЪЛГАРИЯ

## CONTEMPORARY CHALLENGES FOR SUSTAINABLE DEVELOPMENT OF TOURISM IN THE NATIONAL RESORTS IN BULGARIA

<u>Dessislava Alexova, Elena Alexandrova, Maria Vodenska, Nikolina Popova</u> International business school, Botevgrad, Bulgaria

The survey includes a study of the modern trends and challenges in Bulgarian resorts and the opportunities for their sustainable development and destination management. Its aim is to be developed a model for sustainable development of tourism in the national resorts of Bulgaria. The main accents are focused on their stages of development, mistakes made in the planning and regulations and setting guidelines for their sustainable development, in accordance with the pandemic situation and the current trends. It involves developing a method for local tourist development of a tourist destination. Consideration has been given to the development of a methodological research framework, analysis and evaluation of tourism potential: external and internal environmental factors, tourism resources, material resources, human resources and administrative capacity. They are all represented as subsystems of the territorial recreation and tourism system. A study of the interconnections between them, the definition of strategic priorities and the proposals for a sustainable tourism development at the local level was carried out. It has been proven that successful sustainable tourism development in the national resorts is related to conducting systematic marketing studies and smart regulations in their tourist potential. General conclusions and proposals for the sustainable development of tourism in the national

**Key words:** sustainable development, regional development, national resorts, destination management

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# ТЕНДЕНЦИИ В УПРАВЛЕНИЕТО НА БИЗНЕС ПРОЦЕСИТЕ В МЕБЕЛНАТА ИНДУСТРИЯ В БЪЛГАРИЯ TRENDS IN BUSINESS PROCESS MANAGEMENT IN THE FURNITURE INDUSTRY IN BULGARIA

Petya Slavova

resorts have been made.

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Providing well-structured and properly running business processes and their management are major economic problems of increasing relevance for the management of the furniture sector. The main goal of the study of is to indicates methodological shortcomings related to methods of improving the management of business processes in the furniture industry. The main objectives of this empirical study are: 1. To establish the current status of the management of important furniture companies processes. 2. To demonstrate the usefulness of software tools in improving the business processes in order to improve their management. 3. To propose recommendations to improve management of the business processes in furniture companies. The empirical study is performed in 71 of the planned 100 furniture companies, who have returned answers to the questions in full. The sample included companies, members of the Branch Chamber of Woodworking and Furniture Enterprises (BCWFE), who has expressed their willingness to participate in the study. Data is analyzed as total sample as well as by individual groups implementing comparative analyses. The comparative analysis is made between the results obtained from the individual firms in the sample along with analyzing the overall survey results. Benchmarking is used to display the patterns characterizing the applicability of the methodology adapted to improve the management of business processes in companies from the furniture industry.

**Key words:** business processes; improvement of the management; furniture production; business improvement.

#### МЯСТОТО НА ИЗКУСТВЕНИЯ ИНТЕЛЕКТ В ПРОЦЕСА ПО УПРАВЛЕНИЕ НА РИСКА

#### THE PLACE OF ARTIFICIAL INTELLIGENCE IN THE RISK MANAGEMENT PROCESS

Petya Biolcheva

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In recent years, there has been increasing talk of the rapid entry of artificial intelligence into risk management. All the benefits it would have over the whole process are often commented on: real-time results, processing large amounts of data, more complete risk identification, more accurate risk assessment, etc. There are also negative moods that make various experts feel threatened by their need to be replaced by artificial intelligence. Another problematic issue that arises is related to the transparency of algorithms and the increase in cyber risks. This material aims to identify the individual elements at the stages of risk management in which artificial intelligence (AI) can and should be applied alone, in combination with expert opinion or not. Here it is shown that as a result of the use of AI the efficiency of the whole process is significantly increased, first of all by conducting in-depth analyzes, and the decisions are made by the risk management experts. This proves its usefulness and increases the confidence of experts in it.

Key words: Artificial Intelligence, Risk Management, Semantic Analysis, Expert Analysis

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### ГЛОБАЛНИТЕ БРАНДОВЕ ПОД ВЛИЯНИЕ НА COVID-19

### GLOBAL BRANDS UNDER THE INFLUENCE OF COVID-19

Ventsislava Nikolova-Minkova

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The development of modern business depends to a large extent on the ability of companies to compete. More and more companies engage resource in creating a unique product capable of satisfying and the most demanding users. The protection of these products of unlawful use is carried out through intellectual property sites which are defined as intangible assets. Objects of scientific interest in this study are trademarks as an intangible asset that, through the use of marketing tools, turn into powerful brands for billions of dollars. The purpose of this article is to present the change in the value of world brands under the influence of CVID-19. By using empirical methods (study, comparison and analysis of expert assessments), the paper clarifies the role of intangible assets for the competitiveness of companies and the importance of trademarks and brands as a competitive advantage. The results of the study show predictions about the most valuable global brands for 2021. In conclusion, the role of trademark and brands for society as a whole and in particular for consumers is summarized.

Key words: intangible assets, trademark, brands, pandemic COVID-19

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### КРЪГОВАТА ИКОНОМИКА И МЕТАЛИТЕ

#### THE CIRCULAR ECONOMY AND METALS

Vessela Petrova

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#### **ABSTRACT**

Purpose: The purpose of this publication is to highlight the relationship between the circular economy and metals. On the one hand, the circularity implies a reduction in the use of natural resources and, respectively, in extraction, on the other hand, the renewable sources we are striving for are produced from huge quantities of metals. The thesis is also conditioned by the increased production of copper and its price on the London Metal Exchange in recent months, associated with the European green deal.

Methods: The publication is based on an analysis of the current situation and the incoming circular processes, drawing a parallel with an author's research among 13 companies in the raw-material industry, which proves the use of business models from the circular economy in their activities.

Results: The results prove the essential importance of metals in energy transition processes.

Conclusions: New energy technologies require huge amounts of rare metals. Most of them are technology-specific and may be replaceable. However, this does not apply to metals such as copper. Mass electrification and renewable energy sources (RES), which are at the heart of the transition to clean energy, are impossible without it."

**Key words:** Circular economy; metals; raw-material industry.

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# ОНЛАЙН КОМУНИКАЦИИТЕ И РОЛЯТА ИМ ВЪРХУ БИЗНЕС ПРОДАЖБИТЕ ONLINE COMMUNICATIONS AND THEIR ROLE IN BUSINESS SALES

Tsvetelina Kabakchieva

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Of particular interest to business are the latest and fastest growing online marketing communications, also known as Internet marketing, web marketing, interactive marketing or online marketing. From the variety of names it is clear that there is no single position on the definition and features of this communication channel. A company can promote a new logo, product or overall campaign through multiple channels - print media, television, web and social networks. The idea of the marketing mix is that the content that is submitted to each of them is different and in accordance with the requirements of the specific channel, but all direct users to the same point, namely - the product or service.

The purpose of the article is to present a systematization of online marketing communications and to justify the need for their use in modern business. The research methods are based on the complex use of induction, deduction, comparison, analysis, classification, consultation methods, etc. The results of the research can be used to identify the priority activities in online sales and in the development of company online strategies for business expansion and entry into international markets. The conclusions of the present study are a prerequisite and opportunities for subsequent analysis of the application of online communications in business."

**Keywords:** online communications, internet marketing, product, service, business

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# ПРИЛОЖЕНИЕ НА ДИГИТАЛНИТЕ ТЕХНОЛОГИИ В ПРОЦЕСА НА ОЦЕНЯВАНЕ НА ПЕРСОНАЛА **APPLICATION OF DIGITAL TECHNOLOGIES IN HUMAN RESOURCE PERFORMANCE APPRAISAL** *Marin Geshkov*

University Of National And World Economy, Sofia, Bulgaria

Performance appraisal is an essential part of human resource management. Performance appraisals are used when important decisions regarding employee's work conditions, including promotions, termination, and rewards are made. Developmental use in an appraisal, geared toward improving employees' performance and enhancing their job skills, includes providing feedback, counseling employees on effective work behaviors, and offering them training and other learning opportunities. If done effectively, performance appraisal can be the key to further augmenting employees' aptitude and competency and improving their achievement. How do modern digital technologies apply to the process of performance appraisal? To answer this question is the purpose of our report. It will be organized as follows: Introduction, Chapter I – Performance Appraisal, Chapter II - Application of Modern Digital Technologies in Conducting Performance Appraisal, Conclusion."

**Key words:** performance appraisal, enterprise, human resource management, digital technologies JEL: J81, M15, M13

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# ИНТЕРНЕТ МАРКЕТИНГ: СЪВРЕМЕННИ РЕКЛАМНИ МОДЕЛИ ЗА ДОСТИГАНЕ ДО НОВИ КЛИЕНТИ INTERNET MARKETING: MODERN ADVERTISING MODELS FOR REACHING NEW CUSTOMERS Simeon Kolyandov, Radko Radev

University Of National And World Economy, Sofia, Bulgaria

The establishment of the Internet has offered new models for the world economy. Web advertising is destined to adjust to this fast improvement of online business. The web showcasing is turning into a hotly debated issue in each business organization and progressively assumes a genuinely significant part in any organization's multi-channel advertising methodology. In any case, how to apply Internet promoting particularly how to use it to draw in more guests

to a specific site is as yet an unavoidable issue for various companies. The two primary reasons for this examination are to bring an overall image of the Internet showcasing of business to its per-users and delve into how to drive traffic to the site

The article utilizing a subjective exploration strategy, in the meantime quantitative technique, is utilized to gather significant information supporting the contextual investigation examination. The viability of the securing cycle is tried in any case, all exercises of obtaining a cycle ought to be joined and executed persistently to augment quality customers. The fundamental motivations behind this publication are to secure new clients, convert them into purchasers, and cause them to become ordinary clients.

**Key words:** web advertising, internet marketing, augment quality customers, business organization's multichannel advertising

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# НАРАСТВАЩАТА ПОПУЛЯРНОСТ НА ПЛАТФОРМИТЕ ЗА ДИГИТАЛНИ ТРАНЗАКЦИИ **THE RISING POPULARITY OF DIGITAL TRANSACTION PLATFORMS**

Simeon Kolyandov

University Of National And World Economy, Sofia, Bulgaria

Using of electronic transaction platforms has increased as our economies had become more and more connected to the internet. The platforms presently middle an enormous number of exchanges between end-clients and autonomous merchants and specialist organizations in numerous pieces of the economy. The worldwide rising popularity of digital transaction platforms has huge ramifications for retail, advertising, and circulation as the current connection designs in the worth chain are progressively supplanted by new computerized systems.

The Internet progression and the appearance of online business encouraged digitalization in the installment measures by giving a variety of electronic installment choices including computerized and versatile wallets, digital money, contactless installment strategies, and so on. In the paper, we will investigate the eventual fate of this industry and assess the present status, also development of digital installment in different business sectors. This research investigates different frameworks of electronic transactions, security issues identified with them, and the fate of the portable money installment mode. Later on, we can expect the development of portable money installments worldwide made via cards on the POS terminals by virtue of all the security and convenience provided by versatile electronic installment strategies.

Key words: electronic transaction platforms, online business, digitalization, digital money, digital wallets

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ВЛИЯНИЕ НА МАРКЕТИНГОВИЯ КОМУНИКАЦИОНЕН МИКС ВЪРХУ БИЗНЕС РЕЗУЛТАТИТЕ НА МСП

#### IMPACT OF MARKETING COMMUNICATION MIX ON BUSINESS RESULTS OF SMES

Gergana Todorova, Georgy Zhelyazkov

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

Marketing communications show a favorable impact on all aspects of the company's activities. They play an essential role in shaping the final economic results. The purpose of the research is to study the effects of elements for marketing communication mix on the business results of selected small and medium enterprises in Stara Zagora district, Bulgaria. The collection of primary data has been developed and disseminated to the owners/managers of SME's survey. The research uses a descriptive and casual research approach to identify the impact of individual communication elements - advertising, sales promotion, and direct marketing on some financial parameters, such as the profit, sales, and profitability of the companies.

The result shows statistical significance between advertising, sales promotion, and financial indicators: profit and net sales revenue. Recommendations were made to the SME managers regarding the use of promotional activities, using communication channels to inform and keep up to date customers, the effectiveness of the types of media, and more.

Key words: marketing communication mix, advertising, sales promotion, profit, sales

### СЕКЦИЯ 3: КОНКУРЕНТОСПОСОБНОСТ И УСТОЙЧИВО РАЗВИТИЕ НА ЗЕМЕДЕЛИЕТО **SECTION 3:**

#### COMPETITIVENESS AND SUSTAINABLE DEVELOPMENT OF AGRICULTURE

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СЪСТОЯНИЕ И ПРЕДИЗВИКАТЕЛСТВА ПРЕД ЦИФРОВИЗАЦИЯТА НА АГРАРНИЯ СЕКТОР В БЪЛГАРИЯ

# STATE AND CHALLENGES BEFORE THE DIGITALIZATION OF THE AGRICULTURAL SECTOR IN BULGARIA

Nadka Kostadinova

Trakia university, Stara Zagora, Bulgaria

One of the priorities for the new EUs' CAP programming period is to improve the dissemination of knowledge, innovation and digitalization in agriculture and rural areas, which will make a significant contribution to increasing competitiveness and ensuring a higher return on investment in agriculture.

In recent years, the access of Bulgarian households to the Internet and modern information technologies, as well as their use has improved significantly. But there is a big variation in the degree of digitalization in the different sub-sectors of the Bulgarian agricultural sector and in the different regions of the country.

The aim of this study is to analyze the state and challenges for the digitalization of Bulgarian agriculture.

To achieve this goal the following tasks are solved: to analyze the state of digitalization in Bulgarian agriculture; to identify trends in this area; to identify problems and challenges to the development of our agricultural sector in this direction.

The methods used to achieve the goal and solve the problems are analysis and synthesis, induction and deduction, axiomatic method, structural-functional approach, statistical calculations.

The expectations from the study are that the Bulgarian agricultural sector does not make sufficient use of modern digital technologies and the majority of farmers are not familiar with the nature of digital agriculture.

Key words: competitiveness, information technologies, rural areas, digital agriculture, market trends

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ЗЕМЕДЕЛИЕТО В КОНТЕКСТА НА РАЗВИТИЕТО НА СЕЛСКИТЕ РАЙОНИ: ЮГОИЗТОЧЕН РАЙОН НА ПЛАНИРАНЕ

# AGRICULTURE IN THE CONTEXT OF RURAL DEVELOPMENT: SOUTHEAST PLANNING REGION Julia Doitchinova, Ivan Kanchev

University Of National And World Economy, Sofia, Bulgaria

For 15 years the agrarian business in our country has been developing in a business environment formed mainly by the common agricultural policy. The purpose of the report is to assess this development in the South-East Planning Region and its impacts on the socio-economic development of rural areas and the state of the environment. The report uses quantitative and qualitative methods. They are the basis of mixed research design. Of the quality methods, expert assessment based on a survey and in-depth structured interviews with 26 experts at the municipal and district level were applied. Quantitative methods are used to process survey and statistical information on agricultural and rural development in the Southeast planning region. The main results are related to the changes in the production and organizational structure of agriculture and their impact on jobs and employment, the age and qualification structure of the employed, unemployment, migration processes, etc. The characteristics of the applied model of agriculture in terms of the predominant type of farms, the functioning of producer organizations, the transition to the production of quality products with protected geographical indications, etc. are outlined.

**Key words:** agricultural models, agricultural holdings, producer organozations, rural areas

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ЗЕМЕДЕЛИЕТО В СЕВЕРЕН ЦЕНТРАЛЕН РАЙОН И СОЦИАЛНО-ИКОНОМИЧЕСКИТЕ И ЕКОЛОГИЧНИ АСПЕКТИ НА ВЪЗДЕЙСТВИЕТО МУ ЗА РАЗВИТИЕТО НА РАЙОНА

AGRICULTURE IN THE NORTH CENTRAL REGION AND THE SOCIO-ECONOMIC AND ENVIRONMENTAL ASPECTS OF ITS IMPACT ON THE DEVELOPMENT OF THE REGION

#### Albena Miteva

University Of National And World Economy, Sofia, Bulgaria

The aim of the study is to assess the importance and socio-economic and environmental aspects of the impact of agriculture in the North Central region for the development of the region. The analysis uses statistical data for the period of our country's membership in the EU. To assess the importance of agriculture in the region and the trends in its development, data from expert assessment by specialists from the regional offices of the State Fund "Agriculture" and the National Agricultural Advisory System are presented. On this basis, are disclosed the peculiarities of the formed model of agriculture in the North Central region in terms of changes in the size of farms, production specialization, organizational parameters, diversification of activities, application of agri-environmental practices and others.

Key words: rural areas, agricultural model, structural changes

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ОБОСНОВКА НА НЕОБХОДИМОСТТА ОТ ПРИЛОЖЕНИЕ НА ИНТЕЛИГЕНТНИ СИСТЕМИ ЗА СКЛАДОВЕ В ЖИВОТНОВЪДСТВОТО

### JUSTIFICATION OF THE NEED TO APPLY INTELLIGENT STORAGE SYSTEMS IN LIVESTOCK BREEDING

<u>Velizara Pencheva, Vladimir Hvarchilkov, Asen Asenov, Ivan Beloev, Dimitar Grozev, Emil Yankov, Ivailo Hristakov</u>

University of Ruse, Ruse, Bulgaria

The report analyzes existing solutions for warehouse management systems in livestock breeding. As a result of the research, a concept for the application of intelligent systems in livestock warehouses was presented. The proposed system is intended to improve the operation and functionality of the warehouse.

**Key words:** warehouse, intelligent systems, warehouse efficiency, warehouse logistics, livestock breeding

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# ИНВЕСТИЦИОННА АКТИВНОСТ В РАСТЕНИЕВЪДСТВОТО - ОЦЕНКА И ПЕРСПЕКТИВИ INVESTMENT ACTIVITY IN HORTICULTURE - EVALUATION AND PROSPECTS

<u>Desislava Ivanova</u>

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

The agricultural sector in Bulgaria faces a number of challenges related to the new programming period for Europe and the forthcoming technological transformation. The new realities in the transition period (2021-2022) require in-depth research on the willingness of the sector in terms of investment opportunities and prospects for it. The purpose of this study is to analyze the investment activity in the horticulture sector and to identify some of the main factors that interposed it. The dynamics and the amount of investments in the sector is analyzed through the incremental changes that have occurred with fixed tangible and intangible assets. The impact of financing and co-financing is taken into account, as well as the company's refinancing opportunities.

**Key words:** horticulture, investment activity, financing, gross value added, sale revenue, profit

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# МОДЕЛИ ПРИ УПРАВЛЕНИЕ НА ДОСТАВКИТЕ В ЖИВОТНОВЪДСТВОТО MODELS IN SUPPLY MANAGEMENT IN ANIMAL HUSBANDRY

Nadezhda Petrova, Evgeni Genchev

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

The models that could be used to manage livestock supplies are quite diverse. They are deterministic or stochastic depending on the level of demand for a resource. If they allow time change of some parameters are dynamic, and in the opposite case - static. They can affect only one or several important stocks at a time. The purpose of this article is to make a literature review of the different types of models and their possible application in livestock supply management.

**Key words:** models, supply management, animal husbandry

АНАЛИЗ НА ДИНАМИКАТА НА СРЕДНИТЕ ЦЕНИ НА ДОГОВОРИТЕ ЗА АРЕНДА НА ЗЕМЕДЕЛСКИ ЗЕМИ В ЮИР НА БЪЛГАРИЯ ЗА ПЕРИОДА 2010-2019 ГОДИНА

# ANALYSIS OF THE DYNAMICS OF THE AVERAGE PRICES OF THE CONTRACTS FOR LEASE OF AGRICULTURAL LANDS IN SOUTH-EASTERN REGION OF BULGARIA FOR THE PERIOD 2010-2019

Hristo Momchilov, Plamena Petkova

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Leases and rent play a key role in agricultural production. Rental payments represent a significant part of production costs. Practice shows that in order not to lose the already occupied areas, producers increase the amount of payments to owners. The aim of the study is to track the dynamics of average prices for lease agreements for the South-Eastern region of Bulgaria. Basic and chain indices of price dynamics were used. There was a continuous growth of increase in rent payments.

Key words: land, basic year, trend, increase

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# ИКОНОМИЧЕСКИ АСПЕКТИ И ПРЕДИЗВИКАТЕЛСТВА ПРИ ПРЕЦИЗНОТО ЗЕМЕДЕЛИЕ ECONOMIC ASPECTS AND CHALLENGES OF PRECISE AGRICULTURE

Nikolay Penev, Marin Petrov

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

Precise agriculture is an intersection in which meet high technologies, knowledge of the earth, soil, climate and good practices in agricultural activity. Economical aspects with precise agriculture are related to introduction of those practices that can help improving the optimization of costs and achievement of higher quality products and better crop collection rates. In order to introduce the practices and techniques of precise agriculture specific investments are required in: information assurance, agrotechnical procedures, services of monitoring, and the use of GPS devices for mapping the field and planning the production process according the specific needs of the farm. There are wide variety of techniques that could be introduced in the production process, but only in determined cases these practices could be viable and could lead to real pay-back in reasonable period of time and of course, could lead the agricultural production to optimization levels, reducing costs of exploitation and improving financial statements of the farm.

Key words: agriculture, economics, new technologies

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# ДИГИТАЛИЗАЦИЯ И ФИНАНСОВИ РЕЗУЛТАТИ НА ПРЕДПРИЯТИЯ ОТ СЕКТОР ЖИВОТНОВЪДСТВО DIGITALIZATION AND FINANCIAL PERFORMANCE OF ENTERPRISES FROM LIVESTOCK SECTOR

Dimitrina Stoyancheva, Rumyana Angelova

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The European Union's strategy for the digitalization of agriculture is reflected in a number of initiatives, programs and projects. The effect of promoting the application of digital technologies is sought in increasing the farmers' competitiveness and their entry into the foreign market. This is expected to be done through the introduction of innovations leading to cost optimization and greater efficiency. The article examines some concepts related to digitalization, such as "digital maturity", "digital transformation", "digital intelligence" and others. A model is presented to establish the impact of digital opportunities on the business efficiency of entrepreneurs in the livestock sector. Based on an empirical study of companies in the livestock sector, the relationship between digitalization and business results, increasing sales revenue, size, and innovation activity is analyzed. An attempt is made to determine the characteristics and degree of financial performance of enterprises implementing ICT solutions to enterprises that have not yet oriented their activities towards digital transformation.

**Key words:** digitalization, ICT solutions, financial performance, livestock sector solutions, financial performance, livestock sector

СТРАТЕГИИ ЗА ПРИЛАГАНЕ НА ИНОВАЦИИ ОТ ВИНОПРОИЗВОДИТЕЛИТЕ В БЪЛГАРИЯ: ЕМПИРИЧНИ ДОКАЗАТЕЛСТВА

## STRATEGIES FOR IMPLEMENTATION OF INNOVATION BY WINE PRODUCERS IN BULGARIA: AN EMPIRICAL EVIDENCE

Mina Angelova, Daniela Pastarmadzhieva

Plovdiv University "Paisii Hilendarski", Plovdiv, Bulgaria

The innovations are rather important for the competitiveness of a company. As wine production is a traditional economic sector in Bulgaria, its sustainable development and competitiveness can be enhanced by implementation of innovations. Making the implementation of innovation resultative and successful depends on the existence of an innovation strategy. Thus, the purpose of the current study is to identify the level of implementation of innovation strategies among Bulgarian wine producers, and to identify an association between various factors and the intention to implement innovation strategies. The object of the research is Bulgarian SMEs wine producers. The focus is their activity, regarding the innovation strategy of their company. The methods include a survey performed in the period December 2019 - January 2020. The data was processed with statistical software and statistical methods were used. The results show that several associations can be identified as regards some of the characteristics of the SMEs and we can conclude that the newest companies mostly implement innovations, alongside with the smallest ones. There are more strategic innovators among the companies, who work on world markets and use financing from national funds, alongside with those who produce fruit wines, special wines, and wines with PDO.

Key words: innovation strategy, SMEs, wine producers, Bulgaria

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ПРИРОДЕН РЕСУРСЕН ПОТЕНЦИАЛ - ОСНОВА ЗА РАЗВИТИЕ НА БИОИКОНОМИКАТА, СВЪРЗАНИ С КОНВЕНЦИОНАЛНОТО И БИОЛОГИЧНО ЗЕМЕДЕЛИЕ В БЪЛГАРИЯ

# NATURAL RESOURCE POTENTIAL - BASIS FOR DEVELOPMENT OF THE BIOECONOMY, RELATED TO CONVENTIONAL AND ORGANIC FARMING IN BULGARIA

Desislava Toteva, Rumen Popov, Petar Marinov,

Institute of Agrarian Economics - Sofia at SAA, Sofia, Bulgaria

The lithosphere is the solid foundation formed during the formation of our planet. Natural resources have been formed in its layers, which directly influence the Socio-economic development of human civilization during different time periods. The natural complex of Bulgaria is formed by three basic components: natural environment, natural resources and natural conditions. They take part in one way or another in the formation and development of economic, economic and environmental territorial structural units at the local level.

Unlike the classical branch economy - Bioeconomy could form and analyze its synergetic models based on ecological attitude to all economic activities of the landscape such as: extraction of mineral and forest resources, tillage, extraction of non-metallic minerals (low carbon), mineral waters, processing of waste for secondary industrial use and other economic activities.

The aim of the present study is to study the natural resource potential on the territory of Bulgaria and to analyze the existing opportunities for development of the bioeconomy. To compare and analyze the relationship between conventional and bio culture crops in ha. on the territory of the country, the possibility for their practical application in the systems of the circular economy.

**Key words:** Bioeconomy, natural environment, conventional and bio culture crops

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# ИНТЕЛИГЕНТЕН АНАЛИЗ НА АКТИВНОТО УПРАВЛЕНИЕ В ЖИВОТНОВЪДСТВОТО INTELLIGENT ANALYSIS OF ACTIVE MANAGEMENT OF ANIMAL HUSBANDRY

Stanislav Dimitrov, Krassimira Stoilova, Todor Stoilov

ICT-BAS, Sofia, Bulgaria

The growth of modern technological solution, information technology, automation, artificial intelligence allows their power to be applied in traditional animal husbandry. This will give rise in productivity and sustainable development

of the animal farms by increasing the economical growth, decrease on recourses in husbandry operations and human efforts.

- The information technologies are applied in feeding system by means to automate the operations and intelligent solutions support the preparation of the feeding.
- The intelligent solutions can increase the animal production to be more profitable and efficient. This make rise of the research development towards implementation of intelligent applications of animal productivity and sustainability [ZluiluiXi, IEE2021].

The usage of intelligent solutions on husbandry management prevent managers from ineffective decision makings. Thus the risk of husbandry management is considerably decrease.

The application of intelligent technological solutions on animal husbandry can assess in real time the current state of their operational life. This is performed by qualitive analysis of financial and material flow which participate in inputs and outputs recourses and production outcomes of the animal husbandry. Based on qualitative evaluation it is identified tendencies of the future behavior of the husbandry.

**Key words:** animal husbandry, intelligent solutions, innovations, risk assessment

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# СЪВРЕМЕННО БАНКИРАНЕ ЗА ДИГИТАЛИЗАЦИЯ В ЖИВОТНОВЪДСТВО ADVANCED BANKING FOR DIGITALIZATION IN ANIMAL HUSBANDRY

Milvina Terzieva, Dimitar Karastoyanov

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The article describes ICT innovations in modern banking and the transition to open banking. Platforms for fast money transfers, movement schemes for transactions and types of services are presented. Possibilities for digitalization of financial operations in animal husbandry are discussed. Factors such as reducing costs, increasing efficiency, facilitating and improving decision-making in the overall management of the financial, economic and reporting activities of a livestock farm are analyzed.

Key words: open banking, fast money transfers, banking services

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### ИКОНОМИЧЕСКА ЕФЕКТИВНОСТ НА БИОСТИМУЛАНТИТЕ В ЗЕМЕДЕЛИЕТО

ECONOMIC EFFICIENCY OF BIOSTIMULANTS IN AGRICULTURE

Angel Sarov, Ivan Boevsky

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Addressing issues related to the economic efficiency of biostimulants in agriculture meets the needs of farmers and consumer requirements. The urgency of the problem is also determined by its compliance with the priorities of the European Union for the new CAP 2021+. It seeks and solves a new problem for our country, which is in line with national priorities for healthy food and commitments to the European Union. Increasing plant productivity can be achieved on the one hand by genetics and selection, as well as by managing physiological and biochemical processes through the use of growth regulators, on the other hand. The aim of the study is to assess the economic efficiency of biostimulants used in agriculture. The economic efficiency of the various biostimulants is established by solving the problem with the production structure of the agricultural holding. To establish the economic efficiency of the various biostimulants, an economic-mathematical model based on linear optimization has been developed. The results of the preliminary studies show that in assessing the impact of biological substances it is necessary to take into account not only the increase in profitability and the profit per unit area of agricultural crops but also whether the profit of the holding has increased as a whole.

**Key words:** agriculture, economic effect, biostimulants, optimizing of production structure

#### РОЛЯТА НА БИОМАСАТА В БЪДЕЩАТА БИОИКОНОМИКА

#### THE ROLE OF AGRICULTURAL BIOMASS IN THE FUTURE BIOECONOMY

Rositsa Beluhova-Uzunova, Mariyana Shishkova, Boryana Ivanova Agricultural university, Plovdiv, Bulgaria

The European Commission presented the 2018 Bioeconomy strategy which developed action plan for resource-efficient, competitive and sustainable economy. Bioeconomy sectors are also linked to the European Green Deal, Stepping up Europe's 2030 climate ambition Communication, Farm to Folk strategy and other innovation strategies. In the transition to low carbon world, biomass play crucial role as an alternative to fossil resources. In the EU agriculture is main biomass source with 68% of the total supply. The paper analyses European Union agricultural biomass potential, supply and use. Agricultural biomass is part of the core bioeconomy sectors and its demand is increasing. However, the potential and alternative opportunities for its use are major concern. Biomass is renewable but limited resource and on that basis it is important to outline biomass balance and pay attention on the ratio between food and industrial needs of biomass which refer to food and energy security. The policy framework in this regards have to be complex and well-targeted. The biomass use could lead to a number of benefits associated with resolving global issues. On the other hand, if sustainability is not taken into account, the opportunity for inclusive growth and development will not be achieved.

