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UDC 002

For the Anniversary Edition of the Scientific Journal European Researcher. Series A – 110 issue

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Abstract

This article is a review of the jubilee scientific journal "European Researcher. Series A ", marked at all in 2016 – the sixth anniversary, of regular and of continuous publication. In addition to the history of the newspaper are exposed to the development phase of its program concept. The journal is the period 2010 – 2016 year, profiled in an important factor of development and the formation of professional and scientific thought. Journal “European Research. Series A” is now open forum for publicizing and stimulating innovative thinking on all aspects of the social sciences, the entire international academic community. In all this we emphasize the infinite persistence, creative energy but also authoring and management merits chief editor and founder of the Journal, Dr Aleksandr Cherkasov for survival and development for this great publishing project.

Keywords: European Researcher. Series A, jubilee, editorial concept, Aleksandr Cherkasov.

Jubilees are generally the important thing in the life of people and institutions. It is customary to jubilees marked at intervals of 100, 75, 50, 25 or 10 years, but we believe that the figure is 6 years old, important and worthy of respect. Specifically, in this, the year 2016, and published the journal volume 110 of the “European Researcher. Series A”(in encounter jubilee 01. November). All of these volumes of journals have "brought forth" and "live" with a sincere commitment to science and profession. The upcoming anniversary is a great opportunity to European Researcher. Series A, on the best way affirms the achieved results and establish the direction for further development and promotion of research.

Journal “European Researcher. Series A”, is scientific journal Academic Publishing House Researcher, Russian Federation and it’s the mission is the publication of high quality research results made in the field of social sciences. Such areas as history, psychology, economics, philosophy, cultural studies, political science and law are the top priorities of the Editorial Board of journal. The goal of are journal “European Researcher. Series A” is to familiarize the scientific public with the research results and their interpretation which are relevant to current social issues.

An unusual combination of practical and theoretical data, the inherent attention to many issues of social disciplinary in a significant part of the publications are distinguishing features of journal. The journal publishes conference proceedings, articles and short reports, concerning the results of social research in the Russian and English languages (Academic Publishing House Researcher, 2016).

Fig. 1. Appearance of the journal "European Researcher. Series A" - 2010 and 2016.godine (Academic Publishing House Researcher, 2016).

Conceptually, the journal contains a well-designed range of different sections - from scientific research to current scientific information, dealing with important scientific topics and their orientation towards social - economic practices and making responses the current socio - economic issues, which is why the "European Researcher. Series A", useful and researchers to practitioners, are especially those who choose to use the experience of others in your own work.

Content-wise, it seems reasonable that and in this journal has the highest contributions in the field of economic sciences (360), i.e., the works of pedagogical sciences (200), although not far behind, either in quality or in numbers, works in the field of philological sciences (159) historical sciences and archeology (131)... In this respect, it is understandable and bridge that this influential journal generated between different countries, especially in the field of social research.

Technically, there are notable differences in the format of the journal and the tidiness articles in relation on most other of the journal (Vukadinović, 2016). Bearing in mind the bigger picture, the creation and support of issues of the journal, it seems that they are primarily a result of seeking inspiration in Russian journals. The journal is slightly larger format, and articles begin abstracts and keywords, or introduction, materials and methods, discussion and references, as is the custom settled practice of issuing this type of serial publications. All supplements generally contain a summary translation in two languages - Russian and English, and have access to a summary of the requirements not only satisfied but, bearing in mind the usual standards, and exceeded, because this Journal has enabled bilingualism availability of basic ideas and attitudes of each author significantly wider circle readers. As typical of scientific journal "European Researcher Series A" is contains detailed instructions for authors of the call for submission of papers.

For a short period 2010 - 2016 in the scientific community Journal is revealed as a witness, but also protagonist, the development of scientific thought and the profession and becomes recognizable and deservedly distinguished by the quality of published scientific, professional and review articles, equipment exemplary contributions and technical arrangement of each number. In previous numbers (from 01 November, 2010 to 31 August, 2016) journal "European Researcher Series A"is represented total of 1.681 articles. These articles proposed by the 3.215 authors from 55 countries, with five continents: Europe, Africa, Asia, North America, South America and Australia. Besides researchers from the Russian Federation and the former space Soviet Union for European Researcher. Series A, for six years have published articles and colleagues from Italy, Greece, Germany, Egypt, Israel, Iran, India, Pakistan, Malaysia, China ... fact is worthy of respect.

The quality of authors' contributions blackmailed by renowned reviewers of Russian Federation and from abroad.

The journal is subjected to constant evaluation (monitoring) depending of influence (the impact of) at the base Russian Science Citation Index and, complementary, in international citation indexes (Rajović and Bulatović,2016). In the context of Russian Science Citation Index, Impact factor in 2014 je 0.415 and Information Matrix for the Analysis of Journals ICDS in 2016 – 5.800. Impact factor of MIAR journal "European Researcher Series A"is in 2012 – 3.301, 2013 – 3.477, 2014 - 5.602 and 2015 - 5.699 (Academic Publishing House Researcher, 2016),

A large contribution for this rise of the journal definitely belong to the editor chief Dr Aleksandr Cherkasov with International Network Center for Fundamental and Applied Research from Russian Federation, including of course the editorial board, consisting of: Bazhanov Evgeny with Diplomatic Academy Ministry of Foreign Affairs from Russian Federation; Beckman Johan with University of Helsinki from Finland; Biryukov Pavel with Voronezh State University from Russian Federation; Goswami Sribas with Serampore College from India**;** Dogonadze Shota with Georgian Technical University from Georgia; Krinko Evgeny with Southern Scientific Centre of RAS from Russian Federation; Malinauskas Romualdas with Lithuanian Academy of Physical Education from Lithuanian; Markwick Roger with University of Newcastle from Australia, Md Azree Othuman Mydin with Universiti Sains Malaysia from Malaysia; Menjkovsky Vaycheslav with University of Belarusian State from Belarus; Müller Martin with University St. Gallen, St. Gallen from Switzerland; Ojovan Michael with Imperial College London from UK; Ransberger Maria with University of Bayreuth from Germany and Šmigeľ Michal with Matej Bel University from Slovakia (Academic Publishing House Researcher, 2016). Of course, great merits the given by the executive editors Violetta Molchanova and Sergey N. Nikitin.

In the coming period priorities of the editorial board will be just continue to strengthen the reputation of the newspaper, as well as work on its visibility and distinctiveness. For are these reasons, and in order to further improve the quality of the journal of the European Researcher. Series A, the editorial team will be widened, and to colleagues who, collaborators, and over the past six years has significantly contributed to the development of the journal.

We hope that and this 110 number of the journal "European Researcher. Series A", be received just as well as the previous one and will attract the attention of many colleagues and all readers who follow the issues in the field history, psychology, economics, philosophy, cultural studies, political science, law... On behalf of the editorial board of the journal would like to thank all who have contributed and in many other ways contributed to the preparation of 110 regular issue of the journal "European Researcher. Series A", or the previous numbers. Special thanks, as ever, we owe reviewers, who have significantly contributed to the quality of published papers, and journal in general.

In the belief that there is still many interesting regular numbers (Electronic Journal for "Communication and Culture Online", 2014), we leave 110 of the journal "European Researcher. Series A", Court of scientific and professional community and we invite all interested colleagues with the permission of the editor in chief Dr Aleksandr Cherkasov and Editorial Board journal „European Researcher. Series A", yes enrich forward mentioned journal with their scientific articles, criticism, polemics, but also our Academic Publishing House Researcher their monographs, textbooks, manuals ... We look forward to continuing already started, and the establishment of new cooperation, and with thanksgiving we expect your suggestions, ideas and comments.

In the end, it is not easy to judge one time section large and significant of the whole (Gaćeša and Jovanović, 2012). Consider, even the 110 anniversary issue of the "European Research. Series A", is impossible without thinking about what the magazine already is or what it could be. However, it seems to us yes journal „European Researcher. Series A", within its wide content located room for advances, especially in the interdisciplinary research approach. In the assessment of individual scientific contributions in this edition of 110, as well as any future issue, it would be important to keep the thought how the is journal "European Researcher. Series A", had and has the potential (more precisely, during the publishing its quality was gained) to continue to be a significant support to researchers as a source of new knowledge, but also as a place where they can publish their research results.

In all this we emphasize the infinite persistence, creative energy but also authoring and management merits chief editor, founder of the Journal and director Academic Publishing House Researcher Dr Aleksandr Cherkasov for survival and development for this great publishing project. Unselfish support in the work of Dr Aleksandr Cherkasov given are and members team Academic Publishing House Researcher in composition: Violetta Molchanova - Russian Federation, Anvar Mamadaliev - Russian Federation, Natalya Shevchenko - Russian Federation, Alisa Konovalova - Russian Federation, Tim Kazbeckoff - Russian Federation (staff), Sribas Goswami - India, Sergei Degtyarev - Ukraine, Diana Ismailova - Kazakhstan, Jacob Sarfo - Ghana, Ia Shiukashvili - Georgia ,Timur Magsumov - Russian Federation (official regional representatives) and Michal Šmigeľ - Slovakia, Pavol Bartik - Slovakia, Md Azree Othuman Mydin - Malaysia, Stefan Aufenanger - Lithuania,Romualdas Malinauskas - Lithuania, Martin Müller - Germany, Zekeriya Karadag - Turkey, Rushan Ziatdinov - South Korea, Evgeniya Vidishcheva - Russian Federation, Yury Tyunnikov - Russian Federation (staff editorial boards).

