ULUSLARARASI AFRO-AVRASYA ARAŞTIRMALARI DERGİSİ
INTERNATIONAL JOURNAL OF AFRO-EURASIAN RESEARCH (IJAR)
E-ISSN 2602-215X
VOLUME 6- ISSUE 11- JANUARY 2021 / CİLT 6 – SAYI 11 – OCAK 2021

SÜRDÜRÜLEBİLİR KALKINMA İLE SAĞLIK EKONOMİSİ ARASINDAKİ İLİŞKİNİN ANALİZİ: VAN İLİ ÖRNEĞİ

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Araştırma Makalesi
Research Article

Geliş Tarihi
Received: 03.07.2020

Kabul Tarihi
Accepted: 25.01.2021

ACKNOWLEDGEMENTS:
This study (2019-SBE-YL-7941) was supported by Van Yüzüncü Yıl University Scientific Research and Projects Center.

ANALYSIS OF RELATIONSHIP BETWEEN SUSTAINABLE DEVELOPMENT AND HEALTH ECONOMICS IN VAN CITY

ÖZ *Van ilinde sürdürülebilir kalkınma ile sağlık ekonomisi arasındaki ilişkinin analizi söz konusu makalede ortaya konmuştur. Çalışmada sürdürülebilir kalkınmanın kapsamı ve tanımına ek olarak, sağlık hizmetleri ekonomisinin kapsamı ve tanımı da ele alınmıştır. Uygulama bölümünde, Van ilinde sürdürülebilir kalkınma ile sağlık ekonomisi arasındaki ilişkinin analizi Van'da yaşayanlarla yapılan anket çalışmasıyla sunulmuştur. Van ilinde yapılan anket çalışması ile belirlenen Değişken faktörlerin bağlantı düzeyleri analiz sonunda sunulmuştur.*

Anahtar Kelimeler: Sürdürülebilir kalkınma, sağlık hizmetleri ekonomisi, Van

ABSTRACT *The analysis of relationship between sustainable development and health care economy in Van city has been revealed in the article in question. In addition to scope and definition of sustainable development in working, the scope and definition of health care economy have been dealt with. In application section, the analysis of relationship between sustainable development and health care economy in Van city has been presented through the survey study conducted with people living in Van. Connection levels of the Variable factors determined by survey study in Van has been presented at the end of analysis.*

Keywords: Sustainable development, health care economy, Van

INTRODUCTION

Sustainable development is the process of being able to supply of next generations needs by not making sacrifice from needs of today's people. From 1970s, the problems related to environment have arrested economists' attention. While the discipline of development, at first, was not taking into consideration environment problems, from the date mentioned it adopted an insight which pays regard to environment as well. The insight expressed as sustainable development. The Notion of sustainable development has unified both environment and social and financial factors which existed before in development. The subheadings of this attachment among the environment, the society and the economy are also playing an essential role without any doubt in this interaction. Health factor which is considered as an important subheading of society factor, comes to the front as a factor which directly influences the welfare of mankind. Out in open and closed area, in the interaction between sustainable development and health care the factors which affect human health play important roles. The countries need to increase the budget and services concerning health care so that individuals can spend healthy life. In the providing with health service health economy being is the sub-branch of economics is taking over this task. The task of health economy is to ensure the productivity of health care services and to make studies related to those.

GENERAL OVERWIEW ON DEVELOPMENT AND SUSTAINABLE DEVELOPMENT

The groundbreaking progresses in human life resulted from new inventions and changeover from the production based on manpower to machine power in Europe in 18th and 19th centuries started happening and it was called industry revolution. Industry revolution has caused to eradicate environment and natural sources with both fast growing the Population and the production. However, environmental problems had not been kept in sight by 1970.In parallel with starting to grow of environmental problems it requires a new approach for the notion of development. After 1980s, an awareness concerning of protecting of environment has started making progress in the world (Terzi, 2017: 7). Growing of destructive eradicating over environment has start becoming a threat in terms of ecosystem. Together with fast production, it has started being consumed much more sources from nature and the wastes of those sources consumed has damaged to nature a lot.

