



South-West University „Neofit Rilski“
Faculty of Philosophy
Department of Psychology

**ABSTRACT
ON**

**DISSERTATION FOR ACQUIRING A SCIENTIFIC
DEGREE
„DOCTOR OF SCIENCE“**

Field of higher education
3. Social, economic and legal sciences,
Professional direction
3.2. Psychology

on the topic:

Well-being in difficult life situations

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Blagoevgrad
2020

THE DISSERTATION WORK WAS DISCUSSED AND DIRECTED FOR DEFENSE BY
THE DEPARTMENT OF PSYCHOLOGY AT THE FACULTY OF PHILOSOPHY OF SWU
„NEOFIT RILSKI“ - BLAGOEVGRAD

The dissertation contains an introduction, five chapters, a conclusion and contributions with a total volume of 561 pages (format A 4; font Times New Roman 12; line spacing Single).

The cited literature covers 1232 sources, of which 499 in Cyrillic and 733 in Latin.

105 tables and 63 figures are presented.

The application includes:

- 7 test methods
- Descriptive statistics
- Checking the normality of the data distribution
- Chi-square analysis for comparisons of frequency distributions
- One-way analysis of variance and t-test
- Regression and correlation analysis
- Measures the size of the effect
- Factor analysis
- Exploratory factor analysis
- Confirmatory factor analysis
- Criteria for suitability / adequacy of the factor model of the initial data
- Reliability and internal consistency of the scale
- Factor score
- Bootstrapping
- Bayesian statistical procedure
- Mediator analysis

The defence of the dissertation for the acquisition of the „Doctor of Science“ will take place on from hours in the hall of SWU „Neofit Rilski“ - Blagoevgrad, at an open meeting of the Scientific Jury.

INTRODUCTION

The scientific and practical relevance of the issue of well-being is that modern society is interested in preserving and improving human health, well-being and the development of its capabilities, which is noted in regulations such as Article 52 (3) of The Constitution of the Republic of Bulgaria declares that the state protects the health of citizens, according to Art. 56 (6) of the Constitution of the Republic of Bulgaria the state supports the able pupils and students, and according to art. 24 (2) of the Constitution of the Republic of Bulgaria among the main political goals of the Republic of Bulgaria is the welfare of Bulgarian citizens (National Assembly of the Republic of Bulgaria, 2015). The study of well-being, to which coping and adaptation strategies contribute to the COVID-19 pandemic, is fundamental to identifying opportunities for improving well-being, especially among educators and health professionals, on whom the future health and wellness system depends to a large extent. educational - professional development of the people and in this way the well-being of the whole society can be stimulated. Well-being studies in difficult life situations can be particularly useful and informative for taking preventive measures to improve coping with life difficulties and improve the quality of services offered in the workplace. Those working in the field of supporting professions direct their efforts and actions to provide social support and ensure the well-being of the people they work with - clients, patients, associates, students, and other members of the public. The main goal of health care provision is to improve the quality of life (Holubova et al., 2018). Psychological interventions aim to improve the quality of life by enhancing social support and modifying coping behaviour (Heim, Valach, & Schaffner, 1997). Well-being, coping and adapting to difficult life situations is an important scientific problem in the psychological literature, related to both the effectiveness of psychological interventions and the skills for self-help and successful coping in life.

The study of well-being and the possibilities for its increase is important because subjective well-being has beneficial effects on social relationships (Georgieva, M., 2007; Diener, 2009, Diener, 2013, Diener & Scollon, 2014; Diener & Seligman, 2004), on family relationships (Diener & Seligman, 2004), on productivity (Diener, 2013) and success at work (Georgieva, M., 2007; Diener & Seligman, 2004), on health (Diener, 2013; Diener & Ryan, 2009; Diener & Scollon, 2014; Diener & Seligman, 2004), on life expectancy (Diener, 2013; Diener & Ryan, 2009; Diener & Seligman, 2004), increases stress resistance (Georgieva, M., 2007). Strong subjective well-being and positive emotions have an adaptive function, as they allow individuals to confidently explore their environment, pursue new goals and acquire personal resources (Diener & Ryan, 2009, p.395). A wide range of critical situations in life are related to the levels of subjective well-being - for example, positive emotionality, optimism and life satisfaction reduce diseases and incidents in life associated with increasing life expectancy (Georgieva, M., 2007, p. 24).

During the pandemic with COVID-19, social distancing was imposed on the society for months - avoiding meetings with other people, striving for people to be at a greater physical distance from each other, wearing protective equipment such as masks when going out; social isolation has also been imposed, in which people are initially forced to stay in their homes and go out only to go to work, to buy food or medicine, to walk pets or small children, and later people are allowed to go out alone for a walk or sports (Ananiev, K., 2020b; Ananiev, K., 2020c; Ananiev, K., 2020e; Ananiev, K., 2020g; Ananiev, K., 2020h; Ananiev, K., 2020i). In the scientific literature, social distance is the degree of understanding and attitude of one person to

each other (Bogardus, 1967, p.72); readiness to realize social contacts in the field of neighborhood, collegiality, friendship and family (Zografova, 1996), ie social distance can be understood as a personal desire to contact other people. Social distancing is a measure taken to prevent the spread of a contagious disease such as COVID-19 by maintaining a physical distance of about 2 meters between people, reducing the number of times people come into close contact with each other and avoiding gatherings in large groups. people (Brenner, Somer, & Abu-Rayya, 2020).

Karen Horney (1997) describes three main lifestyles: the movement toward man associated with helplessness; movement against man associated with hostility and aggression; movement in the direction of distance from the person or isolation, ie social isolation can be considered as movement in the direction of distance from the person, thus creating preconditions for neuroticism (Horney, K., 1997), and leaving home contributes to emotional well-being (Voenkinova, Zh., 2016). Self-isolation is undertaken when a person is ill and shows symptoms of COVID-19, and a health professional has informed him that he should be maximally separated from other people, including people in his household, to prevent the spread of the disease (Brenner, Somer , & Abu-Rayya, 2020). Quarantine is a measure taken to prevent the spread of a contagious disease such as COVID-19 by requiring people who are exposed to infected people to stay at home, in a hotel room or in a designated building and not leave for the period in which they are quarantined, and visits to the quarantined home are not allowed, except for people who normally live in the household (Brenner, Somer, & Abu-Rayya, 2020).

During the Covid-19 pandemic, the organization of work was encouraged as a political measure to allow remote work from home, if not for all work commitments, then at least for a certain type of work tasks or only on certain days and hours of the week (Ananiev, K ., 2020a). The change in lifestyle after the beginning of the period of social isolation in society can create preconditions for experiencing negative emotional states, including feelings of tension, irritability, nervousness, decreased feelings of cheerfulness and energy, fear experiences, boredom, apathy and etc. Body complaints and symptoms such as headache, chest tightness, palpitations, trembling hands, nausea, dizziness, fainting, shortness of breath, etc. may occur, become more frequent, or intensify. Anxiety and worries during the imposed social isolation have many reasons - for a long time people cannot meet relatives who live elsewhere, cannot meet friends, they are worried about the possibility of getting sick and cannot take care of themselves and their families, cannot attend cultural and sporting events, cannot visit restaurants, restaurants and other public places indoors, cannot spend enough time outside in parks and other open places, may lose their work and run out of money, etc. The restrictive measures taken by the state are taken differently by different people - calmly and patiently, because one realizes that one would isolate oneself, or as excessive and irritating, as a great ordeal, extreme, difficult to observe, but still people they decide to show patience and discipline to follow them. After imposing social isolation and maintaining social distance - physical distance and avoiding contact, relationships with family members can also change - to strain, get nervous, quarrel with each other or to unite, communicate more than before and keep calm. Of interest is how the COVID-19 pandemic is perceived by the public, how it affects well-being, adaptation to changed conditions and coping with life's difficulties.

Assessing one's own well-being determines the subsequent development of life, regardless of income and the absence of disease (Georgieva, M., 2007, p. 24), i.e., studies of well-being, which are based on subjective assessment of well-being, seem to that they influence the

expectations for the future development of their life, which reveals the responsibility of the researcher and the importance of the studied issues. Previous studies have also found that life satisfaction predicts future behaviours such as suicide attempts (Pavot & Diener, 2015), which shows that the phenomena studied affect human behaviour and it is important to recommend measures to increase well-being in difficult life situations.

1. HYPOTHESIS

Main hypothesis: It is assumed that in the difficult life situations created by the COVID-19 pandemic, well-being (subjective, emotional, work-related, healthy, mental, psychosocial) is rather low because the perceived threat of the coronavirus to health (their own, relatives and friends), the imposed social isolation and perceived loss of personal control over the situation generate frequent and intense negative emotions, associated with difficulties in relationships and at work.

Working Hypothesis 1: It is assumed that there are socio-demographic differences by gender, age, marital status in the experienced well-being (subjective, emotional, family, work-related, health, mental, psychosocial) during the coronavirus pandemic.

Working Hypothesis 2: It can be assumed that in the difficult life situations created by the COVID-19 pandemic, family well-being is more often experienced than family well-being, although people worry about the health, well-being and maintenance of their members. difficulties in the care of the household, but on the other hand there are prerequisites for further rapprochement between family members on the common danger and the greater frequency of contacts between family members in distance work and study.

Working Hypothesis 3: It is assumed that during the difficult life situations created by the COVID-19 pandemic, consumer well-being is linked to health and social well-being in such a way that consumers are directed to such goods and services that can contribute to improve or maintain good health, as well as contributing to the well-being of large social groups and society.

Working Hypothesis 4: It is assumed that the subjective cognitive assessment of effectiveness in difficult life situations is associated with the experience of higher well-being, and the feeling of helplessness lowers it.

CHAPTER 1. THE WELL-BEING OF THE INDIVIDUAL (GLOBAL AND SPECIFIC), SOCIETY, THE ORGANIZATION AND THE FAMILY

In the first chapter of the dissertation theoretically within 107 pages the following problems are considered:

- Subjective well-being
- General / overall / general / global individual and group satisfaction with the life of Bulgarians according to data from previous surveys
- Mental well-being
- Personal development, personal growth or learning satisfaction as a component of well-being
- Striving for perfection as a component of mental well-being
- Integrity / self-consistency / authenticity as a component of mental well-being
- Self-acceptance / acceptance of oneself as a component of mental well-being and as an expression of self-satisfaction
- Sense of community as a component of mental well-being
- Satisfaction of needs as a component of mental well-being; Well-being as an orientation towards autonomy
- Activity as a component of mental well-being

- Motivation as a component of mental well-being
- Enthusiasm as a component of mental well-being
- Self-esteem and self-confidence as components of mental well-being
- Psychosocial well-being
- Trust as a component of psychosocial well-being
- Sense of usefulness as a component of psychosocial well-being
- Stable social roles as a component of psychosocial well-being; Satisfaction with the performance of social roles
- Social well-being
- Work-related well-being, organizational well-being; job satisfaction.
- Family well-being.

Empirically, in Chapter 1, 5 independent studies have been conducted, which I will discuss in more detail.

1. LIFE SATISFACTION IN THE DIFFICULT LIFE SITUATION OF THE CORONAVIRUS PANDEMIC

A study of overall life satisfaction during a coronavirus pandemic found a predominance of lower life satisfaction rather than high life satisfaction - see Figure 1.

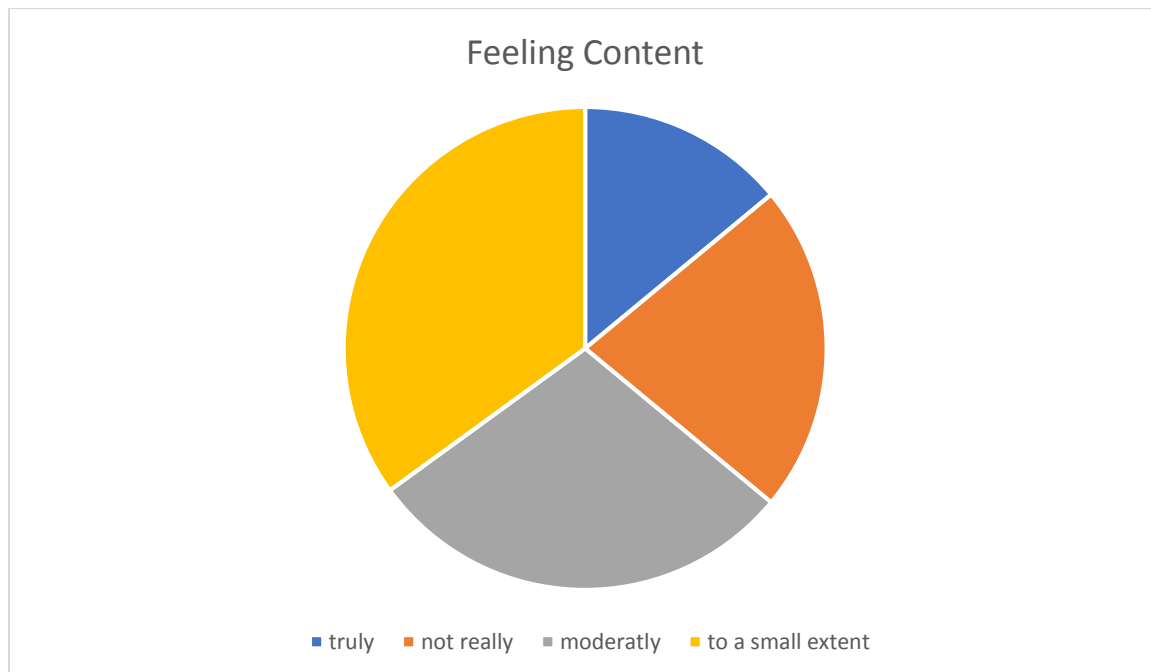


Figure 1. Overall life satisfaction of Bulgarians during the coronavirus pandemic

Significantly more women than expected were dissatisfied with life during the coronavirus pandemic, and men were more satisfied with life - see Table 1, χ^2 (N = 635; df = 3) = 22,646; $p < 0.001$; Cramer's V = 0.189, which means a small size of the effect (Goev, V., 1996; IBM Knowledge Center, n.d.a1.).

Table 1. Gender differences in life satisfaction during the coronavirus pandemic

		I feel satisfied with life			
		Not really	To a small extent	moderately	truly
men	Observed frequencies	29	102	69	36
	Expected frequencies	51,7	84,0	68,0	32,3

women	Observed frequencies	110	124	114	51
	Expected frequencies	87,3	142,0	115,0	54,7

Significantly more people without an intimate partner than expected are not satisfied with life during the coronavirus pandemic, and people with an intimate partner are more satisfied with life - see Table 2, χ^2 (N = 635; df = 3) = 36.025; p < 0.001; Cramer's V = 0.238, which means the average size of the effect (IBM Knowledge Center, n.d.a1.), But according to another interpretation it is a small size of the effect (Goev, V., 1996).

Table 2. Differences in marital status (presence of an intimate partner) in life satisfaction during the coronavirus pandemic

	I feel satisfied with life				
		not really	to a small extent	moderately	truly
Without intimate partner	Observed frequencies	63	106	96	13
	Expected frequencies	60,9	98,9	80,1	38,1
with intimate partner	Observed frequencies	76	120	87	74
	Expected frequencies	78,1	127,1	102,9	48,9

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Without intimate partner	observed frequencies	63	106	96	13
	expected frequencies	60,9	98,9	80,1	38,1
with intimate partner	observed frequencies	76	120	87	74
	expected frequencies	78,1	127,1	102,9	48,9

Table 3. Differences in marital status (presence of children) in life satisfaction during the coronavirus pandemic

	I feel satisfied with life			
	not really	to a small extent	moderately	truly

Do you have kids	no	observed frequencies	94	156	148	18
		Expected frequencies	91,1	148,1	119,9	57,0
	yes	Observed frequencies	45	70	35	69
		Expected frequencies	47,9	77,9	63,1	30,0

Significantly more people aged 36 to 65 years than expected were satisfied with life during the coronavirus pandemic, and people aged 20 to 36 were more dissatisfied with life - see Table 4, χ^2 (N = 635; df = 9) = 193,414; p < 0.001; Cramer's V = 0.319, which means the average size of the effect (Goev, V., 1996; IBM Knowledge Center, n.d.a1.). Older people's life satisfaction may be due to the fact that they have avoided coronavirus infection, and younger people find it more difficult to tolerate the deprivation of normal entertainment and social life to which they are accustomed.

Table 4. Differences by age groups in life satisfaction during the coronavirus pandemic

			I feel satisfied with life			
			not really	to a small extent	moderately	truly
Age groups	20-23 years	Observed frequencies	46	51	77	15
		expected frequencies	41,4	67,3	54,5	25,9
	24-27 years	observed frequencies	32	74	33	0
		expected frequencies	30,4	49,5	40,1	19,0
	28-35 years	observed frequencies	44	61	42	3
		expected frequencies	32,8	53,4	43,2	20,6
	36-65 years	observed frequencies	17	40	31	69
		expected frequencies	34,4	55,9	45,2	21,5

It can be summarized that the most satisfied with life during the coronavirus pandemic seem to be men who have established an intimate partnership with children over the age of 36. More dissatisfied with their lives during the coronavirus pandemic are young women aged 20 to 36, without an intimate partner, without children. Probably the loneliness experienced in social isolation during the coronavirus pandemic contributes to the life dissatisfaction experienced.

2. SELF-CONFIDENCE AS A COMPONENT OF MENTAL WELL-BEING DURING THE CORONAVIRUS PANDEMIC

A study of self-confidence during a coronavirus pandemic found a predominance of self-confidence over insecurity - see Figure 2, which creates the preconditions for successfully coping with difficult life situations during a coronavirus pandemic and for increasing well-being.

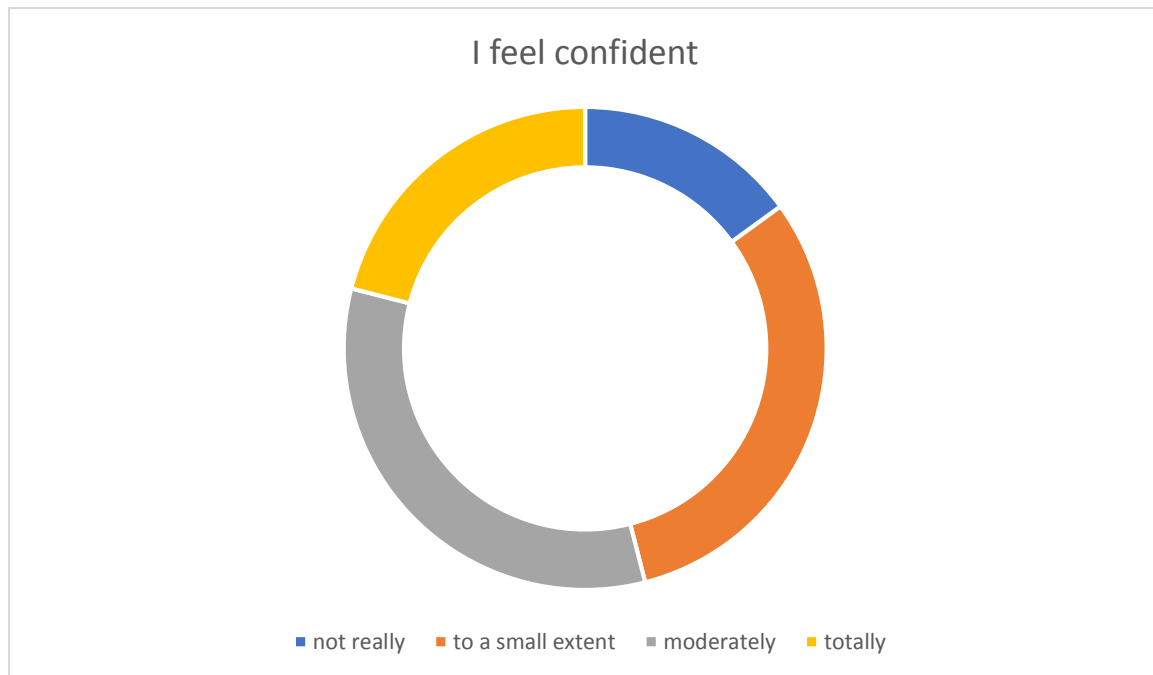


Figure 2. Self-confidence as an expression of mental well-being during a coronavirus pandemic

Significantly more women than expected feel insecure during the coronavirus pandemic, and men are more confident - see Table 5, χ^2 ($N = 635$; $df = 3$) = 21,518; $p < 0.001$; Cramer's $V = 0.184$, which means a small size of the effect (Goev, V., 1996; IBM Knowledge Center, n.d.a1.).