References

1. Academic Publishing House Researcher (2016), European Researcher. Series A (Social sciences), Available from: http://www.aphr.ru (24.07 2016).
2. Vukadinović, S.,(2016), New Law Review - anniversary edition of the journal that connects, *Pravni zapisi*, VII(1), 162 - 167.
3. Rajović, G., Bulatović, J., (2016), The Russian Historical Journal "Bylye Gody" (2006–2016 years): the Results of the First Decade, *Bylye Gody*, 41(3), 550-554.
4. Electronic Journal for language, communication, culture and society "Communication and Culture Online" (2014), Introductory word, Available from: http://www.komunikacijaikultura.org (25.07 2016).
5. Gaćeša, N. N., Jovanović, Z. D., (2012), Sixty years of the Military Technical Courier: All our jubilees, *Vojnotehnički glasnik*, *60*(3), 7-41.

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К юбилею издания научного журнала European Researcher. Series A – 110 выпуск

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Аннотация. Данная статья представляет собой обзор – 2016 к юбилею научного журнала «European Researcher. Series A» – его шестой годовщине со дня регулярного и непрерывного издания. В дополнение к истории журнала в обзоре даны концепции развития. Журнал зарекомендовал себя как издание, публикующее материалы по развитию и формированию профессиональной и научной мысли. Журнал «European Researcher. Series A» специализируется на популяризации и стимулировании инновационного мышления во всех аспектах социальных наук среди всего международного научного сообщества. В этом процессе мы подчеркиваем бесконечную настойчивость, творческую энергию по созданию и ведению издания – главного редактора и основателя журнала, д-р Александра Черкасова, его усилия, направленные на поддержку этого интересного издательского проекта.

Ключевые слова: European Researcher. Series A, юбилейный, редакционная концепция, Александр Черкасов.

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Articles and Statements

UDC 338

Development of the Asia-Pacific Region: Current Economic Position and Perspective of Information Society

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Abstract

The article examines the problems of current economic development in the Asia-Pacific region. It is a condition of the system in which its key parameters are the optimal ratio contributing to the existence and development of the whole system. It was analyzed the changing situation in the Asia-Pacific region based on the main characteristics of the researching complex according to the authors' calculated index. It was identified that in the analyzing period the quantitative and qualitative structure of the group of countries has completely changed. It was also provided the classification of the Asia-Pacific countries based on the current level of their economic development. Thus, because of the differences in the economic dynamics it was identified the main differences in the levels of economic development among the groups of the Asia-Pacific countries. This analysis was conducted for identification of the competitive advantages of the information society in the Asia-Pacific region, as the development of a new society based on "knowledge economy" which will be a priority for a long-term perspective.

Keywords: Asia-Pacific region, clustering of the Asia-Pacific countries, balanced development, information society

1. Introduction

The cooperation of the countries in the Asia-Pacific Region (APR) has become an important factor in the economic development of the modern stage of the world economy. Nowadays, a variety of indicators' combinations of the economic development in different countries does not provide the ability to assess the level of economic development from only one side of researching activity. Each stage of the development of the national economy and the world economy as a whole is making certain changes in a range of the main indicators. In this connection, the research of the current situation of economic development of the Asia-Pacific region has a special importance and relevance.

A lot of modern foreign and Russian researchers focused on the problems of the assessment of the economic development. Modern processes of globalization, and increased competition between countries have some differentiation problems and contradictions in the social and economic development.

Nowadays, there are a lot of researches about the problems of economic growth. Obviously, the results of economic growth contribute to improve the quality of human life. A lot of economists interpret the economic growth as the development. It should also be noted that one of the elements of development is the level of balanced development of the economy. Firstly, it is important to determine the relationship between the concepts of "economic growth" and "economic development". The economic development is a qualitative change in the structure of the economy, which leads to the increase of welfare. Economic growth is a positive change in the quantitative results of the functioning of the economy, it is measured by the volume of production of goods and services (GDP) per capita. Economic development can be accompanied by economic growth, and can be taken place on the background of economic stagnation.

If we speak about the national priorities of government regulation of world economies, firstly, it should be mentioned the stabilization of economic growth and elaboration of balanced macroeconomic policy for the future economic development.

The most important goal of every country is to ensure a balance between economic efficiency and social justice. This balance is a required condition for sustainable and balanced economic development.

In the post-industrial period the economic and social development has entered in a qualitatively new phase of development, which called "information society". Information society is a society based on the widespread distribution of information and communication technologies (ICT), with a dynamic economy and high levels of per capita income, level of education and health, aimed at innovative development, international competitiveness and prosperity of the country.

Creation and development of the information society within the national framework is accompanied by the formation of a global information space and "retraction" in this global process, not only the most developed, but also developing countries. This process generally contributes to innovative development and competitiveness of the national economy, but it also has negative effects. That is why the process of creation of the information society needs to be regulated by the government for stimulating the positive effects and reducing the negative effects.

The identification of "best practice" strategies and tools of economic growth and international competitiveness based on the development of the information society involves determining the number of countries, whose experience has a theoretical and practical significance.

2. Methods

It is used the author's method of estimating the economic development of the Asia-Pacific region which is based on the calculation of the integral index. Based on the mathematical, econometrics and multivariate statistical analysis methods it was provided the classification of the Asia-Pacific countries according to the degree of the balance of their economic development.

3. Results

It was provided the estimation of the level of economic balance in the Asia-Pacific countries. The distribution of the countries in 2012 based on the calculations are presented in Table 1.

Table 1. The classification of the Asia-Pacific countries based on calculations of the balance of economic development, 2012

Level of economic balance	2012
Absolutely balanced level of development	–
Balanced level of development	Australia, Brunei, Canada, China, Malaysia, New Zealand, Russia, Singapore, USA, Thailand, Chile, South Korea, Japan
Medium balanced level of development	Peru, Salvador, Samoa, Solomon Islands, Tonga, Fiji, Philippines, Ecuador , Vietnam, Guatemala, Honduras, Hong Kong, Indonesia, Cambodia, Colombia, Costa Rica, Macao, Mexico, Mongolia, Nicaragua, Papua New Guinea,
Low balanced level of development	Vanuatu, Marshall Islands, Micronesia, Nauru, Palau, Panama, Timor-Leste, Tuvalu

Source: the authors' calculations

There is more detail classification of the Asia-Pacific countries according to the average, low and high levels of economic balance of the economy (Table 2).

Table 2. The characteristics of the calculated integral index of the Asia-Pacific region, 2012

Level of economic balance	2012		
	Average	Low	High
Balanced level of development	13 countries (30.23 % of total number)		
	0,560	0,502 Chile	0,641 S. Korea
Medium balanced level of development	21 countries (48.84 % total number)		
	0,390	0,281 Vietnam	0,492 Philippines
Low balanced level of development	9 countries (20.93 % total number)		
	0,115	0,044 Marshall Islands	0,213 Timor-Leste

Source: the authors' calculations

The characteristic feature of the modern world economy is a growing irregularity of the socio-economic development of the countries. The process of economic differentiation has intensified in the 1980-1990. It develops in different directions, for instance, levels of economic development, national economic structures, situation in the world economy.

The irregularity of social and economic development partly inherited from the colonial period of historical development. The expansion of industrial production in the metropolitan countries with insufficient provision of some of these mineral resources has stimulated the development of mining industries in the colonies.

Thus, based on the differences in the economic dynamics it was identified the major differences in levels of economic development among the groups of countries and regions. If in the western highly developed countries the differences of the levels of per capita income were declined over the past half century, but in developing world it rapidly increased.

The changing of the economic situation of some countries (groups of countries) is determined by a variety of factors and conditions. It is the differences in the scale of the national economy, empowerment of mineral resources, the approaches to the implementation of development strategies, in the terms of international trade, the demographic situation, and the external debts.

The countries have developed in a variety of ways, using different models of economic development. The high growth rates were achieved due to the high rate of accumulation, the usage of modern technology, and the high productivity. These functions are carried out with a combination of market initiatives, government regulation and entrepreneurship. Due to the high differentiation of socio-economic development of the Asia-Pacific region, particular importance has the research and classification of countries according to the degree of the balance of economic development.

