General well-being

Oleksandr Afanasyev (50773)

Curso; EST - Instituto Politécnico do Cávado e do Ave, Portugal.

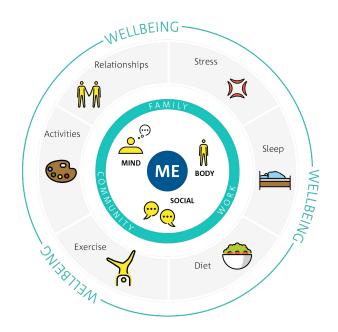
a50773@alunos.ipca.pt

Introduction

The term well-being is used in philosophy to describe everything that is in itself good for someone. Popular use of the term 'well-being' usually relates to health. Well-being is a sustainable condition that allows the individual or population to develop and thrive. Well-being has been linked to success at professional, personal, and interpersonal levels.

Gender is an important social determinant of health and gender-based analysis is necessary to improve women's and men's health and health care.

The main goal of this study is to identify explanatory factors for general well-being and the relationship of some variables to this factor.



Abstract

The purpose of this study was to assess people's general well-being using the database 'Base de dados' (BD). BD is a database consisting of 45 variables, these are examples of variables that I used in my work: sex, age, social support, optimism, practice of physical exercise and general well-being. Data from 158 people were entered into the database, of which 54 (34.2%) were men and 104 (65.8%) were women. The mean age of the study sample was 24.96 years. Statistical analysis was performed using SPSS version 25 statistical software.

Work progress

Hypotheses I chose to test:

- **H1:** The general well-being differs between sex.
- **H2:** The general well-being varies with practice of physical exercise.
- **H3:** Verify if the sex, age, optimism and social support are predictors of general well-being.

Hypothesis 1

|H0: μM = μW |H1: μM ≠ μW

Table 2 - Descriptive statistics of general well-being. T test

	Sex1	N	Mean(SD)	р
General well-being	0,00	104	37,0673	0,09
	1,00	54	41,5741	

Hypothesis 2

- **X1** general well-being of individuals who never practice in sports
- **X2** general well-being of people who practice more than 3 times a week
- **X3** general well-being of people who practice less than 3 times a week

Test for homogeneity of variation:

H0:
$$\sigma^2_{x1} = \sigma^2_{x2} = \sigma^2_{x3}$$

H1: $\exists i, j: \sigma^2_{xi} \neq \sigma^2_{xj}$

Table 3 - Test for homogeneity of variation

Levene Statistic	df1	df2	р
1,109	2	155	0,332

Table 5 - Descriptive statistics of the relationship between general well-being and the number of physical activities. ANOVA

Are there groups in which the average general well-being varies?

H0: $\mu 1 = \mu 2 = \mu 3$ H1: ∃i,j: µi ≠ µj

	Sum of Squares	df	Mean Square	F	р
Between groups	1140,745	2	570,373	5,582	0,005
Within groups	15838,926	155	102,187		
Total	16979,671	157			

Table 4 - Descriptive statistics of the relationship between general well-being and the number of physical activities. ANOVA

General well-being

	N	Mean(SD)
More than 3 times a week	47	41,2766
Less than 3 times a week	72	39,2778
Never	39	34,1538
Total	158	38,6076

SD=St.deviation

Graph 1 - graph of the relationship between average total well-being and the number of physical activities.

3. H0:
$$\mu$$
2 = μ 3
H1: μ 2 \neq μ 3

2.
$$\frac{\text{H0: } \mu \text{1} = \mu \text{3}}{\text{H1: } \mu \text{1} \neq \mu \text{3}}$$

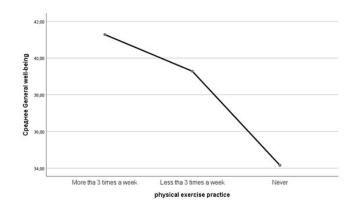


Table 6 - Multiple comparisons. Test Tukey

(I) physical exercise practice	(J) physical exercise practice	St. deviation
More than 3 times a week	Less than 3 times a week	0,544
	Never	0,004
Less than 3 times a week	More than 3 times a week	0,544
	Never	0,031
Never	More than 3 times a week	0,004
	Less than 3 times a week	0,031

Hypothesis 3

Let **Y** (dependent variable) = general well-being

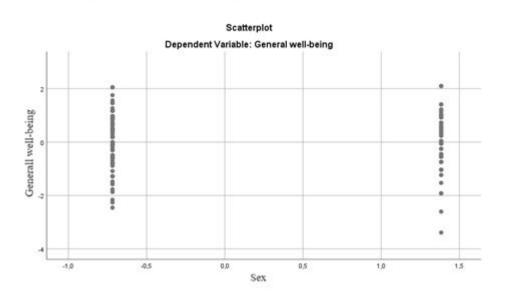
 X_1 = optimism

 $X_2 = age$

 X_3 = social support

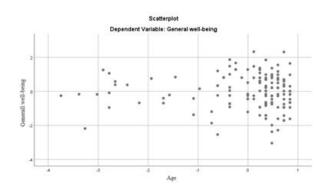
 $X_4 = Sex1$

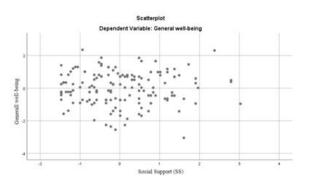
Graph 1 - The relationship between general well-being and sex



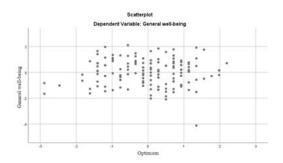
Graph 2 - The relationship between general well-being and age

Graph 3 - The relationship between general well-being and social support (SS)



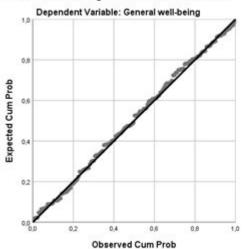


Graph 4 - The relationship between general well-being and optimism



Graph 5 - Normal P-P graph

Normal P-P Plot of Regression Standardized Residual



Model Summary^b

						Cha	nge Statistic			
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin- Watson
1	,616ª	,380	,364	8,29509	,380	23,442	4	153	,000	1,897

- a. Predictors: (Constant), Sex1, Social Suport, age, otimism
- b. Dependent Variable: General well-being

Variables Entered/Removeda

Model	Variables Entered	Variables Removed	Method
1	Sex1, Social Suport, age, otimism ^b	*	Enter

- a. Dependent Variable: General well-being
- b. All requested variables entered.

Coefficientsa

		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	16,085	4,180		3,848	,000		
	otimism	1,291	,142	,586	9,106	,000	,978	1,023
	age	-,134	,081	-,107	-1,659	,099	,978	1,022
	Social Suport	-,010	,039	-,016	-,249	,804	,992	1,008
	Sex1	3,528	1,401	,161	2,518	,013	,986	1,014

a. Dependent Variable: General well-being

$Y = 16,085 + 1,291x_1 - 0,134x_2 - 0,10x_3 + 3,528x_4$

Thank you for your attention!