Table 5. Gender differences in self-confidence during a coronavirus pandemic

		I feel confident			
		not really	to a small extent	moderately	totally
men	observed frequencies	25	56	88	67
	expected frequencies	35,7	72,1	77,7	50,5
women	observed frequencies	71	138	121	69
	expected frequencies	60,3	121,9	131,3	85,5

Significantly more people without children feel insecure during the coronavirus pandemic, and the studied Bulgarians with children are more confident - see Table 6, χ^2 ($N = 635$; $df = 3$) = 22,273; $p < 0.001$; Cramer's $V = 0.187$, which means a small size of the effect (Goev, V., 1996; IBM Knowledge Center, n.d.a1.).

Table 6. Differences in marital status (presence of children) in self-confidence during the coronavirus pandemic

			I feel confident			
			not really	to a small extent	moderately	totally
Do you have kids	no	observed frequencies	69	136	145	66
		expected frequencies	62,9	127,1	136,9	89,1
	yes	observed frequencies	27	58	64	70
		expected frequencies	33,1	66,9	72,1	46,9

There were no statistically significant differences between the studied Bulgarians with and without an intimate partner in their self-confidence during the coronavirus pandemic - χ^2 (N = 635; df = 3) = 5,797; p = 0.122.

The surveyed Bulgarians between 24 and 27 years of age feel significantly more insecure than expected, and the surveyed Bulgarians between 36 and 65 years of age feel significantly more confident than expected, and for the other two age groups the differences are not so obvious. in self-confidence, but still there is a tendency for Bulgarians between 28 and 35 years of age to be more insecure than expected - see Table 7, χ^2 (N = 635; df = 9) = 105,210; p < 0.001; Cramer's V = 0.407, which means the average size of the effect (Goev, V., 1996; IBM Knowledge Center, n.d.a1.).

Table 7. Differences by age groups in self-confidence during the coronavirus pandemic

			I feel confident			
			not really	to a small extent	moderately	totally
Age groups	20-23 years	Observed frequencies	37	43	79	30
		expected frequencies	28,6	57,7	62,2	40,5
	24-27 years	observed frequencies	32	59	39	9
		expected frequencies	21,0	42,5	45,7	29,8
	28-35 years	observed frequencies	20	55	50	25
		expected frequencies	22,7	45,8	49,4	32,1
	36-65 years	observed frequencies	7	37	41	72
		expected frequencies	23,7	48,0	51,7	33,6

It can be summarized that during a coronavirus pandemic, mental well-being in the form of self-confidence is more common than experienced mental well-being as self-doubt, and most self-confident during a pandemic. with coronavirus are men who have children and are over 36 years old. They have achieved a certain social, family and professional status in society, support their families and seem confident in their ability to cope with difficult life situations during the coronavirus pandemic, rely on their experience, skills and social networks of contacts.

3. TRUST IN OFFICIAL AUTHORITIES DURING THE CORONAVIRUS PANDEMIC AS A COMPONENT OF PSYCHOSOCIAL WELL-BEING

A survey of trust in official authorities during the coronavirus pandemic found that 250 Bulgarians (39.4%) did not believe the information from official sources (for example, the government), and 385 did (60.6%). More Bulgarians aged 28 to 35 than expected (see Table 8) do not believe the information from official sources (χ^2 (N = 635; df = 3) = 32,483; $p < 0.001$; Cramer's V = 0.226, which means small effect size (Goev, V., 1996) or average effect size according to another interpretation - „IBM Knowledge Center”, nda1.).

Table 8. Differences between age groups in their confidence in the information provided by official sources during the coronavirus pandemic

			Do you believe the information from official sources (for example, the government)?	
			No	yes
Age groups	20-23 years	observed frequencies	81	108
		expected frequencies	74,4	114,6
	24-27 years	observed frequencies	41	98
		expected frequencies	54,7	84,3
	28-35 years	observed frequencies	84	66
		expected frequencies	59,1	90,9
	36-65 years	observed frequencies	44	113
		expected frequencies	61,8	95,2

At the same time, only 95 Bulgarians surveyed (15%) stated that the situation with the coronavirus was a fraud in their opinion, at the age of 28-35 years significantly more often than expected the situation with the coronavirus was perceived as a fraud than in other age groups - see Table 9.), and the remaining 540 surveyed Bulgarians (85%) do not consider the reports of coronavirus diseases or the severity of the coronavirus disease to be fraudulent. χ^2 (N = 635; df = 3) = 31.922, $p < 0.001$; Cramer's V = 0.224, ie moderate effect size (IBM Knowledge Center, n.d.a1), variables are moderately related

Table 9. Compared frequency distributions of the age group responses regarding the perception of the coronavirus situation as fraud

			I think the situation with the coronavirus is a fraud	
			yes	no
Age groups	20-23 years	observed frequencies	20	169
		expected frequencies	28,3	160,7
	24-27 years	observed frequencies	14	125
		expected frequencies	20,8	118,2
	28-35 years	observed frequencies	44	106
		expected frequencies		

	36-65 years	expected frequencies	22,4	127,6
		observed frequencies	17	140
		expected frequencies	23,5	133,5

160 Bulgarians (25.2%) define as illegitimate, illegal the actions of the authorities regarding the regime of self-isolation, and 475 Bulgarians (74.8%) consider them legitimate, legal. Significantly more men than expected than women (see Table 10) consider the authorities' actions regarding the self-isolation regime to be illegitimate, illegal (χ^2 (N = 635; df = 1) = 7.559; p = 0.006; Cramer's V = 0.109, which means a small size of the effect (Goev, V., 1996; IBM Knowledge Center, nda1.).

Table 10. Gender differences concerning the acceptance as legitimate of the authorities' actions regarding the self-isolation regime during the coronavirus pandemic

		Are the actions of the authorities regarding the self-isolation regime legitimate?	
		no	yes
men	observed frequencies	74	162
	expected frequencies	59,5	176,5
women	observed frequencies	86	313
	expected frequencies	100,5	298,5

Significantly more Bulgarians between the ages of 28 and 35 (see Table 11) consider the authorities' actions regarding the self-isolation regime to be illegitimate compared to other age groups (χ^2 (N = 635; df = 3) = 16,283; p = 0,001; Cramer's V = 0.160, which means a small size of the effect (Goev, V., 1996; IBM Knowledge Center, nda1.).

Table 11. Differences between age groups in their acceptance as legitimate of the authorities' actions regarding the self-isolation regime during the coronavirus pandemic

			Are the actions of the authorities regarding the self-isolation regime legitimate?	
			no	yes
Age groups	20-23 years	observed frequencies	41	148
		expected frequencies	47,6	141,4
	24-27 years	observed frequencies	26	113
		expected frequencies	35,0	104,0
	28-35 years	observed frequencies	56	94
		expected frequencies	37,8	112,2

	36-65 years	observed frequencies	37	120
		expected frequencies	39,6	117,4

225 Bulgarians (35.4%) believe that the measures taken by the authorities regarding quarantine and self-isolation are not sufficient, and according to 410 Bulgarians (64.6%) these measures are sufficient. Significantly more people with an intimate partner than expected (see Table 19) consider the measures taken by the authorities regarding quarantine and self-isolation to be sufficient, and significantly more people without an intimate partner than expected consider them insufficient (χ^2 (N = 635; df = 1) = 15,439; $p < 0,001$; Cramer's V = 0,156, which means a small amount of effect (Goev, V., 1996; IBM Knowledge Center, nda1.) People with an intimate partner do not always live with him in one household and with the imposed measures for social distance and self-isolation they find it difficult to maintain their relationship, which is related to the unwillingness of these measures to be continued or aggravated.

In an earlier study conducted from April 25 to May 2, 2020, among 868 Bulgarians, they assessed safety measures to avoid coronavirus infection with an average score of about 7 on a scale from 1 totally inadequate to 10 completely adequate („Institute for Population and Human Studies ", 2020c).

4. WELL-BEING CONNECTED WITH THE WORK DURING THE CORONAVIRUS PANDEMIC

A study found that the majority of Bulgarians surveyed did not complain of difficulties at work - see Figure 3.

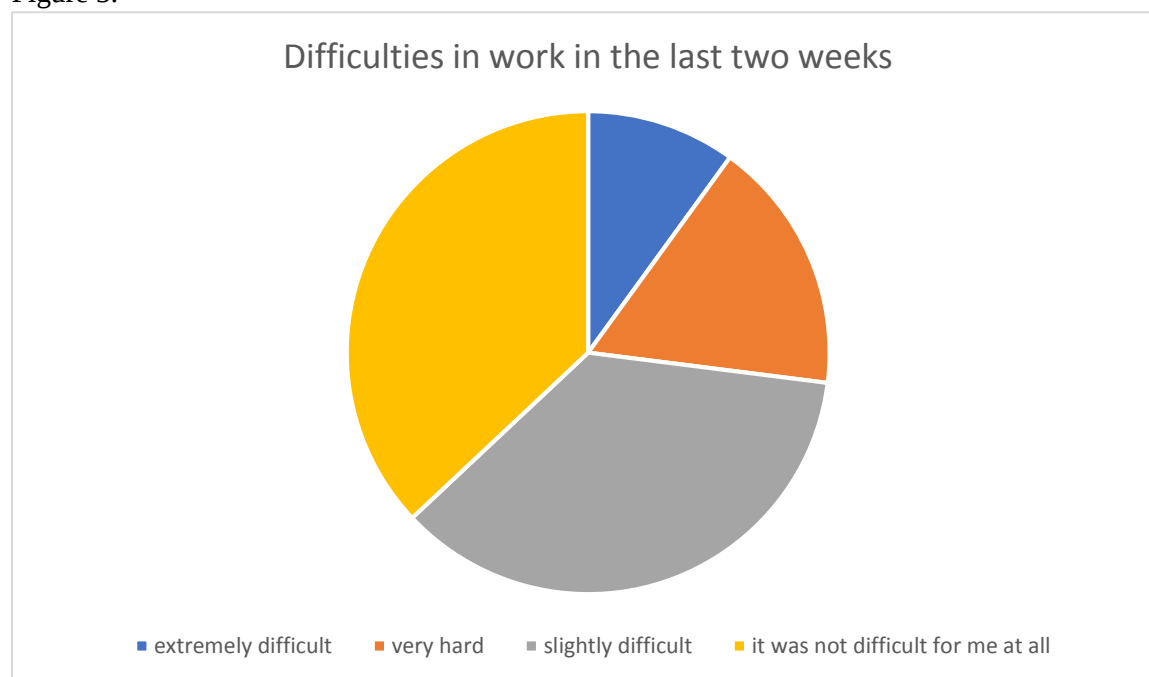


Figure 3. Percentage distribution of responses to work difficulties in the last two weeks before the study during the coronavirus pandemic

Significantly more women than expected compared to men (see Table 12) complained of work difficulties in the last two weeks before the study during the coronavirus pandemic - χ^2 (N = 635; df = 3) = 30,132; $p < 0,001$; Cramer's V = 0.218, which means the average size of the effect („IBM

Knowledge Center“, n.d.a1.), And according to another interpretation is a small size of the effect (Goev, V., 1996). Probably women combine work at home with babysitting and housekeeping, which creates additional difficulties for them at work. The difficulties in the work are related to the relationships with people who change their intensity and quality during the imposed social isolation in the coronavirus pandemic, which changes the way of performing team tasks and customer service. Lifestyle changes during the coronavirus pandemic have led to a crisis in some industries, such as tourism, and some people have lost their jobs, affecting their incomes and creating negative experiences.

Table 12. Differences between men and women in labor difficulties experienced in the last two weeks before the study during the coronavirus pandemic

		How hard has it been for you to do your job in the last two weeks?			
		it was not difficult for me at all	slightly difficult	very hard	extremely difficult
men	Observed frequencies	107	74	48	7
	expected frequencies	88,1	85,9	39,0	23,0
	Percent of men	45,3%	31,4%	20,3%	3,0%
women	observed frequencies	130	157	57	55
	expected frequencies	148,9	145,1	66,0	39,0
	percent the women	32,6%	39,3%	14,3%	13,8%

Work-related well-being is conceptualized in the present study as expressed by the absence of difficulties in doing the work, including those related to the absence of relationship problems, as well as by stability or increase in income. Accordingly, work-related unhappiness is expressed through difficulties in doing the work, related to problematic relationships, reduction or loss of income.

Mediator analysis was performed by bootstrapping with a set number of 5000 samples and the assessment is performed by the method of maximum probability, performed with the software JASP 0.11.1.0 (JASP Team, 2019). The results of the mediator analysis with predictor difficulties in the last two weeks before the study during the coronavirus pandemic, mediator - emotional well-being during the coronavirus pandemic and result variable - possible change in family income during the coronavirus pandemic are presented in Table 13, Table 14, Table 15 and Figure 4.

Table 13. Direct effects of difficulties in working on the change in family income during the coronavirus pandemic

Independent variable		result variable	variable	standard error	z-value	significance level	Bootstrap 95% prejudice-adjusted
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							confidence interval	
							lower limit	upper limit
difficulties in work	→	Change in family income	-0,182	0,045	-4,041	< 0,001	-0,267	-0,092

When examining the direct effect of difficulties in working on the change in family income during the coronavirus pandemic, a significant non-standardized impact factor is found, presented in Table 13 and Figure 4. Based on a bootstrapping procedure with 5000 samples from the data file confidence intervals are generated to determine the significance of the direct effect as the calculated value of the direct effect is the midpoint of this interval and since zero does not fall within the confidence interval, it is found that the direct effect of difficulties in working on the change in family income during the coronavirus pandemic is significant. As the difficulty of working during a coronavirus pandemic increases, family income decreases.

Table 14. Indirect effect of work difficulties on the change in family income mediated by emotional well-being during the coronavirus pandemic

Independent variable		Mediator variable		Result variable	variable	standard error	z-value	significance level	Bootstrap 95% prejudice-adjusted confidence interval	
									lower limit	Upper limit
difficulties in work	→	emotional well-being	→	change family income	-0,030	0,021	-1,464	0,143	-0,071	0,014

When examining the indirect effect of work difficulties on the change in family income mediated by emotional well-being, an insignificant non-standardized impact factor is found, presented in Table 14 and Figure 4. Based on a bootstrapping procedure with 5000 samples of the data file confidence intervals are generated to determine the significance of the indirect effect as the calculated value of the indirect effect is the middle of this interval and since zero falls within the confidence interval, it is found that the impact of work difficulties on changes in family income is not mediated by emotional well-being. This means that not experienced negative emotional states at work difficulties lead to a decrease in family income, but objective obstacles related to the nature of work in the changed social situation during the coronavirus pandemic - for example, wearing masks at work can be difficult to do, not all work tasks can be done remotely, especially without prior training, and industries such as tourism are losing customers, making it difficult to do work, people are losing their jobs and this is affecting their income.

Table 15. Overall effect of difficulties at work on changes in family income during the coronavirus pandemic

Independent variable		result variable	variable	standard error	z-value	significance level	Bootstrap 95% prejudice-adjusted confidence interval	
							lower limit	upper limit
difficulties in work	→	change in family income	-0,213	0,040	-5,278	< 0,001	-0,291	-0,141

The overall effect includes a combination of the direct and indirect effects of the variables. Increasing work difficulties reduce family income - see Table 15 and Figure 4. The coefficient of determination for the change in family income as an expression of well-being (family, material and work-related) is $R^2 = 0.045$, which means that the model explains 4, 5% of the variations (Zarbova, B., 2019) in the change in family income, which is a small amount of the effect (Awang, 2015, p.105). The coefficient of determination for emotional well-being is $R^2 = 0.206$, which means that the model explains 20.6% of the variations (Zarbova, B., 2019) in the level of emotional well-being and this is the average size of the effect (Awang, 2015, p. 105). As emotional well-being was found not to mediate the impact of work difficulties on family income (see Table 14 and Table 14), this magnitude of the effect means that work difficulties impair emotional well-being by exacerbating negative affect - see Figure 4. Difficulties at work have a direct impact on family income by lowering it. 63% of the respondents complained of some difficulties at work, from more to less pronounced (see Figure 3), and family income decreased in 39.7% of the participants in the survey.

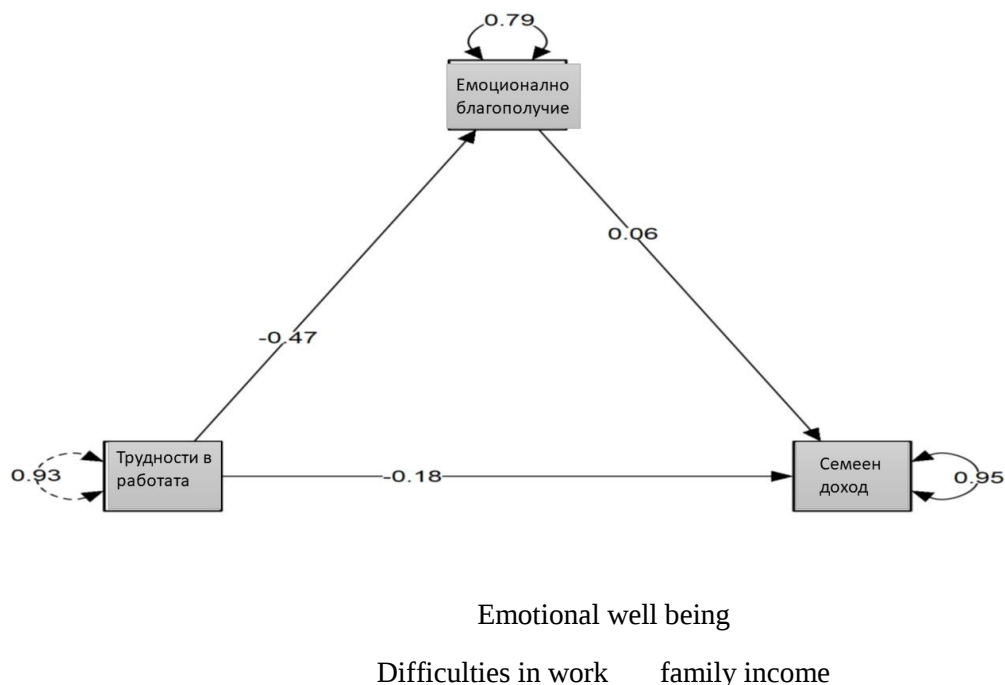


Figure 4. Indirect impact of work difficulties on the change in family income with a mediator emotional well-being

Through the software JASP 0.11.1.0 (JASP Team, 2019) a mediator analysis was performed using bootstrapping with set 5000 samples and the assessment is performed by the method of maximum probability. The results of the mediator analysis with predictor difficulties in understanding other

people in the last two weeks before the study, mediator (indirect effect) - difficulties in work and result variable - emotional well-being during the coronavirus pandemic are presented in Table 16, Table 17, Table 18, and Figure 5.

Table 16. Direct effect of communication difficulties with other people on emotional well-being during a coronavirus pandemic

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	upper limit
Difficulty understanding with other people	→	Emotional well-being	-0.309	0.044	-6,969	< 0.001	-0.397	-0.222

Examining the direct effect of communication difficulties with other people on emotional well-being during a coronavirus pandemic reveals a significant non-standardized impact factor, presented in Table 16 and Figure 5 . Based on a bootstrapping procedure with set 5000 samples from the data file, confidence intervals are generated to determine the significance of the direct effect and the calculated value of the direct effect is the middle of this interval and since zero does not fall within the confidence interval, it is found that the direct effect of difficulties in understanding other people on emotional well-being during a coronavirus pandemic is significant. As difficulties with understanding with other people increase during a coronavirus pandemic, emotional well-being decreases.