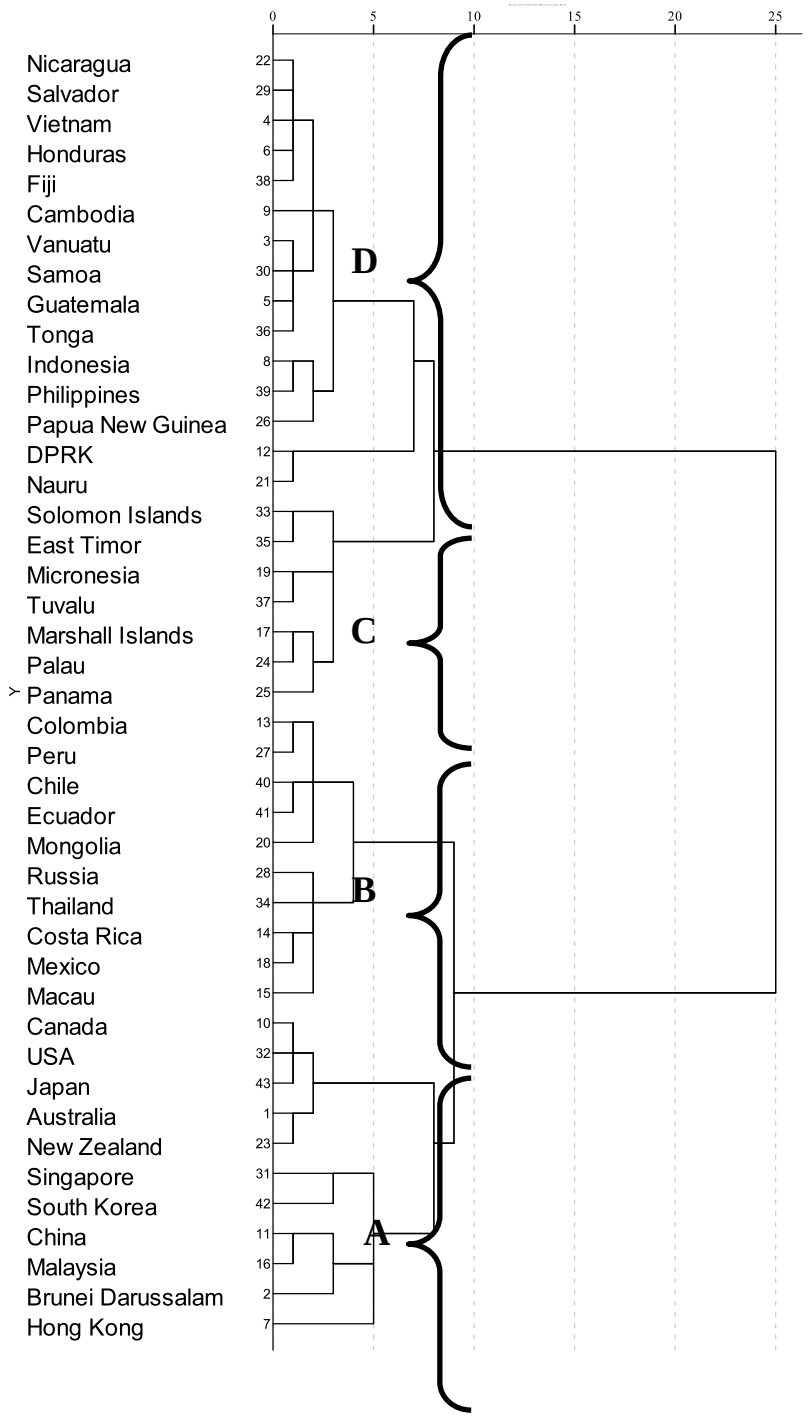

Fig. 1. The hierarchical cluster analysis of the Asia-Pacific countries on the basis of economic and social balanced development, 2012
Source: the authors' calculations

In this research it was used a multi-dimensional classification of data - a cluster analysis. The cluster analysis is a multivariate statistical procedure, which provide opportunities to collect data, containing information about the objects, and then organize the objects in a relatively homogeneous group. Nowadays, there are about 100 different clustering algorithms, but a hierarchical cluster analysis is the most useful for the purpose of this research.

The result of hierarchical cluster analysis is the construction of dendograms. It describes the proximity of the clusters to each other, it is a graphic sequence of association or the separation of clusters and a nested grouping of objects which change at different levels of the hierarchy. The results of the classification in 2012 are shown below as a dendogram, where the vertical axis represents the observation, and the horizontal axis is the distance between the objects of observation (Figure 1).

In 2012, there are 11 countries (26 % of the total number) of the Asia-Pacific region in the *Cluster A*. In this cluster it was marked the highest rates of innovation activity, potential of resource and raw materials and level of production, demography and health.

Cluster B includes 10 countries (23 % of the total number) of the Asia-Pacific region. For this cluster we identified the high grouping indicators which characterize the investment climate and education. *Cluster B* has the best values of the considered parameters of Cluster C and D. It was observed a positive trend in almost all indicators (except financial capacity) measuring the degree of balance between economic development of countries.

Cluster D, which in 2012 included 15 countries (35 % of the total number) of the Asia-Pacific region, is determined by the lowest values of the investment climate, financial capacity, health and education indicators.

Based on the results of our research it was concluded that in the Asia-Pacific region there is a high differentiation in terms of the balanced economic development. A sufficiently large number of countries are not attractive in investment sphere, with a low level of resource and financial potentials, and thus, it effects on the social problems which related to such important spheres as education and health service.

In addition, it was identified the competitive advantages of the Asia-Pacific countries: Hong Kong (leadership in the region in commerce, finance, trade and shipping), South Korea (a leader in the export of labor-intensive goods, the amount of input and technology of ship construction, automobile manufacturing), Singapore (best place in the world for business for small and medium-form; a major global banking, financial and commercial center, the most efficient in the world functioning of institutions, high standard of living and a high legal security and low taxes), Japan (high quality of public service; high level of effective demand, high level of education, the world highest relative measures of spending on science, the most powerful banks, global economic and technological leader), Australia (the world leader in the manufacture and export a range of products and services, including electricity production per capita).

The specific nature of the competitive advantages which created in the process of creating the Information Society (Castells, Manuel-Himanen, Pekka, 2002; Dakhli, M., De Clercq, D., 2004), was provided by some main characteristics: firstly, on the basis of superiority in the human, social equity and the conversion of knowledge into advanced innovations; and, secondly, a stable long-term benefits, due to the nature of the phenomenon of innovation. This specificity is determined the increasing role of open innovation and the creation of competitive advantages based on the ability of the country to make a profit and improve its business as a result of research and scientific-technical cooperation.

The competitiveness of the country, which develop the information society, can be identified as the ability of the country to achieve sustainable economic growth and be in advance of other countries in terms of the socio-economic development, which created on the basis of strategies and mechanisms for construction and development of the information society.

Based on the researching data and results of dendogram it was analyzed the level of conversion of the Asia-Pacific region into the information society (Table 3).

In addition, there is one useful index for measuring the information society development in the regions. It is ICT Development Index, IDI, which is calculated by experts of the International Telecommunication Union (ITU, ITU).

Table 3. The rating of the Asia-Pacific countries on the basis of Index IDI

Country	Total rating			
	2010	**2011**	**2012**	**2013**
Australia	14	21	11	12
Hong Kong	6	11	10	9
Singapore	19	12	15	16
South Korea	1	1	1	1
Japan	13	8	12	11
USA	17	15	17	14
Russia	47	38	40	42

Source: The Global Competitiveness Report 2014-2015.The World Economic Forum 2015

The ICT Development Index (IDI) is a composite index combining 11 indicators into one benchmark measure that serves to compare developments in information and communication technology (ICT) across countries. The main objectives of the IDI are to measure: the level and evolution over time of ICT developments in countries and relative to other countries; progress in ICT development in both developed and developing countries: the index should be global and reflect changes taking place in countries at different levels of ICT development; the digital divide, i.e. differences between countries with different levels of ICT development; the development potential of ICTs or the extent to which countries can make use of ICTs to enhance growth and development, based on available capabilities and skills (Methodology Report on European Innovation Scoreboard, 2005; Measuring the Information Society, 2013).

The world leader of creation the information society in the Asia-Pacific region is South Korea. The growing trend is characterized by the creation of the information society in Singapore and Japan, although in 2013 the development of the information society in these countries was slowed. Hong Kong is also characterized by reduced positions in the sphere of the information society, but it is still among the top ten countries based on the indicators. Australia has increased position of this indicator. It is due to the governmental task to overcome the lag in the development of the information society, in which the solutions are implemented of the smart technology, improved broadband infrastructure, a growing number of households to the Internet. The US position probably didn't changed. Russia shows a low improvement in this position, but it is far away from the developed countries of the Asia-Pacific region.

4. Discussion

For this research it is significant aspects of the application theories of international economic development. In the middle of the XX century a significant contribution in the research of this issue was made by French economist M. Byeau, who published in 1950 his article "The Customs Union and the national interests" (Byeau, 1950), and US international trade theorist J. Viner, one of the founders of the theory of customs unions, he published the book "The consequences of the customs union". J. Viner has shown that the presence of trade and other national economic barriers has led to a crisis in the international economy and politics, to the inefficient usage of resources in a closed economic space that can be overcome through the establishment of alliances to ensure the free economic exchange. Both of these publications have initiated a number of investigations of economic effects of free trade areas and customs unions.

Thus, J. Viner (Viner, 1950) firstly formulated the condition of trade-creation and trade-diversion effects of combining two or more of the national markets into a customs union, contributes both to the resultant of GDP growth and well-being in all member countries of such integration group. According to his opinion the removal of barriers increase the gains from trade in the case if the imports from the partner country replaces less efficient domestic suppliers, resulting in the effect of creation.

R. Lipsi (1957) and I. Bogati (1997) (Lipsi, 1957, Bhagwati, 1997) have shown that in some cases the result of a customs union, which is dominated by trade-diversion effects may increase welfare of the nation.

P.Krugman considered that the countries of the regional trading blocs, are so-called "natural partners", with the result that they are more likely to have benefits from participation in this agreement and their winnings will be as higher as their share in the domestic regional market (Krugman, 1989).

E. Moravcsik outlined that national countries remain key actors in the process of integration, and he considered that it is necessary to draw a distinction between "formal" and "informal" integration (Moravcsik, 1992).

It is obviously that the value of informal integration is enormous. Inter-governmental cooperation is just a reaction to the necessity of society and market economy. However, the primary one in the integration process is a formal integration.

The effective social and economic development of the Asia-Pacific region can be successfully carried out as a result of the integration of the countries into a single socio-economic space. Each country actively developed the concept and the program of socio-economic development, however, cannot be claimed about the presence of a comprehensive tools for the policy implementing which relating to the balanced development of the country.

The researches about the information society began in the middle of the XX century in the frameworks of the theory of post-industrial society. The theorists of post-industrial society D.Bell (D. Bell, 1980), Z. Brzezinski (Z. Brzezinski), J. Galbraith (J. Galbraith), P. Drucker (P. Drucker), A.Toffler (A.Toffler, 1980), A. Touraine (A. Touraine), D. Riesman (D. Riesman), T. Forester (T. Forester) and others almost fifty years ago had forecasts about the transformation period of the developed countries to a new type of production on the basis of new computer technologies.

There is a huge selection of the definition of Information Society. The most disputable concept is identified as follows: "A society that organizes itself around knowledge in the interest of social control, and the management of innovation and change" (D. Bell, 1980).

The ideas of the new industrial society (J. Galbraith) and the post-industrial society (D. Riesman, D. Bell) was gradually modified in the concept of the information society, the development of this idea was continued in the researches of U. Dayzarad, E. Masuda, M. Haydeger, K. Errou, Zh. Ellyul, Karl Jaspers, A. Norman, M. Konnarz, G. Benesko, T. Morris-Sasuke, F. Machlup, J. Stigler, M. Porat, M. Castells and others.