**Key words:** sustainability, low carbon economy, food security

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# КЪСИТЕ ВЕРИГИ НА ДОСТАВКА НА ХРАНИ В БЪЛГАРИЯ - УСТОЙЧИВОСТ И СМУЩЕНИЯ SHORT FOOD SUPPLY CHAINS IN BULGARIA – SUSTAINABILITY AND DISRUPTIONS Georgi Aleksiev

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

Short food supply chains have the potential of improving local food production and provide the population with high quality fresh food. The sustainability of these chains has come under question last year (2020) due to the disruption caused by the pandemic and the lack of preparation for it.

The goal of this study is to analyze the sustainability of short food supply chains in Bulgaria and identify the main sources for their disruptions.

In order to achieve this goal, the following tasks must be solved: to analyze the state of short food supply chains in Bulgaria; to evaluate the level of sustainability of these chains, and to discover and present the main sources for disruptions of short food supply chains in Bulgaria.

Key words: agriculture, competitiveness, logistics

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ДИГИТАЛНАТА ТРАНСФОРМАЦИЯ НА ПРОИЗВОДСТВОТО НА ХРАНИ В ЕВРОПА И ВЪЗМОЖНОСТИ ЗА АДАПТАЦИЯТА И В БЪЛГАРИЯ

# DIGITAL TRANSFORMATION OF FOOD PRODUCION IN EUROPE AND OPPORTUNITIES FOR ITS ADAPTATION IN BULGARIA

Georgi Aleksiev

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

Agricultural production in Europe has been focused on increasing its efficiency and improving its ecological imprint. New digital technologies have created opportunities to achieve these goals and thus created a competition among producers for their implementation on a large scale. In the meantime, CAP of EU has presented multiple forms of support for the digital transformation of the sector.

The goal of this study is to analyze the key points of digital transformation of agricultural production in Europe and distinguish the opportunities for technological adaptation of digital solutions in Bulgaria.

In order to achieve this goal the following tasks must be solved: to analyze the level of digital transformation of food production in Europe and its main advantages; to recognize the opportunities for transfer of technologies and solutions adapted for the Bulgarian agricultural sector.

**Key words:** production technology, competitiveness, agriculture

ФАКТОРНИ ВЛИЯНИЯ В ХРАНИТЕЛНАТА ИНДУСТРИЯ НА ПРИМЕРА НА МЛЕКОПРЕРАБОТВАТЕЛНИТЕ ПРЕДПРИЯТИЯ В БЪЛГАРИЯ

## FACTOR INFLUENCES IN THE FOOD INDUSTRY OF THE EXAMPLE OF DAIRY PROCESSING ENTERPRISES IN BULGARIA

Oleg Milev

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The purpose of this article is to examine the factors that affect the sales revenues of companies in the food industry with a subject of business activity of processing milk and dairy products.

Based on available statistical information and applied theoretical statements, a method of analysis was chosen related to the change in sales revenues from the volume, price and range of produced and sold types of dairy products.

By studying the relationships and dependencies of factor influences, it is possible to optimize production capacity and to do more effective strategic planning.

The obtained result of the research is the basis for deriving guidelines and recommendations in order to increase the financial result of the dairy processing enterprises in Bulgaria.

**Key words:** sales revenues, factor influence, production and processing, milk and dairy products

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# КОНКУРЕНТНИ ПРЕДИМСТВА НА БЪЛГАРСКИЯТ ВИНЕН СЕКТОР COMPETITIVE ADVANTAGES OF THE BULGARIAN WINE SECTOR

Gergana Dimitrova

Plovdiv University "Paisii Hilendarski", Plovdiv, Bulgaria

The wine industry is traditional sector in the Bulgarian economy. However, at the end of the XX century it faced various challenges. Later, it has started to restore and has developed in number of areas. Nowadays it has new characteristics, based on its strengths and weaknesses. Thus, the purpose of the current study is to identify the competitive advantages of the wine sector in Bulgaria. The object of the research are Bulgarian wine producers, who are small and middle size enterprises (SMEs). The focus of the study is a selection of indicators, which contribute for the identification of their competitive advantages. The data used is of own survey, performed among Bulgarian wine producers. The results show that the main advantages are targeted at qualitative wines from authentic local sorts. This justifies the obligatory direction for differentiation and validation of the Bulgarian wine producers by promoting the wines of local varieties and establishing the identity of the wine regions.

**Key words:** Wine Industry, SWOT analysis, Competitiveness, Competitive advantage, SMEs

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КЛАСИФИКАЦИЯ НА СТРАНИТЕ ОТ ЕС СПОРЕД СТЕПЕНТА НА ПОСТИГАНЕ НА ЦЕЛИТЕ ЗА УСТОЙЧИВО РАЗВИТИЕ, СВЪРЗАНИ СЪС СЕЛСКОТО СТОПАНСТВО

# CLASSIFICATION OF EU COUNTRIES ACCORDING TO THE DEGREE OF THE SUSTAINABLE DEVELOPMENT GOALS ACHIEVEMENT RELATED TO AGRICULTURE

Radka Nenova

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The main goal of the study is to classify the 27 countries of the European Union (excluding the UK) according to their contribution to achieving the UN's global goals for sustainable development related to agriculture. Five goals were selected: Goal 2: Zero hunger, Goal 3: Good health and well-being, Goal 12: Responsible consumption and production, Goal 14: Life below water and Goal 15: Life on land. The following criteria for distinguishing countries were used in the clustering: Goal achievement, Challenges remain, Significant challenges, Major challenges. To achieve this goal, from a methodological point of view, are applied: correlation analysis, cluster analysis, ANOVA analysis of variance and post hog test for multiple comparison - Tukey HSD. As a result of the analysis, with data from the Sustainable Development Report 2020, four clusters were identified. Bulgaria falls into the second cluster, along with Croatia, Cyprus, Finland, France, Greece, Ireland and Sweden. The main conclusion for countries in the second cluster is that there are significant challenges for Goal 2 and Goal 14, challenges remain for Goal 3 and Goal 15 and major challenges for Goal 12.

ИДЕНТИФИЦИРАНЕ НА КРИТЕРИИ ЗА ДОБРИ ЛОГИСТИЧНИ ПРАКТИКИ ЗА РАЗВИТИЕ НА АГРОБИЗНЕСА

### IDENTIFICATION OF CRITERIA FOR GOOD LOGISTICS PRACTICES FOR AGROBUSINESS DEVELOPMENT

Elitsa Krasteva

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The main research goal is to identify criteria for good logistics practices for the development of agribusiness in Bulgaria. The thesis is that the construction of logistics chains is a market reaction of the business for efficient use of available resources and generation of added value, contributing to cohesion between the regions in the national economy. Methods are analytical tools such as: analysis and summary of literature, tabular, graphical and schematic presentation of characteristics and trends, interview and survey on the possibilities for building logistics chains in agribusiness. The results of the study are: First. There are regional inequalities and asymmetries in territorial development. The survey data show that in less developed regions there are more logistics companies with a wide range of activities, which helps generate economic growth and achieve regional cohesion. Second. Based on the survey, the main problems and positive trends in solving internal organizational problems in business organizations are outlined. Third. The following criteria for good logistics practices in business development have been identified and substantiated: internet platform for doing business, commercial packaging and design, inventory and delivery tracking systems, shortening planning time, order processing and delivery, service and maintenance, promotional policy and establishment of logistics structures.

**Key words:** logistics chains; criteria for good logistics practices; regional inequalities and asymmetries; regional cohesion; agribusiness.

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ПОДОБРЯВАНЕ НА ДОСТЪПА ДО ФИНАНСИ ЗА ЗЕМЕДЕЛСКИТЕ СТОПАНСТВА В БЪЛГАРИЯ КАТО ФАКТОР ЗА УСТОЙЧИВОСТ НА ФИНАНСИРАНЕТО НА ЗЕМЕДЕЛИЕТО В БЪЛГАРИЯ

## IMPROVING ACCESS TO FINANCE FOR AGRICULTURAL AS A FACTOR FOR THE SUSTAINABILITY OF AGRICULTURAL FINANCING IN BULGARIA

Damyan Kirechev

University of Economics, Varna, Bulgaria

The report analyzes the demand for finance and the supply of financial services. The assessment is that access to finance is a significant difficulty for Bulgarian farmers. Bulgarian farmers value their problems with access to finance at least twice as much as those of average European farmers. The main difficulties experienced by Bulgarian farmers and reflected in the demand for finance are determined by their needs for working capital, modernization of agricultural enterprises, and the purchase of agricultural land. The supply of agricultural loans is growing. The state of lending to the agricultural sector in the period after the country's accession to the European Union in 2007 is studied. In recent years, the supply of credit has increased. The main problems in the credit market are the concentration of the banking sector, the high levels of indebtedness, difficulties related to loan collateral. Lending is closely linked to financial support under CAP schemes. The development of financial support in combination with the improvement of the supply of agricultural finance is an important factor for achieving sustainable financing of agriculture in Bulgaria in the coming years. The need to improve the tools for improving the value chain in agriculture is highlighted.

Key words: access to finance; financing; agriculture; financial needs; farm credit;

АГРОЕКОЛОГИЧНИ ПРАКТИКИ ЗА ИЗПОЛЗВАНЕ НА ЗЕМЯТА КАТО ПРЕДПОСТАВКА ЗА ИЗГРАЖДАНЕ НА УСТОЙЧИВА ХРАНИТЕЛНА СИСТЕМА

### AGRI-ENVIRONMENTAL PRACTICES FOR LAND USE AS A PREREQUISITE FOR BUILDING A SUSTAINABLE AGRI-FOOD SYSTEM

Damyan Kirechev

University of Economics, Varna, Bulgaria

The study analyses the potential of agroecological practices in agricultural land use to ensure increased sustainability of the agri-food system. Conventional agricultural practices are perceived to have an increasingly negative impact on land use, necessitating the adoption of new approaches. In the context of climate change, the role of sustainable land management and its ability to sequester carbon is increasing. The need to support farmers adopting agri-environmental practices is highlighted. The introduction of such practices is seen as a major factor in improving the supply of healthy and safe food.

Key words: agroecology; agroecological practices; land use; sustainable lend management; agri-food system;

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СРАВНЕНИЕ НА ИКОНОМИЧЕКАТА ЕФЕКТИВНОСТ НА СТОПАНСТВАТА В МЛЕЧНОТО ГОВЕДОВЪДСТВО В БЪЛГАРИЯ И ФР ГЕРМАНИЯ

### ECONOMIC EFFICIENCY COMPARISION OF DAIRY CATTLE FARMS BETWEEN BULGARIA AND FEDERAL REPUBPIC OF GERMANY

Konstantin Stankov

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Milk is produced in every single EU Member State without exception. The EU is a major player in the world dairy market as the leading exporter of many dairy products, most notably cheeses. The EU's main producers are Germany, France, the United Kingdom, Poland, the Netherlands and Italy which together account for almost 70% of the EU production.

Dairy farming is structured differently in all of the Member States.

The purpose of this article is to make a comparative analysis of economic performance of the holdings of dairy farming between Bulgaria and the largest producer of milk in the EU - Germany.

To achieve the target the following - important tasks are solved:

- Analysis of the Economic Efficiency in the sector in both countries;
- Comparison of economic efficiency in Bulgaria and the Federal Republic of Germany with data from selected farms in the sector;
- Outlining some trends in the development of economic efficiency of dairy farms and making recommendations for its improvement.

Key words: Economic efficiency, dairy cattle, Bulgaria, Federal Republic of Germany

#### СЕКЦИЯ 4:

# СЪВРЕМЕННИ ПРЕДИЗВИКАТЕЛСТВА ПРЕД КЛЮЧОВИ СОЦИАЛНО-ИКОНОМИЧЕСКИ СЕКТОРИ **SECTION 4:**

### CONTEMPORARY CHALLENGES FOR KEY SOCIO-ECONOMIC SECTORS

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СТРУКТУРА И УСТОЙЧИВОСТ НА МОТИВАЦИЯТА ЗА ДЕЙНОСТ НА ФЕРМЕРИТЕ В СФЕРАТА НА ГОВЕДОВЪДСТВОТО В БЪЛГАРИЯ

### STRUCTURE AND STABILITY OF THE MOTIVATION FOR ACTION IN CATTLE FARMERS IN BULGARIA

Tanya Taneva

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

Motivation for work, despite having been thoroughly analyzed in literature, does not cease to attract the interest of researchers not only due to its exceptional complexity as a psychological phenomenon, but also to a variety of concepts, combined with the resulting interpretations and explanatory models. The theoretical base for the presented empirical study is Self-Determination Theory and the ensuing concept for internal and external motivation. Comparable data from studies in 2010 and 2020 have been analyzed to inform about the dynamics of motives dependent on changes in economic and social conditions. The respondents of the survey include 238 farmers from dairy cattle farms. The aim is to establish the structure and stability of motivation for action, as well as its dynamics over a period of ten years. The main results show a predominantly internal motivation for action, sustained interest in the work performed, as well as strong dynamics in some of the internal and external motives. The stability of motivation for action is significantly determined by internal reasons for work. A certain tendency for unstable motivation for action in farmers who have mostly external motives for communication, lack of other work, or little respect by others has been confirmed.

**Key words:** internal motivation, dynamics of motifs, cattle farming

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РАЗВИТИЕ НА ТУРИСТИЧЕСКИТЕ ДЕСТИНАЦИИ ЧРЕЗ ВЪЗСТАНОВЯВАНЕ И НАСЪРЧАВАНЕ НА МЕСТНАТА ИЛЕНТИЧНОСТ

## TOURIST DESTINATION DEVELOPMENT THROUGH REVIVING AND PROMOTING THE LOCAL IDENTITY

Yulia Dzhabarova, Margarita Ruseva

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Local identity is a collective concept, which comprises landscape, culture, traditions, and inhabitants on a distinguished place. It serves as a strategic tool for the development of local territories and communities. In the context of the tourist product, local identity plays a key role for shaping and imposing the tourist appearance of a certain tourist destination.

Under Dionysos project, within V-A Interreg Greece-Bulgaria 2017-2020 a series of studies were conducted, which aim at revealing the typical features, composing the local identity of the Sakar-East Rhodopi region. To achieve this purpose, a complex methodology was applied, including the following methods: in-depth interview, questionnaire research and observation.

On the basis of the gained results from the analysis, concrete suggestions, related to the development and imposing of the local identity of the region, are derived. The provided information could serve the business organizations in the tourist sector, as well as the local government and non-government institutions. The proposed tools correspond to the up-to-date trends in the consumer demand of tourist product. They are a prerequisite for the sustainable development of the region within its economic, social and cultural dimensions.

Key words: local community, tourist destination, traditions local community, tourist destination, traditions

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ПОВЕДЕНЧЕСКИИ ПРОМЕНИ НА СТРАНИТЕ В ТУРИСТИЧЕСКИЯ СЕКТОР СЛЕД ИЗПЪЛНЕНИЕ НА МЕРКИТЕ ЗА ПРЕОДОЛЯВАНЕ НА КРИЗАТА COVID-19

### BEHAVIOURAL CHANGES OF THE PARTIES IN THE TOURIST SECTOR AFTER IMPLEMENTATION OF THE MEASURES FOR OVERCOMING THE COVID-19 CRISIS

Yulia Dzhabarova, Zlatka Grigorova

Plovdiv university "Paisii Hilendarski", Plovdiv, Bulgaria

The harmful consequences of COVID-19 mostly influenced the tourist sector worldwide. The negative trends shaped the reality for all related businesses and involved parties, and let them face the challenge to overcome this non-friendly environment, and streamline their future existence and development. In order to prevent the companies from the environmental threats, and to support their recovery and future stable existence, many different measures at national and regional level were taken. The paper aims to give an insight to the influence and efficiency of the carried out measures in the tourist sector. The applied methodology is based on the comparative analysis. For this purpose a two-step, on-line research was conducted, and the data was registered through structured questionnaires. The sample consists of representatives of different parties engaged in the tourist sector in the Plovdiv region. The survey was conducted in the period of March 2019 – April 2020. The derived conclusions and recommendations could serve all institutions at national and regional level, as well as business organizations in their policies in order to reply adequately to the challenges of the surrounding environment and consumer requirements.

**Key words:** tourist sector, COVID-19, crisis, measures

#### БЕЗЖИЧНИ ТЕХНОЛОГИИ В ТЪРГОВСКИЯ БИЗНЕС

#### WIRELESS TECHNOLOGIES IN THE COMMERCIAL BUSINESS

Michal Stojanov

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Purpose: The main aim of this study is to review some widespread wireless technologies and the possible dimensions of their operation in the commercial business. Methods: The paper uses general and specific methods such as the descriptive method, situational and content analysis. Results: Wireless technologies are becoming a mandatory element in various situations of personal and business life. Their role is growing both in terms of information and communication exchange, but also in relation to the creation of new application areas for their use in business. Each wireless technology has certain physical specifics and characteristics that predetermine the field for their successful implementation and usefulness in trade. Conclusions: In the commercial business, wireless data and information transmission is a technological factor in accelerating the economic process and is an integral part of the digital transformation in the implementation of product exchange in both traditional physical and online store environments.

Key words: commerce, wireless network, Bluetooth, RFID, NFC

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ИЗСЛЕДВАНЕ НА ОЧАКВАНИЯТА НА СТУДЕНТИ ПЕДАГОЗИ ЗА ФОРМИРАНЕ НА ПРОФЕСИОНАЛНА КОМПЕТЕНТНОСТ И ГОТОВНОСТ ЗА ПРОФЕСИОНАЛНА РАБОТА

# RESEARCH ON EXPECTATIONS OF STUDENT PEDAGOGUES FOR FORMATION OF PROFESSIONAL COMPETENCE AND READINESS FOR PROFESSIONAL WORK

Veselina Ivanova

Trakia University, Stara Zagora, Bulgaria

Purpose: The study has been conducted to determine the attitudes for formation of professional competence and readiness of the students from "Pre-school and primary school education" at Trakia University, Stara Zagora, Bulgaria to start a professional career in the field of physical education. The subject of the survey are 68 students at their Bachelor's degree, who graduated in the academic year 2019/2020. All respondents are women with an average age of 22,6 years. For the purpose of the research, a questionnaire with the author Ilieva was attached. Alternative analysis and chi-square Pearson's test (× ²) were used to analyze the results. Results: The surveyed students are aware of the importance of the subjects "Theoretical foundations of physical education" and "Methodology of physical education in preschool and primary school age." They are ready to actively participate in the learning process of physical education in the academic environment. The study of their motor and health culture, as linked to the future pedagogical development, reveals some deficits in academic training and points to the need to refine curricula.

**Key words:** Student pedagogues, professional training, pedagogical and personal expectations

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ВЗАИМОВРЪЗКА И ВЗАИМООБУСЛОВЕНОСТ НА КЛЮЧОВИ ИКОНОМИЧЕСКИ СЕКТОРИ – СЕЛСКО СТОПАНСТВО И ТУРИЗЪМ В УСЛОВИЯТА НА ПАНДЕМИЧНА КРИЗА

## INTERCONNECTION AND INTERDEPENDENCE OF KEY ECONOMIC SECTORS - AGRICULTURE AND TOURISM IN THE CONDITIONS OF A PANDEMIC CRISIS

Marina Nikolova, Pavlin Pavlov

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The rural development policy in Bulgaria is aimed at achieving sustainable development of the economic sectors, as the rural area is a place for development not only for agricultural activities, but also offers good prospects for economic development in the regional scope, through adequate business support, job creation and tourism development. Therefore, the interconnection and interdependence between the two economic sectors is especially important in the search for opportunities for the development of alternative tourism with the formation of unique tourism products and the application of environmentally friendly agricultural practices to achieve higher living standards and economic benefits for local communities. The problem is that the current pandemic conditions of last year and this year impose a number of restrictions to a greater or lesser extent on each of the economic sectors. The aim of our study is related to the study of the relationship and interdependence of key economic sectors - agriculture and tourism in crisis. The research methods used in the study include: general research methods, questionnaire, summary and synthesis, logical method, tabular and graphical presentation of characteristics and trends. The results of the research can be systematized in several directions: analysis of the connections and interdependence of the sectors through the opportunities for formation of unique tourist products and through diversification of the activities in the rural areas. In conclusion, the pandemic inevitably affects the economic sectors, and to a greater extent the constraints in the tourism business, where the preferences of potential tourists are focused on domestic alternative tourism. In the construction of unique and specific tourist products in rural areas, the relationship agriculture - tourism is strongly emphasized in terms of requirements for clean and healthy food, incl. organic products or the purchase of local products from the region. The diversification of activities in rural areas through the development of tourism provides an opportunity for the development of entrepreneurial initiatives. The strong connection and interdependence between the economic subjects in the indicated economic branches of key importance is fully manifested in a good combination of the interests of all interested participants in the process of development of the specific territory / region.

**Key words:** Covid 19, interconnection, interdependence, agriculture, alternative tourism, rural areas

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### ЕМПАТИЯТА В УСЛОВИЯТА НА КРИЗА

EMPATHY IN TIMES OF CRISIS

Svetla Panayotova

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Most of us are certainly familiar with empathy. These people who show empathy can empathize with others, understand their feelings, no doubt this favorable quality for them has an advantage over others. The aim of the author of the report is to present empathy as a key factor in a crisis. To achieve the formulated goal, the research methods are used: the concepts of "empathy" and "ecpathy" are compared; the qualities of empathetic people are analyzed; the four pillars of empathy are interpreted; the characteristics of empathy, which helps people to cope in a crisis, are summarized. In conclusion, conclusions and recommendations for the use of empathy in a crisis are presented.

**Key words:** empathy, ecpathy, characteristics of empathy, empathetic people.

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ИЗСЛЕДВАНЕ НА ПРИЧИННОСТ МЕЖДУ БАЗИСНИЯ ЛИХВЕН ПРОЦЕНТ И ВЪЗВРЪЩАЕМОСТТА НА ПАЗАРА В СТРАНИТЕ ОТ ОИСР

### STUDY OF CAUSALITY BETWEEN THE BASE INTEREST RATE AND THE MARKET RETURN OF OECD COUNTRIES

Petar Atanasov

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The relation between macroeconomic indicators and the capital market is a major problem in the economic literature. Market return and the base interest rate are two of the main drivers of economic growth, and the global financial crisis has provided additional impetus for research into the relationship between monetary policy and asset prices globally. This study examines the existence of causality between the base interest rate and the market return of the OECD 15 countries for the period 2001 to 2017. Proof of causality in the direction of the BIR (Base Interest Rate) - market return would allow more accurate capital market forecasting as well as the use of interest rate as an impact tool.

**Key words:** investments, market return, interest rates

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РАЗВИТИЕ НА ЖИВОТОЗАСТРАХОВАТЕЛНИЯ СЕКТОР В БЪЛГАРСКАТА ИКОНОМИКА DEVELOPMENT OF THE LIFE INSURANCE SECTOR IN THE BULGARIAN ECONOMY

Tzvetelina Andreeva

University Of National And World Economy, Sofia, Bulgaria

Summary: This study focuses on the following significant points in the development of the life insurance sector in Bulgaria:

- Prospects for the life insurance sector based on the use of statistical and factual information published for the first half of 2019;
- The link between life insurance with a rent (savings) nature with health insurance Accident and Illness, as well as with health insurance from the National Health Insurance Fund;
- Savings of life insurance as an alternative to other investments (bank deposit, pension fund);
- Additional tax deductions for individuals and legal entities who have taken out life insurance;

The purpose that is set is to track, analyze and outlook life insurance developments in Bulgaria.

Key words: life insurance, health insurance, illness insurance, accident JEL: D81

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ПРЕДПОЧИТАНИЯ НА СТУДЕНТИ ПО ВЕТЕРИНАРНА МЕДИЦИНА ЗА ИНТЕГРИРАНО ЧУЖДОЕЗИКОВО ОБУЧЕНИЕ

#### VETERINARY STUDENTS' PREFERENCES FOR AN INTEGRATED ESL EXPERIENCE

Zhenya Gundasheva, Nevena Naydenova

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A survey with veterinary students on their preferences for an integrated foreign language learning experience was launched in April 2021. Students were asked to select the options they find valid and suitable for the improvement of their academic performance in ESL. The methodology included analysis of the relations between demographic characteristics, learning styles, individual vs. group learning, autonomous preparation, communicative and integrated vs traditional methods and approaches, learner and teacher roles, content and language-integrated learning and intercultural aspects of their education. The results were processed with a statistical software which compared the means established between the different sections. Significant correlations between the demographic characteristics and the items related to autonomous learning and intercultural aspects were found. Other correlations between the confidence of learners and their motivation to communicate in English were also exemplified. The discussion explains the variations in the individual answers and includes an analysis of the selections and the open questions. The conclusions inferred from the learners' input draw a pertinent picture of the aspects of ESL experience addressed by learners studying under mixed teaching media and suggest some improvements for a better integrated language learning.

**Key words:** ESL, learner preferences, integrated learning

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#### ДИНАМИКА НА ИНТЕРЕСА КЪМ ИЗУЧАВАНЕТО НА ЧУЖД ЕЗИК У СТУДЕНТИТЕ

### DYNAMICS OF THE INTEREST FOR LERNING FOREIGN LANGUAGE IN UNIVERSITY STUDENTS

Nevena Naydenova, Kalina Katsarova

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ABSTRACT: The high level of proficiency in a foreign language is increasingly important for the successful professional realization of graduates. Employers' expectations for the level of language training of specialists are constantly increasing. The disclosure of the change in the attitude towards the foreign language as a result of the conducted training and the dynamics of the individual motives of the students are important guidelines for improving the quality of the foreign language training.

The aim of the presented research is to follow the dynamics of interest in learning a foreign language among university students. The research toolkit is a questionnaire with Likert-type answer scales, organized in three modules. The results show a positive dynamics of motivation to learn the language in terms of spontaneous interest in the foreign language, the chances of finding a job, family insistence, the usefulness of working with computers, opportunities to use information and get closer to the developed nations. The practical applicability of the results: The established dependencies are heuristic guidelines for teachers in their work with student groups to increase the effectiveness of teaching.

**Key words:** foreign language learning, dynamics of interest.

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ВЪЗМОЖНОСТИ ЗА ИЗПОЛЗВАНЕ НА ФИНАНСИРАНЕ ОТ ЕС ЗА ПОДОБРЯВАНЕ КАЧЕСТВОТО НА ВИСШЕТО ОБРАЗОВАНИЕ В БЪЛГАРИЯ

OPPORTUNITIES TO USE EU FUNDING TO IMPROVE THE QUALITY OF HIGHER EDUCATION IN BULGARIA

University of economics, Varna, Bulgaria

One of the critical factors for increasing the competitiveness of the Bulgarian economy and the regional development is the quality of higher education. The financing of the higher education system is one of the main reasons for the level of quality of the provided educational service in higher schools, which is considered in the Strategy for Development of Higher Education. The aim of the author is to explore the possibilities for application of European funding for projects of higher education institutions under the operational programs and on this basis to outline some guidelines for improving the effectiveness of project funding in the sector and improving the quality of higher education. In order to determine the role of project financing within the operational programmes for improving the quality of higher education in Bulgaria, an interview with experts was conducted. The results of the research are processed by content analysis and are summarized in the report. They are the basis of the main conclusions and recommendations for improving the quality of education in Bulgaria.

**Key words:** higher educational institution, operational programmes, projects, funding higher educational institution, operational programmes, projects, funding

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ЕФЕКТИ ОТ СОЦИАЛНИТЕ МЕРКИ ЗА ЗАПАЗВАНЕ НА ЗАЕТОСТТА В ХОТЕЛИЕРСТВОТО И РЕСТОРАНТЬОРСТВОТО В УСЛОВИЯТА НА COVID-19

### EFFECTS OF SOCIAL MEASURES FOR MAINTAINING EMPLOYMENT IN THE HOTELS AND RESTAURANTS UNDER THE CONDITIONS OF COVID-19

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Due to the reduced economic activity, the number of unemployed in various economic spheres, including the Hotel and Restaurant Industry, has increased at an accelerated pace since the beginning of the pandemic by COVID-19. In this regard, measures to implement positive social effects in support of business have been put in place by the state. The aim of the study is to present the social measures and their effects for maintaining employment in the hotel and restaurant industry in Bulgaria in the conditions of COVID-19. The research methods used are: analysis and synthesis, content analysis, situation analysis, deduction, induction, comparative method and others. As a result of the study, the nature and development of social measures for maintaining employment in the sectors under consideration since the beginning of the COVID-19 pandemic in Bulgaria are presented, as well as the achieved effects. The conclusions outline the state of employment in the hotel and restaurant industry in Bulgaria during the pandemic, as well as the effectiveness of the applied mechanisms. Some possibilities for future development of the studied economic sphere are also presented.

Key words: COVID-19, Bulgaria, tourism, hotels, restaurants, social measures, effects

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ЕВРОПЕЙСКАТА ЗЕЛЕНА СДЕЛКА И ТРАНСПОРТНИЯТ СЕКТОР: ВЪЗМОЖНОСТИ ИЛИ ОГРАНИЧЕНИЯ

#### EU GREEN DEAL AND THE TRANSPORT SECTOR: OPPORTUNITIES OR RESTRICTIONS

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The European Green Deal is inevitable. To geo-strategic reasons, the EU is highly dependant on the supply of energy from third countries. On one hand, the high-tech carbon neutrality and energy effectiveness will turn into a strong competitive advantage for the old member-states. On the other hand, the last acceded member-states, such as Bulgaria, have not transformed and modernised their energy and transport systems. Consequently, the green deal could be an opportunity or a restriction for the development of the transport connectivity and mobility. In this regard, the purpose of the current paper is to be assessed the opportunities and restrictions that EU Green Deal provides to the transport sector of the last acceded member-states. There will be used the methods of analysis and synthesis, statistical methods and methods of comparison. As a result of the research, there will be proposed measures in order the governments of the relevant countries to be able to implement sufficient policies and strategies for the development of their transport systems till 2050.