Table 17 . Indirect effect of difficulties in understanding other people on emotional well-being during a coronavirus pandemic mediated by work difficulties

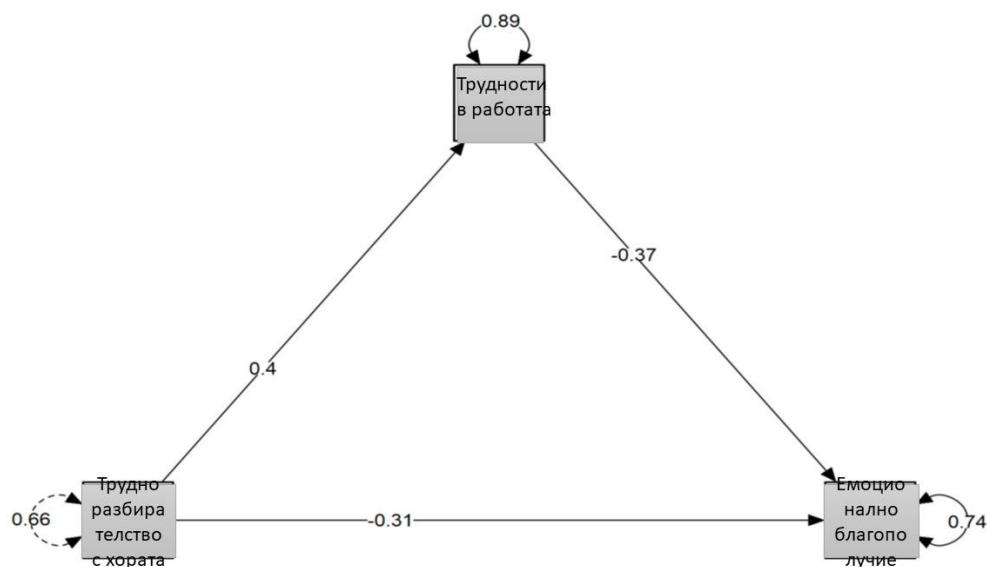
Independent variable		Mediator variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95 % prejudice-adjusted confidence interval	
									Lower limit	upper limit
Difficulty understanding with other people	→	Difficulties at work	→	Emotional well-being	-0.148	0.022	-6,621	<0.001	-0.196	-0.101

Examining the indirect effect of communication difficulties with other people on emotional well-being mediated by work difficulties reveals a significant non-standardized impact factor, presented in Table 17 and Figure 5 . Based on a bootstrapping procedure with 5000 samples from the data file, confidence intervals are generated to determine the significance of the indirect effect as the calculated value of the indirect effect is the middle of this interval and since zero does not fall into the confidence interval, it is found that difficulties in understanding other people on emotional well-being are mediated by difficulties at work. As difficulties with understanding with other people increase, so do difficulties with work, which lowers emotional well-being - see Figure 5 .

Table 18 . Overall effect of difficulty understanding other people on emotional well-being during a coronavirus pandemic

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	upper limit
Difficulty understanding with other people	→	Emotional well-being	-0.457	0.045	-10,085	< 0.001	-0.539	-0.371

The overall effect includes a combination of the direct and indirect effects of the variables. As difficulties with understanding with other people increase, emotional well-being decreases - see Table 18 and Figure 5. The coefficient of determination for the change in emotional well-being is $R^2 = 0.263$, which means that the model explains 26.3% of the variations (Zarbova, B. , 2019) in the change in emotional well-being, which is a large amount of effect (Awang, 2015, p.105). The coefficient of determination for work difficulties is $R^2 = 0.105$, which means that the model explains 10.5% of the variations (Zarbova, B., 2019) in the work difficulties and this is a small amount of the effect (Awang, 2015, p. 105). As difficulties with understanding with other people increase, so do difficulties at work, which diminishes emotional well-being. As work difficulties increase, emotional well-being deteriorates.



Difficulties in work /difficult relationship with people/emotional well-being

Figure 5. Indirect influence of difficulties with understanding with other people on emotional well-being with mediator difficulties at work

A detailed summary of the well-being associated with work during the coronavirus pandemic was made in the final part of the dissertation, and it can be said that Bulgarians experiencing work-related well-being slightly prevail (about 52%) over those who experience more work-related well-being (about 48%). Work-related unhappiness is due to difficulties in work that reduce family income, as well as difficulties in relationships.

Table 19 . Differences between people with and without an intimate partner in accepting them as sufficient for the measures taken by the authorities regarding quarantine and self-isolation

		Are the measures taken by the authorities regarding quarantine and self-isolation sufficient?	
		No	Yes
No intimate partner	Observed frequencies	122	156
	Theoretical / expected frequencies	98.5	179.5
Having an intimate partner	Observed frequencies	103	254
	Theoretical / expected frequencies	126.5	230.5

60 people (9.4%) believe that these measures were introduced too early. According to 342 (53.9%) were introduced just in time. According to 233 people (36.7%) were introduced too late. Significantly more people without children than expected (see Table 20) believe that these measures were introduced too late, and significantly more people with children than expected believe that they were

introduced just in time ($\chi^2_{(N=635; df=2)} = 66,559$; $p < 0.001$; Cramer's $V = 0.324$, which means the average size of the effect (Goev, V., 1996; IBM Knowledge Center, nda1.).

Table 20 . Differences between surveyed Bulgarians without and with children in their opinion on how timely the measures taken by the authorities during the coronavirus pandemic were introduced

			Have these measures been introduced:		
			too early	just in time	too late
Do you have children	no	Observed frequencies	40	178	198
		Theoretical / expected frequencies	39.3	224.1	152.6
	Yes	Observed frequencies	20	164	35
		Theoretical / expected frequencies	20.7	117.9	80.4

Official announcements and rules anger 329 Bulgarians (51.8%), and the remaining 306 (48.2%) are not angry with official announcements and rules during the coronavirus pandemic. The experience of anger has been linked to a deterioration in emotional well-being as a result of information from authorities during the coronavirus pandemic. Significantly more women than expected than men (see Table 21) are outraged by official reports and rules during the coronavirus pandemic ($\chi^2_{(N=635; df=1)} = 5,857$; $p = 0,016$; Cramer's $V = 0,096$, which means a small size of the effect (Goev, V., 1996; IBM Knowledge Center, nda1.).

Table 21 . Differences between men and women in experiencing anger as a result of official announcements and rules

		Do official announcements and rules make you angry in any way?	
		no	Yes
men	Observed frequencies	137	99
	Expected frequencies	122.3	113.7
women	Observed frequencies	192	207
	Expected frequencies	206.7	192.3

Significantly more people aged 28 to 35 than expected compared to other age groups (see Table 22) were outraged by official reports and rules during the coronavirus pandemic ($\chi^2_{(N=635; df=3)} = 37,519$; $p < 0.001$; Cramer's $V = 0.243$, which means small effect size (Goev, V., 1996) or medium effect size according to another interpretation - „IBM Knowledge Center“, nda1.).

Table 22 . Differences between age groups in terms of anger as a result of official announcements and rules

			Do official announcements and rules make you angry in any way?	
			no	Yes
age groups	20-23 years	Observed frequencies	109	80
		Expected frequencies	97.9	91.1
	24-27 years	Observed frequencies	82	57
		Expected frequencies	72.0	67.0
	28-35 years	Observed frequencies	45	105
		Expected frequencies	77.7	72.3
	36-65 years	Observed frequencies	93	64
		Expected frequencies	81.3	75.7

225 Bulgarians (35.4%) tend to blame someone for the current situation in Bulgaria, as some of the respondents specify their accusations against the government (Bulgarian and Chinese), the government for slow and inadequate reactions, the president and leaders of political parties for giving priority of business over the well-being of citizens; doctors, pharmaceutical companies and scientists for their inability to cope; those arriving from abroad who spread the infection; a global conspiracy to destroy old people. 410 Bulgarians (64.6%) do not think that anyone is to blame for the situation with the coronavirus in Bulgaria.

Significantly more women than expected than men (see Table 23) tend to blame someone for the current situation in Bulgaria (χ^2 (N = 635; df = 1) = 5.470; p = 0.019; Cramer's V = 0.093 , which means small effect size (Goev, V., 1996; IBM Knowledge Center, nda1.).

Table 23 . Gender differences in the propensity to be blamed for the current coronavirus situation in Bulgaria

		Do you think that someone is to blame for the current situation in Bulgaria?	
		no	Yes
men	Observed frequencies	166	70
	Expected frequencies	152.4	83.6
women	Observed frequencies	244	155
	Expected frequencies	257.6	141.4

These results reveal that the majority of Bulgarians surveyed (64.5% average percentage of indicators of trust in the official authorities) experience psychosocial well-being in the form of trust in the information provided by the official authorities during the coronavirus pandemic and in the measures taken. and actions of the authorities related to social isolation, and when summarizing the socio-demographic differences, it was found that Bulgarians aged 36-65 seem to have the strongest trust. Approximately 1/3 of the surveyed Bulgarians (35.5% average percentage of the indicators of trust in the official authorities) experience psychosocial distress in the form of distrust of the information provided by the official authorities during the coronavirus pandemic and in the measures and actions taken by the authorities, related to social isolation, and this distrust is also associated with negative emotions such as anger and guilt. Summarizing the socio-demographic differences, it was found that the strongest distrust of the official authorities is shown by Bulgarians aged 28-35 years and mostly single people without an intimate partner and without children, they mostly experience psycho-social distress under the form of distrust of the official authorities - to the information provided by them and the measures taken by them to prevent the spread of coronavirus infection. Accordingly, people from other age groups with an intimate partner and children experience more pronounced psychosocial well-being in the form of trust in the official authorities - in the information they provide and the measures taken by them to prevent the spread of coronavirus infection.

5. FAMILY WELL-BEING DURING THE DIFFICULT LIFE SITUATION RELATED TO THE COVID-19 PANDEMIC

In the present dissertation, family well-being during the difficult life situation related to the COVID-19 pandemic is explored by answering questions related to family relationships . Family well-being during the difficult life situation related to the coronavirus pandemic is conceptualized in the present dissertation as awareness of the importance of the family, rapprochement with family members, importance of communication with relatives, stability or increase of family income, lack of difficulties in household care. The perception of the coronavirus as a threat not only to themselves but also to their relatives is a stressor who at the cognitive level of processing the incoming information expresses the attachment to his family.

In Table 24 are presented the answers of the respondents to the question who lived during the pandemic of coronavirus as the majority of the people who live with someone they are not alone and the majority surveyed Bulgarians live together with their family members during a pandemic coronavirus.

Table 24 . Frequency distributed to the answers of the surveyed Bulgarians about who they live with during the coronavirus pandemic

Who do the subjects live with?	Number	Percentage
I live alone	82	12.9
I live with my partner	343	54.0
I live with friends / roommates	18	2.8%
I live with elderly relatives over 65 years of age	22	3.5
I live with my parents	67	10.6
I live with children up to 14 years old	148	23.3

Note: More than one answer to the question of who the subjects live with is possible.

The majority of those surveyed say the coronavirus pandemic is not a real threat to them (N = 358; 56.4%), but poses a threat to their relatives (N = 444; 69.9%), which reveals the importance of the family for the respondents - they worry more about their family members than about themselves. A survey conducted from March 22 to 28, 2020 among

1,365 Bulgarians reveals that they assess the risk of contracting coronavirus as an average of 6.61 on a scale of 1 to 10 and about 40% perceive coronavirus as a greater threat , and about 60% perceive the economic situation as a greater threat after the measures taken (Institute for Population and Human Studies, 2020 a ; Institute for Population and Human Studies, 2020 b). A survey conducted from April 25 to May 2, 2020 among 868 Bulgarians revealed that they assess the risk of contracting coronavirus as an average of 6.23 on a scale of 1 to 10 and perceive about 10% as a greater threat to coronavirus , and about 25% perceive the economic situation as a greater threat after the measures taken (Institute for Population and Human Studies, 2020 c). These data are in line with the trend identified in the current survey, conducted in late May to mid-June 2020.

People who have children perceive the coronavirus pandemic as a threat to themselves more often than expected, and people without children perceive the coronavirus pandemic as a threat to themselves less often than expected (see Table 25), probably because people with children they believe that if they get sick, they will infect their children as well.

Table 25 . Compared frequency distributions of responses regarding the presence of children and the perceived threat to themselves posed by the coronavirus pandemic

χ^2 (N = 635; df = 1) = 5.932, p = 0.015; Cramér's V = 0.097, ie weak effect size (IBM Knowledge Center , nda1), variables are weakly related			The coronavirus pandemic is a threat to you personally	
			Yes	no
Do you have children	Yes	Observed frequencies	110	109
		Theoretical / expected frequencies	95.5	123.5
	no	Observed frequencies	167	249
		Theoretical / expected frequencies	181.5	234.5

Women significantly more often than expected consider the coronavirus pandemic to be a threat to them, and men more often than expected do not perceive it as a threat to themselves (see Table 26), probably because girls are more timid, sensitive , defenseless than boys (Zakharov, A., 2000), and women are more anxious than men (McLean , Asnaani , Litz , & Hofmann , 2011).

Table 26 . Comparisons of frequency distributions of men's and women's responses to the perceived threat to themselves posed by the coronavirus pandemic

χ^2 (N = 635; df = 1) = 14,440, p <0.001; Cramér's V = 0.151, ie weak effect size (IBM Knowledge Center , nda1), variables are weakly related			The coronavirus pandemic is a threat to you personally	
			Yes	no
sex	men	Observed frequencies	80	156
		Theoretical / expected frequencies	102.9	133.1
	women	Observed frequencies	197	202
		Theoretical / expected frequencies	174.1	224.9

People without an intimate partner more often than expected consider the coronavirus pandemic to be a real threat to them, and people with an intimate partner more often than expected state that the coronavirus pandemic does not pose a real threat to them (see Table 27). rely on their partner to deal with a difficult situation.

Table 27 . Comparison of frequency distributions of responses regarding the presence of an intimate partner and the perceived threat to oneself, which is the coronavirus pandemic

$\chi^2 (N = 635; df = 1) = 8.179, p = 0.004$; Cramér's $V = 0.113$, ie weak effect size (IBM Knowledge Center , nda1), variables are weakly related			The coronavirus pandemic is a threat to you personally	
			Yes	no
presence of an intimate partner	without an intimate partner	Observed frequencies	139	139
		Theoretical / expected frequencies	121.3	156.7
	presence of an intimate partner	Observed frequencies	138	219
		Theoretical / expected frequencies	155.7	201.3

Single people (see Table 30 and Table 28) without children (see Table 31) and without an intimate partner (see Table 29) worry more about their relatives than expected, and those who have an intimate partner (see Table 29) are bound and concluded. marriages (see Table 30) with children (see Table 31) who do not live alone (see Table 28) worry less about their relatives than expected, which means that the worries of single people without children relate mainly to elderly relatives, to their parents, and people with children almost constantly in contact with their family members and probably take the care they think is necessary for the health of their loved ones.

Table 28 . Compared frequency distributions of responses on living alone and perceived threat to relatives posed by the coronavirus pandemic

$\chi^2 (N = 635; df = 1) = 23.195; p < 0.001$; Cramér's $V = 0.191$, ie weak effect size (IBM Knowledge Center , nda1), variables are weakly related			The coronavirus pandemic is a threat to your relatives	
			Yes	no
Do you live alone?	Yes	Observed frequencies	76	6
		Theoretical / expected frequencies	57.3	24.7
	no	Observed frequencies	368	185
		Theoretical / expected frequencies	386.7	166.3

Table 29 . Compared frequency distributions of responses regarding the presence of an intimate partner and the perceived threat to relatives posed by the coronavirus pandemic

$\chi^2 (N = 635; df = 1) = 19.967, p < 0.001$; Cramér's $V = 0.177$, ie weak effect size (IBM Knowledge Center , nda1), variables are weakly related			The coronavirus pandemic is a threat to your relatives	
			Yes	no
presence of an intimate partner	without an intimate partner	Observed frequencies	220	58
		Theoretical / expected frequencies	194.4	83.6
	presence of an intimate partner	Observed frequencies	224	133
		Theoretical / expected frequencies	249.6	107.4

Table 30 . Compared frequency distributions of responses on marital status and perceived threat to relatives posed by the coronavirus pandemic

$\chi^2 (N = 635; df = 4) = 27.043; p < 0.001$; Likelihood Ratio = 32.845, $df = 4, p < 0.001$; Cramér's $V = 0.206$, ie moderate effect	The coronavirus pandemic is a threat to your relatives
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size (IBM Knowledge Center, nda1), variables are moderately related			Yes	no
Marital status	single	Observed frequencies	199	58
		Theoretical / expected frequencies	179.7	77.3
	in a constant relationship	Observed frequencies	95	67
		Theoretical / expected frequencies	113.3	48.7
	married	Observed frequencies	129	66
		Theoretical / expected frequencies	136.3	58.7
	divorced	Observed frequencies	7	0
		Theoretical / expected frequencies	4.9	2.1
	widowed	Observed frequencies	14	0
		Theoretical / expected frequencies	9.8	4.2

Table 31 . Compared frequency distributions of responses on the presence of children in the family and the perceived threat to relatives posed by the coronavirus pandemic

χ^2 (N = 635; df = 1) = 9.427, p <0.001; Cramér's V = 0.196, ie weak effect size (IBM Knowledge Center, nda1), variables are weakly related			The coronavirus pandemic is a threat to your relatives	
			Yes	no
Do you have children	Yes	Observed frequencies	126	93
		Theoretical / expected frequencies	153.1	65.9
	no	Observed frequencies	318	98
		Theoretical / expected frequencies	290.9	125.1

Younger subjects (up to 27 years of age) were more likely than expected to consider the coronavirus pandemic to be a threat to their relatives compared to older subjects (see Table 32). Younger subjects are worried about the health of their older relatives.

Table 32 . Comparisons of frequency distributions of age group responses to perceived threat to relatives posed by the coronavirus pandemic

$\chi^2_{(N = 635; df = 3)} = 24.389, p = 0.024$; Cramér's V = 0.122, ie weak effect size (IBM Knowledge Center, nda1), variables are weakly related			The coronavirus pandemic is a threat to your relatives	
			Yes	no
age groups	20-23 years	Observed frequencies	139	50
		Theoretical / expected frequencies	132.2	56.8
	24-27 years	Observed frequencies	107	32
		Theoretical / expected frequencies	97.2	41.8
	28-35 years	Observed frequencies	100	50
		Theoretical / expected frequencies	104.9	45.1
	36-65 years	Observed frequencies	98	59
		Theoretical / expected frequencies	109.8	47.2

Significantly more women than expected perceived the coronavirus pandemic as a threat to their relatives, and significantly more men than expected did not perceive it as a threat to their relatives (see Table 33). Women are more anxious than men (McLean, Asnaani, Litz, & Hofmann, 2011) and also more often than expected consider the coronavirus pandemic to be a threat to themselves, and men more often than expected do not perceive it as a threat to oneself (see Table 26).

Table 33 . Comparisons of frequency distributions of men's and women's responses to the perceived threat to relatives posed by the coronavirus pandemic

$\chi^2_{(N = 635; df = 1)} = 5.431, p = 0.020$; Cramér's V = 0.092, ie weak effect size (IBM Knowledge Center, nda1), variables are weakly related			The coronavirus pandemic is a threat to your relatives	
			Yes	no
sex	men	Observed frequencies	152	84
		Theoretical / expected frequencies	165.0	71.0
	women	Observed frequencies	292	107
		Theoretical / expected frequencies	279.0	120.0

The social isolation of the coronavirus pandemic leads to a greater appreciation of human life (N = 407) and the family (N = 474), with more respondents realizing the importance of their family than realizing the value of human life (see Figure 6). , which means that family well - being is very important for the studied Bulgarians during the difficult life situation related to the coronavirus pandemic.