However, the process of formation and development of the information society have not been completely investigated yet. The low level of investigation of the problems this area have noted by I.A. Strelez and S.V. Parinov, who developed the concept and theoretical model of a network economy, A.N. Avdulov and A.M. Kulkin, who considered various aspects of socio-economic development.

Although, there is a large number of Russian and foreign researches of the issues of competitiveness, but in the domestic economic literature it has not developed a holistic view of the completed formation of competitive advantages of the country in conditions of deepening globalization and the information society.

5. Conclusion

The proposed approach of this research for the definition of the priorities of countries for ensuring their balanced economic development of the regional market is composed of two parts: firstly, based on the authors' method it is calculated the integral indicator of the balance of economic development of the country, and secondly, the results are complemented by the analysis of the degree of development of information society in the Asia-Pacific region.

Thus, the Asia-Pacific region countries, such as Australia, Singapore, South Korea, Japan, Hong Kong and Taiwan, have made great success in creation of the information society and recognized by the international community as the most competitive economy in the region of East Asia. These countries demonstrate a steady growth of development even in the period of the negative global economic situation. The priorities of the development were shifted from the objectives of improving the global competitiveness of key manufacturing sectors to the challenges of sustainability of development.

The deep inclusion in the information revolution and the focus on the formation of the information society had the influence to the Asia-Pacific region countries for achievement of the high levels of positive dynamics of growth of per capita income and quality of life. The highest correlation between the index of the information society (IDI) and the level of per capita income

achieved in South Korea. It means that the process of construction of the information society in South Korea affects the increase in per capita income in the country.

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References

1. Bhagwati, I. (1997) Decentralized income redistribution and immigration. *European Economic Review,* 40, pp.187-217.
2. Bell, Daniel (1980) The Social Framework of the Information Society. *The Microelectronics Revolution: The Complete Guide to the New Technology and Its Impact on Society*. MIT Press, Cambridge, Mass.
3. Byeau, M. (1950) "Unions douanieres el donnees nationales." *Economic Appliquee,* 3, pp.121-157.
4. Castells, Manuel-Himanen, Pekka (2002) *The Information Society and the Welfare State*. - Oxford.
5. Dakhli, M., De Clercq, D. (2004) Human capital, social capital and innovation: a multicounty study. *Entrepreneurship & Regional development*, 16, pp.107-128.
6. Edquist, C. (1997) *Systems of Innovation: Technologies, Institutions and Organizations*. London: Pinter.
7. Freeman, C. (1987) *Technology Policy and Economic Performance: Lessons from Japan*. London: Frances Printer.
8. Krugman, P. (1989) *Is Bilateralism Bad ?* Cambridge: NBER Working Papers.
9. Laszlo Z. Karvalics (2007) Information Society - what is it exactly? The meaning, history and conceptual framework of an expression. Budapest. Available from: http://www.ittk.hu/netis/doc/ISCB_eng/02_ZKL_final.pdf [Accessed: 13th May 2016].
10. Lu Xingqi, Zhang Hongle (2012) The Study of City Technology Innovation Environment Construction in the View of System Management. Available from: http://www.seiofbluemountain.com/upload/product/200910/2008glhy10a12.pdf [Accessed: 20th May 2016].
11. Lundvall B.A., Intaracumnerd P., Vang J. (2006) Asia innovation system in transition. Edward Elgar, USA.
12. Measuring the Information Society (2013) International Telecommunication Union. Geneva: Switzerland. Available from: http://www.itu.int/en [Accessed: 10th May 2016].
13. Methodology Report on European Innovation Scoreboard (2005) Available from: http://trendchart.cordis.lu/scoreboards/scoreboard2005/index.cfm [Accessed: 21th April 2016].
14. Moravcsik, A. (1992) Liberalism and International Relations Theory. *Harvard University Center for International Affairs,* 92(6), pp.7-13.
15. The Global Competitiveness Report 2014-2015. The World Economic Forum (2015). Available from: http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf [Accessed: 21th May 2016].
16. Toffler, Alvin (1980) *The Third Wave*. William Morrow and Company, New York.
17. Viner, J. (1950) *The Custom Unions Issue*. N.-Y.-London.
18. Walcott, S.M. (2003) Chinese Science and Technology Industrial Parks. Ashgate Publishing Company, p. 220.

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Развитие Азиатско-Тихоокеанского региона: современное экономическое положение и перспективы информационного общества

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Аннотация. В работе проводится анализ современного экономического развития Азиатско-Тихоокеанского региона, которое характеризуется определенным состоянием системы, где ее ключевые параметры имеют оптимальное соотношение для планомерного развития всей системы. В исследовании проведена оценка изменяющейся ситуации в Азиатско-Тихоокеанском регионе по основным характеристикам изучаемой совокупности согласно предлагаемой методике. Выявлено, что за исследуемый период количественный и качественный состав групп стран существенно изменился. Работа дополнена классификацией стран Азиатско-Тихоокеанского региона по показателям, характеризующим уровень их текущего экономического развития. В результате различий в экономической динамике обозначились крупные различия в уровне экономического развития среди групп стран рассматриваемого региона. Данный анализ проведен для выявления конкурентных преимуществ информационного общества Азиатско-Тихоокеанского региона, так как именно развитие нового общества, построенного на "экономике знаний", является приоритетным на долгосрочную перспективу.

Ключевые слова: Азиатско-Тихоокеанский регион, кластеризация стран Азиатско-Тихоокеанского региона, сбалансированное развитие, информационное общество.

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Science and Religion in the Russian Federation nowadays: Conflict or dialogue?

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Abstract

The article discusses the main aspects of the relationship between science and religion in the Russian Federation nowadays. It shows an official position of the Russian Orthodox Church concerning the latest scientific developments, secular culture, and education as well as separate views of different scientists, theologians, and philosophers about it. In particular, the paper examines reaction from academic community in the Russian Federation towards some attempts of introduction of theology in to secular space science and education. This article introduces different points of view about the problem of choice of the world view reference points in contemporary conditions when Christian theology substantiates the necessity of science and religion interaction.

Keywords: science and religion, the Russian Orthodox Church, theology, religious studies, secular culture, a human being, technology, violence, atheism, ethics.

1. Introduction

Today “Science and Religion” is one of the most popular subjects in academic and public spheres in many countries all over the world. A number of publications by researchers, philosophers, and theologians are dedicated to this subject. Some of them speak with atheistic position opposing science to religion. However, most of them are protestant theologians which insist on dialogue between science and religion in contemporary world. In general, this tendency is also typical to catholic and orthodox thinkers.

As in other European countries, in the Russian Federation the problem of the relationship between science and religion is quite acute, but the character of building of this relationship in Russian society is quite specific. Therefore, in this paper I would really like to discuss some of the most important and specific points of the relationship between science and religion in the Russian Federation nowadays.

2. Materials and Methods

The article is based on analysis of an official position of the Russian Orthodox Church concerning the latest scientific developments, secular culture, and education as well as separate opposite views of some scientists towards this issue. The methodological basis for the paper is the principle of scientific objectivity. In this study author used hermeneutic, socio-critical, descriptive and historically-typological approaches as well as qualitative methods of social studies. In the

analysis of social, cultural, and political aspects of contemporary Russian realities submitted by materials of mass media, and Internet resources the different points of the relationship between science and religion in the Russian Federation nowadays are reflecting.

3. Discussion

There are different points of view about the relationship between science and religion. Russian orthodox philosophers, such as Semyon Frank emphasized that science and religion cannot oppose each other because they are "absolutely different matters". Frank said, "All conversations about absence of harmony between them resulted from both ignorance and stupidity" [1, p. 3]. On the contrary, the main tendency in Soviet historiography was categorical opposition of science and religion as important factors of "ideological struggle". The atheistic literature told about the conflict among them for the right to form a world's paradigm. There was emphasized the truth of scientific knowledge as opposite to religion faith.

Today both these points still exist. However, with a change of position of the Russian Orthodox Church in post-Soviet Russia the opinion about science and religion's dialogue begins being introduced in society. Sometimes such persistence leads to the negative reaction among some atheists-scientists and also causes some misunderstanding in the society. In particular, it has to do with some changes of contemporary Russian education.

In august two-thousand was held the Jubilee Council of Bishops of the Moscow Patriarchate of the Russian Orthodox Church. There were adopted "the Basis of the Social Concept". It is an official document about different points of the relationship between the Church and the contemporary secular world. In particular, it focused on science as "one of the most important components of culture" [2].

It says that science is the result of development of Christian thought. However, "despite Christianity's initial impact" later the development of science and technology was carried out under the influence of "secular ideologies" [2]. According to the position of the Russian Orthodox Church, in the eighteenth century some "atheistically-minded thinkers" "resolutely opposed science to religion". It was a result of "faith in the omnipotence of the scientific knowledge" [2]. The Church has condemned this opinion calling it "the false principle". It warns that if science wasn't "restricted by any ethical, philosophical, or religious requirements" it would result in a global disaster [2]. In this sense in Christian theology as well as in postmodern philosophy revaluation of the age of Enlightenment with main concept of "progress" took place.

Really, "Knowledge is power" – it is a great slogan of the Modern European culture and thought. However, the reverse side of progress was blood and thunder, weapons, wars, intervention in the universal laws of a human nature, and the Universe, especially in the XX-th century. In fact, we must recognize that science and technology have made the violence more widespread and ruthless. After the two World Wars a nuclear threat remains relevant as a result of scientific work. Thus history itself raised a fundamental question about responsibility of a scientist who must follow humanistic goals.

Therefore, the Russian Orthodox Church underlines that by the end of the twentieth century science and technology have achieved such influence on all aspects of life as to become "the decisive factors in the life of the civilization" [2]. Consequently, the Church says "to ensure normal human life" it is necessary today as never before "to restore the lost link of scientific knowledge with the religious, spiritual and moral values" [2]. The Church insists on dialogue between science and religion "for the save of life and its proper order" [2].