**Key words:** green deal, transport, energy

УЧЕНЕ ПРЕЗ ЦЕЛИЯ ЖИВОТ ВЪВ ВИСШЕТО ОБРАЗОВАНИЕ: ИЗСЛЕДВАНЕ НА ВЪЗПРИЯТИЕТО И ОТНОШЕНИЕТО НА СТУДЕНТИТЕ ОТ БИЗНЕС УНИВЕРСИТЕТ КЪМ УЦЖ

### LIFELONG LEARNING IN HIGH EDUCATION: AN EXPLORATION OF BUSINESS UNIVERSITY STUDENT'S PERCEPTION AND ATTITUDE OF LLL

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Lifelong Learning (LLL) has become an integral part of modern society. The concept of LLL seems to attract the attention of national and international governmental and non-governmental organizations. The LLL has become an interesting subject for research as the concept is a key element in the educational policies. Today, the promotion of LLL is a topic of great importance for current educational systems of almost all developed countries. The present paper attempts to explore the undergraduate students' understanding of key aspects of the LLL at University of national and world economy (UNWE) – Sofia, Bulgaria. This study addressed the following issues: 1) the nature and defined of LLL; 2) LLL educational development and benefits; 3) LLL and university students; and 4) LLL perceptions and attitudes. The paper is an empirical study based on questionnaires of above 400 undergraduates' students. The purpose of this study is to improve understanding of business students' views of LLL through online survey. Research objectives: to study the perception of lifelong learning among the students of UNWE; to study the attitude of lifelong learning among the students of UNWE. Research methods: For the data collection was used a developed questionnaire as the research tool. The research sample is formed by undergraduate students from 8 faculties of UNWE. Results focused on an area: how better characterized LLL perceptions and attitudes of university students. Discussion of the results, limitations of the study and suggestions have been also made.

Key words: high education, Lifelong Learning, LLL perception, LLL attitude, university, students

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ЗЕЛЕНО УПРАВЛЕНИЕ НА ЧОВЕШКИ РЕСУРСИ: СВЪРЗВАНЕ И ИЗПОЛЗВАНЕ НА ЗЕЛЕНИ ПРАКТИКИ ЗА УСТОЙЧИВИ БИЗНЕС ОРГАНИЗАЦИИ

### GREEN HUMAN RESOURCES MANAGEMENT: LINKING AND USING GREEN PRACTICES FOR SUSTAINABLE BUSINESS ORGANIZATIONS

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Green human resource management (HRM) is an emerging topic in today's society. The earth's natural resources are coming under increasing pressure and resulting in over-consumption, which is leading to an alarming situation for the environment and business. As a result, it is increasingly necessary for companies to implement formal environmental initiatives. Green HRM is an emerging concept that gives meaning to HRM activities that enhance positive environmental outcomes. The purpose of this paper is to study the concept of Green HRM in more comprehensive manner. Research objective: to explore most relevant green human resource management practices of business organizations. Research methods: This study is totally based on secondary data collected from different sources - Books, Journals, Research Papers and other. Results: This paper has analyzed the literature on Green HRM practices from the existing theory and practice. The key findings have identified and highlighted several green HRM practices such as green: job design, job analysis, human resource planning, recruitment, selection, induction, performance evaluation, training and development, reward management, health and safety and other. In addition, this paper outlined the extending the scope and depth of green HRM practices and presented a conceptual model to discover how they affect both the life of the employees and the business environment. Finally, the paper proposes some research agenda for the future research.

**Key words:** Green organizations, Sustainable development, Green human resource management, Green HRM practice, green initiatives

ВИСШИТЕ УЧИЛИЩА В УСЛОВИЯ НА ИКОНОМИКА НА ЗНАНИЕТО И ИНДУСТРИЯ 4.0 – ПОТЕНЦИАЛ И ПЕРСПЕКТИВИ

## HIGHER EDUCATION INSTITUTIONS IN THE CONDITIONS OF KNOWLEDGE ECONOMY AND INDUSTRY 4.0 - POTENTIAL AND PERSPECTIVES

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New Bulgarian University, Sofia, Bulgaria

The observed processes of globalization, internationalization and technological development presuppose the need for the strategic reorientation of a number of sectors in connection with their competitive positioning and development in the new conditions of the macroeconomic environment and the fourth industrial revolution. The changes inevitably affect higher education institutions - a key player in the processes related to the creation of knowledge and its transfer to the economy, in the context of: the formation of quality of human capital, in accordance with the needs of the market labor and the provision of quality R&D - in order to meet the needs and requirements of business, and hence to increase the innovation activity of the nation. There is a need to promote cooperation between science, education and business, which is seen as a key step in the transition to a knowledge economy, in line with the key priorities for economic development and competitiveness set out in the Europe 2020 Strategy. The main goal is to highlight the challenges facing HEIs, preceded by the emerging "new economic model" derived from Industry 4.0 and adaptation to the knowledge economy. A possible potential in the field is their strategic transformation from classical to research universities, with an equal focus on education and research.

**Key words:** science, education, business, R&D, technology transfer, research centers, competitiveness, innovation activity

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ЗАВИСИМОСТ МЕЖДУ ПРИЛОЖЕНИЕТО НА ПСИХОЛОГИЧЕСКИТЕ ПРИНЦИПИ НА ВЛИЯНИЕ В РЕКЛАМНАТА КОМУНИКАЦИЯ И ДЕМОГРАФСКИ ХАРАКТЕРИСИТИКИ

## DEPENDENCE BETWEEN THE APPLICATION OF PSYCHOLOGICAL PRINCIPLES OF INFLUENCE IN ADVERTISING COMMUNICATION AND DEMOGRAPHIC CHARACTERISTICS

Lyubomira Spasova, Tanya Taneva

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

Applying psychological principles of influence can be an effective approach to influencing consumer interest through advertising. The aim of the present study is to determine to what extent the applicability of the psychological principles of influence in the advertising of mobile operators depends on the financial status of the respondents and gender as demographic characteristics. The contingent of the study are young people aged 18 to 25 from three regional cities in Bulgaria. The applicability of the principles of influence in advertising is determined by the valence of the formed subjective opinion of the respondents about the advertised products and services. The main indicators for measuring the advertising impact are the subjectively assessed benefits and satisfaction with the products and services, the attraction of attention, the trust in the advertising, its acceptance or rejection. The results show high effectiveness of the impact of advertising through liking and social approval of a product or service on respondents who have a higher financial status and more often women.

The practical applicability of the research is found in the guidelines for a differentiated strategy for advertising communication, addressed to different demographic target groups.

**Key words:** social approval, factors of advertising impact, consumer interest.

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ОСНОВНИ ЗАВИСИМОСТИ МЕЖДУ ПОЛА И ФИНАНСОВИЯ СТАТУС СПРЯМО ЧЕСТОТАТА НА ПОЛЗВАНЕ НА МОБИЛНИ ПРОДУКТИ И УСЛУГИ В БЪЛГАРИЯ

MAIN DEPENDENCES BETWEEN GENDER AND FINANCIAL STATUS IN RELATION TO THE FREQUENCY OF USING MOBILE PRODUCTS AND SERVICES IN BULGARIA

Lyubomira Spasova

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The present study is conducted in order to establish the relationships between gender and financial status of young people aged 18 to 25 using products and services of mobile operators in Bulgaria. The theoretical framework presents the concepts: influence and impact, as well as their semantic difference, as part of the persuasive impact of advertising. Complex methods of media studies, questionnaires, as well as additional questions to separate focus groups of respondents aged 18 to 25 were applied. Various strategies for influencing have been identified, and studies have conducted T-tests for independent samples on gender and financial status, which look for the relationships between demographic characteristics and the reasons for achieving successful influence. According to the results of the statistical data processing, two groups are derived: the most favorable for influence and the one on which it is difficult to achieve an advertising impact of a mobile operator. The practical applicability of the study is significant because mobile operators in Bulgaria can have a much more successful impact on long-term influence groups - women, financially disadvantaged, aged 21 to 24, using Telenor products and services.

**Key words:** influence, impact advertisings, persuasion, consumer behavior.

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# ИЗМЕРВАНЕ НА МОТИВАЦИЯТА НА СТУДЕНТИТЕ ЗА ИЗУЧАВАНЕ НА ЧУЖД ЕЗИК MEASUREMENT OF STUDENTS 'MOTIVATION FOR LEARNING A FOREIGN LANGUAGE

Kalina Katsarova

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This article measures various subjective and objective indicators of motivation to learn a foreign language among students of the Trakia University aged 18 to 25 years. The main goal is to derive the overall and instrumental motivation that would affect the respondents, the leading needs for learning a foreign language, as well as the flows or the degree of involvement of the respondents. The methodology applied to achieve the main goal is to conduct surveys, and some of the identified motives would determine the practical application of adequate incentives to maintain the motivation of students to learn a foreign language. The identified factor dependences generally indicate approximately the same intensity in the motives of the respondents for learning a foreign language, as the high interest in it is explained first of all by the desire of students to gain knowledge of language, but not least of culture, behavior and traditions. The highest degree of motivation is the establishment of their desire for their knowledge and skills to find practical realization in different professional environments.

**Key words:** overall and instrumental stimulation, degrees of involvement, realization

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# АКТУАЛНО СЪСТОЯНИЕ НА СИСТЕМАТА НА ЗДРАВЕОПАЗВАНЕ В БЪЛГАРИЯ CONTEMPORARY **SITUATION OF THE BULGARIAN HEALTHCARE SYSTEM** *Petko Miran*

During the past 20 years, the Bulgarian healthcare system (BHS) changed dramatically. The resulting situation is of dubious nature and suffers the criticism of all the interested parties: patients and medical representatives, as well as the foreign bodies.

The GOAL is to estimate the efficiency of the money spent in the BHS and to analyze the system from the provision of fundamental economic principles for a stable market.

The METHODS used in the research paper, include statistical data analyses, analysis of the criticism on the BHS, analysis of the hypothesis considering the connection between money increase and better health results, and analysis of the violation of fundamental economic provisions by the BHS which are obligatory for a market to function properly, to be stable and predictive.

The RESULTS of the research show that the BHS needs substantial reconstruction.

In CONCLUSION, the BHS has undergone many radical changes for the past 20 years, many of which of dubious nature and with suspicious "positive" results. Regardless of any increase in the NHIF budget, the money is never enough, which raises a lot of questions, especially concerning the inpatient treatment, the private hospitals investments and funding, and the money spent on pharmaceutical products.

Key words: Healthcare; GDP; Inflation; Market failure; Asymmetric information; Marginal utility

### СЕКЦИЯ 5: ДОКТОРАНТИ И СТУДЕНТИ SECTION 5:

#### PHD STUDENTS AND BA / MA STUDENTS

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# РОЛЯТА НА СТАРТЪПИТЕ В ПОКОЛЕНИЕТО НА ИНОВАТИВНИТЕ МЛАДИ ПРЕДПРИЕМАЧИ **THE ROLE OF START-UPS IN THE GENERATION OF INNOVATIVE YOUNG ENTREPRENEURS** Suzana Smadi-Delcheva

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

Aim

An overview of the motivating factors and the main reasons that influence the young generation of entrepreneurs for the realization of startup companies.

Methods

Research of demographic, social and economic factors that to a large extent have an impact on the implementation of startups by young entrepreneurs.

Results

Rapid growth is a key feature and unifying factor between the hypotheses of different authors - the whole process from establishment through growth to startup development is extremely dynamic and limited in time and compared to the pace at which small- and medium-sized businesses develop.

Conclusions

Innovative entrepreneurs are increasingly perceived as paradigm shifters because of the way of thinking that through its creativity and enthusiasm changes the overall entrepreneurial environment. The development of innovation in doing business is not only due to increasing competition in local and global markets, but also as a result of the identification of trends. The concept of a startup includes a business vision in the field of innovation and high technology.

Key words: Startup, entrepreneurship, innovation, business, development

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AGTECH – ЗЕМЕДЕЛИЕТО НА XXI В.

### AGTECH - AGRICULTURE OF THE XXI CENTURY

Suzana Smadi-Delcheva

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

Aim

Building a complete picture of the Agtech phenomenon as an innovative technological solution in the field of agriculture. Methods

Consideration of the development of Agtech technologies and good practices from implemented projects.

Results

To date, agriculture is the industry that is least digitalized – a factor that makes it an unattractive investment field for innovative entrepreneurs. Through the activities that technology can and does apply in agriculture, it is believed that it can be supported to a stage where it provides more and better products.

Conclusions

The concept of Agtech is an innovative symbiosis between agriculture and technology. The technological concept is developing in the modern entrepreneurial environment, turning agriculture into an attractive area for young entrepreneurs. The combination of specific advanced software or hardware technologies in the agricultural chain leads to an improvement in agricultural production. AgTech is an industry that includes a variety of solutions for almost every step in the food production process. The aim of technological innovation is to reach levels with the production of sustainable agriculture.

Key words: Agtech, Innovative agriculture, agriculture, technology

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ИНИЦИАТИВАТА АВАНГАРД – ВЪЗМОЖНОСТ ЗА ИНТЕЛИГЕНТНА СПЕЦИАЛИЗАЦИЯ НА БИО-БАЗИРАНИ КЛЪСТЕРИ В БЪЛГАРИЯ

### THE VANGUARD INITIATIVE - AN OPPORTUNITY FOR SMART SPECIALIZATION OF BIO-BASED CLUSTERS IN BULGARIA

Vassil Stoychev

Institute of Agrarian Economics - Sofia at SAA, Sofia, Bulgaria

The Vanguard initiative was established in 2013 by ten European regions. The main goal was to establish new model for regional development in the EU based on smart specialization concept and lead by example. The regions were committed to develop new jobs and economic growth through industry-led interregional cooperation, co-creation and co-investment. Since its launch the initiative was recognized as a viable regional perspective on industrial transition and joined by twenty-nine EU regions. Aim of the paper is to present the Vanguard initiative four step approach for development of smart specialization. The Vanguard bio-economy Pilot will be explored and related collaboration with Bio-based Industries Consortium (BIC). Opportunities for support of bio-based clusters in the context of the Vanguard and the BIC networks will be explored. A review of Bulgarian legislation related to smart specialization in bio-economic context will be made.

Key words: bio-economy, cluster, smart specialization, Vanguard initiative, BIC

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### ТЕОРЕТИЧНИ ПОДХОДИ ЗА ИНТЕРНАЦИОНАЛИЗАЦИЯ НА МСП

#### THEORETICAL APPROACHES TO INTERNATIONALISATION OF SMES

Andrey Minchev

University of Economics, Varna, Bulgaria

In the field of internationalisation small and medium-sized enterprises (SMEs) are often characterized by the lack of opportunities, market power and scarcity of resources when compared to large enterprises. Hence, greater challenges are posed by such deficiencies to the internationalisation of SMEs. In this light, it may be assumed that the approaches of internationalisation undertaken by SMEs differ from these of large enterprises. The objective of this research paper is to explore and expose the internationalisation approaches which are most commonly undertaken by SMEs. A detailed examination of the literature reduces the approaches to the economic approach, stage approach, network approach and born-global approach as dominant. This research is based on secondary sources.

**Key words:** small and medium-sized enterprises, internationalisation, resources

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### АНАЛИЗ НА ТИПОЛОГИЯТА НА ЗЕМЕДЕЛСКИТЕ СТОПАНСТВА

#### ANALYSIS OF THE TYPOLOGY OF AGRICULTURAL HOLDINGS

Marina Dimitrova

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

The agricultural sector is of particular importance for the national economy in the conditions of real membership of the country in the European Union. The liberalization of world trade, the association of Bulgaria with European structures and the restoration of some traditional market positions pose new problems and opportunities for the agricultural sector. The aim of the study is to analyze the typology of agricultural holdings. The objects of study are the countries of the European Union and several countries outside it. The latest published agricultural holding counting on Eurostat is included in the survey. The main source of agricultural statistics are the farm structure surveys that are made periodically. The significance of the study is to provide a realistic picture of structural conditions in Bulgaria's agriculture and forestry, which helps to analyze results which can also be compared across the EU and outside EU. Such data is needed not only for examining both the causes of, and the background to, structural change in this important economic sector, but also for drawing conclusions for the future. The methods used in the survey are comparing analyze, method of statistics grouping, experts valuation and etc.

**Key words:** typology, types of agricultural holdings, structure, agrostatistics, Commission Implementing Regulation EU 2015/220

ДИНАМИЧЕН МЕТОД ЗА УПРАВЛЕНИЕ НА ИНВЕСТИЦИОНЕН ФИНАНСОВ РЕСУРС В ЗЕМЕДЕЛСКО СТОПАНСТВО

### DYNAMIC METHOD FOR MANAGEMENT OF INVESTMENT FINANCIAL RESOURCES IN AGRICULTURE

Marina Dimitrova

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

Farm management is related to the decisions that affect the profitability of this business. Limited resources are allocated, and after taking a certain risk, a return is expected. In order to manage risk effectively, it needs to be clearly identified and valued.

Determining the production structure of an agricultural holding in the current study is considered in the short term, in the case of choosing between two annual crops. Solving this problem in the future involves establishing the amount of investment funds, areas in which to invest, and the use of tangible fixed assets as efficiently as possible.

In carrying out the investment process, financial and investment decisions are made, developing this dynamic method for every possible alternative to invest capital.

The purpose of this study is to propose a method for making management decisions in agriculture, when choosing whether to alternate the investment of financial resources in terms of choosing between two crops - wheat and sunflower.

Key words: dynamic method, budget, financial resource, management, agriculture

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### ПАЗАРНИ ТЕНДЕНЦИИ ПРЕД ТЪРГОВИЯТА С АГРАРНИ ПРОДУКТИ В БЪЛГАРИЯ

### MARKET TRENDS BEFORE TRADE IN AGRICULTURAL PRODUCTS IN BULGARIA

Elvira Delcheva

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Abstract: Study of the sale of agricultural products in the conditions of sustainable functioning of the food chain in Bulgaria and analysis of market trends and regulatory challenges for trade. The implementation of the common agricultural policy will have a positive effect in increasing and stabilizing Bulgarian agriculture, income in the industry, improving market orientation, increasing the competitiveness of Bulgarian food and meeting consumer requirements for quality products. Bulgarian agriculture and the market orientation of its products have the potential to develop, but this development must be in line with the requirements of European legislation - aimed at improving the quality of agricultural products offered on the market.

Key words: agricultural products; market orientation; industry; quality

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### ЗНАЧЕНИЕ И ПОТЕНЦИАЛ ЗА РАЗВИТИЕ НА ИЗНОСА НА ЗЕМЕДЕЛСКИ ПРОДУКТИ

### SIGNIFICANCE AND POTENTIAL OF THE DEVELOPMENT OF THE EXPORT OF AGRICULTURAL PRODUCTS

Marin Petrov

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The investigation of the significance and the potential of the export of agricultural products is only a fraction of the studies which has been undertaken. The intersectoral structure of Bulgarian economy has been studied before in several occasions in 1994 and in 2004 with the perspective to the "expected" inclusion of Bulgaria in UE and the common market. Studies use wide variety of scientific instrumentation of analysis but there is a lack of unity and conclusions are unclearly pronounced. This is a weak point of the study of the process because we need to know which are the "departing" levels of Bulgarian Economy and we can use these data and conclusions in order to develop strategic documents for the development of the sector. Bulgarian economic sectors aren't separate one from another and they interact between each other. Stated means that the dynamics of export of agricultural products could be an indicator of overall situation of Bulgarian economy.

**Key words:** significance, potential of export of agricultural products, economic sectors

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ИКОНОМИЧЕСКО РАЗВИТИЕ НА МЕСОДАЙНОТО ГОВЕДОВЪДСТВО В БЪЛГАРИЯ

#### ECONOMIC DEVELOPMENT OF BEEF CATTLE BREEDING IN BULGARIA

Stefan Genov

University of economics, Varna, Bulgaria

The main goal of this study is to introduce level and trends of development in Bulgarian beef cattle. Current paperwork is based on research among members of Bull breeding association in Bulgaria during 2019, public data from 2007 to 2020 and own observation based on meeting farmers. In needs for analyzes are used statistic and marketing methods. The results include structure of cattle herds, farm size, diffusion in territory of the country, opinions of agricultural policy and suggestions of development by farmers. The paper presents some specifics in marketing of beef cattle and characteristics of their meat.

**Key words:** Beef cattle breeding, Economics efficiency and development of cattle

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### ОЦЕНКА НА АРЕНДНИТЕ ПЛАЩАНИЯ В ОБЛАСТ СТАРА ЗАГОРА

### EVALUATION OF RENT PAYMENTS IN STARA ZAGORA DISTRICT

Plamena Petkova, Hristo Momchilov

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

The Stara Zagora region is characterized by the fact that there is a large number of agricultural producers who do not have enough land of their own to optimize their production. This causes increased interest and competition between them for free agricultural land, fields and permanent grassland. is to trace the dynamics of rent payments in Stara Zagora district, through dynamic relative values. A comparative analysis of the relative values characterizing the dynamics was used.

**Key words:** total factor productivity, prices, inrease

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# ПРАВНО-НОРМАТИВНО РЕГЛАМЕНТИРАНЕ НА ПОЗЕМЛЕНИТЕ ОТНОШЕНИЯ В БЪЛГАРИЯ LEGAL-REGULATORY SETTLEMENT OF LAND RELATIONS IN BULGARIA

Sonya Todorova, Todorka Atanasova

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

Abstract: The purpose of the present study is to evaluate and analyze the current legislation framework for the settlement of land relations in Bulgaria, to draw conclusions and recommendations for its improvement.

Methods: The main methods of application for research and analysis are: systematic analysis, logical approach, normative method, synthesis, etc.

Results: Through the research and analysis of the legal framework, significant contradictions and weaknesses are identified, which impede the successful settlement of land relations in the country. Guidelines are provided for changes which are meant to contribute for solving specific problems:

Conclusions: The performed legal analysis of the normative regulations, which govern the land relations reveals the need for a normative initiative for overcoming gaps and contradictions in the legislation in this field, in order to fully protect the rights and interests of the legal entities.

**Key words:** land relations, regulation, legislation, legal framework, law enforcement and analysis.

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### РЕГИОНАЛЕН АНАЛИЗ НА ЧОВЕШКИТЕ РЕСУРСИ В ОБЛАСТ СТАРА ЗАГОРА

### REGIONAL ANALYSIS OF HUMAN RESOURCES IN STARA ZAGORA REGION

Mariyana Bankova

Trakia University, Stara Zagora, Bulgaria

Human resources remain the most valuable factor for the development of any economic activity, despite the fact that we live in a dynamically developing and highly advanced technological time. The report aims to trace the various indicators describing the demographic situation and the labor market in Stara Zagora region. The methods which are used for the purpose and the tasks of the study are the following: growth rate and accretion, structural analysis, index

analysis and SWOT analysis. The indicators which are used in the present research are population, natural increase, migration increase, age structure, educational structure, employment rate, economic activity rate and unemployment rate. The results of the study reflect the changes in the observed demographic and economic characteristics of Stara Zagora region for the period from 2015 to 2019. Data from the National statistical institute is used to ensure the reliability of the research. The conclusions point to the search for and implementation of effective solutions that will lead to the discovery of potential opportunities for development of Stara Zagora region through the use of human resources, as well as dealing with the problems and challenges associated with them.

Key words: human resources, demographic indicators, labor market, Stara Zagora region

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# РЕГИОНИТЕ В БЪЛГАРИЯ И ЗЕЛЕНАТА ИКОНОМИКА – HOBOCT ИЛИ СЕРИОЗЕН ОПИТ? THE REGIONS IN BULGARIA AND THE GREEN ECONOMY - NOVELTY OR SERIOUS EXPERIENCE? Stanka Delcheva

Sofia university "St. Kliment Ohridski", Sofia, Bulgaria

The report presents the regional development policy in Bulgaria after 2007 with focus of the stated and implemented support for application of a green economy transition's instruments. The green economy is defined by relevant economic sectors and themes that add value to quality of life, reducing carbon emissions and creating jobs. Objective: to review the applying of instruments for transition to a green economy in the regions as part of regional development policy and promotion of the regions' competitiveness. Methods: Descriptive analysis and review of documents were used; review of planning documents at regional and municipal level and analysis of the type of applied instruments for the transition to a green economy; comparative evaluation of the already applied instruments with the forecasts for the new programming period 2021-2027. Results: The applied in the period 2007 - 2020 instruments for supporting the transition to a green economy and their connection with the development of the regions in Bulgaria are traced. The results correlation of the already applied instruments with the approach envisaged in the programming period after 2021 has been assessed. Elements of the connection between transition readiness and the regions' competitiveness are considered. Conclusions: Conclusions are drawn about the Bulgarian regions experience and capacities gained to exploit the potential and opportunities to increase competitiveness and well-being.

**Key words:** regional development; green economy; regions in transition; competitiveness

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УСЪВЪРШЕНСТВАНЕ НА МЕТОДИЧЕСКИЯ ИНСТРУМЕНТАРИУМ, ПРИЛАГАН ОТ ОДИТОРИТЕ ОТ СМЕТНАТА ПАЛАТА, ПРИ ПОДХОДИТЕ ЗА ОЦЕНКА НА РИСКОВЕТЕ

# IMPROVING THE METHODOLOGICAL TOOLS APPLIED BY THE AUDITORS OF THE BULGARIAN NATIONAL AUDIT OFFICE AT THE APPROACHES TO RISK ASSESSMENT $Presiyan\ Vasilev$

The main aim of the research paper is to present the guidelines for improvement of methodical tool at the approaches for assess the risk. On the base of software product IBM SPSS Statistics is conducted correlation analyzes of a survey, which made in May-June 2020 among the external auditors from Bulgarian National Audit Office. Its use a Spearman's correlation coefficient for rank scales. Interrelations and interdependencies between the studied quantities have established. Strongly positive correlation rs = 0.571 between the Basic Risk Assessment approach and the lack of competent employees in the organization. There is no correlation between the Standard Risk Assessment approach and the risk of material misstatement

Knowing and applying the correct procedures helps the auditor to assess the risks, regardless of which approach he applies (standard or basic risk assessment). This is due to the fact that in certain cases the management uses the inappropriate control activities for the specific situation or event.

Key words: Approach; Audit; Public sector; Risk Assessment

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АНАЛИЗ РАЗХОД-ПОЛЗА НА ЕВРОПЕЙСКИТЕ ПОЛИТИКИ ЗА СИГУРНОСТ ОТНОСНО ЕЛЕКТРОННИТЕ ПЛАТЕЖНИ ИНСТРУМЕН

### COST-BENEFIT ANALYSIS OF EUROPEAN SECURITY POLICIES ON ELECTRONIC PAYMENT INSTRUMENTS

Magdalena Atanasova

Sofia university "St. Kliment Ohridski", Sofia, Bulgaria

Crime of electronic payment instruments and related illegal activities affect the economic stability and financial interests of the European Union. Organized crime groups generate a profit of  $\in$  1.44 billion euros a year in the Community from payment card fraud. The scientific article is intended to assess the efficiency of the European policy for combating fraud and counterfeiting of payment cards through cost-benefit analysis. Scientific methods are used as follows: research and review of the regulatory framework; content analysis of annual reports and assessments; analysis of qualitative indicators and secondary analysis of empirical data. The results show that the adopted measures help to reduce the fraud of ATM and POS devices in the Union and provide a high level of security for European citizens in making available card present payments within and outside the Community. On the other hand, it is found that the majority of European counterfeit cards and card-not-present transactions are carried out in non-SEPA countries. This leads to the conclusion that it is necessary to adopt common global security standards and to enhance stakeholder cooperation simultaneously at national, regional and international levels.

**Key words:** European public policy, payment card fraud, cost-benefit analysis, stakeholders, European Central Bank

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# МЕХАНИЗМИ ЗА ОПРЕДЕЛЯНЕ И РАЗПРЕДЕЛЕНИЕ НА ДЪРЖАВНИТЕ ТРАНСФЕРИ ПО ОБЩИНИ **MECHANISMS FOR DETERMINING AND DISTRIBUTING STATE TRANSFERS BY MUNICIPALITIES** Daniela Ushatova

Trakia University, Stara Zagora, Bulgaria

The study aims to present the main characteristics of state transfers for municipal budgets (total subsidy for state-delegated activities, total equalization subsidy, targeted subsidy for capital expenditures, transfer for winter maintenance and snow removal and other current transfers), their purpose and mechanisms for their determination and distribution by municipalities. The specific rules for their spending by the municipalities (targeted and non-targeted) are derived, presenting the introduced control mechanisms on the powers of the local authorities for their spending. The correspondence of the used indicators for distribution of the state transfers by municipalities to the expenditure needs is studied, by making an experimental comparison and grouping of the municipalities according to their revenue capacity for providing these expenses. The changes in the share of the individual types of transfers in relation to GDP, the consolidated fiscal program, the state budget and the municipal budgets are also presented. The general trends for a five-year period are established and the general conclusions are determined, the main one of which is that the local budgets are strongly dependent on the state transfers. Based on the results of the study, some key areas are proposed for improving the distribution mechanisms and development of the regulatory framework in the country.

Key words: state transfers, municipal budgets, indicators for distribution, expenditure needs

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### МЕЖДУОБЩИНСКИ РАЗЛИЧИЯ В ПОТРЕБНОСТИТЕ ЗА РАЗХОДИ

### INTER-MUNICIPAL DIFFERENCES IN EXPENDITURE NEEDS

Nadya Karatova

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Municipalities in the Republic of Bulgaria are the only sub-national level of government that adopts and implements an independent budget. The report define the main types of expenditures in municipal budgets that municipalities do in providing public services. There is an extremely large diversity in the size of the territory, the number of inhabitants and their age structure and other characteristics. The influence of the individual factors on the amount and structure of expenditures in the budget is analyzed such as: the scale and geographical location of the municipality, demographic processes and age structure of the population, opportunities for sufficient own revenues, the impact / part of equalization subsidy, number and type of the provided public services, the state of the local economy. As a result of this analysis, the inter-municipal differences in the needs for expenditures for the provision of public services are clearly outlined. The influence of the state through state-transfers to municipalities to reduce inter-municipal

disparities is also studied. On this basis, conclusions are drawn and ways are sought to overcome or reduce intermunicipal differences.

**Key words:** municipalities, municipal budget, public services, own revenues

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## ФИНАНСОВА АВТОНОМНОСТ И УСТОЙЧИВОСТ НА МЕСТНОТО САМОУПРАВЛЕНИЕ FINANCIAL AUTONOMY AND SUSTAINABILITY OF LOCAL SELF-GOVERNMENT

Kalina Petrova

Trakia University, Stara Zagora, Bulgaria

Purpose of the research

The aim of the study was to analyze and evaluate the financial indicators of local self-government and on this basis to make recommendations on increasing the efficiency and effectiveness of local self-government.

