



Theoretical Approaches

Empirical Approaches

Local, Regional and
Global Quality of Life

Sustainable Development
and Quality of Life

Freedom and
Quality of Life

Quality and
Quality of Life

Impact of development
science and technology
on quality of life

Methodology of
Quality of Life
and Happiness

Management of
sustainable
development

Current Issues

Perspectives of
Quality of Life





1. International Conference on Quality of Life



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13. Natalija Bogdanović, Aleksa Đurić CONCEPTS WITHIN A DISCOURSE OF SOCIAL SUSTAINABILITY OF THE CITY	95
14. Danijela Tadić, Miladin Stefanović, Aleksandar Đorđević, Aleksandar Aleksić DETERMINING THE FUNCTIONS OF DEPENDENCE BETWEEN QUALITY OF LIFE AND GDP	101
15. Slavko Arsovski, Goran Putnik, Slaviša Moljević, Dušan Đurović SUSTAINABLE QUALITY OF LIFE: IS IT POSSIBLE IN TRANSITION ECONOMICS?	107
16. Tea Spasojevic-Santic, Daniela Stanojlovic EARTHSHIP – A NEW HABITAT ON EARTH FOR QUALITY LIFE	123
17. Alev AKDOĞAN KAYMAZ, Alper BAYRAKAL, Onur İSKEFLİ, Sinem ÜLGEN SAKA, Ebrahim SARGIN THE EFFECTS OF OWNING A GERIATRIC PET ON LIFE QUALITY OF OWNERS: PRELIMINARY REPORT	127
18. Srdjan Vukadinovich DESIGNING OF NETWORK FOR THE DISMANTLING CENTERS OF THE END-OF-LIFE VEHICLES BY FUZZY ABC METHOD	133
19. Snežana Vrekić, Milosav Đorđević INDEX OF QUALITY OF LIFE AND INDEX OF GLOBAL AGING.....	137
20. Jasna Petrić COMMUNITY EVALUATION MEASURED BY THE NEIGHBOURHOOD SATISFACTION SCALE (NSS).....	143
21. Igor Klopotan, Krešimir Buntak, Ivana Droždek PARAMETERS INFLUENCING EMPLOYEE LOYALTY	149
22. Cornelia Petroman, Simona Albu, Gelu Movileanu, Ioan Petroman, Filip Baba, Diana Marin STUDY ON THE SWINE CARCASSES AND THE MEAT QUALITY EXPLOITED IN INTENSIVE SYSTEMS IN ROMANIA	161
23. Dragan D. Milanović, Petar Kefer, Mirjana Misita, Marija Milanović INTEGRATED MANAGEMENT MODEL FOR COMPANIES WITH MULTIPLE LOCATIONS	165
24. Katarina Stojanović QUALITY OF TRANSFORMED SETTLEMENTS IN THE CONTEXT OF FINANCIALIZATION	171
25. Merce Bernardo, José M ^a Castán Farrero, Martí Casadesús THE IMPACT OF MANAGEMENT SYSTEMS INTEGRATION THROUGH THE VALUE CHAIN	179
26. Bernard Binczycki, Wiesław Łukasiński DETERMINANTS OF QUALITY OF WORK CONDITIONS	187

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DETERMINING THE FUNCTIONS OF DEPENDENCE BETWEEN QUALITY OF LIFE AND GDP

Abstract: *In this paper, the appropriate form of the function which describes the dependence of the quality of life and gross domestic product (GDP) in developing countries is determined. A method for determining a regression curve based on mathematical statistic approach is presented.*

Keywords: *quality of life level, GDP, mathematical statistic approach*

1. INTRODUCTION

Evaluation and management of quality of life (QoL) is an interesting research topic in different research domains. Quality of life depends on different factors, such as economic factors, social networks and communication, culture, all political stability, etc.

Many researchers believe that GDP is the most important economic factors affecting the QoL. There are many methodologies for determination of GDP impact on QoL level. The most commonly used are experimental methods. Accuracy of results obtained in this way depends on the choice of sample, method of measurement, accuracy of processing the measurements results, etc. Although, with all the limitations of the experimental method, it can be argued that the results obtained in this way are generally satisfactory accurate [1]. It can be mentioned that experimental methods require hiring a lot of people that induces high costs of research.

The aim of this paper is to describe dependence of the quality of life level from GDP by applying analytical function. Behavioral testing tool can determine the value of GDP at which it achieves the highest level of QoL [2].

Determination of analytic functions is based on regression analysis. The values of the parameters of this function are based on the method of least squares. Accuracy of regression model is tested by using the techniques of variance analysis [3].

The paper is organized as follows: in

Chapter 2 data used in the problem are presented. In Chapter 3 an illustrative example is shown. While, in the fourth chapter conclusions are provided.

2. PROBLEM STATEMENT

Determination of analytic functions which describes the dependence of QoL and level of GDP is realized through the steps that are further described.

Step 1. The quality of life is measured through The Happy Planet Index (HPI). HPI is a measure of overall life satisfaction. HPI consists of: individual satisfaction, life expectancy and environmental footprint. Individual life satisfaction has three components: a positive impact, the negative impact and satisfaction with life. Life expectancy at birth can be calculated taking into account the genetic predisposition and the living conditions in the country as well as respecting the mortality rate taking into account all stages of life of people in the country [4]. Environmental impact is measured by the amount of food consumed, the degree of pollution of air, water and soil. In many surveys over world countries are ranked according to HPI values. In this paper, respecting the results of these researches, expert teams assessed the quality of life according to a standard measuring scale. A value of 1 means that the value of QoL is the smallest, and opposite value of 9 means that the value of QoL is the highest within the population in the considered

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