However, there is another position. A number of scientists-atheists publicly assumed that theology shouldn't intrude into secular science. In particular, in two thousand and seven was published the open letter to the President of the Russian Federation from ten academicians, the Members of the Russian Academy of Sciences. They were notable scientists such as Nobel laureates in physics Vitaly Ginzburg and Zhores Alferov. They expressed their concern about so-called "increasing clericalization of Russian society" that is "the Church's infiltration of all areas of public life" [3]. They affirmed wide discussion of the issue of dialogue between science and religion is a result of clericalization supported by State. This letter said that in-admissibility for the Russian Orthodox Church to interfere in the secular area of science and education. They emphasized their "respect for the feelings of religious people" and that their goal "is not to fight religion". However,

they affirmed there wasn't alternative to scientific knowledge and opposed so-called "knowledge substitute" for the faith [3].

In the first place, in this letter the authors expressed their attitude towards contemporary Russian education. These academicians were against "the Church's attempts to introduce theology in the list of government-recognized scholarly subjects". They proved that theology being "an assemblage of religious dogmas" and shouldn't be one of scientific subjects [3]. So, this letter illustrated the negative reaction of the some representatives of academic community of Russia to the persistence of the Church in public life, science, and education.

Actually, in recent years in Russia have appeared a lot of theology's educational programs as well as theological departments. Until now they have never existed in Russian State Universities. The Orthodox theologians and priests were always prepared by Orthodox Academies. This always distinguished Russia from other European countries where theology was originally part of classical European university education. Today besides Orthodox Academies in the Russian Federation there are a number of special private universities and institutes with theology as a priority academic direction. However, the problem is that theology as academic direction has being introduced in State' system of higher education.

It means, sometimes theology begins being understood not only as the doctrine of God built on the basis of the Scripture. Today theology as an educational humanities program claims to be a part of the complex of knowledge about religion which used to be a problematic field of religious studies. Therefore, in contemporary Russian society the following question has being discussed: is theology really an independent branch of the humanities along with religious studies, or not? [4].

In two thousand and eleven was held the Council of Bishops of the Moscow Patriarchate of the Russian Orthodox Church. There were adopted the new decision about improving both dialogue between the Church and secular science. A short time before the Patriarch of Moscow and all Rus' Kirill visited National Research Nuclear University (Moscow Engineering Physics Institute). It's one of the fundamental scientific Centers of Nuclear Physics and important technical educational center in Russia. An Orthodox Church was established there a few years ago. The Patriarch Kirill was sanctified this Church gave a lecture about relationship between science and religion for both students and teaching staff and was made an honorary doctor of Moscow Engineering Physics Institute. After two years the Department of theology was opened in this technical University among other aimed to discussion of the relationship between science and religion. However, most of scientists and students were against all these events. They assumed that the Church shouldn't intrude in secular science. [5]

The problem is complicated by a question of a school education. Really, "from the Orthodox perspective it is desirable that the entire educational system should be built on religious principles and based on Christian values" [2]. Although in the same place emphasized that the Church "respects the secular school" as well as a human freedom but it considers "it inadmissible to impose on students anti-religious and anti-Christian ideas and to assert the monopoly of the materialistic view of the world" [2]. On the contrary, the letter by ten academicians says, "all achievements of worldwide modern science are based on a materialistic view of the world. There is simply no other thing in modern science" [3].

One of the authors of the letter academician Vitaly Ginzburg guessed the science and religion should avoid each other. He is known as a critic of religion and popularizer of the secular humanism and principles of the freedom of conscience. Speaking as an atheist, he noted that politics of Bolshevism discredited atheism "which in essence has nothing to do with violence" [6]. On the contrary, the Christian Church has always condemned scientific knowledge. Ginsburg wrote that to identify all atheists with those Bolsheviks "militant atheists", who shot believers, is equivalent to identify all Christians with the Inquisition, or all Muslims with fundamentalists and terrorists [6]. According to him the age of Enlightenment was a period of beginning widespread acceptance of humanism, materialism and progressive scientific knowledge. According to him secular ethics doesn't need religious doctrines [6].

Academician Ginzburg and other scientists especially emphasized that creationism should not be taught in schools in any form. It should be noted that Darwin's theory of evolution is still the most painful issue for the Orthodox theology and Orthodox believers. The official position of the Russian Orthodox Church on this issue does not exist. There are only separate positions of modern Orthodox theologians.

In two-thousand and six a well-known case was held in Russia. A fifteen year old schoolgirl Masha Schreiber, and her father, were speaking against the non-alternative "imposition" of the theory of evolution in school's course of biology which is contrary to her religious faith. Although St. Petersburg court rejected the claim to prohibition of teaching of the evolutionism, the case became a major focus of public attention, and was discussed for a long time [7].

In two-thousand and thirteen a group of Orthodox young people made a flashmob against the theory of evolution at the State Darwin Museum in Moscow. Their leaflets told that the world was created by God seven thousand five hundred twenty two years ago. Also they demanded to bring "religious instruction" in every school. It is even more interesting that one of the leaflets contained the text about the theory of evolution as a real threat. It was called a pseudoscientific myth which Trotsky and Hitler followed to justify the murder of millions of people [8].

This flashmob received a numbers of negative responses on the Internet. For Orthodox culture it was unique. It looked like an action of Protestant creationists in the USA many years ago and in general as a rule it is condemned by Orthodox believers. So, it was supported only by a few Orthodox priests. A lot of theologians were against this flashmob such as one of the most popular and influential contemporary Orthodoxy theologians Andrey Kuraev [9]. In one of his papers "Orthodoxy and evolution" he argues that "in Orthodoxy there are no textual or doctrinal reasons for the rejection of evolution". According to him "the Lord created matter which is able to the benefits of the development" [10].

One more problem which is discussed in modern society even more widely is the problem of the use of biomedical technologies. Here the Church has a clear official position which is shared by almost all orthodox theologians. Particularly, in this point it is most significant that the understanding of good and evil in the modern Christian thought is contrary to ethics of liberal secular humanism.

In fact, the rapid development of biomedical technologies which have invaded the life of modern man rises nowadays in front of society serious questions about boundaries of tolerance. "The Basis of the Social Concept" of the Russian Orthodox Church says that this development without spiritual moral bases "can bring to humanity new burdens and suffering" [11]. The Church insists that "proceeds from the ideas of life based on the Divine Revelation. It asserts life as a precious gift of God". It noticed that "the growing technological interference in the conception of human life presents a real threat to the spiritual integrity and physical health of a person" [11].

Thus, the Church strongly condemns abortion as a grave sin, and different manipulations of reproductive medicine such as donation of germ, surrogate motherhood as well as a change of the human genome, the cloning of the human being, foetal therapy, euthanasia, sex reassignment surgeries, and others things of new medicine technologies. In this case, it is emphasized that not medicine is condemned as such, but a human choice of "a distortion of the God-created human nature" [11]. The Russian Orthodox Church and contemporary Orthodox theology of science reasoning from today's realities very clearly define their position towards the saving of Christian values, human life, traditional family, freedom, and responsibility as well as the sin.

4. Conclusion

In such a way, we can come to the following conclusions.

In Russia as in other European countries, the problem of relationship between science and religion is being very acute last decades. This is one of the most important subjects in both academic studies and public discussions. In particular, it has to do with some changes of contemporary Russian education.

On the one hand, the importance of scientific discoveries of modern theology is scarcely contested. In general, Christian theology is trying to find correct explanation for scientific theories. However, on the other hand, the Russian Orthodox Church opposed "the monopoly of the materialistic view on the world". In turn, a number of "atheistically-minded" scientists resolutely oppose it.

Unfortunately, a gap between secular liberalism and Christian conservatism is increasing. Certainly, the problem of the relationship between science and religion has not only theological or ethical issues, but also social and political aspects. But I believe that definition of basic human values and principles today is fundamentally important for people all over the world. Actually,

today the need for a new world view promoted the successful interaction between science and religion [12, pp. 5-6].

Indeed, the impact of science and technology on the process of the formation of a personality and society nowadays is infinite and it will only increase. It has always been the most important factor of secularization. In fact, such influence of science and technology to humanity in the twenty first century also carries a potential threat to the essence and existence of a human being. So, for this reason it is necessary for Orthodox Christian theology to understand the modern reality. Thus it leads Christian theology all over the world including Russia to the development and popularization of discussions about relationship between science and religion.