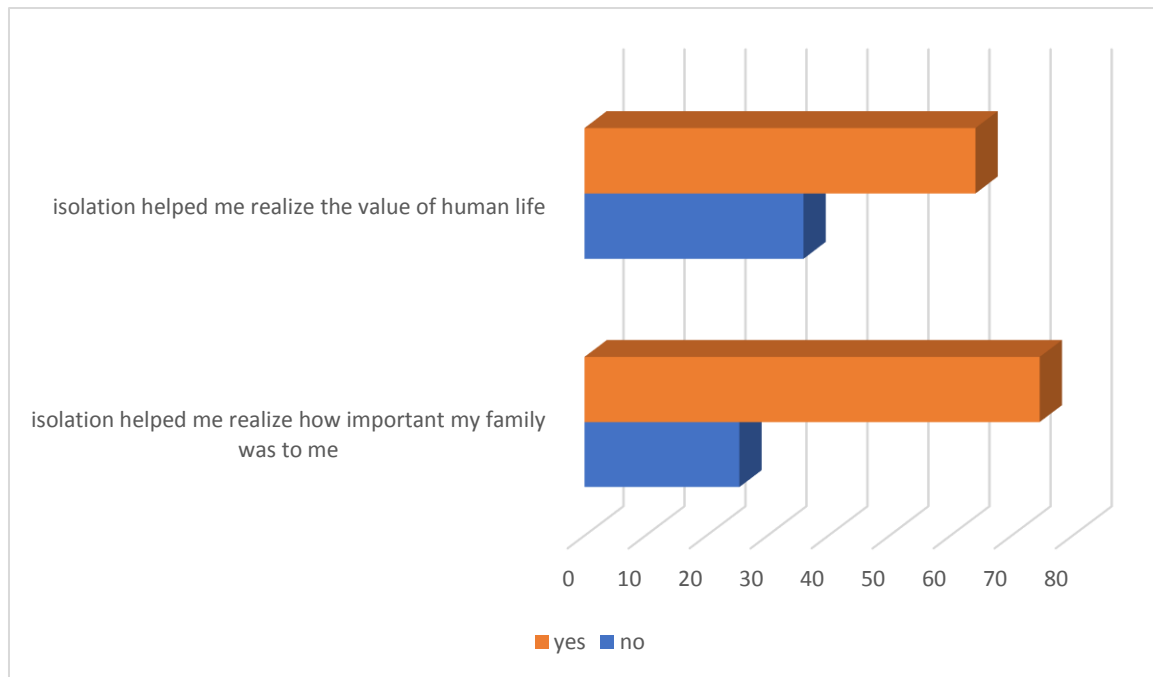


Figure 6. Percentage distribution of responses on awareness of the value of human life and the importance of the family due to social isolation during the coronavirus pandemic

There is a tendency for people who have realized the value of human life in a coronavirus pandemic to also realize how important their family is to them (see Table 34).

Table 34 . Compared frequency distributions of responses on awareness of the value of human life in the coronavirus pandemic and awareness of the importance of the family

$\chi^2_{(N = 635; df = 1)} = 173.102, p < 0.001$; Cramér's $V = 0.522$, ie moderate effect size („IBM Knowledge Center”, nda1), variables are moderately related			Isolation helped me realize how important my family was to me:	
			Yes	no
Isolation helped me realize the value of human life:	Yes	Observed frequencies	373	34
		Theoretical / expected frequencies	303.8	103.2
	No	Observed frequencies	101	127
		Theoretical / expected frequencies	170.2	57.8

Social isolation has helped them realize the value of human life to a greater extent than expected, mainly for people with children (see Table 35) who do not live alone (see Table 36) but without an intimate partner (see Table 37) 28-35 years (see Table 38), and in people aged 24-27, without children living alone but with an intimate partner, isolation helped them to a lesser extent than expected to realize the value of human life . Caring for children is accompanied by responsibility for their lives, especially in the coronavirus pandemic.

Table 35 . Compared frequency distributions of responses on the presence of children in the family and awareness of the value of human life due to isolation in the coronavirus pandemic

$\chi^2_{(N = 635; df = 1)} = 11,674; p = 0.001$; Cramér's V = 0.136, ie weak effect size (IBM Knowledge Center , nda1), variables are weakly related			Isolation helped me realize the value of human life:	
			Yes	no
Do you have children	Yes	Observed frequencies	160	59
		Theoretical / expected frequencies	140.4	78.6
	no	Observed frequencies	247	169
		Theoretical / expected frequencies	266.6	149.4

Table 36 . Compared frequency distributions of responses on living alone and awareness of the value of human life due to isolation in the coronavirus pandemic

$\chi^2_{(N = 635; df = 1)} = 6.782, p = 0.009$; Cramér's V = 0.103, ie weak effect size („IBM Knowledge Center ”, nda1), variables are weakly related			Isolation helped me realize the value of human life:	
			Yes	no
Do you live alone?	Yes	Observed frequencies	42	40
		Theoretical / expected frequencies	52.6	29.4
	no	Observed frequencies	365	188
		Theoretical / expected frequencies	354.4	198.6

Table 37 . Compared frequency distributions of responses regarding the presence of an intimate partner and awareness of the value of human life due to isolation in the coronavirus pandemic

$\chi^2_{(N = 635; df = 1)} = 5.308, p = 0.021$; Cramér's V = 0.091, ie weak effect size (IBM Knowledge Center , nda1), variables are weakly related			Isolation helped me realize the value of human life:	
			Yes	no
presence of an intimate partner	without an intimate partner	Observed frequencies	192	86
		Theoretical / expected frequencies	178.2	99.8
	presence of an intimate partner	Observed frequencies	215	142
		Theoretical / expected frequencies	228.8	128.2

Table 38 . Comparisons of frequency distributions of age group responses on awareness of the value of human life due to isolation in the coronavirus pandemic

χ^2 (N = 635; df = 3) = 35.789, p < 0.001; Cramér's V = 0.237, ie moderate effect size (IBM Knowledge Center , nda1), variables are moderately related			Isolation helped me realize the value of human life:	
			Yes	no
age groups	20-23 years	Observed frequencies	125	64
		Theoretical / expected frequencies	121.1	67.9
	24-27 years	Observed frequencies	66	73
		Theoretical / expected frequencies	89.1	49.9
	28-35 years	Observed frequencies	121	29
		Theoretical / expected frequencies	96.1	53.9
	36-65 years	Observed frequencies	95	62
		Theoretical / expected frequencies	100.6	56.4

People who do not live alone are more aware than expected that their family is very important to them during the social isolation of the coronavirus pandemic, and people who live alone are less aware than expected, that their family is very important to them during social isolation in a coronavirus pandemic (see Table 39). This result can also be interpreted as an indicator of the reliability of the answers of the participants in the study.

Table 39 . Compared frequency distributions of responses regarding living alone and awareness of the importance of family as a result of isolation in the coronavirus pandemic

χ^2 (N = 635; df = 1) = 11.030, p = 0.001; Cramér's V = 0.132, ie weak effect size (IBM Knowledge Center , nda1), variables are weakly related			Isolation helped me realize how important my family was to me:	
			Yes	no
Do you live alone?	Yes	Observed frequencies	49	33
		Theoretical / expected frequencies	61.2	20.8
	no	Observed frequencies	425	128
		Theoretical / expected frequencies	412.8	140.2

In addition, for the majority of Bulgarians surveyed (N = 484; 76.2%), restrictive measures due to COVID-19 have shown the importance of communicating with their relatives. Mostly at the age of 20-23 years, but also 28-35 years significantly more often than expected restrictive measures due to COVID-19 have shown the importance of communication with relatives (see Table 40).

Table 40 . Comparisons of frequency distributions of age group responses regarding the importance of communication with relatives as a result of restrictive measures in the coronavirus pandemic

χ^2 (N = 635; df = 3) = 9,920, p = 0.019; Cramér's V = 0.125, ie weak effect size (IBM Knowledge Center , nda1), variables are weakly related			Restrictive measures because of COVID-19 have shown the importance of communicating with my relatives	
			Yes	no
age groups	20-23 years	Observed frequencies	155	34
		Theoretical / expected frequencies	144.1	44.9
	24-27 years	Observed frequencies	97	42
		Theoretical / expected frequencies	105.9	33.1
	28-35 years	Observed frequencies	120	30
		Theoretical / expected frequencies	114.3	35.7
	36-65 years	Observed frequencies	112	45
		Theoretical / expected frequencies	119.7	37.3

The results of the study reveal that the majority of Bulgarians surveyed became close to family members during social isolation in the coronavirus pandemic (see Figure 7).

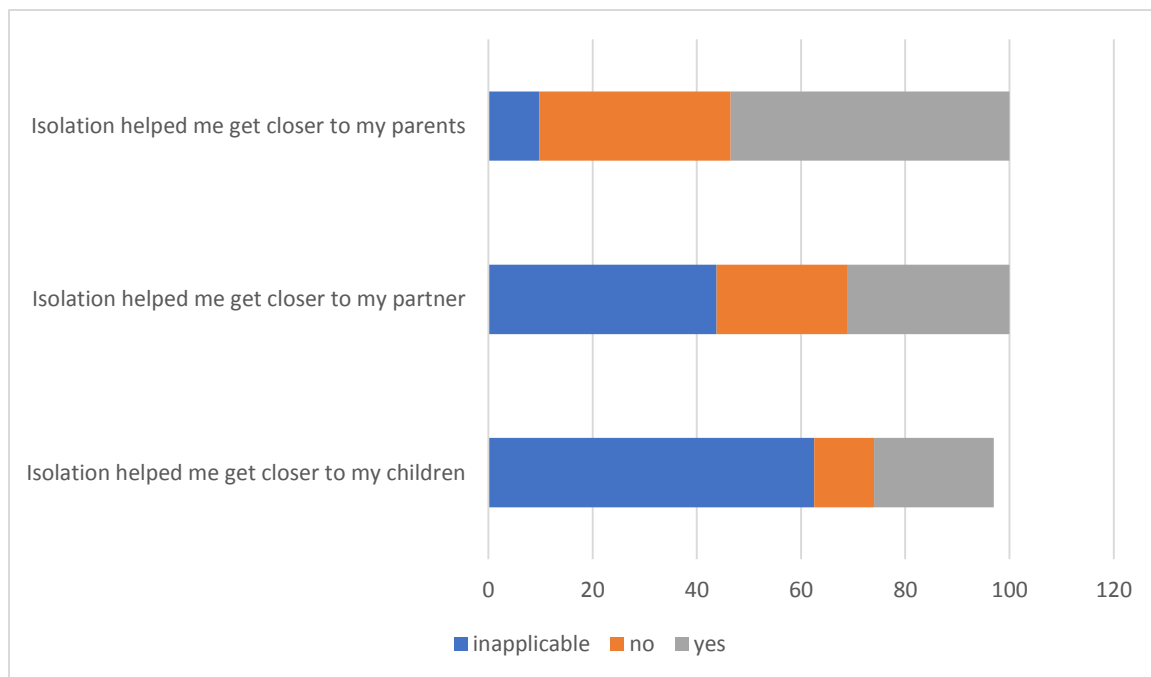


Figure 7. Percentage distribution of responses regarding family members with whom the studied Bulgarians became close during the coronavirus pandemic

The majority of those surveyed became close to their parents (340 were close to their parents versus 233 who were not close to them, and 62 of the parents were not alive) during social isolation in the coronavirus pandemic, followed by the number of subjects who became close to their spouse or romantic partner during social isolation in the coronavirus pandemic (197 became close to their partner against 160 who did not become close to him, and 278 subjects did not have an intimate partner with whom to converge), followed by the number of subjects who became close to their children during the social isolation of the coronavirus pandemic (146 became close to their children against 73 who did not become close to them, and 416 subjects did not have children with whom to converge). The general situation during the coronavirus pandemic and the responsibility for family members have led to family cohesion and improved family relationships in most cases, ie family well-being has increased in this regard.

In significantly more men than expected, isolation helped them to get closer to their children, while in significantly fewer women than expected, isolation helped them to get closer to their children (see Table 41), and a possible explanation is that in principle mothers are close to their children because stereotypes about traditional gender roles attribute to the mother the responsibility for raising the children (Stoyanova, S., 2005; Tupitsyna , I., 2003; Doyle & Paludi , 1991).

Table 41 . Comparisons of frequency distributions of men's and women's responses to social cohesion in social isolation during the coronavirus pandemic

			Isolation helped me get closer to my children		
			Yes	no	not applicable
sex	men	Observed frequencies	62	14	160
		Theoretical / expected frequencies	54.3	27.1	154.6

	women	Observed frequencies	84	59	256
		Theoretical / expected frequencies	91.7	45.9	261.4

At the age of 20-23, people were significantly more likely than expected to approach their parents in isolation during the coronavirus pandemic, and people over the age of 23 were significantly less likely than close to their parents in isolation during the coronavirus pandemic (see Table 42).

Table 42 . Comparisons of frequency distributions of age group responses on social cohesion in social isolation during the coronavirus pandemic

$\chi^2_{(N = 635; df = 6)} = 90.362, p < 0.001$; Cramér's $V = 0.267$, ie moderate effect size („IBM Knowledge Center ”, nda1), variables are moderately related			Isolation helped me get closer to my parents		
			Yes	no	not applicable
age groups	20-23 years	Observed frequencies	147	33	9
		Theoretical / expected frequencies	101.2	69.3	18.5
	24-27 years	Observed frequencies	71	65	3
		Theoretical / expected frequencies	74.4	51.0	13.6
	28-35 years	Observed frequencies	58	62	30
		Theoretical / expected frequencies	80.3	55.0	14.6
	36-65 years	Observed frequencies	64	73	20
		Theoretical / expected frequencies	84.1	57.6	15.3

Another measure of family well-being is family income (Melnikova , N., 2004; Miteva, S., 2013). Just over half of the Bulgarians surveyed (N = 351; 55.3%) stated that family income had not changed due to the restrictions imposed due to COVID-19. Approximately one in three subjects (N = 252; 39.7%) reported that family income decreased due to restrictions imposed by COVID-19. With a very small share of the surveyed, family income increased due to the restrictions imposed due to COVID-19 (N = 32; 5.0%). These data are an indicator that the family well-being related to the material well-being of the family in about half of the subjects did not change significantly in the difficult life situation of a coronavirus pandemic, and in about one third of the study participants it decreased.

In more people without an intimate partner than expected, family income decreased after the restrictions imposed by the coronavirus pandemic, and in more people with an intimate partner than expected, family income increased under the restrictions imposed by the pandemic (see Table 43 ; $\chi^2_{(N = 635; df = 2)} = 10.065, p = 0.007$; Cramér's $V = 0.126$, ie weak effect size (IBM Knowledge Center , nda1), variables are weakly related).

Table 43 . Comparison of frequency distributions of responses regarding the presence of an intimate partner and changes in family income due to the restrictions imposed in the coronavirus pandemic

Having an intimate partner	Type of frequency	Family income has declined following restrictions imposed by COVID-19	Family income has not changed since the restrictions imposed by COVID-19	Family income has risen since the restrictions imposed by COVID-19
without an intimate partner	Observed frequencies	121	151	6
	Theoretical / expected frequencies	110.3	153.7	14.0
presence of an intimate partner	Observed frequencies	131	200	26
	Theoretical / expected frequencies	141.7	197.3	18.0

In significantly more men than expected, family income did not change due to the constraints imposed by the coronavirus pandemic, and in significantly more women than expected, family income changed - decreased or increased (see Table 44).

Table 44 . Comparisons of frequency distributions of men's and women's responses to changes in family income due to restrictions imposed by the coronavirus pandemic

χ^2 (N = 635; df = 2) = 6.818, p = 0.033; Cramér's V = 0.104, ie weak effect size (IBM Knowledge Center , nda1), variables are weakly related			Has your family income changed after the restrictions imposed by COVID-19?		
			decreased	did not change	grew
sex	men	Observed frequencies	88	142	6
		Theoretical / expected frequencies	93.7	130.5	11.9
	women	Observed frequencies	164	209	26
		Theoretical / expected frequencies	158.3	220.5	20.1

At the age of 20 to 23 years and from 28 to 35 years significantly more often than expected family income decreased after the restrictions imposed due to COVID-19, and at the age of 24-27 years and 36-65 years significantly more often than expected family income did not change after the restrictions imposed by COVID-19 (see Table 45).

Table 45 . Compared frequency distributions of age group responses to changes in family income due to restrictions imposed by the coronavirus pandemic

χ^2 (N = 635; df = 6) = 50.997, p < 0.001; Cramér's V = 0.283, ie moderate effect size (IBM Knowledge Center, nda1), variables are moderately related			Has your family income changed after the restrictions imposed by COVID-19?		
			decreased	did not change	grew
age groups	20-23 years	Observed frequencies	92	94	3
		Theoretical / expected frequencies	75.0	104.5	9.5
	24-27 years	Observed frequencies	36	93	10
		Theoretical / expected frequencies	55.2	76.8	7.0
	28-35 years	Observed frequencies	83	57	10
		Theoretical / expected frequencies	59.5	82.9	7.6
	36-65 years	Observed frequencies	41	107	9
		Theoretical / expected frequencies	62.3	86.8	7.9

In significantly more than expected subjects without children the family income decreased after the restrictions imposed due to COVID-19, while in significantly more than expected subjects with children the family income did not change or increased after the restrictions imposed due to COVID-19 (see Table 46). Perhaps people with children have made extra efforts to maintain and even increase family income during the coronavirus pandemic.

Table 46 . Comparison of frequency distributions of responses on the presence of children and changes in family income due to restrictions imposed in the coronavirus pandemic

χ^2 (N = 635; df = 2) = 6,508, p = 0.039; Cramér's V = 0.101, ie weak effect size („IBM Knowledge Center”, nda1), variables are weakly related			Has your family income changed after the restrictions imposed by COVID-19?		
			decreased	did not change	grew
Do you have children	Yes	Observed frequencies	75	128	16
		Theoretical / expected frequencies	86.9	121.1	11.0
	no	Observed frequencies	177	223	16
		Theoretical / expected frequencies	165.1	229.9	21.0

In significantly more men than expected (see Table 44) aged 24-27 years and 36-65 years (see Table 45) with children (see Table 46), family income did not change due to the restrictions imposed by the coronavirus pandemic. , and in significantly more women than expected (see Table 44) family income

has changed - decreased between the ages of 20 and 23 and from 28 to 35 (see Table 45) in women (see Table 44) without children (see Table 46) or increased in women (see Table 44) with children (see Table 46).

The majority of subjects did not have difficulty caring for the household, despite problems experienced in the coronavirus pandemic (see Figure 8), and more often than expected, women (see Table 48) with children (see Table 47) experienced difficulties in care for the household during a coronavirus pandemic.