Methods

Both general and specific scientific methods were used in the research, such as analysis, synthesis, induction, deduction, method of expert evaluations.

Results

An analysis of the legal framework in the field of local finance and the methodology for assessing the financial condition of municipalities was performed. Based on the development, an assessment of the local self-government was made according to the tested indicators. A number of author's conclusions have been made regarding the current state of the municipalities. Author's views on increasing the efficiency and effectiveness of local self-government are presented.

The system of local finances is a reflection of the relations between the central and local government, between the local government and the representatives of the local community.

At present, a significant part of local budgets are still heavily dependent on government transfers from the central budget.

**Key words:** Financial autonomy, sustainability, local self-government, regional policy, administrative-territorial organization

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ВЛИЯНИЕ НА ПОДХОДА "ВОДЕНО ОТ ОБЩНОСТИТЕ МЕСТНО РАЗВИТИЕ" ВЪРХУ ТЕРИТОРИАЛНИЯ ПРОСПЕРИТЕТ

### THE IMPACT OF APPROACH "COMMUNITY-LED LOCAL DEVELOPMENT" ON TERRITORIAL PROSPERITY

Stoyanka Tsacheva, Violetka Zheleva

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Community-led local development is an approach that is increasingly applied in traditional territorial development policy. In this method, the management is left in the "hands of the local people", who receive long-term funding, which they distribute according to the needs of the area. The purpose of the development is to study the extent and impact of participation in the development of the territory through CLLD measures. The expert assessment criticism and recommendations of the surveyed LAG managers regarding the role of the LAG in decentralization in decision-making related to rural development programs are sought. The applied research methods in the present study are theoretical and empirical methods, such as analysis, synthesis, comparison, survey, expert evaluation, statistical observation, method of sociological research. The results of the survey show that majority of respondents express satisfaction with the implementation of CLLD and have clear and concrete proposals for improving the approach in the next programming period. In conclusion, it is mandatory to note that despite the difficulties, the interest in CLLD on the part of local communities is very high, because they have many needs, and the approach and the Strategy provide many opportunities.

**Key words:** community-led local development, local action group, territorial prosperity

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ИНТЕРНЕТ МАРКЕТИНГ И ЕЛЕКТРОННАТА ТЪРГОВИЯ –ВЗАИМОДЕЙСТВИЕ

INTERNET MARKETING AND E-COMMERCE - INTERACTION

Zvezdelina Bilnikova

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E-commerce has been gaining an ever increasing market share in recent years. Using the tools that online marketing offers helps us to reach the targeted end user. This report will address some of the particular tools that are more specifically involved in the communication politics.

The main goal of the development process is to analyze the interaction between internet marketing and e-commerce and the effects it has on the end user of goods and commodities. The research methods used are: theoretical and empirical methods, such as analysis, synthesis, comparison, etc.

The achieved results are related to the analysis of the creation of an online store or website, where the connection between the producer and the user of the product or service takes place.

In conclusion, we can summarize that the use of social networks, e-mail marketing, VibeMarket, online ads are the main channels for Internet advertising.

Online advertising, in turn, is a means by which the customer can expand their pool of options and get acquainted with more detailed information about the desired product or service.

Internet advertising benefits the advertisers because it requires a lower budget and is flexible in targeting a specific target group.

**Key words:** e-commerce, online shopping, internet advertising

~ ~ ~ ~ ТЕНДЕНЦИИ В ТУРИСТИЧЕСКОТО РАЗВИТИЕ НА РОЗОВАТА ДОЛИНА В УСЛОВИЯТА НА

ПАНДЕМИЧНИ ОГРАНИЧЕНИЯ
TRENDS IN THE TOURIST DEVELOPMENT OF THE ROSE VALLEY IN THE CONDITIONS OF
PANDEMIC RESTRICTIONS

Lalcho Kasev

Trakia University, Stara Zagora, Bulgaria

In the conditions of pandemic restrictions, a significant number of businesses in Bulgaria are experiencing stagnation or collapse. One of the most attractive regions of the country - "Rose Valley" is characterized as a leading tourist destination for both national and foreign tourists. The goal of this study is to determine how the pandemic period has affected tourist objects of various type in the Rose Valley and to make proposals that will contribute to the development of measures for the future development of the region as a tourist destination. The method used is a standardized face-to-face interview with representatives of tourist objects in the Rose Valley. The results of the survey show that there is a contraction of the tourist flow for the period 2020-2021, with the exception of the one in the spa hotel, which participated in the study and the structure of the tourists has changed. In conclusion, it can be pointed out a favorable fact that all types of tourist objects are ready to search ways to maintain and increase the tourist flow in the future.

**Key words:** tourism, Rose Valley, pandemic restrictions

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ВЪЗМОЖНОСТИ И ПРЕДИЗВИКАТЕЛСТВА ЗА ГРАД ВЕЛИКО ТЪРНОВО КАТО ТУРИСТИЧЕСКА ДЕСТИНАЦИЯ

### OPPORTUNITIES AND CHALLENGE OF THE CITY OF VELIKO TARNOVO AS A TOURIST DESTINATION

Alexandra Atanasiadu, Marina-Olga Ivanova, Monika Mateva

Trakia University, Stara Zagora, Bulgaria

The survey includes a study of the modern trends and challenges in Bulgarian resorts and the opportunities for their sustainable development and destination management. Its aim is to be developed a model for sustainable development of tourism in the national resorts of Bulgaria. The main accents are focused on their stages of development, mistakes made in the planning and regulations and setting guidelines for their sustainable development, in accordance with the pandemic situation and the current trends. It involves developing a method for local tourist development of a tourist destination. Consideration has been given to the development of a methodological research framework, analysis and evaluation of tourism potential: external and internal environmental factors, tourism resources, material resources, human resources and administrative capacity. They are all represented as subsystems of the territorial recreation and tourism system. A study of the interconnections between them, the definition of strategic priorities and the proposals for a sustainable tourism development at the local level was carried out. It has been proven that successful sustainable tourism development in the national resorts is related to conducting systematic marketing studies and smart regulations in their tourist potential. General conclusions and proposals for the sustainable development of tourism in the national resorts have been made.

**Key words:** sustainable development, regional development, national resorts, destination management

### СЕКЦИЯ 6: МЕЖДУНАРОДНА СЕКЦИЯ SECTION 6: INTERNATIONAL SESSION

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## ARE OFFICIAL CERTIFICATIONS A RELEVANT ASPECT IN THE CONSUMPTION OF NATURAL WINES? A PROSPECTIVE STUDY AMONG SPANISH PRODUCERS/CONSUMERS

Rosana Fuentes-Fernández, Ana Lanero Carrizo, José Luis Vázquez Burguete Universidad de León, Spain

Spain is leader in the world ranking of surface vineyards of ecological production, with almost 27% of world production. Consumers are demanding for more information about these sustainable practices and the oficial certificates can be a good option to help them. In the case of natural wines, five certifications can be used in the packaging of wines to inform consumers that they are acquiring natural wine: i) certified organic winery by the EU; ii) certified biodynamic winery by Demeter; iii) certified organic (EU) and biodynamic (Demeter) winery; iv) certified by the National Institute of Origins and Quality (INAO) as 'vin méthode nature' (natural method wine) with two logos (natural method without added sulfites and natural method with less than 30 mg/l added sulfites); v) and non-certified. To obtain the results we have conducted a pilot study with a sample of consumers of wine. The study has given us an idea about the importance of sustainability for consumers of natural wine and if an official certificate is a necessary question for them in the decision-making process.

**Key words:** Natural wines, sustainability, Spain, EU certification, Demeter, biodynamic, natural method wine

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#### SUSTAINABLE DEVELOPMENT THROUGH RURAL TOURISM IN DEPOPULATED AREAS IN SPAIN

<u>José María López-Sanz, Azucena Penelas-Leguía, Pablo Gutierrez-Rodríguez, Pedro Cuesta-Valiño</u> University of Alcalá, Madrid, Spain

Purpose: The high level of depopulation in certain areas of Spain is a serious threat to the country, which is aggravated, even more, by the continuous loss of inhabitants in those areas that continues to occur year after year. One of the activities that can help prevent this depopulation is rural tourism. But to promote it, it's necessary to look at the most important elements that make the tourist choose one place or another, one accommodation or another.

Methods: A wide data collection was carried out through 1,658 valid surveys in one of the most depopulated areas of the Spanish territory. After that, various multivariate techniques were used, such as Principal Component Analysis (PCA), and Multiple Classification Analysis (MCA).

Results: Several factors were obtained that identified both the different motivations that move tourists, as well as the different variables that identify the province based on its image. After that, it was analyzed how both variables influence the formation of the image that tourists form after the visit.

Conclusions: The motivations that move tourists are cultural and natural, above social ones, and the cognitive image is the one that most influences the formation of the new image.

**Key words:** Sustainable development, rural tourism, depopulation, image of the destination, motivations

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# EVALUATOIN OF HUMAN CAPITAL PERFORMANCE OF THE COUNTRIES BY CRITIC AND COPRAS METHODS: AN APLLICATION ON THE MEMBERS OF THE ORGANIZATION OF THE BLACK SEA ECONOMIC COOPERATION

Mahmut Masca

Afyon Kocatepe University, Faculty of Economics and Administrative Sciences, Turkey

Purpose: This study aims to evaluate and rank the members of the Black Sea Economic Cooperation Organization (BSEC) in terms of human capital performance.

Methods:CRITIC (Criteria Importance Through Intercriteria Correlation) and COPRAS (Complex Proportional Assessment) methods have been used in the study. This integrated model consists of a combination of CRITIC and COPRAS methods. The CRITIC method was used to find the objective weights of the criteria. The COPRAS method was used to rank the countries according to their performance.

Results: According to the analysis results, the top three countries with the highest human capital performance are Serbia, Greece, Romania in 2000, Greece, Romania, Bulgaria in 2005, Greece, Russia, Bulgaria, in 2010, Russia, Moldova, Bulgaria in 2015, Russia, Romania and Bulgaria in 2018. Countries with the lowest human capital performance are as follows: in 2005, 2000 and Armenia, Albania, Azerbaijan, in 2010, Turkey, Armenia, Azerbaijan, in 2015 and 2018, Albania, Azerbaijan, Turkey. Turkey was ranked 5th among 12 countries in 2000. It was ranked eighth in 2005, tenth in 2010, and twelfth in 2015 and 2018.

Conclusions: Armenia, Azerbaijan, and Turkey, which are the most disadvantaged countries in terms of human capital, should invest in human capital. They should make comprehensive reforms on these issues and rapidly improve the quality of human capital to grow economically in the future.

**Key words:** Human capital, Economic Growth, Multi-Criteria Decision Making Techniques, COPRAS Method, CRITIC Method, BSEC Countries.

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#### DEVELOPMENT OF REMOTE IDENTIFICATION THE ENTERPRISES BY DIGITAL TECHNOLOGIES

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National University of "Kyiv-Mohyla Academy", Ukraine

Kremenchuk Mykhailo Ostrohradskyi National University, Kremenchuk, Ukraine

The purpose of the article is to research the role of Information and Communication Technology sector in the formation of GDP, and provide recommendations for improving the process of remote identification of enterprises using digital technologies.

Research methods used: method of generalization of theoretical knowledge; tabular method, analysis and graphic method; methods of synthesis, deduction, induction; the approximation method etc..

The paper determines a practical aspect of using electronic remote identification between the bank and the organizations. The article emphasizes that BankID system has great social importance and wide practical application in Nordics and Ukraine. It is analyzed the level of Ukrainian enterprises' computerization in various industries. The shares of some industries in the structure of the Ukrainian's GDP with the construction of a trend line are given. Authors compare states of electronic identification in the northern countries and advantages of BankID systems.

The following recommendations for improvement electronic remote identification the enterprises by digital technologies are made:

- increasing digitalization between banks and enterprises. This will reduce the number of mistakes that made by bank employees when serving customers;
- cooperating IT employees of the domestic banks with employees of different countries in this scope. It is necessary to improve the software products of banks in order to save time on servicing enterprises;
- developing a mechanism for managing the quality of service, product quality, operation of the bank's software products;
- creating refresher courses for banks managers for explanatory work to enterprises' top managers;
- establishing relationships between banks, businesses and universities to increase the level of an information and a financial literacy among the population etc.

**Key words:** digitalization of finances, finance of enterprises, remote identification, digital technologies, BankID, banking

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## COVID-CRISIS: OPPORTUNITIES VS CHALLENGES FOR INNOVATIVE TRANSFORMATIONS AND SELF-DEVELOPMENT

Galyna Piatnytska, Oleh Hryhorenko, Valentyna Zhukovska

Kyiv National University of Trade and Economics, Ukraine

The aim is to identify opportunities and challenges for innovative transformations in the context of the Covid crisis. The methods of systems analysis, surveys and synthesis were used. The main results of the study: the pandemic

has not fundamentally changed the fact that the potential of breakthrough innovations continues to exist. It is not expedient for enterprises to abandon R&D and innovations, despite the current challenges. Innovative transformations require not only financial support, but also human resources and innovative ideas. According to our survey of students in 2020, it was identified that today they can be divided into those who are: 1) able to develop and try to solve problems regardless of the situation; 2) able to take advantage of opportunities, but may be unable to resist threats and solve problems; 3) unable to make constructive decisions and think creatively in a Covid crisis. To ensure progressive innovation development, the number of the first group should be the largest, and the third – the smallest. Conclusions: Currently, the situation for innovative transformations is ambiguous. The paradox of imaginary and real positioning is revealed. This showed discrepancies between how potential business managers assess opportunities and respond to challenges in a Covid crisis.

**Key words:** innovative transformations, crisis, business development, opportunities, challenges, decisions, threats, human resources

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## CLASSIFYING THE INTERBRAND'S TOP LUXURY BRANDS BASED ON BRAND EQUITY TRENDS (2001 TO 2020)

Kamran Siddiqui

Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia

Purpose: This paper aims to classify Interbrand's top luxury using 20-year longitudinal data (2001-2020).

Methodology: This study used longitudinal data of 20 years (2001 to 2020) from the top 100 global brands lists annually published by Interbrand.

Findings: Firstly, with reference to Interbrand's 100 best global brands for the last 20 years, country of origin for luxury brands is restricted to only five countries; France (4 brands: Louis, Chanel, Hermès, Dior); Italy (4 brands: Gucci, Prada, Armani, Bulgari); Switzerland (3 brands: Cartier, Rolex, Swatch); UK (1 brand: Burberry) and USA (2 brands: Tiffany and Polo). European brands dominate the global Luxury industry.

Secondly, this research provides a cluster analysis based on brand equity and growth data of 14 Interbrand's top luxury brands (2001-2020). These brands can be classified into three distinct clusters; Leaders, Challengers, Intermittent. The first cluster named 'Leaders' included in this cluster are Louis (France), Chanel (France), Hermes (France) and Gucci (Italy). The second cluster was named as 'Challengers' having Cartier (Switzerland), Dior (France), Tiffany (USA), Burberry (UK), and Prada (Italy). The third cluster was named as 'Intermittent', including Armani (Italy), Rolex (Switzerland), Polo (USA), Bulgari (Italy), and Swatch (Switzerland).

Finally, effects of global financial crisis (2008) and global pandemic (2020) on the luxury brands. During both global crises all luxury brands have shown negative growth rates as compared to other brands.

Key words: Interbrand, Luxury Brands, Brand Equity, Trends

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#### From GDL to SDL

<u>Tibor Zsigmond, Annamária Zsigmondová, Renáta Machová</u> J. Selye University, Bratislava, Slovakia

Purpose: In the last decades marketing experts have been concerned about how to reform the world of marketing. Most researchers have sharply criticized the earlier-theories of Goods-dominant logic and called for newer theories. Among these theories were the Vargo and Lusch model – 'Service-dominant logic'. The new approach has brought a lot of attention to the profession. While many supported it, the proportion of critics were relatively high. The model is still not completely solved, and it has several – mostly practical – problems so far. The purpose of our article is to present the path of this new approach and the differences between the two theories (GDL and SDL).

Methods: During the preparation of the article, we conducted secondary research based on domestic and international literature and journals.

Results: The new model is being evaluated, in which we present the main advantages and shortcomings of it and we outline what changes might be necessary in the future.

Conclusions: It would be worth to develop and promote the model to help companies to understand how it works. The potential of online platforms can be further exploited. These were not available at the time of creating the original theory, but they might help to involve consumers in the process."

**Key words:** SDL, GDL, PDL, Service-dominant logic, Goods-dominant logic, Product-dominant logic, marketing, services

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## POLISH LAGOON REGIONS ON THEIR TRACK TO CIRCULAR BIOECONOMY BASED DEVELOPMENT STRATEGY

Marcin Rakowski, Adam Mytlewski

National Marine Fisheries Research Institute, Poland

The poster presents the current progress in the process of local strategy building. Polish Baltic Sea lagoon regions are rural areas, highly dependent on fishery. Both regions are located close to the touristic coastal area, being off side of the touristic flow. Local society have to work in traditional sector of brackish water fishery or looking for work in coastal area. Due to the shortage of traditional fish species in lagoon waters even 50% of landings are so called low-value fish species, which are healthy, relatively cheap, but not known for customers/tourists. The idea of the BE-Rural project is activate local authority to develop a strategy based on circular economy approach and use of low-value fish species as a strength of the region. NMFRI is a scientific advisor of this process. Poster will show following steps leading to strategy building, stakeholders involvement and local authority activity in this matter. low-value

**Key words:** fish species, slow food, local strategy, rural area development, circular economyne Fisheries Research Institute, Poland

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### DO WE NEED A SECOND ENGINE FOR ENTREPRENEURSHIP? HOW WELL DEFINED IS INTRAPRENEURSHIP TO HANDLE CHALLENGES DURING COVID-19?

Samrat Ray, Mehmet Kiziloglu

Peter The Great Saint Petersburg Polytechnic University, St. Petersburg, Russia

Changing domains of economic mobility during the COVID-19 pandemic has brought in perspectives of innovation which are quite different from the earlier traditions in the so called readings of Schumpeterian ways of innovative thinking.

Purpose:Cognitive biases and nudges arising out of crisis globally has shown behavioral functionalities which changes the way human beings react and succumb to choice making. This particular paper is based on extensive literature reviews and global cases arising out of extregencies and the subsequent development of field experiments which study the effects of various factors on innovation within the company.

Methods: The field experiments conducted were at national level in cooperation with national chamber of commerce wherein both intrinsic and extrinsic values of economics of scale was studied statistically using advanced quantitative techniques like regression analysis to understand the innovation functionaries.

Results: Analysis depicted a striking impact of behaviorial motivation at organisational level and individualistic motivating functionaries play vital role in opening the pandora box od innovation.

Conclusion: The rational choice behind measuring intrapreneurship in this study is impactful for learning the trends of human actions and behavior in a firm; which can be a yardstick for future academicians and policymakers to implement directly for aggravating the incubation indices.

**Key words:** Intrapreneur, Entrepreneurial ecosystem, Corporate entrepreneurship, Covid-19, Motivations, Intrapreneurship.

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### THE CONCEPT OF "INNOVATIVE RECEPTIVITY": METHODOLOGICAL ASPECTS

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The development of emerging economies determines the need to include innovation activities as the main factor at all levels of government. However, in practice, there is a disparity between the availability of innovative opportunities and their real implementation. It is caused by the lack of comprehensive research and conceptual approaches to the mechanisms for innovative potential formation and development. The purpose of the paper is to identify and describe the features that form the structure of 'innovative receptivity' concept in the economy. The study used methods of component, comparative and contextual analysis. As a result of the research, the definition of 'innovative receptivity' is given. It is an economic concept that characterizes the ability of an organization and a person to perceive innovations, the ability to create and apply pioneering technological innovations, and the willingness of an organization to implement

and reproduce an innovation for the first time. This definition characterizes the essential features of the concept.

**Key words:** innovative receptivity, innovation, emerging economies

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#### GAMIFICATION AS THE HUMAN RESOURCES MANAGEMENT TOOL

<u>Valeria Kanivets, Yulia Beliaeva</u> St. Petersburg, Pushkin, Russia

There is a huge number of different methods created to increase employee motivation, while they are constantly being improved and new ones appear. The manager must not only choose the right one, but also be able to implement it. One of the methods is gamification. The basics of HR management processes using this method are just beginning to form, so it is necessary to develop mechanisms for implementing gamification in the organization. Based on the research, the main provisions aimed at including elements of gamification in the company and recommendations for their implementation are formulated. The purpose of the article is to study gamification in the organization's personnel management in detail and to formulate practical recommendations for its application. The research used methods of the theoretical level, such as: study and generalization, analysis and synthesis, deduction and induction, as well as the study of literature, the regulatory framework and other sources of information. On the basis of the study, the types of games and players, the main provisions aimed at including elements of gamification in the company, as well as recommendations for their implementation to improve the organization's activities are formulated.

**Key words:** management, HR management, gamification, organization, motivation, personnel, management methods, personnel adaptation, game network.

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#### SALES POLICY: ARRANGEMENT AND CONTROLLING

Alina Fatkullina, Yulia Beliaeva St. Petersburg, Pushkin, Russia

The article is devoted to the study of the commodity policy, which directly plays a key role in the management of any company, as well as affects all aspects of its activities. It examines the directions and goals of the product policy, studies its components and principles, as well as methods of managing the company's product policy. The main idea is to reveal the essence of the product policy as an economically significant and effective tool for managing the company.

**Key words:** product policy, product strategy, assortment policy, management, strategy, sales policy, sales activity, management system, efficiency.

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### TRUST IN ORGANIZATION EFFECT ON THE RELATIONSHIP BETWEEN HRM PRACTICES AND EMPLOYEE WELL-BEING

<u>Vaida Jaškevičiūtė</u> Vilnius University, Vilnius, Lithuania

In organizations where a high level of trust is perceived to be present, that trust contributes to the well-being of the employees. This paper investigates the effects of trust in organization on the relationship between human resource management practices and employee well-being. Method: An anonymous survey of 638 employees in Lithuania was conducted. The research was designed based on a 6-dimensional scale of perceived human resources management policies and practices, a 3-dimensional questionnaire of employee well-being, and a 2-dimensional questionnaire of trust in organization. Questionnaire items were measured on a 5-point Likert scale. Survey data were analyzed using descriptive statistics, factor analysis, correlations, multivariate linear regressions and mediation analysis. Findings: Specific relationships were found between various human resource management (HRM) practices with employee well-being in having a full effect or in having a partial effect. This empirical study showed that select HRM practices positively influence employee well-being through the mediating effect of trust in organization. Managerial implications: Based on the results of the survey, employee well-being at work in Lithuania can best be improved by the strengthening of trust in organization through following these HRM practices: "recruitment and selection," "involvement," "training, development and education," work conditions, ""competency-based performance appraisal," and "compensation and reward."

**Key words:** Trust in organziation, HRM practices, employee well-being, Lithuania

#### LEADERSHIP: FROM CLASSIC THEORIES TO THE 21TH CENTURY CHALLENGES

Stanca Petruta Ionela

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Permanent changes, the globalized economy, the universality of information have increased the level of competitiveness between countries in general and organizations in particular. What could be the reason why organizations competing in the same market, with similar technology and comparable resources, differ significantly from each other in terms of performance? The most limited resource in any organization is an efficient and trained person. Finding the right people for each position is critical to the company's success. Technological variations force us to learn, to adapt and to change our mentality. In order to survive, organizations need flexibility and the ability to adapt to change. It is and will be a necessary condition for employees to be the tools that provide the necessary answers that allow organizations to remain in the markets successfully over time. Leadership is the most vital, challenging and mysterious phenomenon in an organization for which researchers have worked tirelessly to explain how the best leaders perform. This article aims to review and synthesize the existing literature from the beginning to the 21th century's challenges to find the best solution for an organization's success.

**Key words**: Leadership, leadership styles and behaviors, classic theories, new challenges.

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## DEVELOPING RURAL BIOECONOMIES BY FOCUSING ON REGIONAL STRENGTHS: INSIGHTS FROM THE BE-RURAL PROJECT

<u>Robijns, Clément</u> BIOCOM AG, Berlin, Germany

Purpose: The transition towards a new, bio-based regional economy requires the active involvement of a broad spectrum of stakeholders and the sustainable use of agricultural, forest and marine ecosystems. The EU project, BE-Rural explores the potential of regional and local bio-based economies and supports the development of bioeconomy strategies, roadmaps and business models in five focal rural regions called Open Innovation Platforms (OIPs). One of them is the region of Stara Zagora, Bulgaria.

Methods: The conceptual foundation of BE-Rural builds on a Quintuple Helix Approach, which combines knowledge and innovation generated by key stakeholders from policy, business, academia and civil society within the frame of the environment.

Results: The work carried out in the first 18 months of the project has demonstrated that the involvement of different stakeholder groups in the development of regional bioeconomy strategies is crucial and should start at the very beginning of the strategy development process.

Conclusions: In the first two years of the project, BE-Rural collected feedback from more than 400 local policy-makers, stakeholders and citizens on their vision for the development of their region. The end-phase of the project will aim to integrate citizens' feedback into the development of bioeconomy strategies and roadmaps in the five OIPs.

Key words: Bioeconomy, Sustainability, Rural Development, Participatory Approaches, Social Innovation

#### СЕКЦИЯ 7

## СПОРТНИ ПРОБЛЕМИ НА БИЗНЕСА И ОБЩНОСТИТЕ SECTION 7:

#### SPORTS PROBLEMS OF BUSINESS AND COMMUNITIES

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ГЛЕЗЕННИ ТРАВМИ В БАСКЕТБОЛА – ЛЕЧЕНИЕ И АДАПТИРАНЕ КЪМ ТРЕНИРОВЪЧНИЯ ПРОЦЕС

### ANKLE INJURIES IN BASKETBALL - TREATMENT AND ADAPTATION TO THE TRAINING PROCESS

Iren Peltekova, Hashem Malla Houech, Lora Vasileva

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Summary: The article analyzes the problems of sports injuries, the main focus is on ankle injuries received during training and basketball competition. Given the growing incidence of ankle pain complaints not only from pupils and students- game lovers, but also from professionals of all ages, ankle injuries are considered significant injuries, with serious consequences for the training of basketball players. The aim of the study is to indicate the most common ankle injuries received during basketball training and competition activities and to explain the options for treatment. Conclusions: The factors for the occurrence of chronic injuries in the ankles are complex, but most authors determine the lack of proper treatment and subsequent model for gradual adaptation to training after injury as most significant. That is why coaches and doctors combine their knowledge with the task of reducing injuries during training and competitive activities in basketball and effective recovery of the athlete after treatment of injuries.

**Key words:** injuries, trauma, diagnosis, recovery, competitions, basketball, sports training.

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РОЛЯ НА МАГНИТНО-РЕЗОНАНСНО ИЗСЛЕДВАНЕ ЗА УСТАНОВЯВАНЕ НА ТРАВМА НА КОЛЯНО ПРИ БАСКЕТБОЛИСТИ

### ROLE OF MAGNETIC RESONANCE IMAGING IN DETECTING KNEE INJURIES IN BASKETBALL PLAYERS

<u>Intesar-Victoria Malla Houech, Iren Peltekova</u> Sofia University "St. Kliment Ohridski", Sofia, Bulgaria Medical University, Sofia, Bulgaria

The article covers matters related to traumatic injuries of the knee in basketball players, emphasizing on diagnostic imaging as a non-invasive test that allows evaluation of the player's condition.

Precise and prompt diagnosis of the trauma can help in reduced treatment period, which in turn decreases the time the player is absent from training and competition.

The aim of the study is to present the potential of magnetic resonance (MR) as a reliable method in detecting knee injuries.

Methods: Patients with anamnesis of a knee contusion after basketball game were examined on a 3 Tesla (3T) MR machine. The examinations was carried out using standard protocol – applying sequences T1, T2, fat suppression (STIR) and proton density (PD) techniques. The images were processed and analyzed on a Syngo workstation.

Both acute and chronic trauma features of the knee were detected. The most commonly affected structure was the anterior cruciate ligament and to a lesser extent - the menisci. Cartilage injuries, bone marrow oedema and intraarticular effussions were also observed.

MR is a reliable diagnostic tool that successfully allows the detection of knee contisions. Since many of the cases are asymptomatic, MR could also help in evaluating the athlethe's condition in preseason."

**Key words:** players, contusion, treatment, diagnostic, basketball, students, pupils, trainings.

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### ЦЕННОСТНИ ОРИЕНТАЦИИ НА БЪДЕЩИ ФИТНЕС ИНСТРУКТОРИ

#### VALUE ORIENTATIONS OF FUTURE FITNESS INSTRUCTORS

Miglena Bahchevanova, Eleonora Mileva

National sports academy "Vassil Levski", Sofia, Bulgaria

The article discusses the value orientations of future fitness instructors aimed at their successful professional activity. For this purpose, a questionnaire was used, containing twenty values, among which the respondents must rank five in a hierarchical sequence. In this regard, the opinions of 27 students from postgraduate qualification center were surveyed and analyzed. The analysis of the results reveals a desire and motivation to support the activities of athletes

to achieve the desired results, continuous enrichment of their own competence in the field and the pursuit of independent work.

The respondents want to gain all the necessary knowledge to optimize the condition of their future clients and to successfully practice this profession. Risky actions, authoritarian style of communication and work in a tense environment are not among the preferred values. The perspectives for improving the activities of future fitness instructors are outlined.

**Key words**: values, fitness, students, profession, clients, knowledge.

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#### PEDAGOGICAL DIAGNOSTICS IN SPORT

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Substantiation of sports pedagogical diagnostics in sports. METHODS. In the study we use content and comparative analysis. RESULTS. Our research in the literature and information sources has shown that sport pedagogical diagnostics in sports has some similarities in the methodology of research in sport in Bulgaria. The discovery of sports talents is a task with increased difficulty and there are some very good achievements in Bulgaria in the period 1065-1990, but it has not been fully revealed. CONCLUSIONS. After 1990, with the change of socioeconomic conditions in Eastern Europe and specifically in our country, the conditions for preparations, control and evaluation of the achievements in sports also changed. With the change in the financing of sports, it has become estremely difficult to conduct sports pedagogical research. The sports pedagogical diagnostics has entered a new stage of development.