Growing of environmental problems extremely and beginning of overhanging the next generations by providing current generations by providing current generations with their needs requires to act in unison at an international level to keep under control such threats. Firstly, a few national and international treaties, agreements and papers have started to be prepared regarding this subject. International institutions such as United Nations (Un), Council of Europe (COE), Organization for Economic Cooperation and Development (OECD), World Trade Organization (WTO) have started to pay attention to the subject closely. They have also started to produce solutions about the subject by detecting environmental problems. It is admitted that the milestones of sustainable development began with 1972 Stockholm Declaration. With the Declaration it has been drawn attention to relations between human beings and environment, negative impacts of human activities on environment and the importance international cooperation about protecting the environment; besides, it has been admitted that people must have the right to live in healthy and clean environment. ''Sustainable Development'' has started to be emphasized and its background to be constituted with the Stockholm Declaration. That the carrying capacity has been pointed out, that accurately utilizing the sources has been defended, and that establishing the link between economic-social advancement with the environment can be stated as the reasons for this.

HEALTH ECONOMY

Economics is social science that examines how to meet infinite human needs with finite sources. It is divided into sub-branch. Health economy is a sub-branch which has emerged in accordance with applying the general rules of economics in health sector. Health economy can be defined as to produce the highest-level health care service and to distribute among groups and individuals making up the society in the best way by using allocated sources for health sector in the best way (the most economical, effective, productive, and rational). Although the health economy was first introduced by Mushkin's study it was identified with the essay of K. Arrow published in 1963.Arrow included some concepts about health market and health economy. Arrow in the introduction part, investigated unique differences of normative economy and stated the specific problems of health economy by comparing medical health industry with norms of welfare economy (Arrow, 1963: 941).

The study fields of health economy encompass all activities related to health services. Health economy overs a broad field of study which surrounds health concept. The aim of health economy is to provide the best output in health by using resources in the best way. Its abimes to live healthily without being ill and to utilize resources in the most efficient way While achieving this goal, which can be explained by the figure below.

Figure 1: The 'black box' of health economics

Source: Smith G.T, 1987

With the economists' dealing with the problems in health sector, health economy discipline has emerged. Once the need for few resources allocated to the health sector has increased, the healthy economists have started to carry out studies to minimize the ineffectiveness experienced in health sector. The reasons of improvements in health economy are listed as (Şantaş, 2017: 86-87):

1.When compared to human's demands, existing resources are scarce. This fact indicates that all needs and demands cannot be met.

2.Resources have alternative areas of usage. This is identified as ''opportunity cost.''

3.Each person owns different needs and demands and to each person his/her own needs and demands are more important.

THE RELATIONSHIP BETWEEN SUSTAINABLE DEVELOPMENT AND HEALTH ECONOMY

With the occurrence of Industrial Revolution positive events appeared in economic, social, environmental, and demographic developments. Following all these developments there have been advancements in health field. One of the consequences of the Industrial Revolution is that the differences of development levels among countries have increased. Today health is one of the most important means of economic development. Therefore, to ensure an effective economic development, countries should provide

individuals with every service in health sector. Because, when a healthy individual can work produce something, it contributes to national (Kanberoğlu ve Günsan, 2018: 787).

Sustainable development concept involves environment, economy, socio-demographic and health elements. The fundamental characteristic of sustainable development concept is to meet the needs of existing population in a way that will not hinder meeting the needs of Future generations. The importance of this definition in terms of health care system and services is to improve the life standards of humans without damaging the environment. However sustainable development concept handles more than just the attempts to protect the environment. This concept also includes Future generations and being healthy in long term. Sustainable development focuses on not only the increase of income but quality of life equality among individuals and generations, human welfare social and moral aspects in a way that will cover decreasing the poverty. Because next generations have right to live in a clean world as much as we do (Çelik,2006:27). Themes and indicators stated at Table 1 have importance in sustainable development and health relations

Table 1. Evaluation of Sustainable Development Goals Theme

THEME	SUB-THEME	INDICATOR
HEALTH	Nutritional Status	Nutritional status of children
	Death rate	Life expectancy at birth
		Child mortality rate under 5 years
	Hygiene Conditions	Proportion of the Population who has adequate polluted water and waste services.
	Drinking water	Proportion of Population waste service who able to find clean drinking water.
	Health care	Population receiving primary healthcare. Vaccination against infections child diseases Using proportion of birth control methods

Source: Çelik, 2006:34

When we evaluated the relationship between sustainable development and health, nutritional status, death status, death rate, hygiene Conditions drinking water and health care services become important factor. Hence within this relationship these factors reveal the negative or positive aspects.

LITERATURE SURVEY

The literature review on health is summarized in the table below.