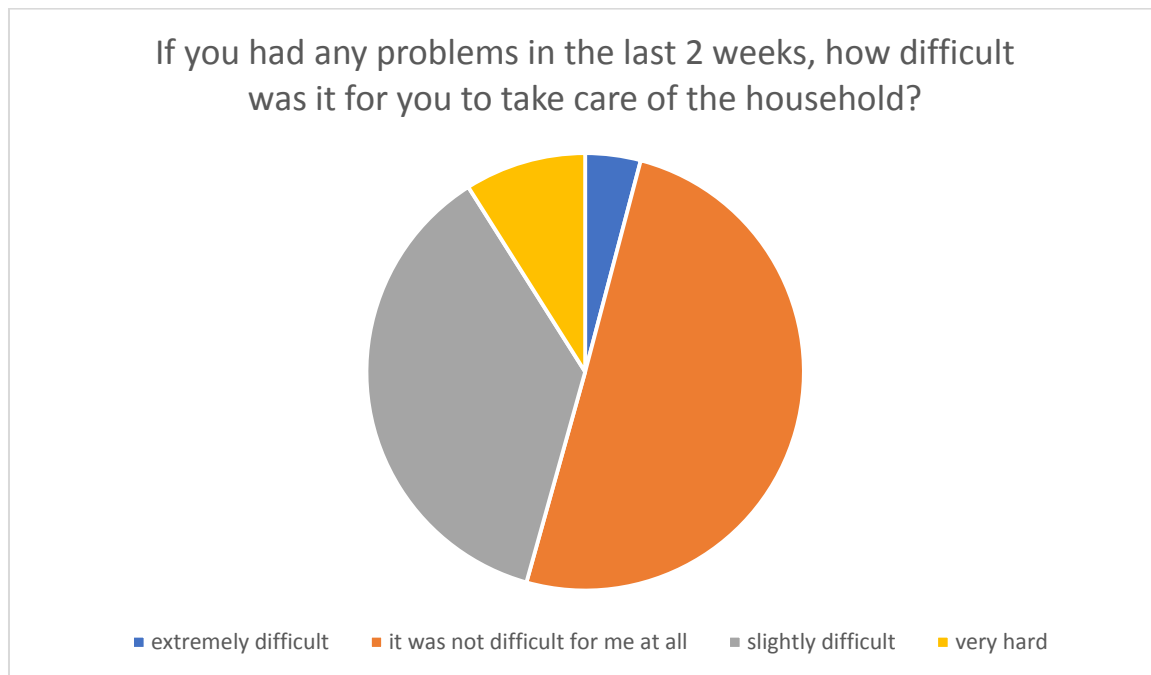


Figure 8. Percentage distribution of answers to the question „If you had any problems in the last 2 weeks, how difficult was it for you to take care of the household?“

Table 47 . Frequency distributions of responses on the presence of children and difficulties in household care during a coronavirus pandemic compared

			If you had any problems in the last 2 weeks, how difficult was it for you to take care of the household?			
			it was not difficult for me at all	slightly difficult	very hard	extremely difficult
Do you have children	Yes	Observed frequencies	99	73	33	14
		Theoretical / expected frequencies	110.0	80.4	19.7	9.0
	no	Observed frequencies	220	160	24	12
		Theoretical / expected frequencies	209.0	152.6	37.3	17.0

Table 48 . Frequency distributions of male and female responses to household care difficulties during a coronavirus pandemic compared

$\chi^2 (N = 635; df = 3) = 10.484, p = 0.015$; Cramér's $V = 0.128$, ie weak effect size (IBM Knowledge Center, nda1), variables are weakly related			If you had any problems in the last 2 weeks, how difficult was it for you to take care of the household?			
			it was not difficult for me at all	slightly difficult	very hard	extremely difficult
sex	men	Observed frequencies	132	82	19	3
		Theoretical / expected frequencies	118.6	86.6	21.2	9.7
	women	Observed frequencies	187	151	38	23
		Theoretical / expected frequencies	200.4	146.4	35.8	16.3

Family well-being during the difficult life situation related to the coronavirus pandemic, expressed as awareness of the importance of the family (in about 75% of respondents), closeness with family members (with parents - in 53.5%; with spouse) - in 31%, with children - in 23%), giving importance to communication with relatives (in about 76% of respondents), stability (in about 55% of respondents) or increase (in 5% of respondents) family income, no difficulties in household care (in 50% of respondents). Approximately 70% of the surveyed Bulgarians perceive the coronavirus as a threat to their relatives, which expresses their attachment to their family. It can be summarized that about 70 % of the studied Bulgarians experience family well-being during the coronavirus pandemic, and the rest have lower family well-being during the coronavirus pandemic. In terms of socio-demographic characteristics, it cannot be stated categorically that some social groups experience the most pronounced family well-being during the coronavirus pandemic, as it happens that one social group in society experiences a strong indicator of family well-being. pronounced family well-being, but according to another indicator of the same group to be in a less enviable position with less pronounced family well-being.

With regard to some indicators of family well-being, the relationship between them and their determination by certain factors during the coronavirus pandemic was examined through mediator analysis.

Multiple mediator analysis was performed by bootstrapping with set 5000 samples and the assessment is performed by the method of maximum probability, performed with the software JASP 0.11.1.0 (JASP Team, 2019). Table 49. Direct effects of the number of children and the presence of an intimate partner on emotional well-being

Independent variables		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	upper limit
Number of children	→	Emotional well-being	0.241	0.053	4,557	< 0.001	0.125	0.348

Without or with an intimate partner	→		-0.267	0.088	-3,034	0.002	-0.452	-0.083
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When examining the direct effect of the number of children on emotional well-being and the direct effect of having an intimate partner on emotional well-being, significant non-standardized impact factors are found, presented in Table 49 and Figure 9. Based on bootstrapping procedure with set 5000 samples from the data file, confidence intervals are generated to determine the significance of the direct effect as the calculated value of the direct effect is the middle of this interval and since zero does not fall within the confidence intervals, it is found that the direct effect of the number children and the presence of an intimate partner on emotional well-being is significant. As the number of children in the family increases, so does the emotional well-being experienced. In the presence of an intimate partner, emotional well-being decreases, and the studied Bulgarians without an intimate partner experience higher emotional well-being, which means that the intimate partner is associated with more negative experiences during the coronavirus pandemic, perhaps due to concerns about his health and maintaining relationships.

Table 50. Indirect effects of the number of children and the presence of an intimate partner on emotional well-being, mediated by the perception of the coronavirus as a threat to themselves and / or relatives

Independent variables		Mediator variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
									Lower limit	Upper limit
Number of children	→	Perception of the coronavirus as a threat to themselves and / or relatives	→	Emotional well-being	0.013	0.008	1,631	0.103	-0.002	0.033
Without or with an intimate partner	→		→		0.032	0.015	2,133	0.033	0.009	0.071

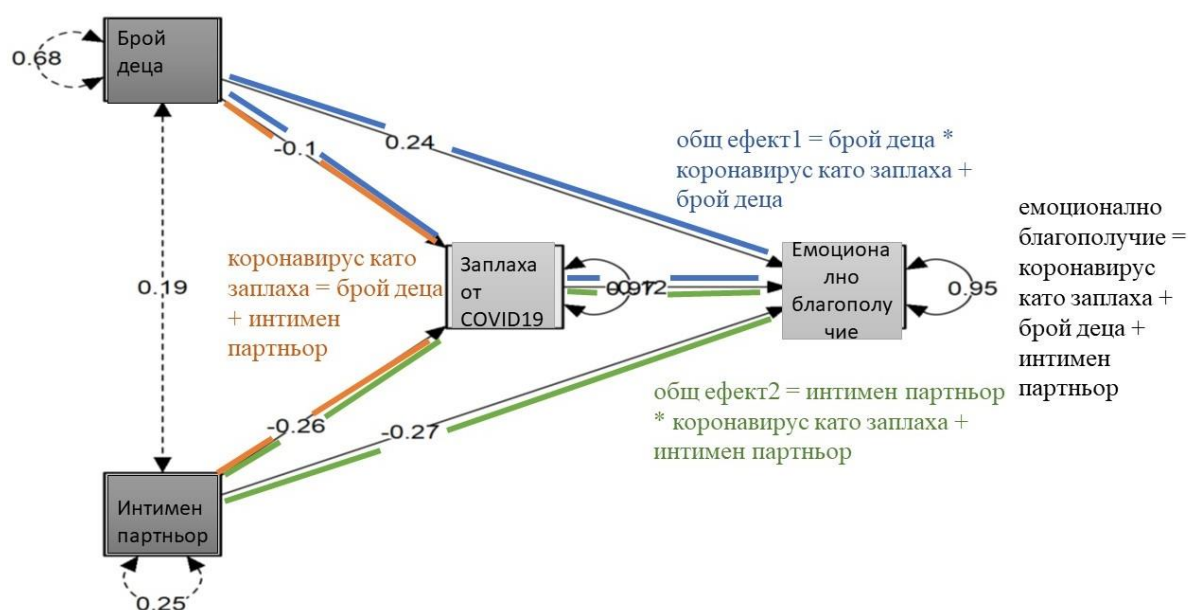
Examination of the indirect effects of having a child and an intimate partner on well-being mediated by the perception of the coronavirus as a threat to oneself and / or relatives reveals significant non-standardized impact factors, presented in Table 50 and Figure 9. Based on a bootstrapping procedure with a set of 5000 samples from the data file, confidence intervals are generated to determine the significance of the indirect effects and the calculated value of the indirect effects is the middle of this

interval. It was found that the influence of the number of children on emotional well-being is not mediated by the perception of the coronavirus as a threat to themselves and / or their relatives. It has also been found that the influence of having an intimate partner on emotional well-being is mediated by the perception of the coronavirus as a threat to oneself and / or one's relatives. Having an intimate partner reduces the perception of the coronavirus as a threat to relatives (see Figure 9) and, accordingly, emotional well-being increases because people worry less about their relatives, perhaps because people with an intimate partner realize that they can count on him.

Table 51 . General effects of the number of children and the presence of an intimate partner on emotional well-being

Independent variables		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	upper limit
Number of children	→	Emotional well-being	0.254	0.053	4,771	< 0.001	0.137	0.363
Without or with an intimate partner	→		-0.236	0.088	-2,670	0.008	-0.421	-0.050

Common effects include a combination of the direct and indirect effects of variables. More children in the family increase emotional well-being. Having an intimate partner reduces it in a coronavirus pandemic situation - see Table 51 and Figure 9 . With imposed social isolation, people have difficulty maintaining a relationship with their intimate partner if they do not live with him, which upsets them. The coefficient of determination for emotional well-being is $R^2 = 0.05$, which means that the model explains 5% of the variations (Zarbova , B., 2019) in the level of emotional well-being and this is a small amount of effect (Awang , 2015, p. .105). The coefficient of determination for the perception of the coronavirus as a threat is $R^2 = 0.033$, which means that the model explains 3.3% of the variations (Zarbova , B., 2019) in the perception of the coronavirus as a threat and this is a small amount of effect (Awang , 2015).



Number of children/ threat of COVID-19/ emotional well-being/ Intimate partner

Figure 9 . Indirect influence of the presence of an intimate partner and the number of children on the emotional well-being with a mediator the perception of the coronavirus as a threat to themselves and / or relatives

Mediator analysis was performed by bootstrapping with set 5000 samples and the assessment is performed by the method of maximum probability, performed with the software JASP 0.11.1.0 (JASP Team, 2019). The results of the mediator analysis with predictor awareness of the importance of your family during the coronavirus pandemic, mediator variable (with indirect effect) - perceived threat of the coronavirus for themselves and / or relatives, and result variable - rapprochement with family members in social isolation during the coronavirus pandemic as an expression of family well-being are presented in Table 52 , Table 53 , Table 54 , and Figure 10 .

Table 52 . Direct effects of awareness of the importance of his family on cohesion with family members during a pandemic with coronavirus

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	upper limit
Isolation helped me realize how	→	Getting closer to family	0.961	0.082	11,678	< 0.001	0.820	1,100

important my family was to me		member s						
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Examining the direct effect of awareness of the importance of one's family during social isolation on rapprochement with family members during a coronavirus pandemic as an expression of family well-being reveals a significant non-standardized impact factor, presented in Table 52 and Figure 10. . Based on a bootstrapping procedure with set 5000 samples from the data file, confidence intervals are generated to determine the significance of the direct effect as the calculated value of the direct effect is the middle of this interval and since zero does not fall within the confidence interval, it is found that the direct effect of realizing the importance of one's family on getting closer to family members is significant. Awareness of the importance of one's family during the coronavirus pandemic also increases the rapprochement with family members during the coronavirus pandemic as an expression of family well-being.

Table 53 . Indirect effect of awareness of the importance of one's family on rapprochement with family members during a coronavirus pandemic mediated by the perception of the coronavirus as a threat to oneself and / or relatives

Independ ent variable		Mediator variable		Result variabl e	Evaluati on	Standa rd error	z- valu e	Level of significa nce	Bootstrap 95% prejudice- adjusted confidence interval	
									Low er limit	upp er limi t
Isolation helped me realize how important my family was to me	→	Percepti on of the coronavi rus as a threat to themselv es and / or relatives	→	Gettin g closer to family memb ers	0.066	0.021	3,13 7	0.002	0.03 0	0.11 6

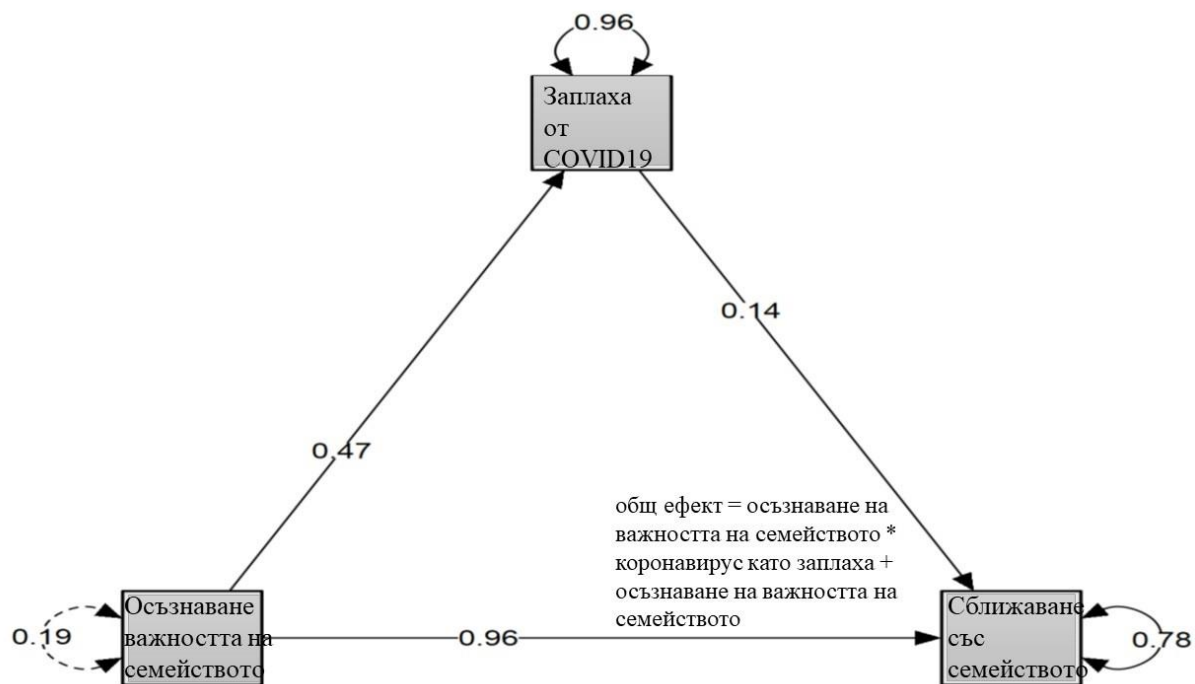
Examining the indirect effect of awareness of the importance of the family on rapprochement with family members as an expression of family well-being, mediated by the perception of the coronavirus as a threat to oneself and / or relatives, a significant non-standardized impact factor is presented in Table 53. and in Figure 10 . Based on a bootstrapping procedure with a set of 5000 samples from the data file, confidence intervals are generated to determine the

significance of the indirect effect and the calculated value of the indirect effect is the middle of this interval. It has been found that the influence of awareness of the importance of one's family on rapprochement with family members is mediated by the perception of the coronavirus as a threat to oneself and / or one's relatives. Awareness of the importance of one's family during social isolation increases the perception of the coronavirus as a threat to relatives, and one becomes closer to one's family members (see Figure 10).

Table 54 . Overall effect of awareness of the importance of one's family on rapprochement with family members during a coronavirus pandemic

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	upper limit
Isolation helped me realize how important my family was to me	→	Getting closer to family members	1,026	0.082	12,588	< 0.001	0.883	1,168

The overall effect includes a combination of the direct and indirect effects of the variables. Awareness of the importance of the family increases family well-being, expressed through rapprochement between family members - see Table 54 and Figure 10 . The coefficient of determination for family rapprochement is $R^2 = 0.219$, which means that the model explains about 22% of the variations (Zarbova, B., 2019) in the level of family well-being, expressed through rapprochement between family members, and this is an average size of the effect (Awang , 2015, p.105). The coefficient of determination for the perception of the coronavirus as a threat is $R^2 = 0.041$, which means that the model explains 4.1% of the variations (Zarbova, B., 2019) in the perception of the coronavirus as a threat and this is a small amount of effect (Awang , 2015, p.105).



Threat of COVID-19/ Awareness of the importance of the family/ Getting closer to the family

Figure 10. Indirect influence of the awareness of the importance of the family on the rapprochement with the family members with a mediator the perception of the coronavirus as a threat to oneself and / or to the relatives

Mediator analysis was performed by bootstrapping with set 5000 samples and the assessment is performed by the method of maximum probability, applied with the software JASP 0.11.1.0 (JASP Team, 2019). The results of the mediator analysis with a predictor of household care difficulties in the last two weeks prior to the study during the coronavirus pandemic, a mediator variable (indirect effect) was rapprochement with family members during the coronavirus pandemic as an expression of family well-being, and The outcome variable was emotional well-being during the coronavirus pandemic, are presented in Table 55, Table 56, Table 57, and Figure 11.

Table 55 . Direct and effects of difficulties in caring for the household on the emotional well-being during the pandemic with coronavirus

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	Upper limit

Difficulties in household care	→	Emotional well-being	-0.486	0.045	-10,721	< 0.001	-0.570	-0.395
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Examining the direct effect of household care difficulties on emotional well-being during a coronavirus pandemic reveals a significant non-standardized impact factor, presented in Table 55 and Figure 11.. Based on a bootstrapping procedure with set 5000 samples from the data file, confidence intervals are generated to determine the significance of the direct effect as the calculated value of the direct effect is the middle of this interval and since zero does not fall within the confidence interval, it is found that the direct effect of difficulties in household care on emotional well-being during a coronavirus pandemic is significant. As the difficulties of household care increase during a coronavirus pandemic, emotional well-being decreases. People are worried about providing basic necessities with the introduction of social isolation during the coronavirus pandemic.

Table 56 . Indirect effect of household care difficulties on emotional well-being mediated by rapprochement with family members during a coronavirus pandemic

Independent variable		Mediator variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
									Lower limit	Upper limit
Difficulties in household care	→	Getting closer to family members	→	Emotional well-being	-0.012	0.007	-1,764	0.078	-0.030	0.002

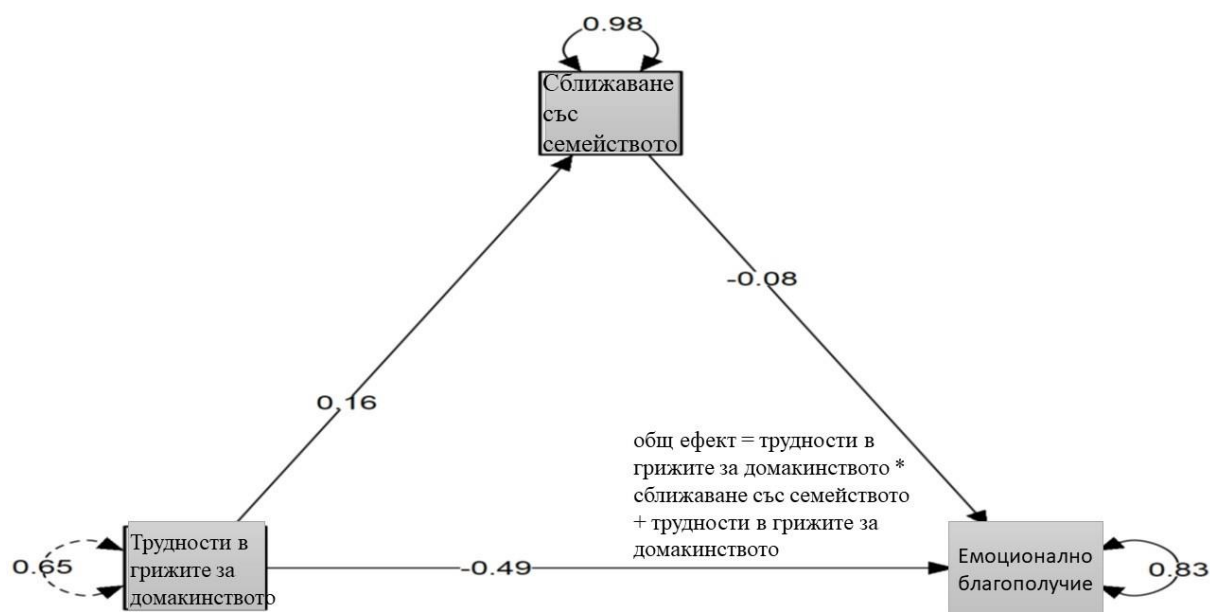
Examining the indirect effect of household care difficulties on emotional well-being mediated by rapprochement with family members found an insignificant non-standardized impact factor, presented in Table 56 and Figure 11 . Based on a bootstrapping procedure with 5000 samples from the data file, confidence intervals are generated to determine the significance of the indirect effect as the calculated value of the indirect effect is the middle of this interval

and since zero falls in the confidence interval, it is found that the impact of difficulties in the care of the household on emotional well-being is not mediated by rapprochement with family members.