**Key words:** sports pedagogical diagnostics, research methodology, discovery of sports talents

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ЕФЕКТЪТ ОТ ТЕРАПЕВТИЧНА ЕЗДА ВЪРХУ НЯКОИ ДВИГАТЕЛНИ УМЕНИЯ ПРИ ДЕЦА С АСПЕРГЕР СИНДРОМ

### THE EFFECT OF THERAPEUTIC RIDING ON SOME MOTOR SKILLS IN CHILDREN WITH ASPERGER'S SYNDROME

<u>Nezabravka Gencheva, Diana Stefanova, Mariana Angelcheva</u> National sports academy "Vassil Levski", Sofia, Bulgaria

Introduction.Asperger syndrome (AS) is a developmental disorder related to autism, characterized by repetitive behavior, significant movement disturbance, including some poor motor skills and clumsiness. Therapeutic riding (TR) is oriented to rider's cognitive, physical, emotional and social well-being. TR is a form of the physical, occupational and speech therapy, utilizing the specific movements of horse therapeutic techniques to facilitate normal muscle tone and to enhance balance, coordination, and motor development. The aim is to evaluate the impact of therapeutic riding on motor skills of AS children. Methods.Posture changes have been assessed using the Posture Assessment Scale and child's coordination in everyday functional activities - by the usage of the Developmental Coordination Disorder Questionnaire (DCDQ'2007). Five AS children, aged 4.9-year-old to 7.2-year-old were participated in the study. Results.We registered some improvements during the horseback riding course: better head and posture position and fine motor/handwriting and general coordination. Conclusion. Although the study is just a pilot one with a small participant group, the results obviously manifest that Therapeutic riding is inducing a positive change of some motor skills in AS children.

**Key words:** Therapeutic Riding, Asperger syndrome, children, motor skills

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### СПОРТЪТ КАТО ВЪЗМОЖНОСТ ЗА УВЕЛИЧАВАНЕ НА ТРУДОВАТА ЗАЕТОСТ В РЕГИОНИТЕ

### SPORT AS AN OPPORTUNITY TO INCREASE EMPLOYMENT IN THE REGIONS

Albena Dimitrova, Vasil Dimitrov

National sports academy "Vassil Levski", Sofia, Bulgaria

In recent years, sport has gained a significant profile in a number of European strategies and programs. The aim of this study is to open up potential opportunities for increasing employment in the regions through sport and its accompanying sporting activities. Compared to most industries, in times of economic turmoil, sports are proving to be resistant to recession.

Methodology A theoretical and regulatory review was made, measuring employment in sport using the central statistical definition of the 'Vilnius definition' for sport, covering the main sport activities coded by class 93.1 - Sporting activities.

The results analyzed a number of regulatory documents, including recommendations and reports of various committees related to employment in sport in a broad and narrow aspect, identified stakeholders and described leading sports successfully supporting local employment.

The conclusion provides guidelines for work related to additional information and intelligence programs on employment for non-profit organizations, municipalities and others.

Discussion through state regulations in the field of sport should ensure that non-profit organizations and municipalities are more involved in the development of sport.

**Key words:** Human Resources, sports law, management, sociology of sport

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РЕТРОСПЕКТИВЕН АНАЛИЗ НА ХИПОКСИЧНИТЕ ТРЕНИРОВКИ В ШОСЕЙНОТО КОЛОЕЗДЕНЕ В БЪЛГАРИЯ В ПЕРИОДА 1945-1965 ГОДИНА

### RETROSPECTIVE ANALYSIS OF HYPOXIC TRAINING IN ROAD CYCLING IN BULGARIA BETWEEN 1945 AND 1965

Ivan Kolev

National sports academy "Vassil Levski", Sofia, Bulgaria

The purpose of the theoretical study is to reveal the characteristic features of hypoxic workouts in the period 1945-1965. in road cycling. The study was conducted using the methods: study of information sources, document analysis, theoretical analysis and synthesis. Analysis of the results. In this period characterized by us hypoxic trainings are part of the means of widespread application by the Bulgarian cycling athletes. Then the remarkable results of D. Bobchev, N. Hristov - winner of the 10th Mileage of Peace, D. Kotev, A. Kirilov and many other Bulgarian competitors. Conclusions. It can be predicted that to optimize the training process in road cycling useful will be the wider use of hypoxic workouts

**Key words:** approach, synthesis, preparation, sources

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### ХАРАКТЕРНИ ОСОБЕНОСТИ В СПОРТНАТА ПОДГОТОВКАТА ПРИ МЛАДИ КОЛОЕЗДАЧИ

### FEATURES IN SPORTS TRAINING IN YOUNG CYCLISTS

Ivan Kolev

National sports academy "Vassil Levski", Sofia, Bulgaria

The purpose of this theoretical study is to reveal the peculiarities of preparation in young cyclists. The study was conducted using the methods: study of literary sources and documentary materials, theoretical analysis and synthesis. Analysis of results. Sports cycling training is a multi-year process requiring long and hard work with young cyclists, who are a reserve of high sportsmanship.

Conclusions.Based on the theoretical analysis, we can draw the following generalized conclusions: From the proper planning and implementation of the training loads depends on reaching a good sports form from children, adolescents and girls to men and women preparing to participate in international competitions and to reach the level of sports mastery.

Key words: cycling, synthesis, children, description

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СЪПОСТАВЯНЕ НА НЯКОИ ЛИЧНОСТНИ КАЧЕСТВА НА СТУДЕНТИ-СПОРТИСТИ ОТ ПРЕДСТАВИТЕЛНИТЕ ОТБОРИ НА УНСС ПО БАСКЕТБОЛ И ВОЛЕЙБОЛ

### COMPARISON OF SOME PERSONAL QUALITIES OF STUDENTS-ATHLETES FROM THE REPRESENTATIVE BASKETBALL AND VOLLEYBALL UNWE TEAMS

Spas Stavrev, Petar Ivanov

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Summary: One of the main goals of sport activities, apart from improving technical and tactical skills, general physical state, etc., is building and improving personal qualities. Especially for student-athletes, mastering diverse professions, those qualities will not only support their sports career, but contribute to their future professional realization. A number of scientific researches proves the importance of personal qualities, where volitional qualities and personal anxiety are one of those defined as professionally significant. It is critically valuable to define the influence of individual sports on those qualities' development. In this context, we have observed the level of development of these qualities for male athletes, who are part of the representative basketball and volleyball UNWE teams and compared them. It would be needed to note that all student-athletes have their sports experience of five or more years. When studying the variability of volitional qualities and personal anxiety, the indicators for both studied contingents, are within the limits,

defining them as relatively homogeneous. Exception are volleyball players' volitional qualities, whose results define the group as highly homogeneous. The average values of volitional indicator define student-athletes from both teams as personalities with "strong will", who can be relied on. Statistically significant differences when comparing the results, were not found in both studied metrics.

**Key words:** student-athletes, basketball, volleyball, volitional qualities, personal anxiety, comparison

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ПРОСЛЕДЯВАНЕ И АНАЛИЗ НА ТРЕНИРОВЪЧНОТО НАТОВАРВАНЕ НА 12-13 ГОДИШНИ ГИМНАСТИЦИ (МЪЖЕ) ЗА ЕДНОГОДИШЕН ТРЕНИРОВЪЧЕН ПЕРИОД

## MONITORING AND ANALYSIS OF TRAINING LOAD AT 12-13 YEARS OLD MALE GYMNASTS FOR A ONE-YEAR TRAINING PERIOD

Georgi Sergiev

National sports academy "Vassil Levski", Sofia, Bulgaria

The characteristics of modern artistic gymnastics are complex coordination routines and combinations, in which can be seen the elements with risk, originality, virtuosity, as well as security in performance. This implies high efficiency and rationality of the training process. The basis of this process is the management of the training load in the different periods of preparation. The issue of training load is fundamental in the theory and methodology of sports training. It is always up to date and provokes serious discussions among specialists.

Aim. The aim of the study was to register, monitor and analyze the specific training load indicators of 12-13 year old male gymnasts for one-year training period. Methods. The research methods we used were - registration, analysis, comparison, variation analysis.

Results. The results with respect to training load would enrich the theory in practical terms by assisting specialists and coaches in the preparation of athletes. Conclusions. The conclusions from a study show that the preparation of athletes was carried out according to the specific principles of sports training. They also give the opportunity to change some indicators, which will optimize the preparation in the future. There will also be an opportunity for additional analyzes and discussions between specialists.

Key words: artistic gymnastics, training load, specific training indicators

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УСЪВЪРШЕНСТВАНЕ НА СИСТЕМАТА ЗА ОЦЕНКА НА СПЕЦИАЛНАТА ФИЗИЧЕСКА ПОДГОТОВКА НА 11-12 ГОДИШНИ СЪСТЕЗАТЕЛИ ПО СПОРТНА ГИМНАСТИКА

### IMPROVING THE SYSTEM FOR ASSESSMENT OF SPECIAL PHYSICAL PREPARATION OF 11-12 YEAR OLD MALE COMPETITORS IN ARTISTIC GYMNASTICS

Georgi Sergiev

National sports academy "Vassil Levski", Sofia, Bulgaria

The main purpose of the study is to improve sports training in gymnastics at the stage of initial sports specialization. This stage is characterized by mastering the basic elements in artistic gymnastics, which will help to master the most difficult elements of the code of points in the future. This implies raising the level of special physical preparation as a key element of the training proses of the athletes. This article discusses the issue of special physical preparation of gymnasts. Its planning, assessment and reporting is a part of the management of the training process. Aim of the study. On the basis of 38 tested 11 - 12 year old male gymnasts with 14 tests to design a 50-grade scale for assessment of special physical preparaton along the different indexes (tests). Methods. The research methods we used are: testing, registration, analysis, statistical methods (variation analysis, sigma method). Results. The obtained results will be interesting for the specialists because they constitute a contemporary database, which was not available in the past. The normative tables allow for a short time, operatively to give an assessment of each competitor for the respective indicator immediately after his testing. As a result, the normative tables will achieve a more focused and rational management of the training process by improving the system for control and evaluation of special physical preparation at each stage of training proses of the athletes.

**Key words:** artistic gymnastics, specific physical preparation, assessment, normative tables.

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СПЕЦИАЛНА ФИЗИЧЕСКА ПОДГОТОВКА НА СТУДЕНТКИТЕ ОТ ПРОФИЛИРАНИТЕ ГРУПИ ПО БАСКЕТБОЛ

### SPECIAL PHYSICAL TRAINING OF STUDENTS FROM THE PROFILED BASKETBALL GROUPS Larisa Kasabova

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The purpose of this study is to increase the level of specific working capacity of the students from the basketball groups of high schools by optimizing the work for the development of the special motor qualities. The subject of the study is the training in the groups "Sport of choice - basketball". The object of the research is the signs of special physical preparedness and their development during the training in the higher school. In the study participate 50 students from the University of National and World Economy, divided into two equivalent groups (experimental and control). For the needs of the study a sports-pedagogical experiment is conducted. During the working period, the experimental group is subjected to the impacts, included in the developed own training program and the control group – to these in the standard program. To solve the purpose and tasks of the study, the following methods of research are used: theoretical analysis, sports-pedagogical testing. The results of the conducted sports-pedagogical testing are processed using the following mathematical and statistical methods: variational analysis and verification of hypotheses, using the comparative t-criterion of Student. The analysis of the results proves the effectiveness of the developed training program for physical fitness.

**Key words:** high school, training, basketball, sports and pedagogical experiment

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# ОЦЕНКА НА ХЕМОДИНАМИКАТА ПРИ СТУДЕНТИ ПРАКТИКУВАЩИ ПЛУВАНЕ ASSESSMENT OF HEMODYNAMICS IN STUDENTS PRACTICING SWIMMING

Boryana Tumanova

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Optimizing one's physical activity regime with the means of swimming is a good way to prevent and reduce various health problems. This type of physical activity has multilateral influence on the human body. In swimming, the achievement is measured accurately (in seconds) and it implies various appropriate possibilities for determining the level of training, control and real evaluation in its practitioners. The aim of this scientific study is to assess the impact of swimming through the field indicators used for the management of the training process. Methods: Assessment of the function of the cardiovascular system and the change in physical exertion. The results indicate an improvement in the function of the cardiovascular system. Conclusions: Systematic swimming activities, at an intensity tailored to the capabilities of its practitioners, improves physical capabilities and aerobic performance, which is a characteristic of the whole organism.

**Key words:** swimming, students, training process, physical capabilities, cardiovascular system.

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## ПРИНОСЪТ НА ПАРАСПОРТА ЗА РЪСТА НА СОЦИАЛНИЯ КАПИТАЛ PARASPORT CONTRIBUTION TO GROWTH OF SOCIAL CAPITAL

Stefka Djobova, Ivelina Kirilova

National sports academy "Vassil Levski", Sofia, Bulgaria

Disability sport has arisen and exceedingly grown in popularity in recent decades, as people with disabilities have enhanced their rights, status, perceptions of opportunity in society and access to sport as an essential human right. The literature on sport and social capital is scarce with no particular focus on parasport. PURPOSE of this study is to examine the various complexity of para sport in contribution to social capital. As social capital is concept of a compound nature, we will encompass four areas - Building alliances, Access to places, Attitudes and Events. METHODS: The analyzed data is extracted from seventeen annual reports published by the International Paralympic Committee from 2004 to 2020. The basic assumptions and facts of the parasport paradigm are examined through documentary analysis based on the functional approach of social capital. RESULTS: Nowadays parasport and developmental aspects of society are in complex relationship and also parasport serves for different purposes - as pathway for achieving personal excellence, human right advocator, to trigger of social inclusion. CONCLUSION: Modern parasport has reached a level of self-reinforcing process with great contribution to a number of social development areas that can improve the efficiency of society by facilitating coordinated action toward inclusion.

Key words: parasport events, social capital, inclusion, access, alliances

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ЛЕЧЕБНАТА ФИЗИЧЕСКА КУЛТУРА КАТО СРЕДСТВО ЗА ПРЕОДОЛЯВАНЕТО НА ДЕТСКАТА ХИПОДИНАМИКА В УСЛОВИЯТА НА ЛОКДАУН

## HEALING PHYSICAL EDUCATION AS A MEANS TO OVERCOME CHILDHOOD HYPODYNAMICS UNDER LOCKDOWN CONDITIONS

Diana Peeva, Marina Nedkova, Nela Gocheva

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Sofia University "Kliment Ohridski", Sofia, Bulgaria Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

Abstract: The article examines the possibility to find ways to maintain physical capacity at home through flexibility under the conditions of limited activity of children. The study was done not only on the purpose to prove this possibility, but also to report the specific qualities of the family environment as a constant in upbringing of children.

Key words: healing physical education, flexibility, family environment qualities

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#### СТРЕЛБАТА С ЛЪК – СРЕДСТВО ЗА ПОВИШАВАНЕ НА КОНЦЕНТРАЦИЯТА

#### ARCHERY AS A MEANS OF CONCENTRATION INCREASE

Diana Peeva

South-West University "N. Rilsky", Blagoevgrad, Bulgaria

Abstract: The study presented in this paper is based on the real results in archery training classes of 8-10-yearolds. The degree of concentration, its increase and influence on the abilities of participants have been established and improved with the help of Shakola's tests.

Kev words: concentration, Shakola's tests

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### АНАЛИЗ НА ПРИЗНАЦИТЕ НА ФИЗИЧЕСКОТО РАЗВИТИЕ ПРИ ВОЛЕЙБОЛИСТКИ

### ANALYSIS OF THE CHARACTERISTICS OF PHYSICAL DEVELOPMENT OF FEMALE VOLLEYBALL PLAYERS

Ralitza Arsova

University of National and World Economy, Sofia, Bulgaria

Discovering and selecting sports talents in volleyball is the main and most difficult task for specialists in this sport. In the initial selection, and then in monitoring the physical and technical development of the athletes, coaches rely on the morphoanthropometric features and indicators characteristic of the model of a highly qualified athlete in volleyball.

The rapid pace of development of sport, which is characterized by ever closer specialization in individual sports, requires a deepening of knowledge about the structure of the human body. This will help both the selection of talented athletes in a given sports discipline and the tracking of the dynamic changes in the structure of human body, under the influence of dosed training loads, will allow more effective management of the body's adaptation to different types of sports activities

It is very important that the training work is aimed at individualization of training programs, in accordance with the anthropometric, physiological and psychosocial characteristics of each athlete.

The purpose of this study is to develop a characteristic description of the state of anthropometric data of 15-18 year old female volleyball players.

The analysis on the established average values and variability of the indicators for anthropometry characterizes the studied group as homogeneous. Minor differences are the reason for some sign dissipation in the indicators ""Weight"" and ""Thigh circumference"".

The characteristic level of the female players is at a satisfactory level compared to the anthropometric criteria in volleyball.

**Key words:** volleyball, anthropometry, girls, physical development

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АНАЛИЗ НА ФИЗИЧЕСКАТА ПОДГОТВЕНОСТ НА СТУДЕНТИ ОТ СПЕЦИАЛНОСТ "КИНЕЗИТЕРАПИЯ" В МЕДИЦИНСКИ УНИВЕРСИТЕТ – СОФИЯ

### ANALYSIS OF THE PHYSICAL FITNESS OF STUDENTS MAJORING IN "KINESITHERAPY" AT THE MEDICAL UNIVERSITY – SOFIA

Anna Bozhkova

Medical University, Sofia, Bulgaria

The discipline ""Sports for All"" is mandatory in the curriculum of the specialty ""Kinesitherapy"". At the beginning of the present study to school year 2015/2016 she has a work schedule of 60 hours per year for the entire period of study. Then there are a lot of changes, at this stage it is taught only in the first year and at the end of the study students take a semester exam.

The purpose of the study is to analyze the state of physical fitness of students and to make a proposal for the inclusion of professionally oriented activities in the discipline ""Sports for All"" in the education of students.

Tasks:

- 1. Analysis of the results of the semester exams in the discipline ""Sports for All"" of students majoring in ""Kinesitherapy"".
- 2. To reveal the average level and variability of the indicators characterizing the physical fitness of the students.
- 3. To make conclusions and suggestions for the inclusion of professionally oriented activities in the education of students.

The obtained results inform us about the physical preparation of the students and allow us to make the necessary adjustments in the curriculum of the discipline ""Sports for All"".

**Key words:** Kinesitherapy, sports, students, physical fitness.

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# РАЗРАБОТВАНЕ НА СТРАТЕГИЯ ЗА РАЗВИТИЕТО НА СПОРТА БОРБА В БЪЛГАРИЯ **DEVELOPMENT OF A STRATEGY FOR THE PROGRESS OF SPORTS WRESTLING IN BULGARIA** Rasho Makaveev

National sports academy "Vassil Levski", Sofia, Bulgaria

Summary: Looking at the rankings of the European Championships, World Championships and Olympic Games of bulgarian wrestlers in recent years, we find that they are greatly reduced compared to the performances before 1991. Purpose: analyzing these facts we found a lack of strategic thinking and planning. We set a goal to develop a strategy for the progress of wrestling in the Republic of Bulgaria. Methods: literature research, document analysis, theoretical and logical analysis. Results: the development of a strategy implies thinking in perspective at least 30 years ahead in time. The program formed in this way is only a prerequisite for the development of sport, as there are many conventions that would affect its effectiveness. Discussion: the development of sport in general and wrestling in particular is impossible without strategic planning and the resulting requirements. The implementation of activities under this strategy requires support and long-term commitment from the country. Conclusion: the presented program includes many activities in different directions. The ultimate goal, namely to restore the positions of the Bulgarian struggle on the world carpet, requires solving all specific tasks.

**Key words:** wrestling, strategy, program

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КОРЕЛАЦИОННО-СТРУКТУРЕН МОДЕЛ НА ПОКАЗАТЕЛИТЕ НА СПЕЦИФИЧНА ФИЗИЧЕСКА ПОДГОТОВКА И ОСНОВНИ МОТОРНИ УМЕНИЯ ПРИ 9-10-ГОДИШНИ УЧЕНИЦИ СЛЕД НАЧАЛНО ОБУЧЕНИЕ В МИНИ-ВОЛЕЙБОЛ

CORRELATION-STRUCTURAL MODEL OF THE INDICATORS OF SPECIFIC PHYSICAL PREPARATION AND BASIC MOTOR SKILLS IN 9-10-YEAR-OLD STUDENTS AFTER INITIAL TRAINING IN MINI-VOLLEYBALL

Svetoslav Stefanov

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Abstract: The need to create a correlation-structural model of the indicators of specific physical preparation and basic motor skills in 9-10-year-old students playing mini-volleyball is dictated by the dynamics of volleyball development and the need to lower the age limit at the beginning of training.

Purpose of the study is to develop a correlation-structural model of the indicators of specific physical preparation and basic motor skills in 9-10-year-old students after initial training in mini-volleyball.

Methods: The study included 90 students aged 9-10 years who began initial training in mini-volleyball. The indicators of specific physical preparation and basic motor skills were studied.

Results: After the impact, an increase in the level of dependence between the indicators of general physical preparation and the specific basic motor skills was observed.

Conclusions: At the age studied, i.e. 9-10 years, the anthropometric indicators did not affect the mastery of basic motor skills, as there were no moderate or strong dependences. The most technically difficult element for the subjects of the study, i.e. two-foot jump after a volleyball run-up, did not correlate with the tests for development of physical qualities, which means that this is a matter of technical preparation and not so much physical.

**Key words:** volleyball, initial training, specific physical preparation, basic motor skills, correlation matrix.

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#### ИЗСЛЕДВАНЕ НА МНЕНИЕТО НА ЕКСПЕРТИТЕ ЗА ТЕРАПЕВТИЧНИЯ ЕФЕКТ НА ПЛУВАНЕТО

### SURVEY ON THE EXPERTS OPINION ABOUT THERAPEUTIC EFFECT OF SWIMMING

Martin Stoychevski, Stefaniya Belomazheva-Dimitrova

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ABSTRACT: One of the most widely used sports in the world, as a treatment method for the correction of spinal deformities is swimming. The horizontal position that the body takes in the water helps to unload the spine, and from this position the muscles of trunk can be train.

THE PURPOSE of the study is to research the opinion of experts - swimming coaches on the therapeutic effect of swimming in children with incorrect posture or spinal curvature.

METHODS: For the purpose of the survey was used questionnaire method. The participants of the study are 32 swimming coaches. All collected data were processed and analyzed.

RESULTS: 70% of coaches answers that there are children with deviations from the correct posture or spinal deformities in their training groups. Over 65% of the coaches sais that the number of children with spinal problems in their groups is up to 5 children, and 30.8% - up to 10 children.

CONCLUSIONS: Most of the specialists have been training children with spinal deformities in their practice. All coaches believe that the systematic swimming trainings improve the body posture of children. Not a small percentage of children begin to be involved in swimming training by their parents who are looking for therapeutic effect of swimming on the spine.

**Key words:** Swimming, body posture, spinal deformities, children, coaches, parents, opinion.

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### ИЗСЛЕДВАНЕ НА ФИЗИЧЕСКАТА ДЕЕСПОСОБНОСТ ПРИ УЧЕНИЦИ

#### STUDY OF STUDENTS' PHYSICAL ABILITY

Petia Milanova

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Students' health, physical development, and physical ability are a primary task of the Bulgarian state, school and family. Very important for its effective solution is the correct combination of work and rest, proper nutrition, body strengthening and regular physical activity, which are also the main components of a healthy lifestyle. The aim of this study is to establish the level of physical ability in 6th grade students. To achieve this goal, we have applied the test battery "Eurofit", using 8 out of the 10 possible tests. Based on the results of the tests and analysis, we summarize that the classes in physical education and sports in each age group are of key importance for the physical and mental growth of students. In the age group studied by us, the peculiarities in the development of the child's organism also have a significant influence on the growth. It is obvious that the classes in physical education and sports are not enough to reach high physical potential of children, so it is recommended for them to be engaged in out of class sports or activities.

**Key words:** physical ability, tests, Eurofit, sport in leisure time, physical education and sports, healthy lifestyle, age characteristics

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### ЗАВИСИМОСТ И ВЗАИМОВРЪЗКА МЕЖДУ ФИЗИЧЕСКОТО РАЗВИТИЕ И ДВИГАТЕЛНИТЕ СПОСОБНОСТИ НА ДЕЦА В ПРЕДУЧИЛИЩНА ВЪЗРАСТ

### CORRELATION BETWEEN PHYSICAL DEVELOPMENT AND MOTOR ABILITIES OF PRESCHOOLERS

Tsveta Traykova

National sports academy "Vassil Levski", Sofia, Bulgaria

The genetic, structural, and functional characteristics of the human body are of particular importance for the manifestation of motor abilities. The aim of the investigation is to reveal the character and level of the corelation between body measurements and motor abilities of 5–6-year-olds. 208 boys and girls were studied. methods: theorical analysis, anthropometry, dynamometry, pedagogical testing, statistical methods. Results: height, weight and chest circumference have a positive, moderate, and significant influence only on the grip strength of both hands, static back strength and the explosive srength of the upper extremities. The corelation with other motor abilities is very low and statistically unsignificant. conclusion: positive, moderate to significant correlation between structural characteristics and the static and explosive strength of the upper extremities and static back strength of the studied children was found. Probably motor abilities depend more on functional prerequisites and on other exogenous factors which are not an object of our study. However, in that age period, the role of structural factors should not be neglected when interpreting the results of motor tests.

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# МЯСТО НА ИГРАТА "ФРИЗБИ" В ПРОГРАМАТА ПО ФИЗИЧЕСКА КУЛТУРА В ДЕТСКИТЕ ГРАДИНИ PLACE OF THE "FRISBEE GAME" IN THE PHYSICAL CULTURE PROGRAM IN KINDERGARTENS Tsveta Traykova

National sports academy "Vassil Levski", Sofia, Bulgaria

The purpose of this publication is to offer an algorithm for effective training in the basic elements of the frisbee game and argue its inclusion as a physical activity in physical culture pedagogical situations and in the leisure of preschoolers. Methods: theoretical analysis of scientific and methodological literature, pedagogical observation. Results: the necessity of including new, attractive and funny games in the practice of pre-school physical education is argued. An algorithm for initial training of the elements "pass" and "catch" for 6-7-year-olds has been developed. Conclusions: practicing the game "frisbee" is an appropriate mean for increasing the physical activity of children, their psicho physical health and sense of satisfaction with physical exertion on the background of positive emotions.

The use of new, interesting and fun games in the physical activity of children will increase the benefits and effectiveness of the physical education process, will have a positive impact on their health and physical fitness and increase their interest in physical activity, both in kindergarten and leisure in a family environment.

Key words: flying disk, training, basic elements, benefits, preschooler

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## ВЪЗДЕЙСТВИЕ НА СПОРТНОТО ОРИЕНТИРАНЕ ВЪРХУ ОКОЛНАТА СРЕДА IMPACT OF SPORTS ORIENTEERING ON THE ENVIRONMENT

Boyan Doytchev

National sports academy "Vassil Levski", Sofia, Bulgaria

Summary. In this study, we have look at impact of the sports orienteering on the environment. Orienteering has become increasingly popular in recent years, compriseing people of different age groups. The attractiveness of this sport brings more and more fans. The appropriate behavior and practical habits of practicing orienteering in a natural environment depend on their knowledge of it and how it will react to sports activities. Appropriate environmental education helps people to raise their awareness of environmental issues and problems in specific actions. This requires an up-to-date environmental policy and education aimed at the future development of this sport. Successful environmental training helps people to increase their refreshment on issues related to environmental conditions. This requires an up-to-date environmental policy and education aimed at the future development of this sport.

**Key words:** sports orienteering, ecology, conservation, environment

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# ВЪЗДЕЙСТВИЕТО НА АЛПИНИЗМА И КАТЕРЕНЕТО ВЪРХУ ОКОЛНАТА СРЕДА **THE IMPACT OF MOUNTAINEERING AND CLIMBING ON THE ENVIRONMENT** Boyan Doytchev

National sports academy "Vassil Levski", Sofia, Bulgaria

Summary. In this study, we looked at the impact of mountaineering and climbing on the environment. In recent years, they have become one of the most attractive sports practiced by amateurs and athletes. There's need an obligation of the organizers to protect the environment and the natural resources of the mountains and rocks. This includes the protection of endangered plant and animal species, their ecosystems and ambience. Mountains and rocks are a limited resource that must be shared by climbers with different interests and from different generations. The united efforts of the organizers are needed in building environmental competencies and educating on the users of these services. Organizers must take responsibility for the consequences and to have a commitment protecting the environment and natural resources. These sports must be realized under an optimal environmental conditions and not violate to her environmental sustainability.

**Key words:** mountaineering, climbing, ecology, protection, environment

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ХОМОГЕННОСТ НА УЧЕБНИ ГРУПИ ПО ПОКАЗАТЕЛИТЕ ЗА ПРОФЕСИОНАЛНО ЗНАЧИМИ ИНТЕЛЕКТУАЛНИ ХАРАКТЕРИСТИКИ ОТ ДИСЦИПЛИНАТА ФИЗИЧЕСКО ВЪЗПИТАНИЕ В МГУ "СВ. ИВАН РИЛСКИ"

# HOMOGENEITY OF STUDENT GROUPS BY THE INDICATORS FOR PROFESSIONALLY SIGNIFICANT INTELLECTUAL CHARACTERISTICS OF PHYSICAL EDUCATION DISCIPLINE IN UMG "ST. IVAN RILSKI"

Ivanka Stavreva

University of mining and geology "St. Ivan Rilski", Sofia, Bulgaria

The professiograms for the different occupations must indicate the professionally significant qualities for the successful realization of the specialists. In our research, we focus on professionally significant intellectual abilities of engineers in the mining industry. The aim is to research the level of development of these abilities in students of UMG "St. Ivan Rilski "-Sofia and to establish the variability of some students groups (basketball, table tennis, fitness and football) in the discipline" Physical Education. The results of two (abilities and accuracy of the operative thinking) out of the total of six professionally significant intellectual (cognitive) researched indicators researched define the groups as homogenous. According to three indicators, the groups are defined as relatively homogeneous - concentration of attention, speed of operative thinking and visual memory – an exception is the football group, which is heterogeneous. In terms of logical thinking, the four studied groups are very diverse, an exception is the table tennis group, which is relatively homogeneous. In conclusion, it is recommended to use appropriate methods in the classes, to focus on building and improving cognitive characteristics, which will facilitate the realization of future professionals.