Author	Coverage
Taşkın (2011)	During the literature survey, it has been found out that examining the relationship between sustainable development and health, has obtained different results.
Çelik (2006)	During literature survey, it has been found out that examining the relationship between sustainable development and health has investigated the role of health services in a developed society which is the goal all nations.

Poyraz (1990)	During literature survey, it has been found out that examining the relationship between development and health has mentioned measurements which are to be taken to make health care services in Turkey productive.
Somunoğlu (1999)	During literature survey it has been found out that has dealt with different models about health concept.
Ulutürk (2015),	During literature survey it has been found out that has mentioned QALY and DALY criteria in measuring the health.
Gibis and Wild (2003)	During literature survey it has been found out that have handled the evaluation of health inversion in countries based on social insurance by Germany, Netherlands, and Austria examples
Loş (2016)	During literature survey, it has been found out that has used multi-dimensional scaling analysis method. She has wanted to reveal the differences and similarities among 34 OECD member countries.
Mendelson and Schwartz (1993)	During literature survey it has been found out that have stated that cost increase ageing and demographic increase have impacts on health.

SURVEY STUDY TO DETERMINE THE RELATIONSHIP BETWEEN SUSTAINABLE DEVELOPMENT AND HEALTH ECONOMICS

Analysis of the relationship ‘‘between sustainable development and health Economics in Van City’’ in our study, 400 participants were asked 20 questions and the data obtained was interpreted with the SPSS program. The participants were presented with options such as ‘‘I absolutely disagree’’, ‘‘I disagree’’, I ‘‘I partially agree’’, ‘‘I agree’’, ‘‘I definitely agree’ ’on the questions and these options 5 were given with a score of 1,2,3,4,5. The analysis was conducted with parametric test as the data was normally distributed. **‘‘Independent t test’’** and **‘‘One-way Anova (variance)’’** analysis was performed. The independent t test is analyzed based on demographic characteristics, gender, and marital status by taking averages of respondents answer to survey questions based on two independent variables. The one-way ANOVA test is applied to more than two variables. Demographic characteristic such as age, occupation, education status is analyzed as to how participants answer 20 question. If the average of the groups is ‘‘3 and above’’ it means that the participants approach the questions positively, meaning that they participate in the given question. If the averages of the groups are ‘‘2 and below’’ it means that the participants don’t take asked positive approach to the questions asked or don’t participate in the question asked.

RELIABILITY ANALYSIS

Table 2. Reliability Analysis Table

Cronbach's Alpha	Cronbach's Alpha is based on standard question	Number of questions
0,927	0,929	20

The alpha values were found to be 0,927 and the reliability of the 20 questions addressed to the participants was very high.

FREQUENCY TABLES

Table 3. Distribution of the Participants by Age

		Frequency	%	Valid %	Cumulative %
Valid	15-25 between	109	27,3	27,3	27,3
	26-35 between	159	39,8	39,8	67,0
	36-45 between	83	20,8	20,8	87,8
	45-60 between	39	9,8	9,8	97,5
	60 and over	10	2,5	2,5	100,0
	Total	400	100,0	100,0	

There are 109 people between the ages of 15-25, 159 people between the ages of 26-35, 83 people between the ages of 45-60 and 10 people above the age of 60.

Table 4. Distribution of the Participants by Gender

	Frequency	%	Valid %	Cumulative %
WOMAN	194	48,3	48,3	48,3
MAN	206	51,5	51,5	99,8
Total	400	100,0	100,0	

The number of female participants was 194 and the number of male participants was 206.

Table 5. Distribution of the Participants by Education

	Frequency	%	Valid %	Cumulative %
Primary school	2	0,5	0,5	0,5
Middle School	10	2,5	2,5	3,0
High School	91	22,8	22,8	25,8
University	225	56,3	56,3	82,0
Graduate	72	18,0	18,0	100,0
Total	400	100,0	100,0	

The participants provided 2 elementary school, 10 secondary school, 91 high school, 225 university and 72 graduate students.

Table 6. Distribution of the Participants by Income

	Frequency	%	Valid %	Cumulative%
0-1000 ₺	14	3,5	3,5	3,5
1000-1500 ₺	15	3,8	3,8	7,2
1500-2000 ₺	47	11,8	11,8	19,0
2000-2500 ₺	47	11,8	11,8	30,8
2500 over	277	69,3	69,3	100,0
Total	400	100,0	100,0	

The number of the participants with 0-1000 ₺ income is 15 people with 1000-1500 income, 47 people with 2000-2500 income and 47 people with income over 2500 ₺.