Table 57 . Overall effect of household care difficulties on emotional well-being during a coronavirus pandemic

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	Upper limit
Difficulties in household care	→	Emotional well-being	-0.499	0.045	-11,038	< 0.001	-0.584	-0.407

The overall effect includes a combination of the direct and indirect effects of the variables. Increasing difficulties in household care reduce emotional well-being - see Table 57 and Figure 11 . The coefficient of determination for emotional well-being is $R^2 = 0.167$, which means that the model explains 16.7% of the variations (Zarbova, B., 2019) in the level of emotional well-being and this is the average size of the effect (Awang , 2015, p. .105). The coefficient of determination for rapprochement with family members as an expression of family well-being is $R^2 = 0.016$, which means that the model explains 1.6% of the variations (Zarbova, B., 2019) in rapprochement with different family members.



Growing closer to family / difficulties in household care / emotional well-being

Figure 11. Indirect impact of household care difficulties on emotional well-being with a mediator getting closer to family members

Mediator analysis was performed by bootstrapping with set 5000 samples and the assessment is performed by the method of maximum probability, applied with the software JASP 0.11.1.0 (JASP Team, 2019). The results of mediator analysis with predictor awareness of the value of human life during social isolation, mediator variable (with indirect effect) is the perception of the coronavirus pandemic as a threat, and result variables - rapprochement with family members during the coronavirus pandemic and change in family income as an expression of family well-being are presented in Table 58 , Table 59 , Table 60 , and Figure 12 .

Table 58 . Direct effects of awareness of the value of human life during the coronavirus pandemic on family cohesion and changes in family income as indicators of family well-being

Independent variable		Result variables	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	upper limit
Isolation helped me realize the	→	Getting closer to family members	0.657	0.078	8,370	< 0.001	0.505	0.812

value of human life	→	Change in family income	-0.124	0.084	-1,466	0.143	-0.283	0.027
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Examining the direct effect of awareness of the value of human life in social isolation on rapprochement with family members during a coronavirus pandemic reveals a significant non-standardized impact factor, presented in Table 58 and Figure 12 . Based on a bootstrapping procedure with set 5000 samples from the data file, confidence intervals are generated to determine the significance of the direct effect as the calculated value of the direct effect is the middle of this interval and when zero does not fall within the confidence interval, it is established that the direct the effect of awareness of the value of human life on rapprochement with family members during a coronavirus pandemic is significant. People who realized the value of human life during the coronavirus pandemic became closer to their family members. When examining the direct effect of the awareness of the value of human life on the possible change in family income during the coronavirus pandemic, an insignificant non-standardized impact factor is found, presented in Table 58 and Figure 12 , ie the awareness of the value of human life. life is not associated with a change in family income.

Table 59 . Indirect effects of awareness of the value of human life during the coronavirus pandemic on family closeness and on changes in family income as indicators of family well-being mediated by the perception of the coronavirus as a threat to themselves and / or their relatives

Independen t variable		Mediator variable		Result variabl es	Evaluati on	Standar d error	z- valu e	Level of significan ce	Bootstrap 95% prejudice- adjusted confidence interval	
									Low er limit	uppe r limit
Isolation helped me realize the value of human life	→	Perceptio n of the coronavir us as a threat to themselve s and / or relatives	→	Getting closer to family membe rs	0.073	0.022	3,35 3	<0.001	0.036	0.12 9
	→		→	Change in family income	-0.031	0.020	- 1,57 5	0.115	- 0.077	0.00 3

When examining the indirect effect of awareness of the value of human life on the change in family income mediated by the perception of the coronavirus as a threat to themselves and / or their relatives, an insignificant non-standardized impact factor is found, presented in Table 59 and Figure 12 . Based on a bootstrapping procedure with 5000 samples from the data file, confidence intervals are generated to determine the significance of the indirect effect as the calculated value of the indirect effect is the middle of this interval and since zero falls in the confidence interval, it is found that the influence of awareness the value of human life on the change in family income is not mediated by the perception of the coronavirus as a threat to themselves and / or their relatives.

Examining the indirect effect of awareness of the value of human life on rapprochement with family members, mediated by the perception of the coronavirus as a threat to themselves and / or their relatives, a significant non-standardized impact factor is found , presented in Table 59 and Figure 12 . Awareness of the value of human life increases the perception of the coronavirus as a threat to themselves and their relatives, which strengthens the rapprochement with family members (see Figure 12).

Table 60 . General effects of awareness of the value of human life during the coronavirus pandemic on family cohesion and changes in family income as indicators of family well-being

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	upper limit
Isolation helped me realize the value of human life	→	Getting closer to family members	0.730	0.077	9,426	< 0.001	0.576	0.889
	→	Change in family income	-0.155	0.082	-1,884	0.060	-0.316	0.001

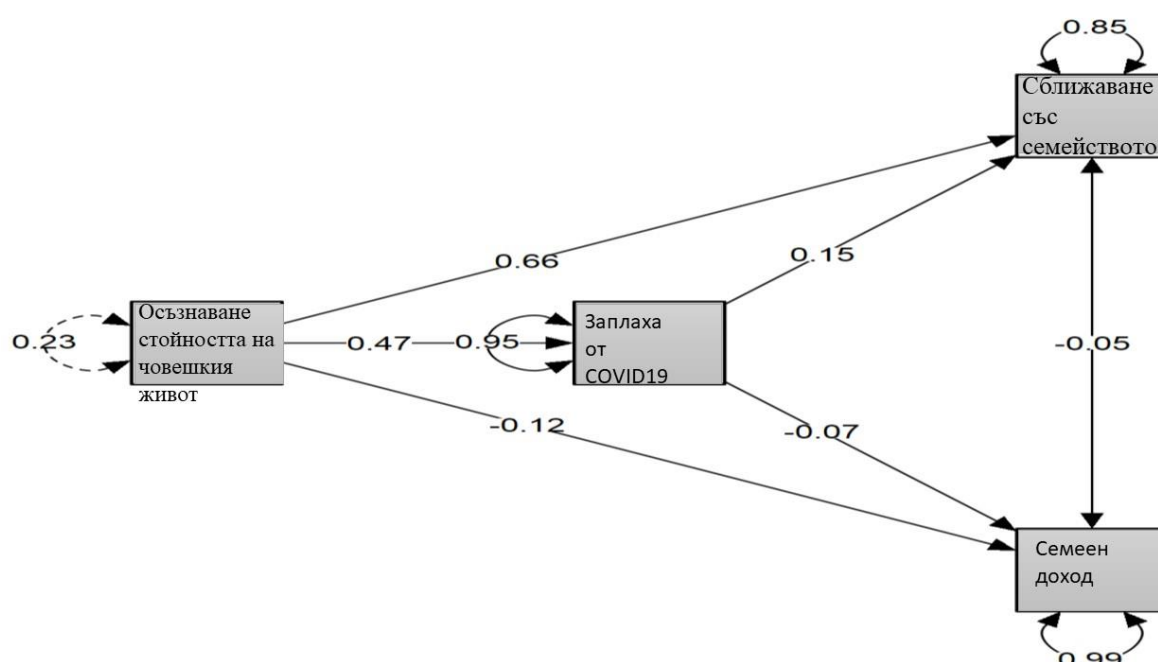
The overall effect includes a combination of the direct and indirect effects of the variables. Awareness of the value of human life leads to the rapprochement of family members, but is not associated with a change in family income - see Table 60 and Figure 12 . The coefficient of determination for rapprochement with family members as an expression of family well-being is $R^2 = 0.145$, which means that the model explains 14.5% of the variations (Zarbova, B., 2019) in rapprochement with different family members and this is average effect size (Awang , 2015, p.105). The coefficient of determination for the change in family income as an expression of family well-being is $R^2 = 0.010$, which means that the model explains 1% of the variations (Zarbova, B., 2019) in the change in family income. The coefficient of determination for the perception of coronavirus as a threat is $R^2 = 0.052$, which means that the model explains 5.2% of the variations (Zarbova, B., 2019) in the perception of coronavirus as a threat, which is a small amount of effect (Awang , 2015, p.105).

Table 61 . Residual covariations of the interaction between rapprochement with family members and the change in family income

Variable		Variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	upper limit

Getting closer to family members	↔	Change in family income	-0.052	0.037	-1,429	0.153	-0.129	0.013
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In Table 61 presents insignificant standardized coefficient of interaction between the two dependent variables in the model - convergence with family members and the change in family income, as an expression of family welfare. The results of the mediator analysis by bootstrapping show that they do not interact statistically significantly.



Awareness of the value of human life/ Threat of covid-19/ Growing closer to the family/ Family income

Figure 12 . Indirect effect of awareness of the value of human life during the coronavirus pandemic on family cohesion and change in family income as indicators of family well-being, with a mediator the perception of the coronavirus as a threat to themselves and / or their relatives

Cognitive processes and values appear to be important in enhancing family well-being during a coronavirus pandemic. Awareness of the importance of the family in social isolation increases family well-being, expressed through rapprochement between family members. Awareness of the importance of one's family during social isolation increases the perception of the coronavirus as a threat to relatives, and one becomes even closer to one's family members. Awareness of the value of human life also leads to the rapprochement of family members. Awareness of the value of human life increases the perception of the coronavirus as a threat to themselves and their relatives, which further enhances rapprochement with family members (see Figure 12). Cognitive processes such as a clearer awareness of the importance of the family and the family as a value are important to increase family well-being during a coronavirus pandemic by enhancing some, but not all, of its components. Awareness of the value of human life is not related to a change in family income, either directly or indirectly through the perception of the coronavirus as a threat to oneself and / or one's relatives. Convergence with family members and the change in family income as expressions of

family well-being do not interact statistically significantly, ie the change in one is not related to a change in the other. With regard to family income as an expression of family well-being, family well-being is affected by work-related well-being (see section 4. **WORK- WELL-BEINGS DURING THE CORONAVIRUS PANDEMIC**). Family well-being is also associated with other types of well-being, such as emotional well-being. The increase in the number of children in the family increases the experienced emotional well-being, ie it leads to a more pronounced predominance of the positive affect over the negative affect. As household care difficulties increase during a coronavirus pandemic, emotional well-being decreases, and people are likely to worry about providing basic necessities with the introduction of social isolation during a coronavirus pandemic. Having an intimate partner lowers emotional well-being in a coronavirus pandemic situation. The intimate partner is associated with more negative experiences during the coronavirus pandemic, perhaps due to worries about his health and the maintenance of the relationship, because with the imposed social isolation people have difficulty maintaining the relationship with their intimate partner if they do not live with him. which upsets them. The influence of having an intimate partner on emotional well-being, in addition to being directly mediated, is mediated by the perception of the coronavirus as a threat to oneself and / or one's relatives. Having an intimate partner reduces the perception of the coronavirus as a threat to relatives (see Figure 9) and, accordingly, emotional well-being increases because people worry less about their relatives, perhaps because people with an intimate partner realize that they can count on him.

CHAPTER 2. TYPES AND CATEGORIES OF WELL-BEING

In the second chapter of the dissertation theoretically within 131 pages the following problems are considered:

- Well-being as an experience, as an emotional state - emotional / affective well-being, hedonistic well-being
- Surprise
- Happiness
- Pleasure
- Depression
- Guilt
- Sadness
- Anxiety
- Fear
- Anger, irritability and hostility
- Other negative emotions associated with low well-being - Disgust, shame, embarrassment / anxiety, boredom
- Frustration
- Emotional well-being as including positive and negative emotions during the COVID-19 pandemic
- Well-being as functioning - Eudemonic / eudemonistic well-being, positive functioning or functional well-being
- Well-being as an orientation
- Well-being as an orientation towards self-realization; satisfaction with self-realization - satisfaction with achievements / successes
- Well-being as a consumer orientation towards life
- Well-being as an orientation towards optimism and hope
- Well-being as value orientations
- Well-being as an orientation towards life goals

- Well-being as a time orientation and meaning of life
- Well-being as a professional orientation
- Well-being as an orientation towards coherence
- Well-being as an orientation towards positive attitudes; satisfaction with social relationships (with friends, with other people at work or at school) and lack of loneliness
- Well-being as an orientation towards control and coping with the environment
- Well-being as behavior

Empirically, in Chapter 2, 4 independent studies have been conducted, which I will discuss in more detail.

1. EMOTIONAL WELL-BEING AS INCLUDING POSITIVE AND NEGATIVE EMOTIONS DURING THE COVID-19 PANDEMIC

Based on the presented theoretical concepts of the structure of well-being, a methodology has been developed that measures well-being during the coronavirus pandemic as currently including positive experiences of satisfaction (as suggested by various authors, eg Shamionov, R., 2008; Judge & Hulin, 1990; McIntosh, 2001; Veenhoven, 2007), self-confidence (as suggested by various authors, e.g. Ryff, 1989; Ryff, 1995) and positive affect: contentment (as suggested by various authors, e.g. Abdallah, Michaelson, Shah, Stoll, & Marks, 2012; Veenhoven 2007; Waterman, 1993), relaxation / relaxation (as suggested by various authors, eg Dodonov, B., 1978; Waterman, 1993), pleasant feeling (as suggested by various authors, eg Dodonov, B., 1978 Mubarak, S., 2007, Shirom, Toker, Berliner, Shapira, & Melamed, 2006) and a sense of comfort (as suggested by various authors, such as Mubarak, S., 2007; Keyes, 1998; Warr, 1999. Also well-being is measured o and as a lack of negative affect - lack of nervousness, anxiety, restlessness, irritation, fear and difficulty relaxing in the last two weeks. The questionnaire was compiled on the basis of questionnaires proposed by M. Butovskaya (2020), Delve Pvt Ltd (2020), as well as on the basis of the adapted for Bulgarian conditions Spielberger's questionnaire for situational and personal anxiety (Shchetinski, D. and Paspalanov, I., 1989). All items are answered on a 4-point scale from 0 (did not happen at all or not at all) to 3 (almost every day or to a large extent). The time frame is different in response - positive emotional experiences as an indicator of well-being refer to the present moment in response, and negative emotional experiences, the absence of which is an indicator of well-being, refer to past and present - a period of 2 weeks before the study, since when assessing satisfaction as a component of well-being, attention is focused on aspects of the human past compared to the present (McIntosh, 2001, p.37), life satisfaction depends on comparing current situations with situations from the past (Argyle, M., 1990). Positive and negative affect are independent dimensions in the study of subjective well-being (Miteva, D., 2010, pp. 252-253), the components of subjective well-being, such as positive affect, lack of negative affect and life satisfaction, are independent and should be measured and studied separately (Georgieva, M., 2007, p. 35), but a connection must be sought between the components of subjective well-being, as people always judge what happens to them, and intellectual assessment is related to the respective emotion (Krastev, L. and Stoyanova, S., 2007a). The construction of the methodology for measuring emotional well-being is consistent with these recommendations. The methodology used in this dissertation to measure emotional well-being is constructed similarly to the short form of the PANAS scale for assessing positive and negative affect, adapted in Bulgarian, which includes a five-point scale for answering how often in the last month. a person has experienced six positive emotions and six negative emotions, and the affective balance is calculated as the sum of the positive and negative affect (Zankova, K., 2015; Pileva, I., 2018), but in the newly created methodology emotional well-being is calculated as the difference between the scores on the scales for positive and negative affect. Well-being as a balance between positive and negative affect (Krastev, L. and Stoyanova, S., 2007a; Silgidjian, H., Karabelova, S. and Zankova, K., 2008; Bradburn, 1969) or as the absence of negative experiences, 1998, p.121), high positive affect and low negative affect (Miteva, D., 2010, p. 259; Diener, Emmons, Larsen, & Griffin, 1985; Diener & Seligman, 2018;

Emmons & Diener, 1985; Kesebir & Diener, 2008; Myers & Diener, 1995), the predominance of positive over negative emotions (Keyes, 1998, p.122), i.e. emotional hedonistic well-being (Miteva, D., 2010) or mental well-being (Krastev, L. and Stoyanova, S., 2007a; Bradburn, 1969) was assessed by subtracting the score on the scale for negative emotional experiences from the score on the scale for positive emotional experiences - a score of about 0 reveals a balance between positive and negative affect, a negative score reveals a predominance of negative affect, ie unhappiness, and a positive result reveals the predominance of positive affect, ie emotional well-being.

The constructed methodology measures not only emotional hedonistic well-being but also mental well-being, as Heubeck & Neill's (2000) general mental well-being questionnaire includes items measuring mental well-being, such as „How satisfied were you in your personal life in the last month?“ „How often in the past month have you been able to relax quickly and easily?“ (Krastev, L. and Stoyanova, S., 2007a), which also measure satisfaction and relaxation, as used in the dissertation questionnaire.

In many measuring instruments of well-being and life satisfaction, the items are formulated only in positive terms, which is a disadvantage of measuring instruments (Westerhof, Dittmann-Kohli, & Thissen, 2001, p.197), direct the thinking of the subject in one direction of reasoning, so the current study also measures negative emotional experiences associated with lack of well-being. On the other hand, in the study of well-being, there is often a tendency towards negative asymmetry (ie predominance of high responses on the response scale), which could be in the nature of subjective well-being (Vittersø, Røysamb, & Diener, 2002) due to general positive self-perception (Wagner et al., 2007).

It is recommended that the items answered on the Likert scale have the same number of positively formulated and negatively formulated items, but the psychometric characteristics and data collected on the life satisfaction questionnaire over time show that it does not harm the qualities of the questionnaire. , if all items are positively worded (McIntosh, 2001). Satisfaction is present as a term almost exclusively in positively completed sentences, and the terms „satisfaction-dissatisfaction“ are avoided when sentences are negatively completed in all age groups (Westerhof, Dittmann-Kohli, & Thissen, 2001, p.193).

It is possible for subjects to simulate, when answering personal questionnaires in the direction of pathological or normal responses (Mikesell, Calhoun, & Lottman, 1970), to show social desirability. When measuring subjective well-being, it was found that response artifacts were not a source of concern in the case of self-assessment questionnaires measuring subjective well-being (McIntosh, 2001). Assessing life and areas of life with questionnaires or incomplete sentences leads to similar assessments, regardless of the method (Westerhof, Dittmann-Kohli, & Thissen, 2001, p.193). Content analysis found similarities between freely constructed responses to well-being when completing incomplete sentences and responses to well-being questionnaires (Westerhof, Dittmann-Kohli, & Thissen, 2001). Most of the scales that measure subjective well-being and consist of a single item have good psychometric characteristics to be used if a short measuring instrument is sought (McIntosh, 2001).

An exploratory factor analysis was applied by the method of the main components with rotation Equamax using the software SPSS 20.0, which extracted two factors. Data from the matrix of correlations between variables reveal that all correlations between variables are statistically significant and the highest correlation coefficient is 0.762, and the determinant of the correlation matrix is 0.001, which indicates that there is probably no multicollinearity

between variables, (Yong & Pearce). . The Condition index check showed values below 15, which also means a lack of multicollinearity between the variables (Glen, 2017; IBM Knowledge Center, n.d.h1.). Covariance and correlation anti-image matrices contain low coefficients - around zero, which is an indicator of appropriate factor analysis (IBM Knowledge Center, n.d.c.). Sample adequacy measures for all variables are above 0.8, which also reveals that the data are suitable for the application of exploratory factor analysis and different and reliable factors can be derived (Yong & Pearce, 2013, p.88). . There are less than 50% (48%) residual correlations between the part of the variables that remained unexplained after the factor analysis, whose absolute values are greater than 0.05, which means a well-matched factor model (Yong & Pearce, 2013, p. .90).

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.884, which means that it makes sense to interpret the results of factor analysis (IBM Knowledge Center, ndc; IBM Knowledge Center, ndh; Yong & Pearce, 2013, p. 88), the adequacy of the factor model to the initial variables is commendable (Glen, 2016; Kaiser, 1974, p.35).

Bartlett's Test of Sphericity = 4217,385; df = 66; $p < 0.001$, which confirms that the relationships between the variables follow a certain pattern (Yong & Pearce, 2013, p.88) and it makes sense to interpret the results of the factor analysis „IBM Knowledge Center“, ndc; „IBM Knowledge Center“, ndh).