**Key words:** students, cognitive, professionally significant, qualities, physical education, mining industry

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СЪСТЕЗАТЕЛНА РЕАЛИЗАЦИЯ ВЪВ ВЪЗРАСТОВ АСПЕКТ ПРИ СЪСТЕЗАТЕЛИТЕ В ДИСЦИПЛИНАТА 100 М (МЪЖЕ)

### SPORT REALIZATION IN AGE ASPECT OF ELITE ATHLETES IN THE DISCIPLINE 100 M (MEN)

Grigor Gutev, Iva Dimova

National sports academy "Vassil Levski", Sofia, Bulgaria

Sport realization in elite sport is of interest both for the people in the practice (athletes and coaches) and for sport theory. In athletic competitions the discipline 100 m for men has its special place as one of the most popular ones. From there is our interest in sport realization of elite sprinters in age aspect. The aim of the following study is to analyze the performance of the world elite sprinters in age aspect. For our study, we analyze top 100 athletes in the all-time rank list divided to two separate groups – retired and active. The two groups are analyzed separately. The group of retired athletes is used to created sport results models in age aspect and reveal in details tendencies in sport performance. The second group of still active athletes is used as control group to check the authenticity of revealed tendencies. Presented data can be used as an optimization tool for optimization of training programs for optimal sport realization in age aspect.

**Key words:** sprint, sport realization, age aspect, elite sport

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МОДЕЛИРАНИ БОРБИ ПРЕДИ СЪСТЕЗАНИЕ-ХАРАКТЕРИСТИКА НА ФУНКЦИОНАЛНИТЕ ВЪЗМОЖНОСТИ НА НАЦИОНАЛНИ СЪСТЕЗАТЕЛИ ПО КЛАСИЧЕСКА БОРБА

# CHARACTERISTICS OF THE FUNCTIONAL CAPABILITIES OF NATIONAL COMPETITORS IN GRECO-ROMAN WRESTLING AFTER SPECIALIZED TRAINING – PRE-COMPETITION MODELED WRESTLINGS

Denislav Chamishki

National sports academy "Vassil Levski", Sofia, Bulgaria

Abstract. Winning medals by our wrestlers of the international Championships is of great importance for the Bulgarian school and the high esteem of Bulgarian sport. In recent years, intensive interval-variable training, modelled wrestling that simulate a competition, has been included in the contest period of our wrestlers' preparation. Purpose: Our goal is to construct a high-intensity modelled training (wrestling) suitable for the functional preparation before a competition and to determine their biochemical and physiological load characteristics by measuring heart rate and lactate concentration in the peripheral blood. Methods: The study involved five medallists in Greco-Roman wrestling in the last European and World Championships, who in six modelled rounds with tasks and with elements of wrestling and tactical ideas showed the following results: - Heart rate varied after each round with values exceeding 182 bpm, and at breaks dropped to 122 bpm; - The concentration of lactate in the blood was also high in each session between the first and the second match. Conclusions: In conclusion, the intensity of this constructed model of modelled training is very high, compared to the values reported in the competitive conditions of the international tournament "Nikola Petrov" values of the concentration of lactate in the blood.

Key words: Greco-Roman wrestling, lactate, heart rate, high intensity modeled training.

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СРАВНЕНИЕ НА КЛАСИРАНЕ, ПОДГОТОВКА И ФУНКЦИОНАЛНИТЕ ПОКАЗАТЕЛИ МЕЖДУ ГЛУХИ И ЧУВАЩИ БОРЦИ ОТ НАЦИОНАЛНИТЕ ОТБОРИ ПО КЛАСИЧЕСКА БОРБА НА БЪЛГАРИЯ

# COMPARISON OF RANKING, PREPARATION AND FUNCTIONAL PARAMETERS OF DEAF AND HEARING WRESTLERS FROM THE BULGARIAN NATIONAL GRECO-ROMAN WRESTLING TEAMS Denislav Chamishki

National sports academy "Vassil Levski", Sofia, Bulgaria

Abstract. The successful performance at the competitions of Bulgarian Greco-Roman wrestlers with hearing and deaf is largely due to the adjustment of the training process to the ever-changing rules of Greco-Roman wrestling. Before the London Olympics, because of the rules, the focus was on the speed and strength endurance, but after that only strength endurance as a major factor for sport results. Purpose: Our goal is to compare a world championship results, the methodology of preparation and the functional parameters of wrestlers with impaired and normal hearing in the pre-Olympic year so as to win Olympic quotas. Methods: The analysis involved three best performing Greco-Roman wrestlers at the respective world championships for deaf and hearing athletes in the same year. Results: In addition to sport results and the methodology of preparation, from the functional parameters (physiological and biochemical), we are using the maximum oxygen consumption (VO2max), the maximum oxygen consumption per kilogram (VO2max/kg), the heart rate values and the lactate concentration in the peripheral blood from conducting functional tests. Conclusions: In conclusion, we can say that the sports achievements are in favor of deaf wrestlers, the training methodology is the same and the functional capabilities are better for hearing wrestlers.

**Key words:** Greco-Roman wrestling for deaf and hearing athletes, analysis, comparison, functional parameters, strength endurance

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ПОНИЖАВАНЕ НА ТРЕВОЖНОСТТА ПРИ СТУДЕНТИ ПОСРЕДСТВОМ ПРИЛАГАНЕ НА СПЕЦИАЛИЗИРАНА МЕТОДИКА В УЧЕБНИТЕ ЗАНЯТИЯ ПО ФИЗИЧЕСКО ВЪЗПИТАНИЕ

## REDUCING ANXIETY IN STUDENTS THROUGH THE APPLICATION OF SPECIALIZED METHODOLOGY IN PHYSICAL EDUCATION CLASSES

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Anxiety is a common negative mental state. A major factor in its induction is high mental tension (distress). Students' learning activities are associated with different degrees of tension, which in certain cases manifest as anxiety. It negatively affects their health and performance. One of the most effective means of reducing anxiety and limiting its negative impact is physical activity. Physical qualities are developed in physical education classes. Physical exercise has been found to have a positive impact on the psyche. Aim: to reduce students' anxiety by applying specialized methodology in physical education classes. Methods: literature study, discussion, pedagogical experiment by applying complex influence methodology. The results were processed by variance analysis. Results: in the process of conducting regular physical education classes with the application of a specialized influence methodology, significantly decreased anxiety in students. Conclusions: with purposeful physical activity, by means of appropriate psychophysical exercises, complete as an impact methodology, applied in regular physical education classes, anxiety is significantly reduced. Conditions are created to improve health and increase student success.

Key words: anxiety, physical education, students, specialized methodology, psychophysical exercises

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АНАЛИЗ НА ИЗМИНАТОТО РАЗСТОЯНИЕ ПРИ ПРОФЕСИОНАЛНИ ФУТБОЛИСТИ ОТ ВТОРА ЛИГА В БЪЛГАРИЯ

### ANALYSIS OF COVERED DISTANCE BY PROFESSIONAL FOOTBALL PLAYERS IN BULGARIAN SECOND LEAGUE

Grigor Gutev, Iva Dimova, Danail Ivanov

National sports academy "Vassil Levski", Sofia, Bulgaria

Football is undoubtedly one of the most famous sport in the world. Monitoring covered distance during training process and official games is well used tool for controlling both fatigue and sport realization. There is a lot of information for professional football players during world cups or international matches, but the data for the footballers in the lower leagues is fragmentary. There is no available information regarding distance covered in different speed zones for lower divisions in Bulgaria. The aim of the following study is to reveal actual data from Bulgarian Second League leading team. For the purpose of the study is used full set of Polar Team Pro GPS system with all option included. Based on collected data is made a profile of second football level football player and data from the matches can be used as basis

for comparison. Also, we present evaluation tables for assessment of covered distance in all speed zones for football players in this league of the professional football in Bulgaria.

Key words: football, GPS, covered distance, speed zones

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ПРИМЕРНА ПРОГРАМА ЗА ПОДОБРЯВАНЕ НА КООРДИНАЦИОННИТЕ СПОСОБНОСТИ И ПРОСТРАНСТВЕНАТА ОРИЕНТАЦИЯ ПРИ ДЕЦА ОТ НАЧАЛНА УЧИЛИЩНА ВЪЗРАСТ

### EXAMPLE PROGRAM FOR IMPROVING COORDINATION SKILLS AND SPATIAL ORIENTATION IN CHILDREN FROM PRIMARY SCHOOL AGE

Milena Dimitrova Tarnichkova

National sports academy "Vassil Levski", Sofia, Bulgaria

The aim of the present research is to prepare a specialized program for improving the coordination abilities and spatial orientation in children of primary school age through the means of aerobic gymnastics. The methods: theoretical analysis of literature sources; internet analysis; sports-pedagogical testing and variation analysis. We studied two groups (A and B) of 21 students aged 9-10 years. To check the level of development of the studied qualities we have used three author's tests. The test results show that in the first test (T1) to check the spatial orientation, both groups show extremely poor results with strong heterogeneity. In test №2 "Laugh clown" the students from group B show slightly better results in their level of development of coordination abilities than those in group A, as far as in the test "Scissors" (T3) the advantage is for the students from group A. In general, the level of development of the spatial orientation and coordination of the students studied by us is unsatisfactory. The prepared sample methodology contains 36 training sessions in which the various means of aerobic gymnastics are used - dance basic steps, their variations and games with a competitive and fun nature.

Key words: coordination, spatial orientation, aerobic gymnastics, primary school age

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ПРОБЛЕМИ, СВЪРЗАНИ СЪС СПОРТА И ХРАНЕНЕТО НА СТУДЕНТИ ОТ МЕДИЦИНСКИ КОЛЕЖ – ПЛОВДИВ ПО ВРЕМЕ НА ОНЛАЙН ОБУЧЕНИЕ

### PROBLEMS RELATED TO SPORTS AND NUTRITION OF STUDENTS FROM MEDICAL COLLEGE – PLOVDIV DURING ONLINE TRAINING

Yordanka Topuzova, Martin Bonev

Medical University, Plovdiv, Bulgaria

Modern technologies and digitalization require that higher education adopt online teaching methods. Current conditions, exacerbated by the ongoing COVID-19 pandemic, required most colleges and universities to transition to online teaching, which has its pros and cons. The effects of online learning on sports and nutrition are the subject of this paper – it is the writer's goal to review and discuss the above topics as they relate to students from Medical College – Ploydiy.

The study is conducted via a survey of Medical College students at random. Students represent a sample of both sexes, as well as a variety of majors, different levels of completed course work and different age groups. After completing the survey, statistical methods are used to extrapolate the data and sum up the main problems related to online education. Online learning leads to a number of issues. The obtained results show the main negative factors observed to be: inactivity, lack of motivation and lack of acceptable conditions for physical education. Surveyed students also display higher propensity toward eating more often, eating larger quantities of food, as well as eating less healthy. All of the above could lead to increased body weight.

Online education may be an acceptable alternative to many other topics, but as it relates to sports and nutrition it is very challenging to successfully replace the in-person method with online learning. This may lead to deteriorating health in students and the early onset of disease. Students may experience high blood pressure, diabetes, cardio-vascular disease and others. Therefore, it is very import to research the above topic and proper action to be taken to address and remedy the above-mentioned issues.

Key words: health, disease, sports, nutrition, online education

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# ТРЕНИРОВЪЧНА ПРОГРАМА ЗА РАЗВИТИЕ НА ФИЗИЧЕСКОТО КАЧЕСТВО СИЛА ПРИ СТУДЕНТИ TRAINING PROGRAM FOR DEVELOPMENT OF THE PHYSICAL CHARACTERISTIC OF STRENGTH IN STUDENTS

<u>Lyuben Lapadatov, Nela Gocheva, Mariya Ivanova, Tihomir Ivanov, Tihomir Kitanov</u> Trakia University, Faculty of Economics, Stara Zagora, Bulgaria During the recent years, more often sports specialist are focusing on improving the content of sports curriculum at the schools of higher education. PURPOSE: The purpose of the training program is to improve and develop the physical characteristic of strength in students / men /.METHODS The methods used to achieve the goal in the research are: theoretical analysis, sports-pedagogical testing, pedagogical experiment, pedagogical observation, graphic analysis, comparative analysis. The experiment was conducted in the academic year 2019, with the first and second year students of the Faculty of Veterinary Medicine, Faculty of Agriculture, Faculty of Economics at the Thracian University. The number of the observed students was 70, who were randomly divided into experimental and control groups. RESULTS: When analyzing the results obtained from the performed tests, it was found an increase in some indicators. CONCLUSION: The used training program proved its effectiveness with the results from the study. This program can be successfully applied in the classes of physical education and sports at the Higher Schools."

**Key words:** Training program, physical characteristic, experiment, higher school

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АКТУАЛИЗИРАНЕ НА УЧЕБНАТА ПРОГРАМА ПО ДИСЦИПЛИНАТА "СПОРТ" ЗА СТУДЕНТИ ОТ СПЕЦИАЛНОСТИТЕ "МЕДИЦИНСКА СЕСТРА" И "АКУШЕРКА" ОТ ФОЗ ПРИ МУ – СОФИЯ

### UPDATING THE CURRICULUM IN THE DISCIPLINE "SPORT" FOR STUDENTS OF THE NURSES "NURSES" AND "MIDWIFERY" FROM PHOS AT MU - SOFIA

Kritiyan Gerasimov, Anna Bozhkova

Medical University, Sofia, Bulgaria

The discipline ""Sport"" is a necessary part of the students' education. It regulates the physical with the mental load, improves the motor skills and habits, preserves and improves their health and physical capacity.

The training of students in the discipline ""Sport"" should be focused on their specific professional activity, using different types of sports for stable and sustainable motor, intellectual and emotional development of the personality of the trainers.

The aim is to update the curriculum in the discipline ""Sport"" by including theoretical training (seminars) and additional sports disciplines (Exercises).

Tasks:

- Analysis of the current curriculum in the discipline ""Sports"" for students majoring in ""Nurse"" and ""Midwife"" from the PHC at MU Sofia.
- Inclusion of theoretical material with current topics and a program of activities for independent preparation in the form of seminars.
- Inclusion of additional sports disciplines with the appropriate methodology and content to the ones practiced so far.
- Expected results.

The new additions to the program will help to acquire specialized knowledge about physical exercises, application of exercises for therapeutic purposes, knowledge to practice different types of physical activity and their benefits for maintaining and developing the necessary motor skills of students to practice the professions ""Medical sister "and" Midwife".

Key words: sports, curriculum, students, Nurse, Midwife

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ПРОУЧВАНЕ И АНАЛИЗ НА ПСИХОМОТОРИКАТА И СПОРТНИЯ ИНТЕЛЕКТ НА МЛАДИ БАСКЕТБОЛИСТИ, ПРАКТИКУВАЩИ БАСКЕТБОЛ З НА 3

### RESEARCH AND ANALYSIS OF PSYCHOMOTOR SKILLS AND SPORTS INTELLECT OF YOUTH BASKETBALL PLAYERS PRACTICING 3 ON 3 BASKETBALL

Martin Bonev, Yordanka Topuzova,

Medical University, Plovdiv, Bulgaria

Goal: The subject of this report is the influence of certain methods of preparation on sports intellect of youth basketball players practicing 3 on 3 basketball. The research contains observation of the 12 to 14 age group.

Methods: Methods used are pedagogical observation, tutorial experiments, and statistical methods to extrapolate results. Results: The results show positive development of the observed factors in all of the monitored groups, whereas the difference within the groups is not statistically significant at the end of the study. This is a result of the basketball practice within the groups, and the basketball game itself and the 3 on 3 game promote improvement of the psychomotor skills and basketball intellect of the practicing youth, despite the different practice methods and the personal qualities of the players observed.

Conclusion: The game of basketball in its standard format and in its 3 on 3 format contribute to the improvement of the psychomotor skills and basketball intellect of the observed youth players ages 12 to 14, despite the different practice methods and the personal qualities of the players observed.

**Key words:** basketball 3 on 3, psychomotor, sports intellect, youth basketball players

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ЙОГА И СПОРТ - ДОБРЕ ДОШЛИ ИЛИ СБОГОМ

YOGA & SPORT - NAMASTE OR LOG OUT

Albena Dobreva

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The issues about the relation between Yoga and Sport have not been sufficiently studied in scientific literature. But they are part of the bigger question about the place of Yoga and Sport in the modern world. Research methods: theoretical analysis and synthesis, exploration and interpretation of international acts and ancient sources in the field of Yoga and Sport. Aim: The author poses frankly and clearly the questions concerning the relation between two at first sight incompatible social phenomena - Yoga and modern Sport, the way they are understood and developed. The results from the application of a specific educational model of Yoga and Sport in Bulgaria provide new starting points for both social phenomena, so that they can be mutually enriched and developed in order to be useful for the society. Results: Yoga is not a sport but can be practiced as a sport if it follows certain scientific standards. Conclusion: Yoga education in the context of sports education can be one of the models for the successful implementation of unique ancient knowledge in the modern digital era.

Key words: yoga, international acts, sport, education, philosophy, culture, knowledge, model

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СПОРТ 2020 - РЕТРОСПЕКЦИЯ НА ОНЛАЙН ПРЯКОТО ПРЕДАВАНЕ

#### SPORT 2020: RETROSPECTION OF LIVESTREAMING

Albena Dobreva

National sports academy "Vassil Levski", Sofia, Bulgaria

2020 was time of birth or end for Humanity. The hard 2020 made the structural changes in sport visible. Some of them had been accumulated, others were provoked by the crisis COVID-19. Research methods: theoretical analysis and synthesis. Aim: Through concrete examples, the research shows the impact of COVID-19 on sport and related businesses, technology, legal framework, anti-doping rules and other regulations, court cases, etc. Last but not least, it affected the philosophy of sport. Whether these changes are for the better, whether they will last or are transitional is an assessment we will leave to the future, which does not prevent our attempts to make an objective judgement. Results: The big sports picture in 2020 showed the structural changes that took place.

Conclusion: Since the time of the first javelin thrown by a human up to present days, sport has been a symbol of human intellect which knows the world through movement and changes it by adapting to it. That is why the way sport changed during that time is indicative to the adaptability of the whole humankind to new realities of one pandemic unseen before.

**Key words:** sport, legal framework, case, philosophy, technologies, intellectual property, games

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## COMPARATIVE ANALYSIS OF THE LEVEL OF SPECIFIC MOTOR QUALITIES IN 12-13-YEAR-OLD TENNIS PLAYERS

Dimitar Dimitrov, Stefaniya Belomazheva-Dimitrova

St. Cyril and St. Methodius University of Veliko Tarnovo, Bulgaria

ABSTRACT: Tennis is one of the most popular games in our time, which is developing rapidly. A characteristic feature of the modern tennis player is the high level of specific motor qualities and physical fitness.

THE PURPOSE of the study is to establish the level of development of specific motor skills in 12-13-year-old tennis players before and after systematic training during general and special preparation period.

METHODS: The participants of the study are 20 students on average age of 12,8 years. Data of level of development of specific motor skills were collected during the experiment. All data were processed and statistically analyzed.

RESULTS: We observe the closest in value results of the indicators of special motor qualities both at the beginning and at the end of the experiment. The mean value of each indicator increases at the end of the experiment. The differences in the results of the study at the beginning and at the end of the experiment are statistically significant.

CONCLUSIONS: We can conclude that the closest in value results proves that systematic training has been carried out in adolescent tennis players. Statistically significant differences in the results are an improvement that the applied training methods leads to the observed changes.

**Key words:** Tennis, tennis players, adolescent, training methods, specific motor skills.

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#### ДЕФИНИРАНЕ НА ТРАНСВЕРСАЛНИ УМЕНИЯ: ПЕРСПЕКТИВИ И РАЗВИТИЕ

### DEFINING TRANSVERSAL SKILLS: PERSPECTIVES AND DEVELOPMENT

Yoanna Dochevska

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The aim of the present paper is to describe international perspectives concerning terms, definitions, and meanings of transversal skills and related terminology, highlighting the skills of the future. Methods: Has been analysed the available literature and policy documents and has been implemented analysis of various sources of data via qualitative methodology and expertise of researchers. Results: Although the term transversal skills is reaching wide aspect of importance, different classifications which skills are actually considered as transversal skills are observed and vise versa – different classifications includes skills, considered as transversal ones. Conclusions: Considerations has been described in the present study aiming to stimulate reflection of stakeholders and educational experts with diverse background and to start the discussion regarding possible unification of used terminology.

**Key words:** Transversal skills, Skills development, Soft skills, Core Skills, Key competencies, Basic skills, Workplace know-how, Skills of the future

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МАКРОСТРУКТУРНО РАЗПРЕДЕЛЕНИЕ НА СПЕЦИФИЧНИТЕ ТРЕНИРОВЪЧНИ СРЕДСТВА ЗА КЛАСИЧЕСКО ПЛАНИНСКО БЯГАНЕ ПРИ КОМБИНИРАН МОДЕЛ НА ПОДГОТОВКА ЗА ВАРИАНТИ "ПРЕДИМНО ИЗКАЧВАНЕ" И "ИЗКАЧВАНЕ И СПУСКАНЕ"

MACROSTRUCTURAL DISTRIBUTION OF THE SPECIFIC TRAINING TOOLS FOR CLASSIC MOUNTAIN RUNNING IN A COMBINED MODEL OF PREPARATION FOR "MAINLY UPHILL" AND "UP AND DOWNHILL" VARIANTS

Kostadin Kisyov

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Based on researches completed on the training and sport-racing activity in the mountain running, it has been observed the distribution of the specific training tools, that coincide or are very close in their biomechanics and bioenergetics to the racing activity.

The aim of the research is to establish a basic model of the specific training tools volume, by weeks in the macrostructure. Following methods were used: a) research of the weekly volume of the training tools within the framework of the separate mezzo-cycles in the macrostructure and b) variation analysis of the data received from the training tools explored.

The results from the research give foundation to define following conclusions:

- 1. Tools for development of the main achievement factors are focused mainly in the preparation period.
- 2. Tools for development of the main achievement factor "special strength endurance" are the most important element from the specific training.
- 3. Tools developing the sub factor "specific endurance" are maintaining/supporting element with primary importance for realization of the specific training in the racing period.
- 4. Tools developing the sub factor "specific speed" are present at almost all stages of the training.

**Key words:** Mountain running, Trail running, Off-road running, Achievement factors, Classification of the training tools, Basic training tools, Model of annual periodization.

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МАКРОСТРУКТУРНО РАЗПРЕДЕЛЕНИЕ НА БАЗОВИТЕ ТРЕНИРОВЪЧНИ СРЕДСТВА ЗА КЛАСИЧЕСКО ПЛАНИНСКО БЯГАНЕ ПРИ КОМБИНИРАН МОДЕЛ НА ПОДГОТОВКА ЗА ВАРИАНТИ "ПРЕДИМНО ИЗКАЧВАНЕ" И "ИЗКАЧВАНЕ И СПУСКАНЕ"

MACROSTRUCTURAL DISTRIBUTION OF BASIC TRAINING TOOLS FOR CLASSIC MOUNTAIN RUNNING IN A COMBINED MODEL OF PREPARATION FOR "MAINLY UPHILL" AND "UP AND DOWNHILL" VARIANTS

Kostadin Kisyov

National sports academy "Vassil Levski", Sofia, Bulgaria

The article represents research on the distribution of the basic training tools in the annual cycle of highly qualified racers in mountain running in a combined preparation focused to racings in both variations ""Mainly Uphill""

and ""Up and Downhill"". The aim of the research is differentiation of a principle model of the weekly distribution of the basic training tools in the macrostructure.

Following methods were used: a) research of the weekly volume of the training tools within the framework of the separate mezzo-cycles in the macrostructure and b) variation analysis of the data received from the training tools explored.

The results from the research show, that the main part of the auxiliary running tools for the sub-factors from second level are focused to the development of the pace endurance. The most significant sub-factor from second level – pace endurance is developed by running without denivelation, mainly in the preparation period. The biggest portion of the training workout is related with development of the sub-factor from third level "basic endurance". It appears to be the fundament, on which the whole structure of the training is developed.

**Key words:** Mountain running, Trail running, Off-road running, Achievement factors, Classification of the training tools, Basic training tools, Model of annual periodization.

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ПРОУЧВАНЕ И СРАВНИТЕЛЕН АНАЛИЗ НА ДАННИТЕ ЗА ПОКАЗАТЕЛИТЕ НА ТЕЛЕСНА МАСА ПРИ СТУДЕНТИ ЖЕНИ

### STUDY AND COMPARATIVE ANALYSIS OF BODY WEIGHT INDICATOR DATA IN WOMEN STUDENTS

Petya Angelova

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

The aim of the study is to establish the indicators of body weight in female students from the Thracian University of Stara Zagora and to compare the results of similar studies in students from other Bulgarian universities. Methods: review and analysis of the main theoretical formulations and the available literature on research on anthropometric indicators and the body mass index (BMI) calculated on this basis, in 150 female students; implementation of anthropometric studies of students on morphological indicators; statistical processing of results; comparative analysis. The results show that the students participating in our study have an average height of 1.63 cm and an average body weight of 59.89 kg. With the body mass index, the values range between a minimum of 15.95 kg / m2 and a maximum of 41 kg / m2. Conclusions: the comparative analysis of the various scientific studies reveals a significant difference in the established indicators of body weight and body mass index. The study of female students from the Thracian University in the city of Stara Zagora found that the relative share of those registered with normal body weight is almost preserved. In recent years, however, the relative share of overweight students has increased significantly.

**Key words:** students, BMI, obesity, anthropometric research, physical development

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# ФАКТОРИ, ВЛИЯЕЩИ ПРИ ИЗБОРА НА ХРАНИТЕЛНИ ДОБАВКИ И ВИТАМИНИ ПРИ СТУДЕНТИ FACTORS INFLUENCING THE CHOICE OF NUTRITIONAL SUPPLEMENTS AND VITAMINS FOR STUDENTS

Petya Angelova, Ivelina Angelova

Trakia University, Faculty of Economics, Stara Zagora, Bulgaria

The aim of the study is which factors influence the choice of food supplements in students. Methods: survey; statistical processing of results; grafical analysis; comparative analysis. The respondents are 83 students - 43 women and 36 men. Results: the majority of students (76%) do not use food supplements and only 24% is the relative share of positive answers. The largest (40%) is the relative share of respondents who rely on their own knowledge when choosing supplements. Fitness instructors (20%) and nutritionists (18%) have almost equivalent weight as an authority. The doctor's recommendation does not have a strong influence on the choice of supplements - 13% is the relative share of this answer Conclusion: A small number of students use nutritional supplements, and those who use them rely mainly on their own knowledge and to some extent on fitness instructors and nutritionists. Measures should also be proposed to increase health literacy of the medical specialists themselves - doctors, physiotherapists, rehabilitators, nurses, midwives and others, and in this way the human and financial resources in the health system would be significantly affected.

**Key words:** nutritional supplements, students, health culture, diet

КИНЕМАТИЧНА СТРУКТУРА И ХАРАКТЕРИСТИКА НА ТЕХНИКАТА "ДРАГ ФЛИК" В ХОКЕЯ НА ТРЕВА

## KINEMATIC STRUCTURE AND CHARACTERISTICS OF THE "DRAG FLICK" FIELD HOCKEY TECHNIQUE

Antonio Antonov

National sports academy "Vassil Levski", Sofia, Bulgaria

PURPOSE The aim of our research is to reveal the phase structure of the ""Drag Flick"" technique during the execution of a penalty corner, as well as to make a kinematic characteristic of the main phases and moments of the body and stick movements.

METHODS The object of the study were a total of 10 hockey players - goal scorers, ""top specialists"" of the ""Drag Flick"" technique, PC performers. In the study we used the methods:

- Pedagogical observation;
- Video registration;
- Video-computer analysis of technical actions;
- Analysis of videograms and kinograms composed of the boundary positions between the different phases in the implementation of the DF.

RESULTS: The analysis of the analytical expression shows that the speed of take-off of the ball is influenced to the greatest extent by the mag-nitude of the force pulse received during the joint movement of the stick and the ball during the ,enalty corner executive phase. Second in importance is the path length of the stick and the ball, from the moment of contact to the moment of separation.

CONCLUSIONS: The technique of DF in the execution of a penalty corner goes through three phases, incl. preparatory, executive and final. The overall movement is realized by performing at least 6 steps - 2 or more ac-celerators, rotary step, rear cross step, executive step and final - support step on the right foot. The described 14 moments reflect the motor structure on which the basis of the DF technique is built.

Key words: Biomechanics, Field Hockey, Drag Flick, Penalty Corner, Technique, Phase structure

### СЕКЦИЯ 7А СПОРТНИ ПРОБЛЕМИ НА БИЗНЕСА И ОБЩНОСТИТЕ SECTION 7A:

SPORTS PROBLEMS OF BUSINESS AND COMMUNITIES

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НЯКОИ АСПЕКТИ ОТ ВЪЗМОЖНОСТИТЕ НА ДЖУДИСТИТЕ В БЪЛГАРИЯ

SOME ASPECTS OF THE OPPORTUNITIES OF JUDO PLAYERS IN BULGARIA

Anzhelina Yaneva, Ivaylo Prokopov

Sofia University "St. Kliment Ohridski", Sofia, Bulgaria

The article presents a study of some aspects of the possibilities of current and former judo athletes. An anonymous online survey examines their opinions on the techniques they train during training and use in a competition, as well as what their favorite techniques are and whether they use them during a competition. The results point to problems related to the methodology of training and inefficiency in the preparation of judokas.

Key words: judo, favorite techniques: ne-wadza, tachi-wadza, efficiency

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СЪСТОЯНИЕ НА НОРМАТИВНАТА БАЗА И УСЛОВИЯТА В УЧЕБНАТА СРЕДА ЗА ОБЕЗПЕЧАВАНЕ НА КЛАСНИТЕ И ИЗВЪНКЛАСНИТЕ ЗАНИМАНИЯ ПО ФИЗИЧЕСКО ВЪЗПИТАНИЕ И СПОРТ

### STATE OF THE REGULATORY BASIS AND CONDITIONS IN THE LEARNING ENVIRONMENT FOR PROVIDING CLASS AND EXTRACURRICULAR ACTIVITIES IN PHYSICAL EDUCATION AND SPORT

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St. Cyril and St. Methodius University of Veliko Tarnovo, Bulgaria

The development of the physical capacity and raising the level of motor skills have always been the main task of physical education and sports. The reduced physical capacity is a result of the reduced motor activity of the learners, ie. there are significant gaps in the motor regime in schools. In the development of extracurricular forms of sports, we see one of the opportunities for purposeful and organized implementation of the tasks of the physical education with children in their leisure time. The condition of the normative base and the conditions for conducting the class and extracurricular activities of the physical education and sport is extremely important.