Table 7. Table of Distribution by Place of Residence of Participants

	Frequency	%	Valid %	Cumulative %
Town center	343	85,8	85,8	85,8
District	50	12,5	12,5	98,3
Town or village	7	1,8	1,8	100,0
Total	400	100,0	100,0	

Of the participants 343 were from the city center, 50 were from the district and 7 were from town and villages.

Table 8. Distribution Table by Marital Status of Participants

	Frequency	%	Valid %	Cumulative %
Single	209	52,3	52,3	52,3
Married	191	47,8	47,8	100,0
Total	400	100,0	100,0	

Of the participants, 209 were single and 191 were married.

Table 9. Distribution Table of Participants by Profession

	Frequency	%	Valid %	Cumulative %
Tradesmen	21	5,3	5,3	5,3
Student	70	17,5	17,5	22,8
Officer	143	35,8	35,8	58,5
Academician	20	5,0	5,0	63,5
Other	146	36,5	36,5	100,0
Total	400	100,0	100,0	

Of the participants 21 were tradesmen, 70 were students 143 were Officer, 20 were academician and 146 were from other Professional.

INDEPENDET t TEST

One of the parametric tests, the independent t test averages, two Independent variables and makes a comparison. In our analysis we averaged the answers to the 20 questions we asked the respondents based on their gender and marital status. When gender and marital status are two choices and independent of each other (women and man are independent of each other, married and single are independent of each other) the average of 20 questions is taken to see if there is a significant difference according to gender and marital status. If the sig(p) value is greater than 0.05 there is no significant difference and we interpreter, the analysis according to the mean. If the average values are ‘‘3’’ and above it means that the participants have a positive approach to the questions asked. If average has a value below ‘‘3’’ it means that participants are not participating in the questions asked.

t Test Results

Table 10. Table of Statistical Values According to Gender Status of Participants

	Gender	Person	Average	Standard deviation	Standard error average
The relationship between sustainable development and health	Woman	193	3,9101	0,70859	0,05101
	Man	206	3,8587	0,68452	0,04769

Table 11. t Test Table According to Gender Status of Participants

		Levene's Equality of Variances		Equality of means t-test						
		f	Sig.	t	df	Sig. (2-tailed)	Average differences	Standard Error differences	95% confidence interval	
									Lower	Upper
The relationship between sustainable development and health	Assumption of equality of variances	0,840	0,360	0,737	397	0,462	0,05139	006975	0,08574	0,18852
	Assumption that the variances are not equal			0,736	393,081	0,462	0,05139	0,06983	0,08590	0,18868

Hypothesis 1: ''There is a significant difference between sustainable development and health according to the genders of participants.''
Hypothesis 2: ''There is not a significant difference between sustainable development and health according to the genders of participants.''

As a result of t test homogeneous and sig(p) value has been found 0.462, which has become bigger than 0.05 significance value. In this situation, we reject as Hypothesis 1 and we accept Hypothesis 2. In other words, the value which has been obtained according to the participants' gender status has been bigger a significant difference does not exist between sustainable development and health. When we look at the averages of men and women at Table 11, 3.91 for women and 3.85 for men, there is not a difference at a significant degree. A significant difference does not exist for the relationship between sustainable development and health in terms of gender situation of men and women and it has been concluded that there is not a significant difference between sustainable development and health in both men and women. That there exists no difference means they agree with the questions.

Table 12. Statistical Values Table According to Marital Status of Participants

	Marital status	Person	Average	Standard deviation	Standard error average
The relationship between sustainable development and health	Single	209	3,8753	0,69782	0,04827
	Married	191	3,8939	0,69386	0,05021

Table 13. t Test Table According to Marital Status of Participants

		Levene's Equality of Variances		Equality of means t-test						
		f	Sig.	t	df	Sig(2-tailed)	Average differences	Standard Error differences	95% confidence interval	
									Lower	Upper
The relationship between sustainable development and health	Assumption of equality of variances	0,259	0,611	0,267	398	0,790	0,01859	0,06966	0,15554	0,11836
	Assumption that the variances are not equal			0,267	395,170	0,790	0,01859	0,06965	0,15551	0,11833

Hypothesis 3: ''There is a significant difference between sustainable development and health according to marital status of the participants.''
Hypothesis 4: ''There is not a significant difference between sustainable development and health according to marital status of the participants.''