The derived first factor explains 31.649% of the variance of the output variables, and the second factor explains 31.382% of the variance of the output variables, in total the two factors explain 63.032% of the variance of the output variables after the rotation of the factor solution. However, less than 75% of the variance of all variables (Yong & Pearce, 2013) is explained by the factorial solution.

Each of the two factors has good convergent validity, as all items in the factor have high factor weights on the factor and the Average explained variance (AVE) for each factor (calculated as the factor weight of each item is squared, summed) the squares of the factor weights of the items for the scale and are divided by the number of items in the factor) is greater than 0.5 (Awang, nd, pp.55-56) - the value is 0.585 for the first extracted factor with 6 items in it and 0.586 for the second extracted factor with 6 items in it.

The extracted communities of variables (Extraction communalities) are all except one with high values - over 0.4, which means that the items in the factor are interconnected (Costello & Osborne, 2005), their communality is sufficient (Hampel, Amtmann, Roch , Karpinski, & Petermann, 2018), and there is no variable with a utility below 0.2 to be eliminated (Yong & Pearce, 2013) and the extracted components represent the variables well (IBM Knowledge Center, nda) - see Table 62. For the item „I feel relaxed“ the value „communality“ is not high enough, but the individual measure of adequacy of this item (MSA), on which the CMO coefficient for the whole questionnaire is based, is over 0.8, which is a high enough value. for the particular item, worthy of praise according to the Kaiser classification (1974, p.35), which is an additional reason to keep this item in the factor.

Table 62 . Community (Communality) of items (proportion of the variance of each item , due to factors) and their measures of sampling adequacy questionnaire well as a lack of negative emotionality and being a positive affect

Items	Community (Communality)	MSA (sample adequacy measure)
You felt nervous, anxious	0.693	0.856
You worried too much about different things	0.799	0.865
You had a hard time relaxing	0.645	0.877
You were so restless that it was difficult for you to sit still	0.615	0.860
You were easily annoyed	0.505	0.927
You were afraid that something terrible might happen	0.506	0.885
I feel satisfied	0.646	0.901
I feel comfortable	0.697	0.902
I feel confident	0.646	0.927
I feel relaxed	0.354	0.884
I feel satisfied	0.764	0.875
Nice to meet you	0.694	0.871

Factors decision is justified and the test „scree“ (scree) of Kettle (Brown , 2014, p.34; Cattell , 1966; Costello & Osborne , 2005, P.3; Hayton , Allen , & Scarpello , 2004, r.193 ; StatSoft , Inc. , 2013; Yong & Pearce , 2013, p.92), with the appropriate number of factors being 2, as shown in Figure 13 .

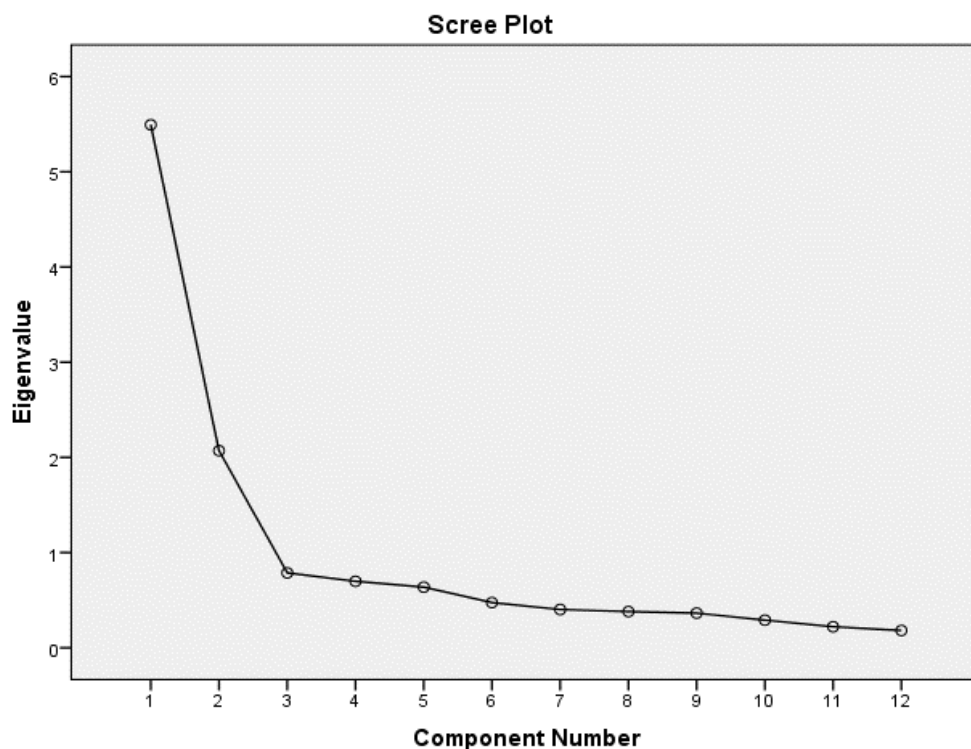


Figure 13 . Test „Scree“ of Kettle on data from the questionnaire well as a lack of negative emotionality and being a positive affect

Note: Scree plot means graphic image „Scree“; Component number means the number of extracted factors; Eigenvalue means the amount of the dispersion of the original variables of the questionnaire, which is explained by each factor („ IBM Knowledge Center “, n . D . K .).

Table 63 . Weights of the items from the wellness questionnaire as a lack of negative emotionality and well-being as a positive affect on the components after the rotation

items	1 Component	2 Component
You worried too much about different things	0.857	-0.253
You were so restless that it was difficult for you to sit still	0.778	-0.099
You had a hard time relaxing	0.774	-0.214
You felt nervous, anxious	0.765	-0.329
You were afraid that something terrible might happen	0.710	-0.041
You were easily annoyed	0.694	-0.153
I feel satisfied	-0.132	0.864
Nice to meet you	-0.064	0.831
I feel confident	-0.241	0.767
I feel comfortable	-0.350	0.758
I feel satisfied	-0.286	0.751
I feel relaxed	-0.057	0.593

Note: High item weights are bold by factor

The data in Table 63 reveal that the items have sufficiently high weights on the extracted two components, allocating for each component those items that have bold factor weights in the corresponding columns of the table. The first component includes items expressing negative emotionality - you have worried about too many different things over the past two weeks; you were so restless that it was difficult for you to sit still; you had a hard time relaxing; you felt nervous, anxious; you were afraid that something terrible might happen; you were easily irritated. A high score on the factor means a lack of well-being, as there is a strong negative affect. The second component includes items expressing positive emotions - I feel satisfied, I enjoy myself, I feel confident, I feel comfortable, I feel satisfied, I feel relaxed. A high score on the factor means a pronounced well-being as an experience of positive affect.

Two items have high factor weights on two components, not just one extracted component - „You felt nervous, anxious“ and „I feel comfortable“, but there must be very few divided factor weights - one variable must have factor weights of 0.32 or higher by several factors (Yong & Pearce, 2013, p.84). These items will be retained because one of the components has very high, very significant factor weights - over 0.5 (Kula, 2011) and the recommendation is that the items are combined into factors when the weight of the items by a factor of at least 0.4, (Leontiev, D., 2000; Leontiev, D., 2003; Balcar, Trnca, & Kuška, 2011, p.31; Salama-Younes, 2011, p. 224). The factor solution corresponds well to the initial data, as the weights of the variables on the components are over 0.30; very few are items with high weights on several factors; there are no factors to include less than three items and both components include at least 5 items with factor weights above 0.50 (Costello & Osborne, 2005, p.3, p.5).

Parallel exploratory analysis performed with the software JASP 0.11.1.0 (JASP Team, 2019) also identifies two factors whose eigenvalues (the amount of variance of the original variables, which is explained by each factor - „IBM Knowledge Center“, ndk), are more -larger than those of parallel components derived from random data having the same sample size and the same number of variables (Hayton, Allen, & Scarpello, 2004, p.194).

Table 64 . Weights of the items from the wellness questionnaire as a lack of negative emotionality and well-being as a positive affect on the factors extracted by exploratory parallel analysis

items	1 factor	2 factor
You worried too much about different things	0.877	-0.226
You were so restless that it was difficult for you to sit still	0.709	-0.109
You had a hard time relaxing	0.734	-0.204

You felt nervous, anxious	0.747	-0.310
You were afraid that something terrible might happen	0.610	-0.072
You were easily annoyed	0.610	-0.166
I feel satisfied	-0.150	0.850
Nice to meet you	-0.098	0.780
I feel confident	-0.262	0.712
I feel comfortable	-0.365	0.719
I feel satisfied	-0.304	0.697
I feel relaxed	-0.114	0.475

Note: High item weights are bold by factor.

The high factor weights of the items are maintained by the same factors in the parallel analysis (see Table 64) as in the factor analysis by the principal component's method (see Table 63). The TLI index for factor model adequacy in parallel analysis is 0.904, which means acceptable suitability of the factor model (Awang, nd; Bentler & Bonett, 1980; Brown, 2014, p.75; Kula, 2011; Kulkarni, 2017; Mohamed , 2019). The RMSEA index for factor model adequacy in parallel analysis is 0.083, and the 90% confidence interval of the RMSEA index varies from 0.071 to 0.095q, which means mediocre / minimum suitability of the factor model (Brown, 2014, p.74; Browne & Cudeck, 1992, p.239; Hooper, Coughlan, Mullen, 2008, p.54; Hu & Bentler, 1999, p.6; Schermelleh-Engel, Moosbrugger, & Müller, 2003, p.36).

Confirmatory factor analysis performed with the software JASP 0.11.1.0 (JASP Team, 2019) with the method for structuring a factor model (estimator - estimator) DWLS, by applying the method Bootstrap CI (for 5000 sub-samples of data) to calculate standard error of the parameters of the factor model also determines two factors.

Table 65 . Indices for adequacy of the factor model of well-being as a positive affect and lack of negative affect in the confirmatory factor analysis

Type of indexes for adequacy of the factor model	Index values	Interpretation of indices
Chi-square	$\chi^2 = 112,299$; $p < 0.001$; $df = 53$	Inadequate factor model, which is a typical value in large samples (Bentler & Bonett, 1980; Gefen, Straub, & Boudreau, 2000; Hopwood & Donnellan, 2010; McIntosh, 2001; Schermelleh-Engel, Moosbrugger, & Müller, 2003; Vittersø, Røysamb, & Diener, 2002 (over 200 people) (Barrett, 2007; Kula, 2011; Li, 2016a)) and chi-square is not a good measure of the suitability of a factor model in the DWLS factor extraction method (Shi, DiStefano, Daniel, & Jiang, 2018) .
Chi-square, divided by degrees of freedom	2,119	Satisfactory adequacy of the factor model (Awang , n . D .; Gefen, Straub, & Boudreau, 2000; Hooper, Coughlan, & Mullen, 2008; Kula , 2011; Lages, Magalhães, Antunes, & Ferreira, 2018; Schwarzer , 1998) .
Comparative Fit Index (CFI)	0.991	Well-matched data, very good factor model (Awang , n . D .; Hooper, Coughlan, Mullen, 2008; Hu & Bentler, 1999; Kula , 2011; Lages, Magalhães, Antunes, & Ferreira, 2018; McIntosh, 2001; Mohamed , 2019; Vittersø, Røysamb, & Diener, 2002)

Tucker-Lewis Index (TLI)	0.989	Very good / adequate factor model (Awang , n . D .; Bentler, & Bonett, 1980; Hu & Bentler, 1999; Kula , 2011; Kulkarni, 2017; Mohamed , 2019)
Bentler-Bonett Non-normed Fit Index (NNFI)	0.989	Good suitability of the factor model (Bollen , 1987; Hooper, Coughlan, Mullen, 2008)
Bentler-Bonett Normed Fit Index (NFI)	0.983	Adequate factor model (Awang , n . D .; Hooper, Coughlan, Mullen, 2008; Mohamed , 2019)
Parsimony Normed Fit Index (PNFI)	0.790	Good factor model (Hooper, Coughlan, Mullen, 2008)
Bollen's Relative Fit Index (RFI)	0.979	Adequate factor model (Kulkarni, 2017; Mohamed , 2019)
Bollen's Incremental Fit Index (IFI)	0.991	Very good adequacy of the factor model (Kulkarni, 2017)
Relative Noncentrality Index (RNI)	0.991	Appropriate factor model (Hu & Bentler, 1999)
RMSEA with 90% confidence interval	0.042 [0.031; 0.053]	Good adequacy of the factor model (Hooper, Coughlan, Mullen, 2008; Hu & Bentler, 1999; Vittersø, Røysamb, & Diener, 2002)
Standardized root mean square residual (SRMR)	0.050	Acceptable factor model (Kula , 2011; Lages, Magalhães, Antunes, & Ferreira, 2018), relatively adequate factor model (Hooper, Coughlan, Mullen, 2008; Hu & Bentler, 1999)
Hoelter's critical N ($\alpha = .05$)	401,803	Adequate factor model (Kula , 2011)
Hoelter's critical N ($\alpha = .01$)	451,766	Adequate factor model (Kula , 2011)
Goodness of fit index (GFI)	0.996	Suitability of the factor model (Awang , n . D .; Hooper, Coughlan, Mullen, 2008; Lages, Magalhães, Antunes, & Ferreira, 2018; Mohamed , 2019; Schwarzer , 1998)
McDonald fit index (MFI)	0.954	Good suitability of the factor model (Blunch , 2016; Byrne , 2008)

The data in Table 65 reveal that the factor model in the confirmatory factor analysis describes the initial data well. The factor model contains 37 free parameters from a maximum of 78 parameters in the factor model (the number of maximum possible parameters is calculated by the formula: number of variables multiplied by the number of variables plus one, and their product is divided into two - “UCLA Statistical Consulting“, 2020), ie it can be considered that there are not too many parameters in the factor model and there is probably no problem with the identifiability of parameters (Nelson, 2008), the number of recognized parameters in the factor model (41) is greater than the number free parameters (37), which means identifiable, good factor model (“UCLA Statistical Consulting“, 2020).

The factor model of emotional well-being is presented in Figure 14 and the factor structure (distribution of items by factors) is confirmed by exploratory factor analysis.

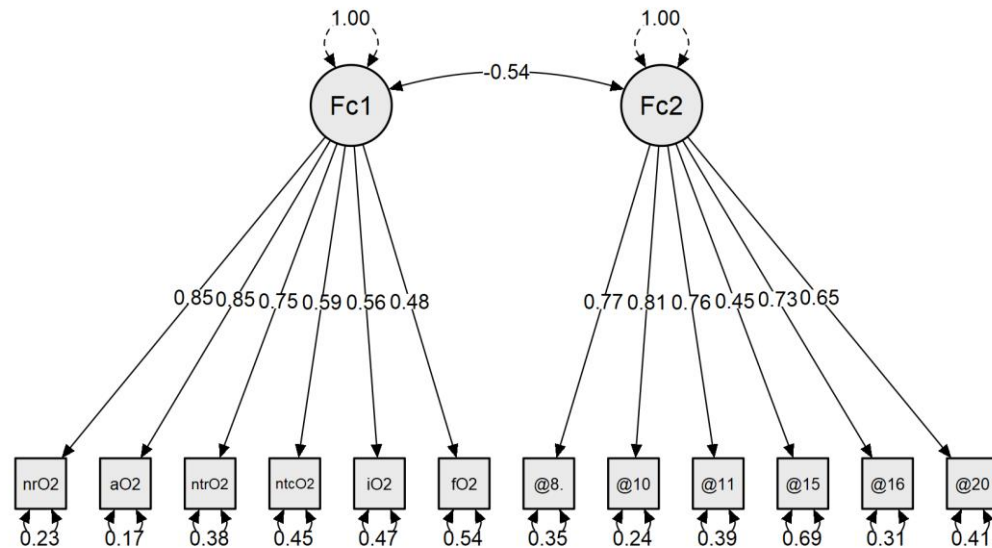


Figure 14. Confirmatory factor model of well-being as a positive affect and lack of negative affect

Note: Fc1 means the first factor (well-being as the absence of negative affect); Fc2 - second factor (well-being as a positive affect); nrO2 - You felt nervous; aO2 - You worried too much about different things; ntrO2 - It was difficult to relax; ntcO2 - You were so restless that it was hard for you to sit still; iO2 - You were easily irritated; fO2 - You were afraid that something terrible might happen; @ 8 - I feel satisfied; @ 10 - I feel comfortable; @ 11 - I feel confident; @ 15 - I feel relaxed; @ 16 - I feel satisfied; @ 20 - Nice to meet you. Factor loadings estimate are displayed on the lines connecting each item to the factor to which it refers. The variances of the remainder of the variables unexplained by the residual variances estimate are shown under the abbreviations used for item names.

Modification indices for item pairs have also been calculated and there are no items with a value above 15, ie there are no overlapping, redundant items (Awang, n.d.).

In addition to calculating each subject's scores on the factors as the sum of their responses to the items distributed by the respective component, the factor scores were stored separately as two variables using the Anderson-Rubin method („IBM Knowledge Center ", NdG; Yong & Pearce, 2013). The Anderson-Rubin method calculates standardized scores that do not correlate with other factors (IBM Knowledge Center, ndg; Yong & Pearce, 2013, p.86) and have an arithmetic mean of 0, a standard deviation of 1 (IBM Knowledge Center, ndg).

The scores on the scales for well-being as positive affect, well-being as lack of negative affect and well-being as the difference between positive and negative affect, calculated in total from the respondents' responses on the scales and the Anderson-Rubin method are normally distributed because the coefficients of asymmetry and excess are in the range of -1 to +1, which means that their distribution is close to normal (Hair, Hult, Ringle, & Sarstedt, 2016, p.54).

The arithmetic mean score on the well-being scale as no negative affect is 5.713 (high values mean more intense negative affect experiences), with a standard deviation of 4.364, which means high variability in responses on the scale. The arithmetic mean of the scale for well-being as a positive affect is 8,844 (high values mean more intense experiences of positive affect), with a standard deviation of 4,455. Well-being as a positive affect is more pronounced in the studied Bulgarians during the coronavirus pandemic than well-being as a lack of negative affect. Emotional well-being as the difference between positive and negative affect averaged 3,131 and a standard deviation of 1,414.