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References

1. Frank, Semen L. Religiya i nauka [Religion and Science] // Religiya, filosofiya i nauka. Bryussel'. 1953, № 1, pp. 1-26.
2. Osnovy sotsial'noi kontseptsii Russkoi Pravoslavnoi Tserkvi. XIV. Svetskie nauka, kul'tura, obrazovanie [The Basis of the Social Concept of the Russian Orthodox Church. XIV. Secular science, culture and education] [online] // Available from: http://www.patriarchia.ru/db/text/141422.html (accessed 10.09.2016).
3. Otkrytoe pis'mo prezidentu Rossiiskoi Federatsii V.V. Putinu [The open letter to the President of the Russian Federation from ten academicians, the Members of the Russian Academy of Sciences] [online] // Available from: http://scepsis.net/library/id_1346.html (accessed 10.09.2016).
4. Shakhnovich, Marianna M., Shmonin, Dmitry V. Teologiya i religiovedenie v sovremennoi Rossii: praktika obrazovatel'noi deyatel'nosti [Theology and religious studies in contemporary Russia: the practice of educational activities] // Vestnik Russkoi khristianskoi gumanitarnoi akademii. 2013, Vol. 14, Is. 1, pp. 253-255.
5. Some Internet news [online] // Available from: http://www.vesti.ru /doc. html?id=345474&photo_id=409336&p=3&fr=1 http://www.patriarchia.ru/db/text/1106478.html https://mephi.ru/special/press/news/1387/9202/ http://www.religiopolis.org/news/149-miphi-zastav-rektorat-bogu-molitcya-on.html (accessed 10.09.2016):
6. Ginzburg, Vitaly L. Ob ateizme, religii i svetskom gumanizme [About atheism, religion and secular humanism.] Moscow: Librokom, 2011. See [online:] Vera v Boga nesovmestima s nauchnym myshleniem [Faith in God is incompatible with scientific thinking] // Available from:
http://www.atheism.ru/library/Ginzburg_2.phtml (accessed 10.09.2016):
7. Some Internet news [online] // Available from:
http://www.fontanka.ru/2007/05/29/089/ https://rg.ru/sujet/2842/
http://www.gazeta.ru/2006/10/26/oa_221708.shtml http://www.interfax-religion.ru/print.php?act=print_media&id=3146 (accessed 10.09.2016).
8. Some Internet news [online] // Available from:
https://www.ridus.ru/news/73497.html
http://macroevolution.livejournal.com/116402.html
http://annya-writer.livejournal.com/1097.html (accessed 10.09.2016).
9. See online: http://diak-kuraev.livejournal.com/455521.html?page=3 (accessed 10.09.2016)
10. Kuraev, Andrey V. Orthodoxy and evolution [online] // Available from: http://svitk.ru/004_book_book/15b/3407_kuraev-pravoslaviya_i_evolyuciya.php (accessed 10.09.2016).
11. Osnovy sotsial'noi kontseptsii Russkoi Pravoslavnoi Tserkvi. XII. Problemy bioetiki [The Basis of the Social Concept of the Russian Orthodox Church. XII. Problems of bioethics] [online] // Available from: http://www.patriarchia.ru/db/text/141422.html (accessed 10.09.2016).
12. Kasavin, Ilya T. Vvedenie. O vozmozhnosti novogo napravleniya issledovanii: "Science & Spirituality" [Introduction by Ilya Kasavin. On the possibility of a new research trend: "Science &

Spirituality"] // Nauka i religiya. Mezhdistsiplinarnyi i kross-kul'turnyi podhod. Moscow: "Kanon +", ROOI "Reabilitatsiya", 2006, pp. 5-10.

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Наука и религия в современной России: конфликт или диалог?

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Аннотация. В статье рассматриваются основные аспекты взаимоотношений между наукой и религией в современной России. В ней представлена как официальная позиция Русской Православной Церкви в отношении новейших научных достижений, светской культуры и образования, так и отдельные взгляды разных ученых, философов и богословов. В частности, в статье рассматривается реакция, существующая в академическом сообществе Российской Федерации, в отношении некоторых попыток внедрения теологии в секулярную сферу науки и образования. В статье отражены различные точки зрения на проблему выбора мировоззренческих ориентиров в современных условиях, когда христианской теологией обосновывается необходимость взаимодействия религии и науки.

Ключевые слова: наука и религия, Русская Православная Церковь, теология, религиоведение, светская культура, человеческое бытие, технология, насилие, атеизм, этика.

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'Unattractive, So Hopeless?' Feelings of Physical Unattractiveness and Hopelessness among Senior High Students

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Abstract

This study sought to investigate the influence of feelings of unattractiveness on hopelessness among adolescents. Using the cross-sectional survey design, total of 150 participants from two categories of senior high schools were sampled for the study. To achieve the aim for this study, the interaction effect of the following on hopelessness was investigated: gender and perceived attractiveness, school and perceived attractiveness and, religiosity and perceived attractiveness. Results showed that there was a significant positive relationship between perceived physical attractiveness and hopefulness. Implications of findings are discussed.

Keywords: attractiveness, unattractiveness, hopelessness, hopefulness, gender, religiosity, senior high school, student.

1. Introduction

Over decades, physical appearance had been noted as a vital contributing factor affecting the self-esteem of adolescents (Pardin, Lerner, & Spiro, 1981). According to Bersheid and Walster (1972), physical characteristics in those days seem to stimulate differential expectations of others depending on the degree of perceived attractiveness. The implication of receiving relatively consistent feedback from others based on physical appearance makes physically attractive and unattractive individuals more likely to develop self- images, social temperaments and styles of interpersonal behaviour that differ (Tucker, 1983).

Emphasis on being physically attractive begins in infancy (Langlois et al., 1987), continues throughout childhood, adolescence (Brooks-Gunn, & Petersen, 1983; Lerner, & Foch, 1987) and college years (Bryne, Ervin, & Lambert, 1970). Cash and Jandra (1984) stated that both children and adolescents differ in their response to people depending on the appearance and attractiveness

of those people. Early as the pre-school and elementary school years, children who are better looking typically receive higher status from their peers (Kleck, Richardson, & Roland, 1974; Vaghn, & Langlois, 1983). Bersheid, Walster and Borhstedt (1973) observed that adolescents who considered themselves as unattractive were the most unhappy group of respondents in a national study of personal happiness. Other researches show that, concern about physical appearance is the most worrisome problem among high school students (Eme, Maisak, & Goodale, 1979). Attractiveness has been found not only related to social status in childhood and adolescence (Henggeler, & Borduin, 1990) but also to indices of happiness, popularity, sociability and success in adulthood (Bersheid, & Walster, 1972). As the millennium drew closer, Lewis and Rosenblum (1999) have indicated that perceptions of physical attractiveness among boys and girls are not significantly different until age fifteen. Talbot (2012) however found no difference between men and women's ratings of self-perception of attractiveness.

As adolescents pay increasing attention to their body features and what they perceive important others think of them, they begin to form an ideal physical self-concept and definite stereotypes of typical and/or ideal physical appearance (Rauste-von Wright, 1989). Adolescents' views on appearance are strongly influenced by socially defined stereotypes and self-concept. This is likely to be adversely affected when one's features are perceived as deviation from what is normal (Page, 1992). Skin colour, appearance and social class have also been cited to be strongly linked (Masi de Casanova, 2004). Masi de Casanova (2004) for example have suggested that people of low social class have lower self-esteem that those of average and higher social class status. Other studies have also suggested physical attractiveness has an influence on hopelessness (Page, 1992). Bersheid and Walster (1972) indicated that such studies suggest that physically attractive people are hopeful and this hopefulness may be linked to confidence that one's physical attractiveness can turn things in his/her favour. In a systematic review, Anakwah, Wiafe-Akenteng, Sarfo and Parimah (2015) found evidence to suggest that physical attractiveness can even bias decision making in the court room.

Also, Abrams, Allen and Gray (1993) acknowledge that cultural variables play a vital role in body satisfaction. Those who accept European or Western standards view others whose physical appearance most closely resemble European ideals as more desirable (Chambers, Clark, Dantzler, & Barldwin, 1994). It must be well noted that not all cultures place the same beauty value on body features. Body attitude measures have been consistently associated with body mass in a direction that suggest that heaviness or high weight levels produce body dissatisfaction and unfavourable fitness and appearance evaluations (Harris, Walters, & Waschull, 2001). However, a wider range of body weight receives acceptance in African-American culture compared to Caucasian culture (Freedman, Carter, Sbrocco, & Gray, 2004). Most adolescents who perceive themselves as 'fat', 'obese', or 'large' usually have unhealthy eating habits. Wilson, Sargent and Dias (1994) found out that African American adolescents who perceive themselves as too large tend to skip meals to control their weight. Most become anorexics or bulimics as a result. Perry (1992) suggested that today's specifications for blonde and thin in the European and American societies is not an easy task since most girls get bigger during adolescence.

However, religious involvement cushions the harmful effects of certain types of adversity on black self-esteem (Homan, & Boyatzis, 2009). 'This stress-buffering pattern is particularly evident with regard to states of the physical body, its attractiveness and its health. Frequent participation in church communities appears to moderate the negative consequences of physical unattractiveness for black self-esteem' (Ellison, 1993). Pardin, et al. (1981) buttressed the initiating viewpoint by commenting that, physical attractiveness when rated is consistently seen to be positively related to self-esteem. The association between physical appearance (real or perceived) and self-esteem led to the hypothesis that perceptions to physical attractiveness may be related to other important aspects of adolescent mental health (Page, 1992).

Perceptions of unattractiveness are normally followed with hopelessness. Hopelessness has been implicated in conditions such as alcoholism, physical illness, sociopathy, and schizophrenia (Beck, Weissman, Lester, & Trexler, 1974). It has also been shown to be a key psychological factor in suicidal behaviours of adults (Beck, 1986). Scores on the Beck Hopelessness Scale have been found to be a significant predictor of the severity of suicidal intent and the extent of suicidal ideation among those hospitalized for attempted suicide (Beck, Kovacs, & Weissman, 1975).

Beck's theory of depression [Negative or Cognitive Triad] is of the view that, thoughts about the self, the external world, and the future all contribute to our mental health (Beck, 1995). Beck theorized that all three of these beliefs become negative a result of *common thought distortions* and this leads to depression. From Beck's theory it can be deduced that for someone to feel hopeless, it depends on his or her cognitive interpretation of an event or situation such as physical attractiveness.

Another model that supports this theory is the ABCDE model by Albert Ellis (Ellis, 2008). Ellis's ABCDE model was formerly known as the ABC model. In the ABCDE model, A, B, and C represent the three-step model which explains how events lead to thoughts, which in turn lead to beliefs and then feelings [A - Activating event, B - Belief, and C - emotional Consequence]. Ellis's model simply replaces these three terms with more easily remembered terms. According to Ellis, irrational beliefs are toxic because they function as rigid, dogmatic demands that we apply to ourselves. For example, "I must get an A in every class," "I need to be dating someone," or "I must be physically attractive." Although these may be strong preferences, they are not, in fact, "musts" or absolute rules (Ellis, 2008). Moreover, when we tend to couple these demands with overestimations of the consequences of failure like, "If I don't get an A, I'll dropout of school and end up on the street," "If I'm not dating anyone, I'm completely worthless," or "If I am not physically attractive, I will not get anyone to marry me", we develop a negative feeling such as being hopeless. Ellis sees flawed logic in all these self-statements and opportunity for therapeutic benefit in correcting them. To accomplish this correction, Ellis's model adds two more steps, D and E. In his model, D stands for Dispute [this is where you oppose your initial irrational belief], and E stands for Effective new belief.