As a result of t test homogeneous and sig(p) value has been found 0.790, which has become bigger than 0.05 significance value. In this situation, we reject as Hypothesis 3 and we accept Hypothesis 4. In other words, the value which has been obtained according to the participants' marital status has been bigger a significant difference does not exist between sustainable development and health. When we look at the averages of men and women at Table 13, 3.87 for single individuals and 3.89 for married individuals, there is not a difference at a significant degree. A significant difference does not exist for the relationship between sustainable development and health in terms of marital situation of single and married individuals and it has been concluded that there is not a significant difference between sustainable development and health in both single and married individuals. As a result of t test which was carried out according to both gender and marital status, it has been concluded that when there are positive improvements for health factor, indicators of sustainable development advances may occur in health status of the society.

-One Way Anova Test (Variance)

The correlation averages among more than two variables are analyzed one-way anova test. By using the one-way Anova test, a comparison is made between their answers to questions which are averaged according to demographic features of participants such as education, occupation, age city and these groups. Whether a significant correlation exists between groups and if it does, between which groups it exists is tried to be tested. In Anova test, ***Post Hoc test*** and ***Tukey*** test are looked at if variances are homogeneous, ***Bonferroni*** test is looked at if they are not and the comparison is made between groups.

Table 14. Statistical Values Table According to Education Status of Participants

	Person	Average	Standard deviation	Standard error	95% confidence interval		Minimum	Maximum
					Lower	Upper		
Primary School	2	2,4000	1,06066	0,75000	6,1297	12,9297	2,65	4,15
Secondary School	10	2,8600	0,66825	0,21132	3,3820	4,3380	2,95	4,75
High School	91	2,7978	0,7210	0,07559	3,6476	3,9480	1,90	5,00
University	225	2,8769	0,70709	0,04714	3,7840	3,9698	1,50	5,00
Postgraduate	72	3,0331	0,60626	0,07145	3,8906	4,1756	2,15	5,00
Total	400	3,8842	0,69512	0,03476	3,8159	3,9525	1,50	5,00

Table 15. Anova Table According to Education Status of Participants

	Average sum of squares	Df	Average squares	F	Sig.
Intergroup comparison	2,763	4	0,691	1,436	0,041
	190,030	395	0,481		
Total	192,793	399			

Hypothesis 5: "There is a significant difference between sustainable development and health according to education status of the participants."

Hypothesis 6: "There is not a significant difference between sustainable development and health according to education status of the participants."

According to table 15, sig(p) was found to be 0.041 and this value. We reject Hypothesis 6, and we accept Hypothesis 5. That is, there is significant difference between the educational status of the participants and the sustainable development and health. When we look at the average of the groups in table 14, the average of the graduate students was found to be 3.8842. According to the results of Anova test, which is higher than 3, the participants were asked to participate in the questions meaning that there is a significant difference between sustainable development and health. When we look at the average of the other groups, primary school average was 2.4000, secondary school average was 2.8600, high school average was 2.7978 and university average was 2.8769. If these values are below 2, it means that the participants didn't participate in the questions. When we look at the total in general it is concluded that there is no significant difference between sustainable development and health as it is above 3. In other words, the participants had a positive approach to the questions.

Table 16. Statistical Values Table According to Income Status of Participants

	Person	Average	Standard deviation	Standard Error	95% confidence interval		Minimum	Maximum
					Lower	Upper		
0-1000 ₺	14	4,0214	0,51988	0,13894	3,7213	4,3216	3,10	4,90
1000-1500 ₺	15	3,6700	0,80463	0,20775	3,2244	4,1156	2,20	5,00
1500-2000 ₺	47	3,9787	0,7443	0,10858	3,7602	4,1973	2,00	5,00
2000-2500 ₺	47	3,6064	0,62159	0,09067	3,4239	3,7889	1,90	5,00
2500- above	277	3,9200	0,69051	0,04149	3,8383	4,0017	1,50	5,00
Total	400	3,8842	0,69512	0,03476	3,8159	3,9525	1,50	5,00

Table 17. Anova Table According to Income Status of Participants

	Average sum of squares	Df	Average squares	F	Sig.
Intergroup comparison	5,354	4	1,338	2,821	0,025
	187,439	395	0,475		
Total	192,793	399			

Hypothesis 7: "There is a significant difference between sustainable development and health according to income status of the participants."