The purpose of our study is to examine the opinion of the physical education teachers on the legal framework and conditions in the learning environment to provide classroom and extracurricular activities in physical education and sports. To achieve our goal, we set the following tasks: 1. To study the opinion of the teachers about the working conditions in schools; 2. To understand the opinion of the parents regarding the participation of their children in the extracurricular sports activities; 3. To receive feedback on the effectiveness of sports activities in schools and in particular on the development of football in schools.

The survey method was used for the purposes of the study. A special closed questionnaire contains 17 questions and was compiled according to the nature of the survey. The survey was conducted in September and October 2020. The subject of the survey are 30 teachers, of which 13 men and 17 women. The results are analyzed and presented on the basis of the analysis of frequencies (f) and percentages (%).

**Key words:** physical education, sports, regulations, learning environment, conditions, classroom and extracurricular activities

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ИЗСЛЕДВАНЕ ВЪРХУ ПОДОБРЯВАНЕ ЗДРАВНИТЕ ГРИЖИ ПРИ ЖЕНИ С НОРМАЛНА БРЕМЕННОСТ ЧРЕЗ ПРИЛАГАНЕ НА РЕКРЕАТИВНА УЕЛНЕС ДВИГАТЕЛНА АКТИВНОСТ

### RESEARCH TO IMPROVE HEALTH CARE FOR WOMEN WITH NORMAL PREGNANCY APPLYING RECREATIONAL WELLNESS ACTIVITY

Bistra Dimitrova, Irina Nesheva

National sports academy "Vassil Levski", Sofia, Bulgaria

PURPOSE: The aim of this study was to achieve a control model of heart and respiratory functions by basic indicators established on comparative analysis between the results of initial and final pulse tests for women with normal pregnancy.

METHODS: The research was done among 111 women, all Bulgarians. We used: functional tests for assessing the effects of our own original Recreational Wellness program with a specific focus to pregnant women. We measured the intensity of the tool branded under the name of the co-author Nesheva.

RESULTS: During our own original Recreational Wellness program was established data by specific tests and the analysis has shown that the average values (Mean  $\pm$  SD) of the measured indicators, in the six lessons are statistically different (p <0.05). These indicators are interpreted as optimal prenatal improvement of health care, but probably our Recreational Wellness program also favors the maintenance of Wellness lifestyle during the all period of pregnancy. CONCLUSIONS: The results in our study are in support of establishing a system for assessing information to improves health care during the period of a normal pregnancy. This specific instrument is a reliable basis for validating standards for regulated inclusion in Recreational Wellness activity programs.

**Key words:** Basic model, Recreational Wellness program, motor activity, heart rate, vital capacity, normal pregnancy.

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ИЗСЛЕДВАНЕ НИВАТА НА АГРЕСИВНАТА РЕАКЦИЯ "ВЕРБАЛНА АГРЕСИЯ" НА СТУДЕНТИ, ЗАНИМАВАЩИ СЕ СЪС СПОРТОВЕТЕ: ДЖУДО, БАСКЕТБОЛ, ФИТНЕС И ТЕНИС

INVESTIGATION OF THE LEVELS OF THE AGGRESSIVE RESPONSE "VERBAL AGGRESSION" OF STUDENTS ENGAGED IN SPORTS: JUDO, BASKETBALL, FITNESS AND TENNIS

Anzhelina Yaneva, Elitsa Stoyanova

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This article reveals the results of the crisis in society and man, caused by a lack of trust and virtues. The mental emptiness and meaninglessness, fears and frustrations created by the replacement of values and the inability to clearly see the boundaries between good and evil; right and wrong, which provoke various manifestations of aggression. The purpose of the study is to establish what is the impact of sports activities on students' mental resilience, stability (emotional intelligence) and this article specifically investigates the levels of aggressive "verbal aggression" response. The results show that students from sports fitness, basketball and tennis are much more likely to exhibit verbal aggression, unlike students who play judo, where the "high" and "very high" level of verbal aggression does not exist. Women to a much greater extent exhibit verbal aggression, unlike men, probably to compensate for their physical ine power. In general, the reasons that give rise to verbal aggression can be reduced to: psychopathology - cumulation of many unresolved problems; neglect — verbal attack of thoughts associated with hate speech; social imitation; argumentative skills deficit.

Key words: sport, students, verbal aggression

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ПРОУЧВАНЕ НА ФИЗИЧЕСКОТО РАЗВИТИЕ, ФИЗИЧЕСКАТА И ТЕХНИКО-ТАКТИЧЕСКА ПОДГОТОВКА ПРИ БАСКЕТБОЛИСТКИ

### STUDY OF PHYSICAL DEVELOPMENT, PHYSICAL AND TECHNICAL-TACTICAL TRAINING IN BASKETBALL PLAYERS

Jasmin Tzankova

South-West University "N. Rilsky", Blagoevgrad, Bulgaria

The sporting achievement in basketball is greatly influenced by both morphofunctional indicators and the level of development of special physical qualities in combination with technical and tactical training. The aim of the study is to improve the training process in adolescent basketball players, through analysis and evaluation of physical development, physical and technical; and tactical training. A test battery with 15 indicators was used. Theoretical research, anthropometry and sports-pedagogical testing are applied in the article. The results of the study are processed mathematically and statistically through variation analysis, body mass index, correlation and comparative analysis. In 6 of the indicators, the adolescent basketball players from the surveyed team have reached grades above the average level. There is a need to improve the ability to lead the ball at high speed, shooting in motion over time and the use of various means to develop the abdominal muscles.

**Key words:** basketball, preparedness, motor qualities, technical skills

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ОСНОВНИ ФАКТОРИ НА ФИЗИЧЕСКАТА ДЕЕСПОСОБНОСТ НА 15-16 ГОДИШНИ УЧЕНИЦИ (СЛЕД ПЪРВИЯ ЛОКДАУН ЗАРАДИ COVD-19)

### BASIC FACTORS FOR THE PHYSICAL ABILITY OF 15-16-YEAR-OLD PUPILS (FOLLOWING THE FIRST LOCKDOWN BECAUSE OF COVID 19)

Mariana Borukova, Milena Kuleva

National sports academy "Vassil Levski", Sofia, Bulgaria

The purpose of the study is to disclose the factor structure and take to the front the basic factors of the physical ability of 15-16-year-old pupils following the first COVID 19 pandemic period of isolation. That will help the optimization of the online educational process in physical education and sport during the present school year. Studied are 252 pupils. The following methods of research are applied: review study and theoretical analysis of the specific literature and sports-pedagogical tests, covering 5 tests, as follows: Running 30 m, Long jump, 3 kg medicine ball throwing with both hands, Running 200 m and the T-rest for Agility. The results are processed by SPSS applying the following mathematic-statistic methods: variation analysis, Sigma deviation method and factor analysis. Conclusions: The pupils under study possess medium level physical ability for the same age group in the country. The factor structure of the 15-16-year old pupils is established by 3 basic factors, which explain a very high percentage of the initial dispersion of the phenomenon under study (87,37%); the first factor is the most important – it is related to the explosive strength of the lower limbs at horizontal efforts, the speed abilities and the endurance of the boys.

**Key words:** pupils, medium educational degree, online education.

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### ВЪЗРАСТОВИ РАЗЛИЧИЯ В НЯКОИ КОНДИЦИОННИ И КООРДИНАЦИОННИ КАЧЕСТВА

#### AGE DIFFERENCE IN SOME CONDITION AND COORDINATION ABILITIES

Georgi Brestnichki

National sports academy "Vassil Levski", Sofia, Bulgaria

Co-ordinational and conditional abilities are two major abilities necessary to the human to be able to practice any sport and not only. The aim of our study is to determine age difference in some of the main coordination and conditional abilities, which could contribute for improving the training methods and training process in all. For the needs of our study, we have tested 178 children at the age of 8 to 16 years in their coordination abilities and 161 children at the age of 9 to 16 years in their conditional abilities. The children have been tested with 4 coordination tests – one for rhythm, one for balance, one for accuracy aiming a goal and one for coordination in the space. About the conditional abilities the children have been tested with 4 other tests – running 20 m from standing stance, long jump from one spot, throwing a medical ball from laying position and speed running endurance with suicide test. Different coordination abilities have different appearance for the different age of the children in the period 8-16 years. While the picture of conditional abilities for different abilities is similar – gradually improvement of the results till 15 years and then little regression.

**Key words:** boys, changes, power strength, quickness, balance, rhythm

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ЛИЧНОСТНО-ПРОФЕСИОНАЛЕН ПРОФИЛ НА СТУДЕНТА-БЪДЕЩ ПЕДАГОГ ПРЕДИ И ПО ВРЕМЕ НА COVID 19

### STUDENT-FUTURE PEDAGOGUE' PERSONAL-PROFESSIONAL PROFILE BEFORE AND DURING COVID 19

Iliana Petkova, Georgi Ignatov

Sofia University "St. Kliment Ohridski", Sofia, Bulgaria

The purpose of this publication is to present the results of a study conducted in the period April-June 2020. The survey is aimed at identifying ways of organizing and spending leisure time and learning activities before and during a pandemic. The results obtained by student-future pedagogue show that during the pandemic the time spent on learning activities has increased; the activities have changed; time for sports have increased, skills related to their personal and professional development have changed. The conclusions are aimed at a comparative analysis of the concepts of leisure time and their personal and professional development before and during isolation.

Key words: leisure time, learning activities, students, pandemic

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АНАЛИЗ НА МНЕНИЕТО НА БЪЛГАРСКИ ФУТБОЛНИ ТРЕНЬОРИ ОТНОСНО ВЛИЯНИЕТО НА РАННАТА СПОРТНА СПЕЦИАЛИЗАЦИЯ И ДИВЕРСИФИКАЦИЯТА НА ТРЕНИРОВЪЧНИТЕ СРЕДСТВА СРЕД ДЕЦАТА ФУТБОЛИСТИ

# ANALYSIS OF THE OPINION OF BULGARIAN FOOTBALL COACHES ON THE INFLUENCE OF EARLY SPORTS SPECIALIZATION AND DIVERSIFICATION OF TRAINING DRILLS AMONG YOUTH FOOTBALL PLAYERS

<u>Vasil Tsvetkov, Danail Ivanov, Ivan Stoilov, Milen Gadzhev</u> National sports academy "Vassil Levski", Sofia, Bulgaria, University of National and World Economy, Sofia, Bulgaria Aim: A questionnaire survey was conducted among 147 Bulgarian football coaches on their opinion on the early sports specialization of players, as well as the place of diversification of training methods and drills in the course of football training. Methods:The survey consists of seven questions, each with several possible answers, and the data were analyzed using the methods of frequency analysis and two-dimensional distribution based on the categories ""license"" and ""age"" of the respondents. Results: The opinion of the coaches about several aspects is successfully observed – the early sports specialization of the children football players, the ability of the Bulgarian football specialists to manage the long-term sports-technical training, as well as the role of the diversification of the training drills and methods in the course of the sports-pedagogical process with youth football players.

Key words: football, children, diversification, coaches

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СПОРТНИ РЕЗУЛТАТИ И АНАЛИЗ НА ОБУЧЕНИЕТО В АТЛЕТИКАТА ТРИАТЛОН ЗА МОМИЧЕТА ПОД 14 ГОДИНИ

### SPORT RESULTS AND TRAINING ANALYSIS IN ATHLETICS TRIATHLON FOR GIRLS UNDER 14 YEARS

Iva Dimova

National sports academy "Vassil Levski", Sofia, Bulgaria

Athletic disciplines for girls under 14 years consists of mandatory type of triathlon during winter season. This type of combined events is the first step to athletics for these competitors. We are particularly interested in their preparation and achievements, because this group is the future of the sport. We analysed their specific training loads for the different means and made comparison to established training programs. Also, we analysed the tendency in competition results in recent years and found out positive improvement, proven with new National records. We established that running volume for speed is 4 times bigger in Unified programs than what is actually accomplished in training for the age group. Volume for general endurance is 10 times bigger than what athletes usually do. Additional means like vertical and horizontal jumps, in our opinion are too elevated in the official program documents. In conclusion we deem that preparation has different proportions compared to the few official Unified training programs and actualization is needed.

Key words: athletics, girls, U14, triathlon, training, sport result

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АНАЛИЗ НА ЕВРОПЕЙСКА КУПА "ТОП 16" - ЖЕНИ ПРЕЗ 2020 Г.

#### **ANALYSIS OF EUROPEAN TOP 16 WOMEN IN 2020**

Galina Otcheva

National sports academy "Vassil Levski", Sofia, Bulgaria

The aim of the study is to analyze the European Cup ""Top 16"" - women: competitive workload (program, game system, matches, logistics); participants (nationality, age, ITTF ranking, game style) and effectiveness of serve and receive.

The minimum time for training on the pre-competition day is 2 hours. Approximately this is the possible competitive load per day (2 matches up to 50-60 minutes). The warm-up time before a match is equal to the approximate set time for one match (50 min) by program. One part of the participants (25%) play 4 matches, 50% of them compete in 1 match, and the remaining 25% in 2 matches.

There are 16 athletes from 13 countries take part in 16 matches. The total played points is 1621: only 49% are won after own service, the other 51% are won after opponent service. The half of the players (50%) are playing with the left hand and 88% of them are attack style of play, only 2 participants are defensive. Among the best European athletes is a PTT player, class 10.

Regarding the age aspects of the competition, we notice that 50% of the competitors are between 25-30 years old, and the oldest participant is 57 years old. Half of the competitors (50%) who drop out in the first round have the lowest ITTF ranking - after the first 60.

**Key words:** competitive workload, elite women table tennis players, service and receive

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АНАЛИЗ НА ДИГИТАЛНОТО ПРЕДСТАВЯНЕ НА ИНФОРМАЦИЯ ЗА ПРОГРАМИ, ПАКЕТИ И ПРОЦЕДУРИ В СЕРТИФИЦИРАНИ СПА И УЕЛНЕС ЦЕНТРОВЕ В БЪЛГАРИЯ

ANALYSIS OF DIGITAL PRESENTATION OF INFORMATION ABOUT PROGRAMS, PACKAGES AND PROCEDURES IN CERTIFIED SPA AND WELLNESS CENTERS IN BULGARIA

<u>Diana Popova-Dobreva</u>

Abstract. This study aims to assess the digital presentation of information about the programs, packages and procedures offered by certified SPA and Wellness centers. An analysis of the availability and completeness of the information related to the services offered by the centers has been made. The information is analyzed in terms of description, duration and value of the respective service. Internet sources of certified SPA and Wellness centers are used as a source of information. The most frequently offered services in the certified SPA and Wellness centers are indicated according to the information available on the Internet. A comparative analysis of the prices of popular procedures has been made. Conclusion. The summarized analysis of the obtained results reveals the presence of information problems related to the digital presentation of the offered services in the certified SPA and Wellness centers.

Key words: ""SPA center"", ""Wellness center"", digital presentation

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ОЦЕНКА НА ДИГИТАЛНОТО ПРЕДСТАВЯНЕ НА ОБЗАВЕЖДАНЕТО И ОБОРУДВАНЕТО В СЕРТИФИЦИРАНИ СПА И УЕЛНЕС ЦЕНТРОВЕ В БЪЛГАРИЯ

### EVALUATION OF THE DIGITAL PRESENTATION OF THE FURNITURE AND EQUIPMENT IN CERTIFIED SPA AND WELLNESS CENTERS IN BULGARIA

Diana Popova-Dobreva

National sports academy "Vassil Levski", Sofia, Bulgaria

Abstract. The National Tourist Register lists the certified centers according to Ordinance № 04-14 of October 9, 2019 on the terms and conditions for certification of ""Balneotherapy (Medical SPA) Center"", ""SPA Center"", ""Wellness Center"" and ""Thalassotherapy Center"". The aim of the present study is to evaluate the digital internet information related to the available furniture and equipment in certified SPA and Wellness centers. An analysis of existing information related to the Dry and Wet High Temperature Section, as well as rooms for contrast procedures was made. The websites of the respective certified SPA and Wellness Centers were used for initial data. The available information related to the available furniture in the respective centers is graphically presented, as well as the comprehensiveness of the presented information is analyzed. Conclusion. The analysis of the summarized results reveals gaps in the digital presentation of the certified SPA and, Wellness centers.

**Key words:** ""SPA center"", ""Wellness center"", programs, packages, procedures

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### ЛИЧНОСТНИ ДЕТЕРМИНАНТИ НА СТИЛОВЕТЕ ЗА РАЗРЕШАВАНЕ НА КОНФЛИКТИ ПРИ СПОРТИСТИ

## PERSONAL DETERMINANTS OF STYLES USED FOR CONFLICT RESOLUTIONAMONG ATHLETES Galina Domuschieva-Rogleva

National sports academy "Vassil Levski", Sofia, Bulgaria

Conflicts are an unavoidable part of the world of sports. They are the result of the stress and high expectations to which athletes are subjected before, during and after sports competition. PURPOSE: This study aims at detecting typological characteristics that influence preferred styles of conflict resolution in the sports field. METHOD: The research was done among 225 athletes aged from 18 to 25 years, grouped by sex and sport. Respondents completed Eysenck Personality Questionnaire (EPQ)) and Rahim Organizational Conflict Inventory–I (ROCI–I), for measurement of styles to resolve interpersonal conflicts. RESULTS: The preferred styles of conflict resolution in all groups of respondents were integrating and compromising. Athletes from team sports showed statistically significant higher results in terms of using an obligating and compromising style of conflict resolution, compared with athletes from individual sports. The extroversion had a significant impact on the use of integrating style and compromising style. Psychoticism was a determining variable in avoiding the integrating style and using the dominant style. CONCLUSION: On the basis of typological characteristics of personality, coaches can implement more effective approaches and solutions for the optimization of interpersonal interaction and adequate resolution of conflicts arising through the use of appropriate strategies.

Key words: extroversion, neuroticism, integrating, obliging, dominating, avoiding, and compromising

### МОТИВАЦИОННО САМООПРЕДЕЛЕНИЕ И УДОВЛЕТВОРЕНОСТ ПРИ СЪСТЕЗАТЕЛИ ПО САМБО

### SAMBO COMPETITORS' SELF-MOTIVATION AND SATISFACTION

Galina Domuschieva-Rogleva, Mariya Georgieva Yancheva

National sports academy "Vassil Levski", Sofia, Bulgaria

The theoretical framework of this study includes the Self-Determination Theory. PURPOSE: The aim of this study was to reveal self-motivation and satisfaction with sports activities among sambo athletes according to sex, age, sport experience and their performance in competition, and to trace the interconnections and interdependencies between them. METHOD: The research was done among 74 athletes in sambo, 52 men, 22 women; aged 13 to 35 years, with mean age 21,6 years. The used questionnaires were: the Bulgarian versions of the Sport Motivation Scale (SMS) and the Athlete Satisfaction Questionnaire (ASQ). RESULTS: The participants in the present study scored higher on self-determined types of intrinsic motivation than non self-determined types of motivation. There were correlation interdependences among the components of self-motivation and satisfaction with sports activities. CONCLUSION: The results may be used as a fundament for creating different training programs which will form certain skills, necessary for a more active and efficient coping, as well as for a higher self-determined motivation in sport activity.

Key words: intrinsic and extrinsic motivation, personal treatment, training and instruction

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# МОТИВИ ЗА ПРАКТИКУВАНЕ НА БОЙНИ СПОРТОВЕ **MOTIVES FOR PRACTICING COMBAT SPORTS**

Zshivka Zsheliaskova-Koynova

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Combat sports have emerged as systems for self-defense, but in our century they are popular among much wider group of practitioners. The aim of the study is to investigate the motives for practicing combat sports of practitioners over 18 (competitors as well as non-competitors). New method for studying motivation for participation in combat sport is introduced in order to cover wider spectrum of motives for participation. Results. Most highly rated motives in the sample of 95 subjects (45 men and 50 women, aged 18-56, Mean=27.2) are: 1. Positive emotions (incl. thrill); 2. Personality development (incl. Self-confidence and Volition development) 3. Aesthetics of the sport. At the bottom of the table are: 1. Financial motives; 2. Prestige. 3. Popularity of their sport. There is no significant difference between motives' rating of men and women, of younger and older athletes. Competitors rated higher than non-competitors: Competitiveness, Successes, Prestige, Rewards, Risk and danger, Personal growth, Self-expression, Self-actualization, Aesthetics. Factor analysis identifies several motivational types: 1. Integrated/spiritual motivation; 2. Competitive; 3. Self-defense; 4. Fit-and-fun; 5. Social. Conclusion. Based on the analysis of the data, we recommend marketing and coaching strategies which could increase practitioners' satisfaction and hence the motivation as a whole.

**Key words:** combat sports, martial arts, motivation, competitors, practitioner, marketing, coaching

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ИЗСЛЕДВАНЕ НА КОМПЕТЕНЦИИТЕ НА УЧИТЕЛИТЕ ОТ НАЧАЛНИ УЧИЛИЩА ОТНОСНО ФИЗИЧЕСКОТО ОБРАЗОВАНИЕ НА УЧЕНИЦИТЕ

# A STUDY OF THE COMPETENCIES OF TEACHERS FROM PRIMARY SCHOOLS REGARDING THE PHYSICAL EDUCATION OF STUDENTS

<u>Ivaylo Prokopov, Mirena Legurska, Vessela Mircheva</u> Sofia University "st.Kliment Ohridski", Sofia, Bulgaria

The purpose of the present research is to establish the competencies of the pedagogical specialists working in the system of primary education regarding the methodology of teaching physical culture and to derive the respective conclusions and recommendations. The methodology used in this research is based on inquiry among pedagogical staff. Diagnosing the competencies of primary school teachers on the problem would help to develop and implement a system of methods for raising the qualification of pedagogical specialists on the methodology of teaching physical education in primary schools. The increase of the levels of physical capacity of the students at primary schools directly correlates with the professional training of the pedagogical specialists. The urgency of the problem stems from the fact that in recent years there has been a tendency to increase the levels of hypokinesia among students, which in turn leads to an increase in body mass index and respectively to many diseases of both the musculoskeletal system and internal organs and systems. In conclusion we consider that primary school teachers need a better qualification in the field of physical education.

**Key words:** Competencies, teachers, adolescents

### СПЕЦИАЛИЗАЦИЯ В СПОРТА - ИЗБОР ИЛИ ЗАДЪЛЖЕНИЕ

### SPECIALIZATION IN SPORTS – CHOICE OR OBLIGATION

Georgi Brestnichki, Maria Tsankova-Kaloyanova

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One of the present tendencies for improvement the quality of sports-education in Republic of Bulgaria is related to the qualification of the trainers (coaches). Preparation of the athletes is tightly connected to the knowledge of the staff (specialists) and efficiency conducting in the educational process.

The goal of the present study is to analyze the opinion of post-graduate students about their education in "The center of post-graduate studies" at NSA "V. Levski", specialty "basketball coach".

The study was done in June 2020. The major method of this study has been a questionary with 19 questions, which aim to improve the whole process in the education of the candidates as organization, content and knowledge.

As a main reason of taking this postgraduate education for basketball coach, the students point the need of qualification to be able to practice coaching job, which is related to the law in Republic of Bulgaria related to the coaches that they need to be register at the Ministry of Youth and Sports with a sports diploma and in connection with that to be licensed by the Bulgarian Basketball Federation.

**Key words:** basketball, coaches, qualification, realization, motives

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### РЕГУЛАЦИИ И УПРАВЛЕНИЕ НА РИСКА В СПОРТА

### RISK REGULATION AND RISK MANAGEMENT IN SPORTS

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Risk can be defined as any threat that may adversely affect the achievement of the organization's goals. Risk is measured by its effect and likelihood of its occurrence. In sports we can see various aspects related to security and risk management. The purpose of the study is to track regulations related to risk management in sports. The methodology provides a theoretical and regulatory overview, including case law, in relation to the issues discussed at the level of Bulgaria and the European Union.

The results analysed a number of regulatory documents, including recommendations and reports from various committees dealing with sport risk in a broad and narrow context, identified stakeholders and an indicative classification of the types of risks involved in sport.

The conclusion provides guidance for the work on additional information and awareness programs on the risk of non-profit organizations from abusing them and providing them with awareness materials. Discussion through state regulations in the field of sport should ensure that non-profit organizations are more closely involved in national risk assessments.

Key words: risk, sport, sports law, management, sociology of sport

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ИЗСЛЕДВАНЕ НА ИГРОВАТА ЕФЕКТИВНОСТ НА НАЦИОНАЛНИЯ ОТБОР ПО БАСКЕТБОЛ ЗА МЪЖЕ В КВАЛИФИКАЦИЯ ЗА ЕВРОПЕЙСКО ПЪРВЕНСТВО

# THE GAME EFFICIENCY STUDY OF THE NATIONAL MEN'S BASKETBALL TEAM QUALIFIED FOR THE EUROPEAN CHAMPIONSHIP

Maria Tzankova-Kaloyanova

National sports academy "Vassil Levski", Sofia, Bulgaria

One of the main ways to measure the realization of basketball teams in competitive conditions is to establish the parameters of their game efficiency. The aim of the present study is to optimize the training process of the basketball players of the national team of Bulgaria, through analysis and evaluation of their game efficiency. With the help of 15 game indicators during the qualifying matches for the European Championship the information was collected about the game actions of the competitors. The article includes a desk research of the specialized literature, expert evaluation; monitoring and recording of competitive efficiency. The obtained results from the study are processed mathematically and statistically through alternative analysis, variation analysis and sigma evaluation method. Bulgarian basketball players have achieved in four of the indicators carrying information about the game efficiency, higher than the average level. It is necessary to increase the effectiveness of the fight under the basket in both phases of the game, in the implementation and success of the shooting from the penalty line.

**Key words:** realization, game preparation, basketball players, indicators

ПРОУЧВАНЕ НА ВЛИЯНИЕТО ОТ ПРИЛОЖЕНИЕТО НА ПРИМЕРНА МЕТОДИКА ЗА ГЪВКАВОСТ В СПОРТНАТА ПОДГОТОВКА НА 19-22 ГОДИШНИ БОРЦИ

# IMPACT OF SAMPLE FLEXIBILITY METHODS IN SPORTS PREPARATION OF 19-22-YEAR-OLD WRESTLERS

Nikola Nikolov

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Our research was aimed at revealing the influence of sample, author stretching methods for development and maintenance of the physical quality flexibility among Greco-Roman wrestlers.

Aim. We wanted to examine the influence of the implementation of sample flexibility exercises in the educational-training process of a particular sample of wrestlers on their general and special flexibility.

Methods. In order to collect and process the data needed to conduct the research we used the following methods – pedagogical experiment; testing; math-statistical processing of the obtained data – variation analysis (for determining the normality of the distribution of the data), t-criterion of Student for independent samples. The results were processed with MS Excel 2016.

Results. The results from the variation analysis of the control and experimental groups are presented in tables with the values of each index. Both groups were homogeneous and relatively homogeneous as regards the tests used, and according to the indexes for asymmetry and excess, we can summarize that the distribution of the data was symmetrical. The last table shows the comparison between the mean values at the beginning and at the end of the experiment for both the control and the experimental groups.

Conclusion. In conclusion, we point out the necessity of purposeful inclusion of flexibility exercises in wrestlers' training process because they help maintaining and increasing the physical quality flexibility, which on the other hand, is a premise for the successful learning and applying certain technical elements and holds in sports wrestling.

**Key words:** wrestling, sports preparation, physical qualities, flexibility

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ВЛИЯНИЕ НА ИЗВЪНРЕДНОТО ПОЛОЖЕНИЕ ВЪРХУ НАГЛАСИТЕ ЗА ТРЕНИРОВКА НА СТУДЕНТИ ОТ ОТБОРА ПО ЛЕКА АТЛЕТИКА НА УНСС

# INFLUENCE OF THE STATE OF EMERGENCY ON THE TRAINING ATTITUDES OF STUDENTS FROM THE ATHLETICS TEAM OF UNWE

Ekatrina Tosheva

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Summary: At the beginning of 2020 many changes took place in social, economic and sports life around the world due to the Covid-19 pandemic. The introduced restrictive measures affected sports life and sports events in the country very much. Therefore, we conducted a survey among students from the athletics representative team in at UNWE in order to determine their opinion and attitude to the training process and their participation in competitions in an emergency epidemic. The survey contained 10 questions and was conducted through the electronic platform for distance learning of UNWE. It was attended by 30 students - 15 women and 15 men. The results of the survey were processed mathematically and statistically. The analysis of the results shows that the needs of students for training activities are growing significantly, as over 75% of the women respondents and 85% of the men respondents need training and train more than three times a week. All athletes from the team give an unequivocal answer that with the opening of the stadiums they have managed to conduct quality training and the state of emergency has not had a detrimental effect on their sports form.

**Kev words:** athletics, students, survey, state of emergency, opinion.

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СРАВНИТЕЛЕН АНАЛИЗ НА ОТНОШЕНИЕТО КЪМ ОПАЗВАНЕТО НА ПРИРОДАТА МЕЖДУ СТУДЕНТИ ОТ ЛЕСОТЕХНИЧЕСКИЯ УНИВЕРСИТЕТ И УНИВЕРСИТЕТА ЗА НАЦИОНАЛНО И СВЕТОВНО СТОПАНСТВО

# COMPARATIVE ANALYSIS OF ATTITUDE TO NATURE CONSERVATION BETWEEN STUDENTS FROM THE UNIVERSITY OF FORESTRY AND UNIVERSITY OF NATIONAL AND WORLD ECONOMY

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University of National and World Economy, Sofia, Bulgaria

The negative changes occurring in nature and the environment have been the subject of attention for more than a century. Awareness of the problems and their successful solution are among the main tasks of future generations. This is especially true for university students preparing staff for positions that are directly related to nature conservation. The present study aims to compare the attitude of students from University of Forestry (UF) and University of National and World Economy (UNWE) to nature conservation.

311 students took part in the study - 219 from UNWE and 92 from UF. For the methodology we used the ""Questionnaire for the attitude towards nature protection"" (V. Yordanov, Zh. Georgiev, L. Krumova, 2019).

The results show higher values for UF students for the scale related to the actions taken for nature protection. The data are supported by statistical reliability. On the scale ""knowledge"" there are no significant differences between students from UF and UNWE.