Page (1992) has therefore suggested that hopelessness represents an aspect of emotional health and well-being and educational professionals should be concerned about it. Kashani, Reid and Rosernberg (1989) stated that little attention has been paid to hopelessness in educational literature and further little research has been conducted among adolescents. According to Beck, et al. (1974), hopelessness has been implicated in conditions such as alcoholism, physical illness, sociopathy, and schizophrenia. Beck (1986) further indicated that hopelessness has also been shown to be a key psychological factor in suicidal behaviour of adults. Regardless of all the negative repercussions of hopelessness, Kashani, et al. (1989) stated that little attention has been paid to hopelessness in educational literature and further little research has been conducted among adolescents. Hence, this study sought to investigate the effect of the perceived attractiveness or unattractiveness of adolescents on their level of hopelessness or hopefulness. The role of gender, class of school and religiosity were also considered in this paper.

2. Methodology

Population

The population under study was adolescents in Greater Accra Region. The sample frame consisted of Senior High School (S.H.S) students. The sample of S.H.S. students that participated in the study were from a well-endowed school and two less-endowed schools. A sample size of 150 students [72 from a well-endowed school and 78 from two less-endowed schools] participated in the study since a greater power was needed for any difference to be detected. Cohen (1992) indicated that the number of participants in any sample is directly related to the standard deviation of the sampling distribution and the more the participants, the narrower the distribution and greater the likelihood that any differences will be discovered (i.e., the greater the power). Ages from 13 to 16 had a total frequency of 76 (50.7%) and ages from 17 to 21 had a frequency of 72 (48%). Students from a well-endowed school had a frequency of 72 (48%) and from two less-endowed schools had a frequency of 78 (52%). Males were 91 (60.7%) and females were 59 (39.3%).

Sampling

Purposive sampling was used because the target population that was of interest to the researcher was only adolescents in senior high schools.

Measures

The survey tools that were used were the Beck Hopelessness Scale, the Estimating Physical Attractiveness Scale and the Santa Clara Strength of Religious Faith Questionnaire.

The Beck Hopelessness Scale developed by Aaron Beck is an internationally accepted measure in the prediction of suicide (Forintos, & Sallai, 2010). BHS is a 20-item true or false scale

with a coefficient alpha of 0.93 (Beck et al., 1974). Some of the items on the scale include: 'In the future, I expect to succeed in what concerns me most' and 'My future seems dark to me'.

The Santa Clara Strength of Religious Faith Questionnaire (SCSORFQ) by Plante and Boccaccini (1997) was designed to measure the strength of religious faith regardless of denomination and it was found to have a coefficient alpha of .95 and a split-half reliability of .92. Some of the items on the scale include: 'My religious faith is extremely important to me.' and 'I pray daily'.

On the other hand, the Estimating Physical Attractiveness Scale (EPAS) is a fairly new instrument that was developed by Swami, Furnham, Georgiades and Pang (2007). Because of this, little reliability and validity information exist. However, it has been used in a number of studies since its development and has proven to be a good measure of physical attractiveness (Swami et al., 2007). Some of the items on the scale include: 'Overall physical attractiveness' and 'Overall facial attractiveness'.

Procedure

A letter of consent from the Department of Psychology, University of Ghana requesting for permission to conduct a survey in schools together with a paper containing a brief description of the study and sample of the questionnaire that was administered was sent to the headmistress and some teachers for approval or consent.

When consent was given, the participants were sampled from some of the classes and a brief description of the study was given to them. However, they were partially deceived. They were told that they are being examined on their perceived physical attractiveness; but hopelessness was not mentioned so as to avoid incidents such as the provision of false answers for the fear of tarnishing their images especially before a stranger (researcher). However, after the study, participants were debriefed. To encourage honest responses, participants were assured and reassured of confidentiality and told not to write their names on the questionnaires.

A questionnaire consisting of three sections was administered to each participant. The first section contained demographics such as age and gender. The second section consisted of items from the Beck Hopelessness Scale and items from the Estimating Physical Attractiveness Scale. The final section consisted of items from Santa Clara Strength of Religious Faith Questionnaire. After participants were done answering the questions on the questionnaires, the questionnaires were collected for analysis.

Scoring

The Beck Hopelessness Scale (BHS) is a 20-item true or false scale. The total score can range from 0 to 20. Every "true" response attracts a score of 1 and every false response attracts a score of 0. Total scores ranging from: 0 to 3 are considered within the normal range, scores from 4 to 8 identify mild hopelessness, scores from 9 to 14 identify moderate hopelessness, and scores greater than 14 identify severe hopelessness (Beck and Steer, 1988).

However for this study, the Beck Hopelessness Scale was adapted to a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). The BHS contains 9 optimistic and 11 pessimistic questions; but to be able to have higher scores representing scores on hopefulness, the scoring for the pessimistic questions were reversed i.e., 4→1, 3→2, 2→3 and 1→4. As a result a total score of 80 represented the highest score on hopefulness and 20 represented the lowest score on hopefulness (severe hopelessness). In short, increasing scores from 20 pointed towards an increasing order of magnitude for level of hopefulness.

Also, the Estimating Physical Attractiveness is a 20-item scale. Each score on this instrument is compared to the normal distribution which has a Mean (M) of 100 and a Standard Deviation (SD) of 15. Based on this guide a rating of 55 is considered very unattractive, 70 unattractive, 85 low average, 100 average, 115 high average, 130 attractive, and 145 as very attractive (Swami et al., 2007).

For this study, one's total score on perceived attractiveness was scored by finding the mean of the scores for each item and mean scores below 100 were considered as unattractive and mean scores from 100 and above were considered as attractive.

The Santa Clara Strength of Religious Faith Questionnaire is a 10-item scale that is measured on a 4-point Likert scale ranging from strongly disagree (1) to strongly agree (4). Therefore, a total of 40 represented very high religiosity whiles a total of 10 represented very low religiosity.

3. Results

The result as shown in Table 1 indicated that there was a significant positive relationship between perceived attractiveness and hopefulness [$r_{(148)} = .20$, $\rho = .01$].

Table 1: Relationship between perceived attractiveness and hopefulness

Study variables	***r***	***ρ***
Attractiveness Hopefulness	.20	.01

The result as shown in Table 2, there was no significant interaction effect between gender and any level of perceived attractiveness on hopelessness [$F_{(1,149)} = 0.00$, $\rho = .991$].

The result similarly indicated no significant interaction effect existed between the strength of faith and perceived attractiveness on students' feelings of hopelessness [$F_{(1,149)} = .00$, $\rho = .991$].

Furthermore, there was no significant interaction effect between school and perceived attractiveness on hopelessness [$F_{(1,149)} = 1.97$, $\rho = .163$]. The result however showed a significant effect of religiosity on hopelessness [$F_{(1, 149)} = 10.53$, $\rho = .001$]. Thus, that students who were high on religiosity [mean = 63.97] are more hopeful than adolescents low on religiosity (mean = 58.78).

Table 2. Summary of ANOVA table of gender school type, physical attractiveness and religiosity on hopelessness

Source of Variance	**Sum of Squares**	***df***	**Mean Square**	**F-Ratio**	***ρ***
Gender	32.61	1	72.76	2.03	.342
ST	83.36	1	83.36	2.32	.130
PA	12.56	1	12.56	.35	.555
Religiosity	377.89	1	377.886	10.53	.001
Gender * ST	.11	1	.110	.003	.956
Gender * PA	.01	1	.005	.000	.991
Gender * Religiosity	5.67	1	5.67	.158	.692
ST * PA	70.65	1	70.65	1.97	.163
ST * Religiosity	3.57	1	3.57	.10	.753
PA * Religiosity	.004	1	.00	.00	.991
Gender * ST * PA	4.65	1	4.65	.13	.720
Gender * ST * Religiosity	14.76	1	14.76	.41	.522
Gender * PA * Religiosity	.20	1	.199	.006	.941
School * PA * Religiosity	6.68	1	6.68	.19	.667
Total	5863.973	149			

ST: Type of school; PA: Perceived attractiveness

4. Discussion

Findings from this study suggest that there is a positive relationship between adolescents' perceived physical attractiveness and hopefulness; which is also consistent with the study done by Page (1992). This suggests that, adolescents who perceive themselves as physically attractive will also perceive having increased opportunities in jobs, dating relationships, among others. This deduction buttresses an old adage that says; what is beautiful is good and that one's success is linked to how beautiful he/she is (Dion, Bersheid, & Walster, 1972). The systematic review by Anakwah et al. (2015) even suggested that decision making in the court room are likely to favour physically attractive people. Hence, such perceptions have been ingrained in most adolescents thereby influencing their hopefulness.

This study also revealed no interaction effect between gender and perceived attractiveness on hopefulness. This is confirms study by Talbot (2012) who found that men and women's ratings of self-perception of attractiveness did not significantly differ. However, the research conducted by

Lewis and Rosenblum (1999) does not support this finding. According to Lewis and Rosenblum (1999), sex differences were not significant until age 15 (which falls under the definition for adolescence). The inconsistency in this study's finding with some other previous study could be attributed to the fact that, Lewis and Rosenblum (1999) for example, only studied gender differences in perceptions of attractiveness and did not examine the interaction effect of gender and perception of attractiveness on hopefulness. However, this study investigated perceptions of attractiveness in relation to hopefulness; some past studies did not consider hopefulness as a variable. The reason for the inconsistency in finding could also be due to the differences in culture and socialization in the Ghanaian society and other Western counties. In Ghana, being hopeful or hopeless may not be heavily dependent on one's perceived physical attractiveness like in some Western societies that place much emphasis on modelling, but rather on other variables such as socioeconomic status and social network.