Hypothesis 8: "There is not a significant difference between sustainable development and health according to income status of the participants."

According to table 17, sig(p) was found to be 0.025 and this value is 0.05 smaller than significance value. We reject Hypothesis 8, and we accept Hypothesis 7. That is, there is significant difference between the income status of the participants and the sustainable development and health. When we look at the average of the groups in table 16, the average of the participants with 0-1000 ₺ income was found to be 4.0214. According to the results of Anova test, which is higher than 3, the participants were asked to participate in the questions meaning that there is a significant difference between sustainable development and health. When we look at the average of the other groups, 1000-1500 ₺ income 3.670, 1500-2000 ₺ income 3,978, 2000-2500 ₺ income 3.606, and 2500 and over ₺ income 3.920 are seen to have values. Given that these values are above 3, it means that the participants agree with the questions and that there is a significant correlation between sustainable development and health.

Table 18. Statistical Values Table According to Professional Status of Participants

	Person	Average	Standard deviation	Standard Error	95% confidence interval		Minimum	Maximum
					Lower	Upper		
Tradesmen	21	4,1881	0,56633	0,1238	3,9303	4,4459	3,00	5,00
Student	70	3,8593	0,75557	0,09031	3,6791	4,0394	1,90	5,00
Civil servant	143	3,8140	0,77828	0,06508	3,6853	3,9426	1,50	5,00
Academician	20	4,3072	0,48236	0,10786	4,081	4,5330	3,5	5,00
Other	146	3,8633	0,58853	0,04871	3,7670	3,9596	2,15	5,00
Total	40	3,8842	0,69512	0,03476	3,8159	3,9525	1,50	5,00

Table 19. Anova Test Table According to Professional Status of Participants

	Average sum of squares	Df	Average squares	F	Sig.
Comparison between groups	6,331	4	1,583	3,353	0,010
	186,462	395	0,472		
Total	192,793	399			

Hypothesis 9: "There is a significant difference between sustainable development and health according to professional status of the participants."

Hypothesis 10: "There is not a significant difference between sustainable development and health according to professional status of the participants."

According to table 19, sig(p) was found to be 0.010 and this value is 0.05 smaller than significance value. We reject Hypothesis 10, and we accept Hypothesis 9. That is, there is significant difference between the professional status of the participants and the sustainable development and health. When we look at the

average of the groups in table 18, the average of the participants who are academician was found to be 4.3072. According to the results of Anova test, which is higher than 3, the participants were asked to participate in the questions meaning that there is a significant difference between sustainable development and health, also they approach more positive than other participants. When we look at the average of the other groups, artisan 4.1881, student 3.8593, civil servants 3.814, other 3.8633 are seen to have values. Sig. (p) value of variants is found to be 0.005 and as this is smaller than 0.05 the variants are not homogeneous. When we look at the Post Hoc Test, there is a significant difference between academician and civil servants. Given that these values are above 3, it means that the participants agree with the questions and that there is a significant correlation between sustainable development and health.

Table 20. Statistical Values Table According to Where Participants Live

	Person	Average	Standard Deviation	Standard Error	95% confidence interval average		Minimum	Maximum
					Lower	Upper		
Town center	343	3,8730	0,69421	0,03748	3,7993	3,9467	1,50	5,00
District	50	3,9509	0,71839	0,10160	3,7467	4,1551	2,20	5,00
Town or village	7	3,9571	0,63010	0,23815	3,3744	4,5399	3,15	4,85
Total	400	3,8842	0,69512	0,03476	3,8159	3,9525	1,50	5,00

Table 21. Anova Test Table According to Where Participants Live

	Average sum of squares	df	Average squares	F	Sig.
Comparison between groups	0,303	2	0,151	0,312	0,732
	192,490	397	0,485		
Total	192,793	399			

Hypothesis 11: "There is a significant difference between sustainable development and health according to where the participants live."

Hypothesis 12: "There is not a significant difference between sustainable development and health according to where the participants live."

According to table 21, sig(p) was found to be 0.732 and this value is 0.05 bigger than significance value. We reject Hypothesis 11, and we accept Hypothesis 12. That is, there is not significant difference between where the participants and the sustainable development and health. When we look at the average of the groups in table 20, city dwellers 3,8730, county dwellers 3,9509, town-village dwellers 3,9571 are the averages. Sig. (p) value of variants is found to be 0.714 and the variants are homogeneous. When we look at the Post Hoc Test, there is not a significant difference between groups. According to the results of Anova test, which is higher than 3, the participants were asked to participate in the questions meaning that there is a significant difference between sustainable development and health.