**Key words:** environmental issues, students, universities, nature conservation

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ОТНОШЕНИЕТО НА СТУДЕНТИТЕ ОТ УНСС КЪМ ПРОВЕДЕНОТО ОНЛАЙН ОБУЧЕНИЕ ПО СПОРТНАТА ДИСЦИПЛИНА ТЕНИС НА МАСА

# THE ATTITUDE OF THE STUDENTS FROM THE UNIVERSITY OF NATIONAL AND WORLD ECONOMY TO THE CONDUCTED ONLINE TRAINING IN THE SPORT OF TABLE TENNIS

Elena Moneva

University of National and World Economy, Sofia, Bulgaria

The attitude of the students from the University of National and World Economy to the conducted online training in the sport of table tennis

Summary:

The coming changes in society pose global challenges to all of humanity. P A professional knowledge and skills behind the pace of development of scientific and technical progress. In the modern conditions of continuous educational process the essence, role, methods and technologies of education in higher schools are changing. Well lektronni these forms of learning replacing traditional. The development and application of mathematical models allow effective evaluation of the activities of an educational organization using the electronic form of students. [1].

Restrictive measures related to the distribution of the new COVID-19 have forced most higher education institutions in Bulgaria to switch to distance learning. In the period 16 - 24 March we conducted a survey among students from UNWE on the topic: The attitude of students from UNWE to the online training in the sport of table tennis.

The purpose of this survey is to study the opinion of students at UNWE on the impact of online training in the sports discipline of table tennis.

Keywords: students, table tennis, online training

**Key words:** students, table tennis, online training

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ВЪЗНИКВАНЕ, РАЗВИТИЕ И ПЕРСПЕКТИВИ НА МАЖОРЕТНИТЕ ДИСЦИПЛИНИ В БЪЛГАРСКИТЕ ВУЗ

# EMERGENCE, DEVELOPMENT AND PROSPECTS OF CHEERLEADING DISCIPLINES IN BULGARIAN UNIVERSITIES

Milena Ignatova

University of National and World Economy, Sofia, Bulgaria

The reduced physical activity is one of the most significant problems of modern man, which is of great public, biological and social importance and affects to a very large extent the student youth. All universities offer a variety of sports to their students according to the approved curriculum, the conditions of the facilities, but it is necessary to look for new ideas to break the stereotype and to attract the attention of students. The present study presents a brief historical overview of the emergence of cheerleading in the world and an analysis of the emergence and development of it in the universities in our country. The conclusions that were made give us a reason to believe that cheerleading is an attractive discipline that would be of interest to students and it has great potential for development and expansion of sports activities in Bulgarian universities.

Key words: cheerleading, physical activity, student sport, sport for all

СКРИНИНГ НА ЗАТЛЪСТЯВАНЕТО КАТО ОСНОВЕН РИСКОВ ФАКТОР ЗА РАЗВИТИЕ НА МЕТАБОЛИТЕН СИНДРОМ СРЕД СТУДЕНТИТЕ НА СУ "СВ. КЛИМЕНТ ОХРИДСКИ

# SCREENING OF OBESITY AS A MAJOR RISK FACTOR FOR THE DEVELOPMENT OF METABOLIC SYNDROME AMONG SOFIA UNIVERSITY "ST. KLIMENT OHRIDSKI" STUDENTS

Petya Hristova

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Obesity is a chronic disease that can seriously damage health, worsen quality of life and reduce its duration. In recent decades, globally there has been a large increase in the incidence of overweight and obesity in all age groups. Therefore, the aim of this study was to screen the overweight and obesity among students of Sofia University "Kliment Ohridski". Methods: To assess the severity and extent of obesity and/or overweight, we used the Body Mass Index (BMI) as a generally accepted indicator. The results show a high incidence of overweight and obesity among university students. Conclusions: the study's data confirm the trend for the ever-increasing number of young people who are overweight and/or obese. To raise a healthy and capable generation, the author recommends a targeted State policy that would lead young people to a healthy lifestyle that includes regular physical activity, a healthy eating pattern, enough sleep, low stress levels.

Key words: obesity, Body Mass Index, physical activity, university students

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ОТНОШЕНИЕТО НА СТУДЕНТИ ОТ НАЦИОНАЛНА СПОРТНА АКАДЕМИЯ "В. ЛЕВСКИ" КЪМ ОБУЧЕНИЕТО ПО СПЕЦИАЛИЗИРАН АНГЛИЙСКИ ЕЗИК В ОНЛАЙН СРЕДА

# THE ATTITUDE OF STUDENTS FROM THE NATIONAL SPORTS ACADEMY "V. LEVSKI" TO ENGLISH LANGUAGE LEARNING ONLINE

Tatiana Hristakieva

National sports academy "Vassil Levski", Sofia, Bulgaria

Foreign language learning at the National Sports Academy is specialized in the fields of sport, physical education and rehabilitation. The study was organized with first and second year students from the three faculties of the Academy. The aim of the study was to find out about students' problems and preferences with reference to the specialized English language course conducted online due to the COVID-19 pandemic. The methods include an inquiry and statistical analysis. The acquired results show that students are satisfied with the course of study and part of them would like to have online language learning in the future. The conclusions drawn are that online education could be used in the future as an additional element of the specialized foreign language course.

**Key words:** language learning, online education

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НЯКОИ АСПЕКТИ НА УЧЕБНОТО СЪДЪРЖАНИЕ ПО ФИЗИЧЕСКО ВЪЗПИТАНИЕ И СПОРТ В СРЕДНИТЕ УЧИЛИЩА

# SOME ASPECTS OF THE EDUCATIONAL CONTENTS IN PHYSICAL EDUCATION AND SPORT AT THE SECONDARY SCHOOLS

Nadezhda Kostova

National sports academy "Vassil Levski", Sofia, Bulgaria

Physical education and sport as educational subject of the general educational preparation of the students is characterizes by specificity of the education, i.e., execution of the educational process within the conditions of motive-cognitive activity. That is the only school subject where students perform both mental and active physical activity. In order to achieve the purposes, which are multilateral, and to realize the educational, teaching and convalescent tasks during the physical education and sport activities, direct is the influence of the subject educational contents. Purpose: to outline the basic aspects of the educational contents in the physical education and sport subject at the secondary school. Methods: the following scientific research methods are applied – analysis of literature sources, and contents analysis. Results: The general education preparation in all subjects, including physical education are determined by state educational standards for educational contents set up by educational normative documents. School preparation is a totality of competencies – knowledge, skills and attitude and is performed by learning obligatory and selected fields. Conclusions: the structure and characteristics of the educational contents in physical education are fundamental for the effectiveness of the school classes and the harmonious development of the students.

**Key words:** Physical education and sport, educational contents, education preparation, secondary schools, physical activity

ИЗСЛЕДВАНЕ НА ФИЗИЧЕСКАТА ГОДНОСТ НА 12 – 14 ГОДИШНИ СКИОРИ - АЛПИЦИ

## ALPINE SKIING PHYSICAL FITNESS STANDARDS' RESEARCH FOR COMPETITORS OF AGE 12 TO 14

Radoslav Kostadinov, Evgeni Yordanov

University "St. Kliment Ohridski", Sofia, Bulgaria

Summary: This publication presents analysis of actual data, regarding the development level for some of the most significant motor skills in age 12-14 alpine skiers, representing a variety of Bulgarian ski clubs. Alpine skiing is a strongly athletic power-speed sport, setting higher and higher requirements regarding the skiers' physical fitness. The research's goal is documenting the current physical state of the tested skiers' group and based on the data, elaborating evaluation standards for their motor skills. Methods: For the needs of this research we used – onsite testing, analytical synthetics and mathematical statistics (variation analysis, sigma methodology). Results: The obtained and aggregated data from the variation analysis present information in regards to the motor skills state of the persons, while the values are with average or close to the average distribution and applying sigma methodology, we derived evaluation standards table. Conclusions: Motor skills evaluation standards of skiers (adolescents) could assist sports professionals in making quality estimation of the current state of their contestants. We recommend the framing and approbation into the practice tables for all age groups aiming to achieve better quality control and training process management.

**Key words:** alpine skiing, physical fitness, motor skills, youth skiers

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БИОМЕХАНИКА НА БЯГАНЕТО И ИЗБОР НА СПОРТНИ ОБУВКИ, В ПОМОЩ НА ЛЮБИТЕЛСКИ СПОРТУВАЩИ АТЛЕТИ

# BIOMECHANICS OF RUNNING AND SELECTION OF SPORTS SHOES IN BENEFIT TO AMATEUR ATHLETES

Ivanka Karparova

Sofia University "St. Kliment Ohridski", Sofia, Bulgaria

Biomechanical analysis of running is a powerful tool in favor of professional and amateur sports. Through it, data can be obtained to be used to improve sports performance and prevent running injuries.

For our study we used "Tempo motion analysis software" and "Hudl Technique" app to make video recording of the participants. This software package and application developed to analyze in detail the biomechanics of human movement. Randomly selected amateur runners were photographed, and angles of foot pronation were measured when running with different types of shoes.

The angle of dorsiflexion in the ankle joint at the moment of contact of the foot with the surface, as well as the angle between the hip and the lower leg in this moment.

The hypothesis of the study is that the use of biomechanical analysis of running techniques in training and the selection of appropriate shoes for the purposes of the particular athlete, will positively affect the athletic performance and will help prevent injuries. 36 runners take part in the research. We used statistical methods to summarize the results. Conclusions: The biomechanical analysis of the technique, the selection of suitable running shoes will help the training of runners and running prevention.

Key words: running, biomechanics, movements, sports shoes, amateur athletes

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ТЕНДЕНЦИИ В СЪДЪРЖАНИЕТО НА СЪЧЕТАНИЯТА НА ФИНАЛИСТИТЕ НА ХАЛКИ, ОТ ПЪРВОТО МЛАДЕЖКО СВЕТОВНО ПЪРВЕНСТВО

# TRENDS OF EXERCISES CONTENT ON THE RINGS FINAL FROM THE 1ST JUNIOR WORLD ARTISTIC GYMNASTICS CHAMPIONSHIPS

Iliya Yanev

National sports academy "Vassil Levski", Sofia, Bulgaria

The aim of this study was to give crucial information and provide coaches and junior gymnasts with some trends and important guidelines for exercises that are key for the development of gymnasts at an earlier age.

Methods

Recordings of exercises of the eight gymnasts who reached the rings final were taken. The recordings were made by using video cameras which are part of a complete evaluation judging system, intended to clarify controversial moments from the exercises. An analysis of the content of the combinations was made by two experienced judges with an international category level, according to the current Code of Points.

Results

The results showed that elements with C difficulty are the most common exercises in the routines of the finalists. The average difficulty score was 4,538, and the execution was 8,843. The exercise with the highest recognised difficulty was performed by a gymnast from China - 4,6. The most common elements were from group I - Kip and swing elements & swings through or to handstand. All of the observed exercises contains Yamawaki, Jonasson, swing forward with straight arms to handstand (2 s.) and uprise backward or giant swing to handstand with straight arms (2 s.)

Conclusion

Coaches and junior gymnasts should aim for increasing D score above 4, 5 by including elements with a higher value in Groups II and III, as well as decreasing deductions of elements below 1, 2.

**Key words:** Artistic gymnastics, Code of points, Difficulty score, Execution score, Gymnastics elements, Gymnastic exercises, Still rings

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# ЗАВРЪЩАНЕ КЪМ СЪСТЕЗАТЕЛНИЯТ ПРОЦЕС ПО РЪГБИ В УСЛОВИЯТА НА ПАНДЕМИЯ **BACK TO COMPETITIVE RUGBY IN THE CONTEXT OF PANDEMIC**

Pavel Velkov

National sports academy "Vassil Levski", Sofia, Bulgaria

This article deals with the feasibility of returning to the competitive performance in the Game in the context of pandemic. The study was performed to assist sport associations in organizing and hosting sport events both on national and international level. It aims at providing guidelines and options that will bring the Game back to its real life, while respecting the standard health requirements and measures.

Key words: Rugby, Health Standards, Player Welfare Best Practices,

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### УДАРИТЕ С КРАК В РЪГБИ И БИОМЕХАНИЧНИТЕ ИМ ХАРАКТЕРИСТИКИ

### KICKING AND ITS BIOMECKANICAL CHARACTERISTICS IN RUGBY

Pavel Velkov

National sports academy "Vassil Levski", Sofia, Bulgaria

The study features a biomechanical analysis of kicking the ball in rugby. Although rugby has a long history, it is understudied in our country. When taking a place kick in the game, the ball should achieve its maximum speed. The skills of place kicking are unique because of the specific shape of the ball, the use of kicking tee, and the angles of the swing. Here we shall explore this proximal-distal sequence aka the combined speed principle with the outcome of reaching maximum ball speed, which requires maximum speed of the foot prior to the contact with the ball.

**Key words:** kinematics; kick; sequential movements, speed

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СПЕЦИФИКА НА ДВИГАТЕЛНИЯ ПОТЕНЦИАЛ ЗА ПОСТИГАНЕ НА УЧИЛИЩЕН УЕЛНЕС (WELLNESS)

## SPECIFICITY OF THE MOTOR POTENTIAL FOR ACHIEVING SCHOLAR WELLNESS

Darinka Ignatova

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Purpose: The aim is to study the degree of development for motor skills, speed and explosive power of the legs in 1st-grade students, according to the establishment and assessment of the presence of school Wellness by applying objective control tools.

Methods: The research focus was the indicators that allow harmonization and individualization of the motor potential using differences between the entry and exit level. The object is the value of specific indicators measured through objective and validated tools, as well their systematization and analysis. During the period from 2020, September to 2021, April was conducted measurement of the motor potential for children in the primary school education stage.

Results: The analysis of indicators will allow establishing the presence or absence of Scholar Wellness in the modern education system. To derive the relationship between the indicators, an analysis of the dynamics is applied by mathematical and statistical processing of the obtained data to derive coefficients of variation and correlation.

Conclusions: We found a tendency of disharmony in the motor potential of 1st-grade scholars, which is determined by the peculiarities of the ontogenetic development of children at this age.

**Key words:** motor potential, assessment tests, physical capacity in children, primary scholar wellness.

ТРЕНИРОВЪЧНА ПРОГРАМА ПО ТЕНИС НА МАСА В УСЛОВИЯТА НА КАРАНТИНА ИЛИ ДИСТАНЦИОННО ОБУЧЕНИЕ ЗА СТУДЕНТИТЕ ОТ СУ "СВ. КЛИМЕНТ ОХРИДСКИ"

# TABLE TENNIS TRAINING PROGRAM DURING QUARANTINE OR DISTANCE LEARNING FOR STUDENTS AT SOFIA UNIVERSITY

Venelina Tsvetkova

Sofia University "St. Kliment Ohridski", Sofia, Bulgaria

The purpose of this study is to develop a program for training table tennis at home during COVID19 quarantine or distance learning. The program is in accordance with the table tennis curriculum in Sofia University, the motor abilities of the students and the available equipment. It contains 74 exercises: 23 with a ball, 23 with a racket, 28 only with a racket and/or a small plastic bottle. A handshake grip is used. The program contains steps and instructions related to its implementation as follow: acquaintance with lecture material on the main technical elements in table tennis, construction of the training session of the student's choice, but in accordance with the requirements for the duration of each parts; and marking the completed exercises and sending the file. The program is aimed to all students from Sofia University "St. Kliment Ohridski" participating in table tennis classes as well as everybody who wants new knowledge and skills for the table tennis, or improving the existing skills. But it can also be used by university lecturers, sports club coaches, Physical education and sport teachers, etc.

Key words: Table tennis program, students, distance learning, quarantine, curriculum

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ПСИХИЧЕСКИ ОСОБЕНОСТИ, СВЪРЗАНИ С МОТИВАЦИЯТА НА СПОРТИСТИТЕ В УСЛОВИЯТА НА ИЗВЪНРЕДНО ПОЛОЖЕНИЕ ПРИ COVID-19

# PSYCHOLOGICAL CHARACTERISTICS RELATED TO ATHLETE'S MOTIVATION IN COVID-19 PANDEMIC CONDITIONS

Evelina Savcheva

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COVID-19 pandemic caused a number of restrictions and changes in training and competitive activities among active athletes. In this relation, the issue of the influence of these changes on motivation and well-being became very topical. Purpose: The aim of this research was to examine the impact of these changes and personal characteristics related to them. Methods: The research was done among 129 athletes practicing different sports (individual, team, single combat) - 88 women, 41 men aged between 12 and 40 years, with sports experience from 1 to 15 years. We used five psychological questionnaires to measure well-being, resilience, goal orientation, sense of mastery, and long-term motivation. Results: We revealed statistically significant differences in ego-orientation according to gender, age and sport; in task-orientation according to sport; in sense of mastery according of age. The researched individuals were characterized with a high level of long-term motivation, sense of mastery, and well-being. Their level of resilience was within the norms for Bulgaria. Conclusions: The changes due to COVID-19 pandemic did not lead to negative consequences for athletes' motivation.

**Key words:** resilience, goal orientation, sense of mastery, well-being, sports

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ПРОУЧВАНЕ И СРАВНИТЕЛЕН АНАЛИЗ НА ДАННИТЕ ЗА ПОКАЗАТЕЛИТЕ НА ТЕЛЕСНА МАСА ПРИ СТУДЕНТИ МЪЖЕ

# RESEARCH AND COMPARATIVE ANALYSIS OF DATA FOR INDICATORS OF BODY MASS OF MALE UNIVERSITY STUDENTS

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Aim of the conducted examination is to determine the indicators of body mass for male students at the Trakia university, city of Stara Zagora, and to compare the results to similar researches amongst other Bulgarian universities. Overview and analysis of the main theoretical statements and examinations of anthropometric indicators and the calculated on this basis index of body mass for male university students; researches of students according to morphological indicators; statistic processing and comparative analyses of the results. In the Trakia university the relative share of underweight people is 1.56%. The group of students with normal weight form 46.88%. The part of students, falling into the overweight category is 40.63%. The obesity rate among the examined resulted in 10.93%. This tendency is disturbing, if it is to be compared to previous researches at the same university - in 1918 students with overweight marked an increase in the relative portion - 51.56%, while students with normal weight were 46.88%. According to the conducted comparative analysis between the existing researches it can be found out that a lot of the

students have normal weight and IBM, but there is a tendency of increasing underweight and even bigger rise of the overweight.

**Key words:** obesity, overweight, anthropometric indicators

### ВЛИЯНИЕ НА КРЪГОВИТЕ ТРЕНИРОВКИ НА СИЛОВАТА ИЗДРЪЖЛИВОСТ НА СТУДЕНТКИ INFLUENCE OF CIRCULAR TRAINING ON STRENGTH ENDURANCE OF STUDENTS Plamen Petkov

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The contingent of the study are 69 female students with an average age of 20.04 years from the first and second year of three faculties of the Thracian University - Economics, Agriculture and Veterinary Medicine. They were divided into two groups. Experimental group of 36 students - with it were conducted circuit training twice a week for 30 weeks. A control group of 33 students who studied according to an approved curriculum for the discipline "Physical Education and Sports". The testing was conducted in the 2016/2017 school year. The aim of the study is to determine the influence of circuit training on the level of physical strength endurance of female students from Thracian University. To achieve this goal we used the following methods: testing, pedagogical experiment, variation analysis, comparative analysis, graphical analysis. The developed test battery includes five tests. After using mathematical methods of analysis, we can draw the following conclusion: circuit training improves the strength endurance of female students.

**Key words:** special endurance, university, experiment

ПРОУЧВАНЕ НА ПОТРЕБНОСТИТЕ ЗА СПОРТУВАНЕ И НАВИЦИТЕ ЗА ЗДРАВОСЛОВЕН НАЧИН НА ЖИВОТ НА СТУДЕНТИ ОТ ГРУПИТЕ ПО ФИТНЕС НА УНСС В ПРЕДИЗВИКАНИТЕ ОТ COVID 19 ПАНДЕМИЧНИ УСЛОВИЯ

### STUDY OF THE NEEDS FOR SPORTS AND HABITS HEALTHY LIFESTYLE HABITS OF STUDENTS FROM THE FITNESS GROUPS OF UNWE IN THE PAVIDEMIC CONDITIONS CAUSED BY COVID 19 Miroslav Shishkov

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The Covid 19 global pandemic has posed a number of problems and posed many challenges to higher education teachers, and in particular to colleagues who teach Physical Education and Sport in higher education. It is precisely these problems and challenges that we, the fitness teachers at the University of National and World Economy, had to look for a solution to. We conducted a survey among first and second year students enrolled in elective sports fitness. The aim of the study was to find out what are the sports needs of students, whether they have habits for healthy eating and whether they lead a healthy lifestyle. The survey contains 14 questions and was conducted through the electronic platform for distance learning of UNWE. It was attended by 80 students - 60 women and 20 men. The results of the survey are processed mathematically and statistically. The analysis of the results shows that over 90% of students exercise more than 2-3 times a week, know how important nutrition is for their health and have a basic knowledge of nutrients.

**Key words:** fitness, students, survey, pandemic, opinion

ДЕЕСПОСОБНОСТ И ТЕХНИЧЕСКА ПОДГОТВЕНОСТ НА СТУДЕНТИ ОТ ГРУПИТЕ ПО БАСКЕТБОЛ В МЕДИЦИНСКИ УНИВЕРСИТЕТ – СОФИЯ

### PHYSICAL CAPACITY AND TECHNICAL PREPAREDNESS OF THE STUDENTS FROM BASKETBALL GROUPS AT THE MEDICAL UNIVERSITY IN SOFIA

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The state of physical capacity and technical preparedness among students is a very accurate and objective indicator through which the efficiency of the basketball training process can be evaluated. The purpose of the study is to explore the physical fitness state and technical preparedness of the students in their Sports training lessons, basketball groups, at the Medical University (MU), Sofia. The study was conducted during school-year 2019-2020. It was used a test battery with 10 indicators. The indicators give information about students' physical development, fitness and capacity, and their technical preparedness. The derived results were processed mathematically-statistically through variation analysis, t-test benchmark by Student, body mass index, comparison analysis, and correlation analysis. In conclusion the different correlational and variational interdependencies were discovered, and also a positive changes were noticed in the indicators for physical capacity and technical readiness, as a result from the basketball training of the students who were part of the study.

Key words: sport, preparedness, training, physical capacity, physical development

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ВЪЗМОЖНО ЛИ Е ПОСТИГАНЕТО НА ЛИЧНО И ОБЩЕСТВЕНО ЗДРАВЕ В НЕЗДРАВА (БОЛЕДУВАЩА) ДЪРЖАВА?

# IS IT POSSIBLE TO ACHIEVE PERSONAL AND PUBLIC HEALTH IN AN UNHEALTHY (SICK) COUNTRY?

Elitsa Stoyanova

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For every educated and well-informed person, it is clear that the main function and priority of sport is the construction of physically prepared and healthy, mentally resilient, emotionally intelligent and morally disciplined individuals. However, a number of scientific studies and the practice's summarization show that sport (including any form of physical activity), the general health, vitality and morality of the Bulgarian population do not meet the relevant norms, both for good physical and mental health, as well as for sustainable morality and emotional intelligence. What are the reasons for this fact? What gave rise to this degradation of man and society, resulting in the disintegration of not only the social structures between which sport is, but also the whole country?

**Key words:** sport, health, statehood

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СРАВНИТЕЛЕН АНАЛИЗ НА ДВИГАТЕЛНИТЕ СПОСОБНОСТИ НА ПОДРАСТВАЩИ ВОЛЕЙБОЛИСТКИ

# COMPARATIVE ANALYSIS OF THE MOTOR ABILITIES OF ADOLESCENT VOLLEYBALL PLAYERS Petko Mavrudiev, Dimitar Nedelchev

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The aim of the study is to establish the level of motor skills and optimize the volleyball training process with 12-year-old adolescent volleyball players (girls). The subject of the study are the signs of the motor abilities of a total of 72 adolescent volleyball players. To achieve the goal of the study - testing, variation and comparative analysis was applied. It was found that 12-year-old volleyball players significantly outperform 11-year-olds in terms of the explosive force of the lower limbs in both vertical and horizontal muscular effort and the static force of the comfortable upper limb. The study population of 12-year-old girls is homogeneous in terms of the level of development of the explosive force of the lower extremities, special speed and agility. With a high guarantee probability, it can be argued that the group of 12-year-olds is inhomogeneous in terms of flexibility. It was found that 12-year-old volleyball players significantly outperform 11-year-olds in terms of the explosive force of the lower limbs in both vertical and horizontal muscular effort and the static force of the comfortable upper limb.

**Key words:** volleyball, girls, physical ability

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АНАЛИЗ НА АНТРОПОМЕТРИЧНИ ПОКАЗАТЕЛИ СВЪРЗАНИ С РИСКА ОТ РАЗВИТИЕ НА МЕТАБОЛИТНИ УСЛОЖНЕНИЯ СРЕД СТУДЕНТИТЕ НА СУ "СВ. КЛИМЕНТ ОХРИДСКИ"

# ANALYSIS OF ANTHROPOMETRIC INDICATORS ASSOCIATED WITH THE RISK OF DEVELOPING METABOLIC COMPLICATIONS AMONG SOFIA UNIVERSITY "ST. KLIMENT OHRIDSKI" STUDENTS

Gergana Despotova

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The increasing number of people who are overweight and obese worldwide leads to an increase in the cardiovascular and metabolic diseases. Although the risk of complications is associated with a high Body Mass Index, the distribution of adipose tissue is a more significant factor for development of morbidity and mortality. Numerous studies have shown that in the android (central) type of obesity, the risk of developing metabolic syndrome is increased. The aim of this study was to determine the risk of metabolic complications in connection with the distribution of adipose tissue, among students of Sofia University "St. Kliment Ohridski". Methods: Data was collected by measuring the anthropometric indicators "Waist circumference", "Hip circumference" and calculating "Waist/hip ratio", and was statistically processed and analyzed. Results: The analysis of the study's results shows a high percentage of the students with an increased risk of morbidity. Conclusions: The results obtained show a high percentage of young people with an

increased risk of metabolic complications. In this regard, the author recommends an obesity prevention program involving a healthy diet model and regular, targeted physical activity and sports.

**Key words:** obesity, waist circumference, waist/hip ratio, metabolic syndrome, university students, prevention

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ПРОСЛЕДЯВАНЕ НА ЕФЕКТА ОТ ПРИЛОЖЕНА МЕТОДИКА НА КИНЕЗИТЕРАПИЯ ПРИ СТУДЕНТИ С НАДНОРМЕНО ТЕГЛО И ЗАТЛЪСТЯВАНЕ

# MONITORING THE EFFECT OF A APPLIED KINESITHERAPY METHODOLOGY IN OVERWEIGHT AND OBESE UNIVERSITY STUDENTS

Gergana Despotova

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Kinesitherapy has a wide application in both the prevention and treatment of overweight and obesity as well as in the prevention of the complications associated with them. The aim of this study was to determine the effect of an applied kinesitherapy methodology with varying weekly frequency in overweight and obese young people. Methods: Students, aged 18 to 25, in their 1st to 4th year of studies at University "St. Kliment Ohridski" were examined. For monitoring the effect of the methodology applied, we calculated the percentage of body fat using calipermetry. The amount of subcutaneous fat, as a percentage of body mass, was calculated by regression equations based on a different number of skin folds. Results: The analysis of the study's results shows that depending on the weekly frequency, the applied methodology causes small to large changes in the indicators – "Skin folds" and "Amount of body fat". Conclusions: The applied methodology of kinesitherapy has a positive effect in reducing the thickness of skin folds and in decreasing the percentage of body fat. For the prevention and treatment of obesity and other chronic diseases, the author recommends introducing mandatory Physical Education and sports classes in all Bachelor and Master's programmes' curricula.

**Key words:** skinfold, body fat, obesity, university students, physical activity

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ФИЗИЧЕСКА ГОДНОСТ НА СТУДЕНТИ ОТ СОФИЙСКИ УНИВЕРСИТЕТ "СВ. КЛИМЕНТ ОХРИДСКИ" ПРАКТИКУВАЩИ ФИТНЕС ДИСЦИПЛИНИ

# THE PHYSICAL ABILITIES OF SOFIA UNIVERSITY "ST. KLIMENT OHRIDKSI "'S STUDENTS PRAKTICING FITNESS DISCIPLINES

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This article analyzes the state of the physical abilities of students enrolled for fitness classes - circular workouts at Sofia University "St. Kliment Ohridski" during 2018-2019 academic year. The data is part of the author's dissertation work. The aim of the study was to establish the students' fitness level at the beginning of the experiment. Methods: A variance analysis was applied to determine the average level of students in each test. These values were compared with the recommended ones for the relevant age and gender. The results show that in most tests students have physical capabilities of good, medium and below average level. Conclusions: The younger generations in Bulgaria have very low levels of physical fitness in the age at which the optimum of psychomotor functions and physical qualities should be manifested. Recommendations: The author recommends a targeted development of the physical abilities of students.

**Key words:** general physical training, fitness disciplines, circular workout, physical fitness, students.

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### УЕЛНЕС ХРОМОТЕРАПИЯ ЗА ПОДОБРЯВАНЕ ЗДРАВНИЯ БАЛАНС НА АКТИВНИ ЖЕНИ

### WELLNESS CHROMOTHERAPY TO IMPROVE HEALTH BALANCE OF ACTIVE WOMEN

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PURPOSE: The aim of this study was to achieve evidence of the efficiency of the Colour Light therapy by registering basic indicators established on comparative analysis between the results for women Body Lighting Chromotherapy.

METHODS: The research was done among 61 Bulgarian costumers, all women. We used: tests-retest for assessing the efficiency of our own Colour Wellness Chromotherapy. We measured the intensity of the tool registering basic indicators, established on comparative analysis between the results of before and after the applied Colours lighting influence for women Body.

RESULTS: During our original Wellness Chromotherapy data were established by a specific retest approach and the analysis showed that the mean values (Mean  $\pm$  SD) of the measured values of the indicators in the three-months

therapeutic effect of Chromotherapy were statistically different (p <0.05). These indicators are interpreted as effective improvement of health care by our wellness program which favours the maintenance of a wellness lifestyle for active women.

CONCLUSIONS: The results in our Light therapy study are reliable data in order to establish a Wellness standard table for assessing information to improve the health balance of active women. This specific tool is a reliable basis for validating innovative Colour therapy to improve Wellness lifestyle.

**Key words:** Wellness program, body chakras' colors, Light therapy, Chromotherapy Lighting, Wellness lifestyle.