Additionally, the study did not show a significant interaction effect between school and perceived attractiveness on hopelessness. This finding comes to support findings by Masi de Casanova (2004). Results from his study indicated that the lower class (Colegio Amazonas) scored lower on the body and self-esteem questionnaire than those from the middle and upper class (Santa Fé). However, since the Amazonas valued being "arreglada", or making the best out of what they had and also complemented each other, it was observed that it reduced hopelessness among them. Therefore, a plausible reason for this result may be due to the fact that like the Amazonas, students from less-endowed schools do value being "arreglada" and do often complement each other thereby increasing feelings of hopefulness in them. Also, from the demographics, it was observed that a large percentage of students from a well-endowed school had parents who were professionals (doctors, engineers etc.) and were highly educated (tertiary and postgraduate). Therefore, another reason may be that because of the high educational standards and social statuses of their parents, the students generally had a high self-esteem just like the middle and upper class Sante Fé group in Masi de Casanova (2004) thereby increasing hopefulness in them.

The study did not find any significant interaction effect between religiosity and perceived attractiveness on hopefulness. Thus, adolescents who had a higher religious faith and perceived themselves as physically unattractive were not more hopeful than adolescents who had a comparatively lower religious faith and perceive themselves as physically unattractive. This finding is however not consistent with a study by Ellison (1993) which found that frequent participation in church communities appears to moderate the negative consequences of physical unattractiveness for black self-esteem. However as mentioned earlier on, a possible reason why religiosity and perceived attractiveness had not been seen to have any significant difference on hopefulness may be due to cultural and socialization differences in Ghana and the other Western societies. The inconsistency may however be attributed to the fact that the current study sampled adolescents while Ellison's (1993) study sampled both young and old people in his study. In addition, the current study sampled people from diverse religious backgrounds whilst the study by Ellison sampled only Christians. Adolescents who were high on religiosity were however found to be more hopeful than those who were low on religiosity.

5. Conclusion

Results from the study showed a significant relationship between perceived physical attractiveness and hopefulness. According to literature, feelings of hopelessness have a lot of negative implications on an individual. This can however be controlled if practical steps to promote psychosocial empowerment of individuals; especially adolescents are carried out.

6. Conflict of Interest Statement

The authors declare that they do not have any conflict of interest.

References

1. Abrams, K.K., Allen, L.R. & Gray, J.J. (1993) Disordered eating attributes and behaviours, psychological adjustment and ethnic identity: A comparison of Black and White female college students. *International Journal of Eating Disorders*, *14*(1), 49-57.

2. Anakwah, N., Wiafe-Akenteng, C. B., & Parimah, F. (2015). "Judging a book by its cover": A legal psychological review of target's physical appearance and legal decisions. *European Journal of Psychological Studies, 5*(1), 4-8.

3. Beck, A. T. (1986). Hopelessness as a predictor of eventual suicide: an overview. In J. J. Mann and M. Stanley (Eds.). *Psychology of suicidal behaviours*. New York: The New York Academy of Sciences.

4. Beck, A. T., & Steer, R. A. (1988). *Manual for the Beck Hopelessness Scale*. San Antonio, TX: Psychological Corp.

5. Beck, A. T., Weissman, A., Lester, D, & Trexler, L. (1974). The measurement of pessimism. The Hopelessness Scale. *Journal of Consulting and Clinical Psychology, 42,* 861-865.

6. Beck, A.T., Kovacs, M., & Weissman, A. (1975). Hopelessness and suicidal behaviour: An overview. *Journal of the American Medical Association*, *234,* 1146-1149.

7. Beck, J. S. (1995).*Cognitive therapy: Basics and beyond*. New York: Guilford Press.

8. Bersheid, E., & Walster, E. (1972). Beauty and the beast. *Psychology Today*, *5,* 42-46.

9. Bersheid, E., Walster, E., & Borhstedt, G. (1973).The happy American body: A survey report. *Psychology Today*, *11,* 119-131.

10. Brooks-Gunn, J., & Peterson, A. C. (1983). *Girls at puberty*: *Biological and psychological perspective*. New York: Plenum.

11. Bryne, D., Ervin, C.R., & Lambert, J. (1970). Continuity between the experimental study of attraction and real life computer dating. *Journal of Personality and Social Psychology*, 157-165.

12. Cash, T. F., & Jandra, L. H. (1984). The eye of the beholder. *Psychology Today*, *12*, 46-52.

13. Chambers, J. W., Clark, T., Dantzler, L., & Baldwin, J. A. (1994). Perceived Attractiveness, Facial Features and American Self-Consciousness. *Journal of Black Psychology*, *20*, 305-324.

14. Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112,* 155-159.

15. Dion, K. K., Bersheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of Personality* and Social Psychology, *24,* 285-290.

16. Ellis, E. (2008). Child custody evaluations. In R. L. Jackson (Ed.), *Learning Forensic Assessment* (pp. 417–448). New York: Taylor and Francis.

17. Ellison, C. G. (1993). Religious Involvement and Self-Perception among Black Americans. *Social Forces*, *71*(4), 1027-1055.

18. Eme, R., Maisak, R., & Goodale, W. (1979). Seriousness of adolescent problems. *Adolescence*, *14,* 93-99.

19. Forintos, P. D., & Sallai, J. (2010). Adaptation of the Beck Hopelessness Scale in Hungary. *Psychological Topics*, *2,* 307-321.

20. Freedman, R. E. K., Carter, M. M., Sbrocco, T., & Gray, J. J. (2004). Ethnic differences in preferences for female weight and waist-to-hip ratio: A comparison of African American and White American college and community samples. *Eating Behaviours*, 5, 191-198.

21. Harris, M. B., Walters, L.C., & Waschull, S. (2001). Body image and weight as correlates of eating behaviours for African-American college females. *Journal for Social and Behavioural Sciences*, *38*(1), 31-41.

22. Henggeler, S.W., & Borduin, C. M. (1990). The treatment of difficulties in peer relations. In S.W. Henggeler and C.M. Borduin (Eds.). *Family therapy and beyond: A multisystematic approach to treating behaviour problems of children and adolescents*. Pacific Grover CA: Brooks Cole Publication Company.

23. Homan, K. J., & Boyatzis, C. J. (2009). Body Image in Older Adults: Links with Religion and Gender. *Journal of Adult Development*, *16,* 230-238.

24. Kashani, J. H., Reid, J. C., & Rosenberg, T. K. (1989). Levels of hopelessness in children and adolescents: A development perspective. *Journal of Consulting and Clinical Psychology*, *57*, 496-499.

25. Kleck, R. E., Richardson, S.A., & Roland, L. (1974). Physical appearance cues and interpersonal attraction in children. *Child Development*, *45,* 305-310.

26. Langlois, J. H., Roggman, L. A., Cassey, R. J., Ritter, J. M., Rieser-Danner, L. A., & Jenkins, V. Y. (1987). Infant preferences for attractive faces: Rudiments of the stereotype. *Developmental Psychology*, *23*(3), 363-369.

27. Lerner, R. M., & Foch, T. T. (1987). *Biological-psychosocial interactions in early adolescents: A lifespan perspective*. Hilldale; NJ: Erlbaum.

28. Lewis, M., & Rosenblum, G. D. (1999). The Relations among Body Image, Physical Attractiveness and Body Mass in Adolescence. *Child Development*, *70*(1), 50-64.

29. Masi de Casanova, E. (2004). “No ugly women”: Concepts of Race and Beauty among Adolescent Women in Ecuador. *Gender and Society*, *18*(3), 287-308.
30. Padin, M.A, Lerner, R.M., & Spiro, A. (1981). Stability of body attributes and self-esteem in late adolescence. *Adolescence, 161,* 371-184.
31. Page, R.M. (1992). Feelings of physical unattractiveness and hopelessness among high school students. *The High School Journal*, *75*(3), 150-155.
32. Perry, N.Y. (1992). Why it’s so tough to be a girl. *Fortune*, 82-84.
33. Plante, T. G., & Boccaccini, M. T. (1997). The Santa Clara Strength of Religious Faith Questionnaire. *Pastoral Psychology*, *45,* 375-387.
34. Rauste-von Wright, M. (1989). Body image satisfaction in adolescent girls and boys: A longitudinal study. *Journal of Youth and Adolescence*, *18*, 71-83.
35. Swami, V. et al. (2007). Evaluating self and partner attractiveness of oneself and one’s romantic partner. *Journal of Individual Difference, 30*(1), 35-43.
36. Talbot, T. L. (2012). *Comparing self-perception of attractiveness and overall life satisfaction: The differences between men and women*. Doctoral dissertation, Western Carolina University.
37. Tucker, C. A. (1983). Self Concept: A function of self-perceived somatotype. *Journal of psychology*, *113*, 123-133.
38. Vaghn, B., & Langlois, J. H. (1983). Physical attractiveness as a correlate of peer status and social competence in pre-school children. *Developmental Psychology, 19,* 561-567
39. Wilson, D. B., Sargent, R., & Dias, J. (1994). Racial difference in selection of ideal body size by adolescent females. *Obesity Research*, *2*(1), 38-48.

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‘Непривлекательные, настолько безнадежны?’ Чувства физической непривлекательности и бесперспективности среди учащихся старших курсов

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Аннотация. Данное исследование было призвано изучить влияние чувств непривлекательности на ощущение бесперспективности среди подростков. С помощью кросс-секционного опроса, всего 150 участников старшей школы были отобраны для исследования. Для достижения цели данного исследования – изучить влияние взаимодействия на чувство безнадежности были исследованы следующие факторы: пол и привлекательность, школа и привлекательность, религиозность и привлекательность. Результаты показали, что существует значительная положительная связь между восприятием физической привлекательности и оптимизма. В статье обсуждаются результаты исследования.

Ключевые слова: привлекательность, непривлекательность, безысходность, надежда, пол, религиозность, старшей школы, студент.

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