Table 22. Statistical Values Table According to Age Status of Participants

	Person	Average	Standard Deviation	Standard Error	95% confidence interval average		Minimum	Maximum
					Lower	Upper		
15-25 between	109	3,8156	0,66697	0,06388	3,6890	3,9422	1,90	5,00
26-35 between	159	3,8814	0,67265	0,05334	3,7761	3,9868	1,90	5,00
36-45 between	83	3,7914	0,75352	0,08271	3,6269	3,9560	1,50	5,00
45-60 between	39	4,1333	0,68742	0,11008	3,9105	4,3562	2,05	5,00
60 and over	10	4,4750	0,42246	0,13359	4,1728	4,7772	3,70	5,00
Total	400	3,8842	0,69512	0,03476	3,8159	3,9525	1,50	5,00

Table 23. Anova Test Table According to Age Status of Participants

	Average sum of squares	df	Average squares	F	Sig.
Comparison between groups	7,139	4	1,785	3,798	0,005
	185,653	395	0,470		
Total	192,793	399			

Hypothesis 13: "There is a significant difference between sustainable development and health according to age status of the participants."
Hypothesis 14: "There is not a significant difference between sustainable development and health according to age status of the participants."

According to table 23, sig(p) was found to be 0.005 and this value is 0.05 smaller than significance value. We reject Hypothesis 14, and we accept Hypothesis 13. That is, there is significant difference between the age status of the participants and the sustainable development and health. We can understand between which groups is the significant difference by examining the averages when we look at group averages in table 22, 15-25 ages 3,856, 26-35 ages 3,8814, 36-45 ages 3,7914 45-60 ages 4, 1333, 60 ages and over 4.4750 are seen to have values. The participants were asked to participate in the questions meaning that there is a significant difference between sustainable development and health, also they approach more positive than other participants. However, we can see that 60 ages and over approach more positively with 4,4750 average. When we look at homogeneous tests of variants sig(p) value, is 0.373 and this value is bigger than 0.05 and variants are homogeneous. When we look at Post Hoc Test Tukey there is a significant difference between 15-25 ages and 65 ages and over; 15-25 ages group with 3,8156 average and 60 ages and over group with 4.4750 average have a significant difference. However, since both groups have over 3 average, it means that they give positive responds to the questions.

CONCLUSION AND RECOMMENDATIONS

The concept of sustainable development includes environmental, economic, socio-demographic and health elements. The point emphasized in sustainable development is that it meets the needs of the current population in a way that doesn't prevent the meeting of the needs of Future generations. When t is evaluated in terms of health services it is important to increase the quality of human life without damaging

the environment while meeting these needs. Because sustainable development covers not only protecting the environment but also being healthy in the long term. Health indicators of sustainable development include nutritional status (nutritional status of children) mortality rate (mortality rate of children under 5 years of life expectancy at birth) hygiene conditions (proportion of population with adequate contaminated water and waste services services) drinking water (proportion of population with clean drinking water) indicators such as the rate of population receiving primary health care, vaccination against infections pediatric diseases, the use of birth control methods reveal the relations ship between sustainable development and health.

When the results of hypothesis test are evaluated collectively, it can be said that there is a positive relationship between sustainable development and health. In this context, it can be said that improvements health indicators will boost social welfare in line with new analysis results. As a result of the survey results and observations made in the thesis study, it is estimated that the Following suggestions will positively affect the sustainable development health relationship in Van city. These suggestions can be listed as follows.

- Vaccination to protect children living in Van against infectious diseases,
- Investigation of education levels of citizens living in Van city,
- To inform the citizens living in Van about healthy living,
- To minimize the environmental damage caused by the factories in Van,
- Providing access to health services for citizens living in villages,
- Providing the citizens of Van to have access to clean water,
- Attention should be paid to hygiene conditions in places such as hospitals, school and dormitories where the citizens living in Van collectively life,
- Increasing the preventive health services of the citizens in Van city,
- Medical wastes, household wastes, solid wastes collected and disposed of separately from the city,
- Effective awareness- raising activities to avoid unhealthy consumption while meeting the needs of the day,
- Adoption of evasion from environmental and economic activities that will be adversely affect by health,
- Ultimately, development (growing) and health are defining each other to ensure internalization,

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