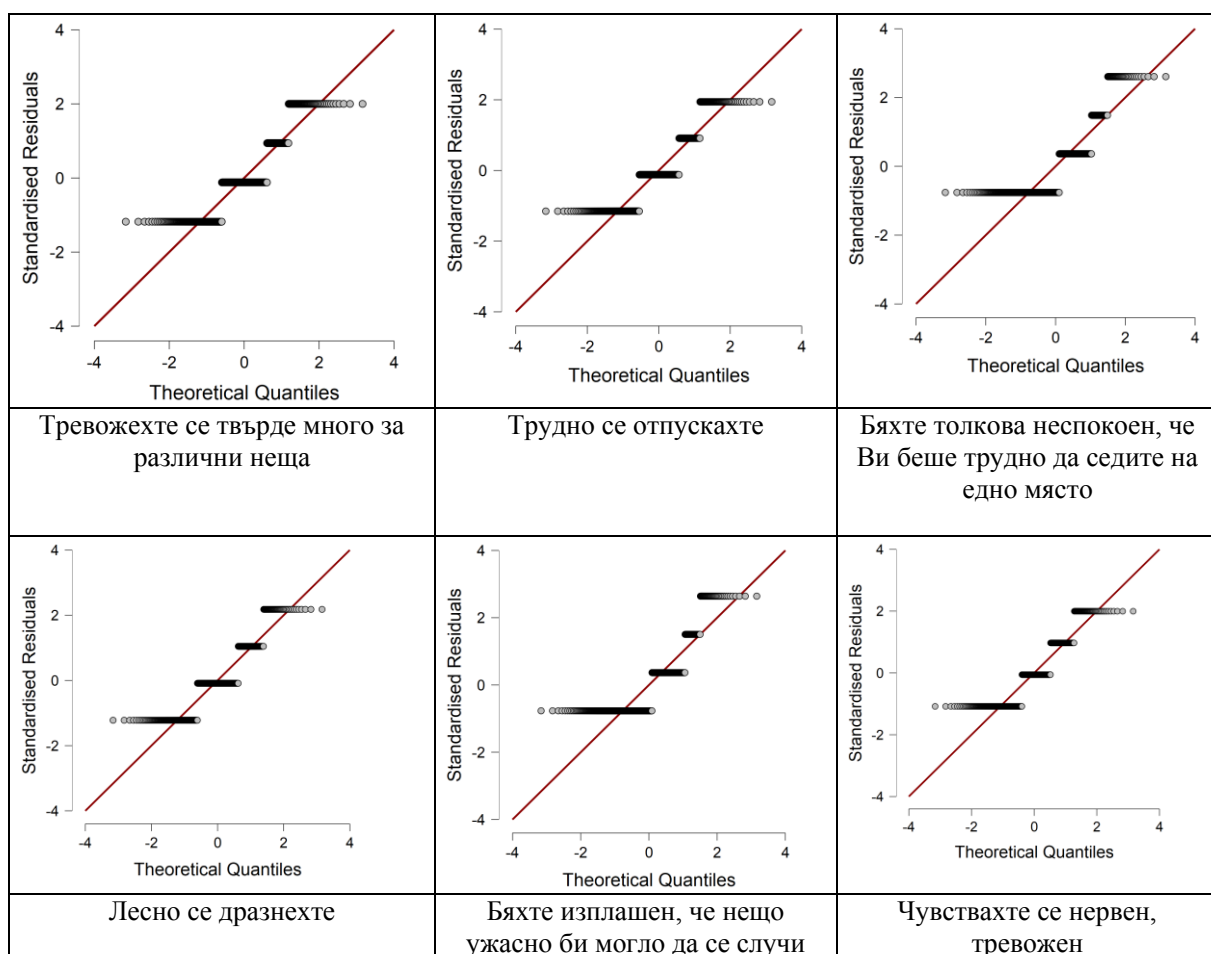
14.5% of the subjects had very low experiences of negative affect during the coronavirus pandemic (scores on the scale for negative affect, calculated by the Anderson-Rubin method,

in the range from -1,882 to -1,008). 70.1% of the subjects had moderate experiences of negative affect during the coronavirus pandemic (scores on the scale for negative affect, calculated by the Anderson-Rubin method, in the range from -0.988 to 0.970). 15.4% of the subjects had very strong experiences of negative affect during the coronavirus pandemic (scores on the scale for negative affect, calculated by the Anderson-Rubin method, in the range from 1,051 to 3,275).

17% of the subjects had very low experiences of positive affect during the coronavirus pandemic (scores on the scale for positive affect, calculated by the Anderson-Rubin method, in the range from -2,440 to -1,003). 63% of the subjects had moderate experiences of positive affect during the coronavirus pandemic (scores on the scale for positive affect, calculated by the Anderson-Rubin method, in the range from -0.993 to 0.955). 20% of the subjects had very strong experiences of positive affect during the coronavirus pandemic (scores on the scale for positive affect, calculated by the Anderson-Rubin method, in the range from 1,016 to 2,475).

23.3% of the subjects experienced emotional distress during the coronavirus pandemic, expressed as the predominance of negative affect over positive ones (scores on the emotional well-being scale, calculated by the difference between positive and negative affect according to the Anderson-Rubin method, in the range from -3.71 to -1.04). 48% of the subjects had moderate emotional well-being during the coronavirus pandemic, expressed as the balance between positive and negative affect (scores on the emotional well-being scale, calculated by the difference between positive and negative affect according to the Anderson-Rubin method, in range from -0.98 to 0.95). 28.7% of the subjects experienced severe emotional well-being during the coronavirus pandemic, expressed as the predominance of positive affect over negative (scores on the emotional well-being scale, calculated by the difference between positive and negative affect by the Anderson-Rubin method, in the range of 1.04 to 2.74). The surveyed Bulgarians predominate, experiencing hedonistic emotional well-being over those who have deteriorated emotional well-being.

There are no missing answers to the items and all 4 categories of answering all items are selected by over 5% of the surveyed persons, as recommended for example by S. Stoyanova (2007, p. 162). The coefficients of asymmetry and excess of all items and scores on the scales range from -1 to +1, which means that their distribution is close to normal (Hair, Hult, Ringle, & Sarstedt, 2016, p.54), except for two items with asymmetry coefficients of 1.258 (You were so restless that it was hard for you to sit still) and 1,266 (You were scared that something terrible could happen), and one item whose coefficient of excess is -1,015 (I feel confident), but Hair, Hult, Ringle, & Sarstedt (2016, p.61) also treat a value of -1.3 of asymmetry or excess as not differing much from the normal distribution and retain such items in the questionnaire, and according to some authors coefficients of asymmetry and excess in the range from -2 to 2 do not differ significantly from the normal distribution (Stoyanova, S. 2007, p. 157).

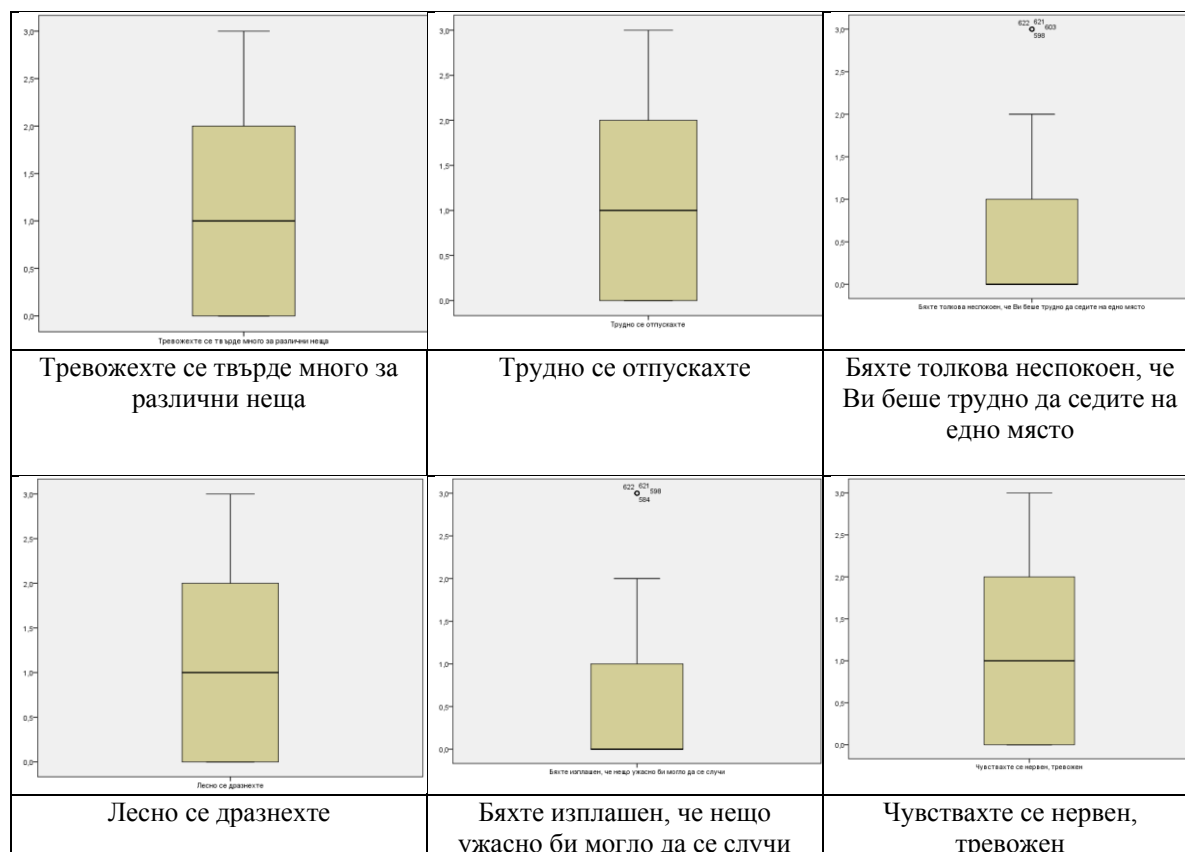


You worried too much about different things / You had a hard time relaxing / You were so restless that it was hard for you to sit still

You were easily annoyed / You were scared that something terrible could happen / You felt nervous, anxious

Figure 15. Graphs of the responses to the items on the negative emotionality scale, grouped in clusters of points according to the frequency of selection of each category of responses

Figure 15 shows the responses to each item of the negative emotionality questionnaire, grouped into clusters of points in response categories selected more frequently, and dispersed further as distribution points for responses selected less frequently (Glen, 2015; Kim & Loadman, 1994). The final answer options are seldom chosen for each item.



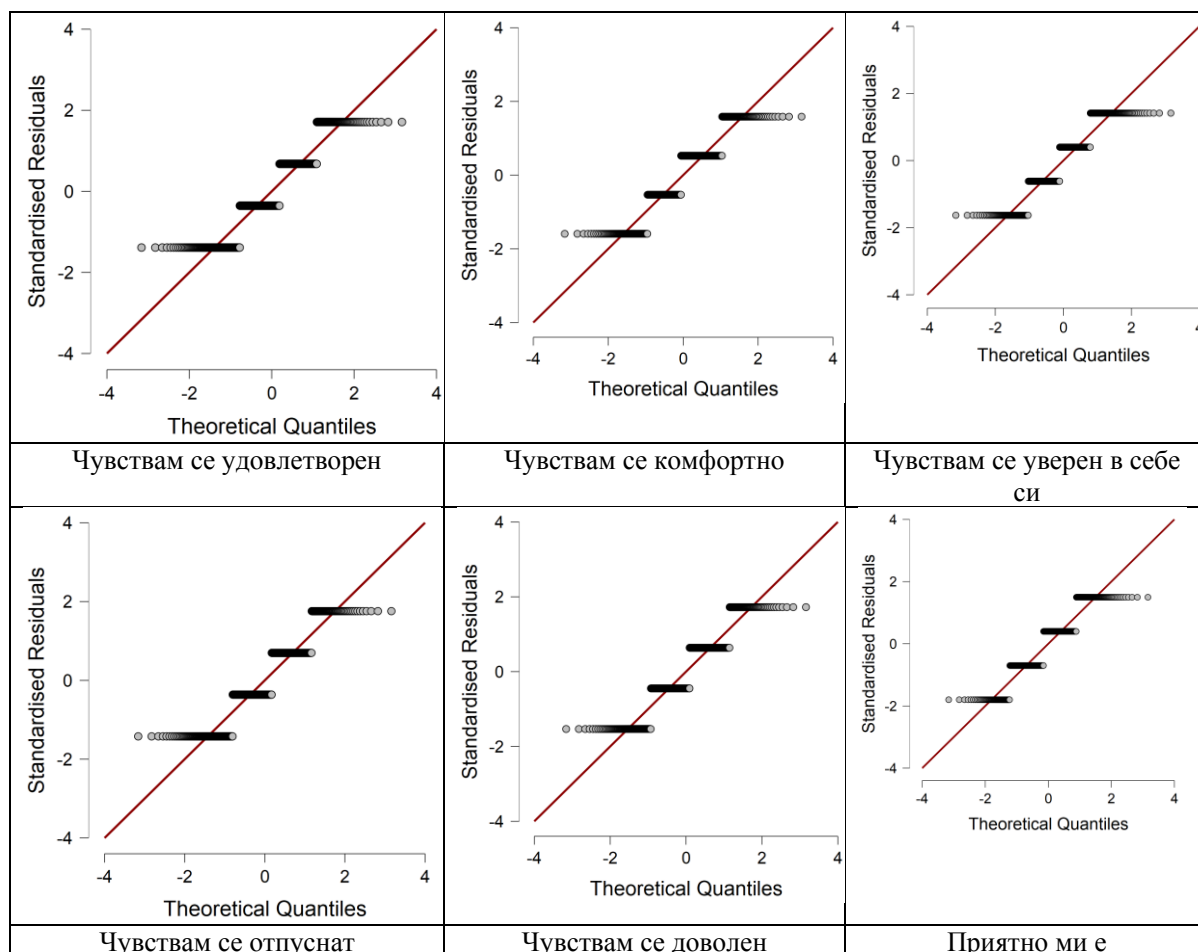
You worried too much about different things / You had a hard time relaxing / You were so restless that it was hard for you to sit still

You were easily annoyed / You were scared that something terrible could happen / You felt nervous, anxious

Figure 16. Box-type diagrams summarizing the data on the frequency distribution of the responses to the items from the negative emotional questionnaire and the presence of extremely different responses from the rest of the sample

Figure 16 shows box-type diagrams summarizing the frequency distribution of the data with five values - minimum, first quartile, median (ie, second quartile), third quartile and maximum (Khan Academy, 2020b), and remote values - individual results that are below the first quartile more than one and a half times the difference between the third and first quartiles or are above the third quartile more than one and a half times the difference between the third and first quartiles (Khan Academy, 2020a). As Figure 16 shows, several people have a remote value of the answers to two items from the rest of the sample - these are the items „You were so restless that it was difficult to sit still“ and „You were scared that something terrible could happen. happened ”- these are women aged 30 to 49, with children who experienced negative

emotions almost every day in the last two weeks before the study. More than half of the respondents answered the items on the scale for negative emotionality that in the last two weeks it did not happen at all or only for a few days, but less than half of the time, to feel nervous, anxious, restless, scared, difficult to relax, easy to irritate. The median value is 1, ie for several days in the past two weeks they have felt nervous, anxious, difficult to relax, irritable. The median is 0, ie it has not happened at all in the past two weeks to feel restless and scared.

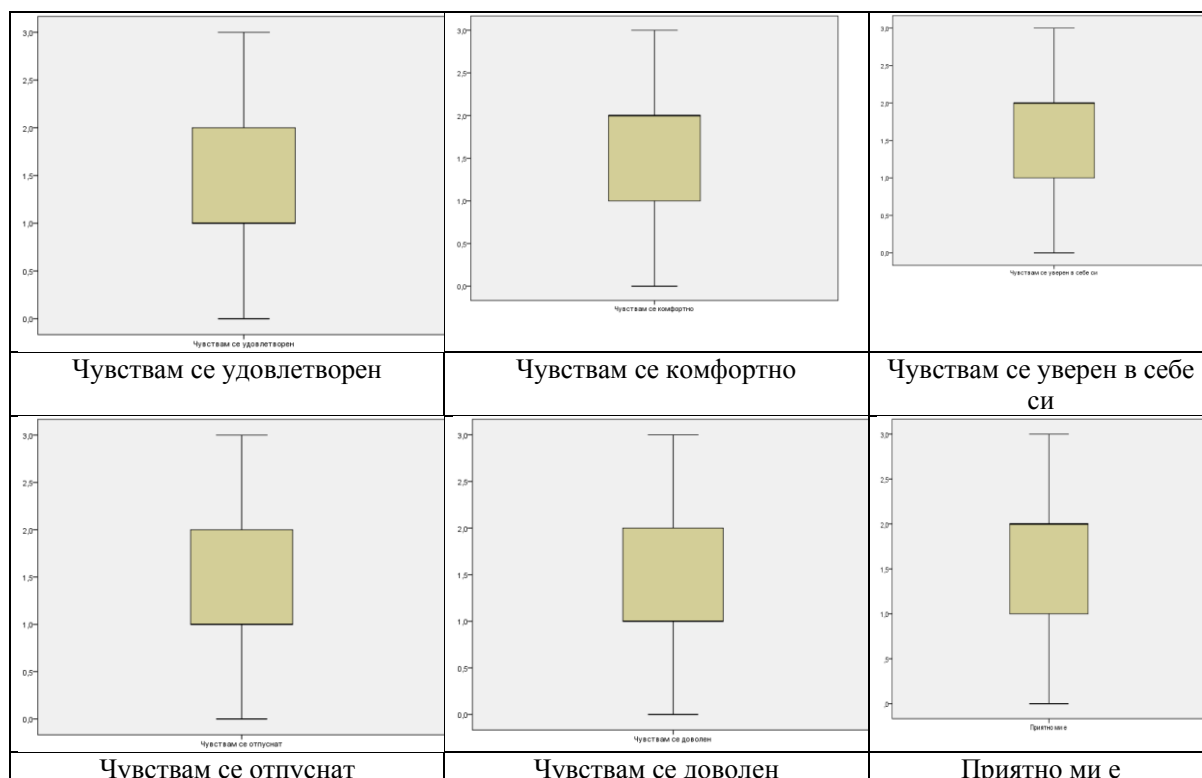


I feel satisfied / I feel comfortable / I feel confident

I feel relaxed/ I feel satisfied / I'm happy

Figure 17. Graphs of responses by items on the positive emotionality scale, grouped in clusters of points according to the frequency of selection of each category of responses

Figure 17 shows the responses to each item of the positive emotionality questionnaire, grouped into clusters of points in response categories selected more frequently, but scattered further as distribution points for responses selected less frequently (Glen, 2015; Kim & Loadman, 1994). The final answer options are seldom chosen for each item.

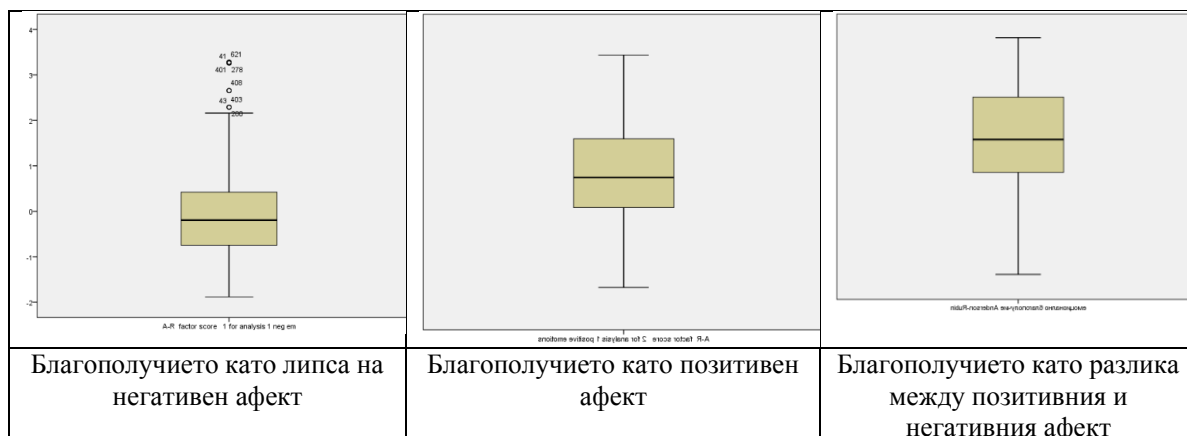


I feel satisfied / I feel comfortable / I feel confident

I feel relaxed / I feel satisfied / I'm happy

Figure 18. Box-type diagrams summarizing the data on the frequency distribution of the responses to the items from the positive emotional questionnaire and the presence of extremely different responses from the rest of the sample

Figure 18 shows box-type diagrams summarizing the frequency distribution of responses to well-being items as a positive effect. As shown in Figure 18, there are no subjects with remote value of the answers to the items. More than half of the respondents answered the items on the scale for positive emotionality, that they do not feel satisfied, relaxed, satisfied, but that they feel moderately, largely self-confident, self-confident, pleasant. The median is 1, ie to a small extent they feel satisfied, relaxed, satisfied. The median is 2, ie they feel comfortable, self-confident, and comfortable.



Well-being as a lack of negative affect / Well-being as a positive affect / Well-being as a difference between positive and negative affect

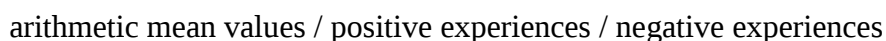
Figure 19. Box-type charts summarizing data on the frequency distribution of scores on well-being scales as a lack of negative emotionality, well-being as positive experiences, well-being as a difference between positive and negative affect (calculated by the Anderson-Rubin method), and the presence of extremely different responses from the rest of the sample

Figure 19 shows box-type diagrams summarizing the frequency distribution of scores on well-being scales as positive affect, lack of negative affect, and difference between positive and negative affect. As Figure 19 shows, there are a small number of respondents with a remote value of their responses from the rest of the sample only on the scale of well-being as no negative affect - they experience severe negative emotional states and have diverse socio-demographic characteristics, such as general among them is that they are between the ages of 23 and 41.

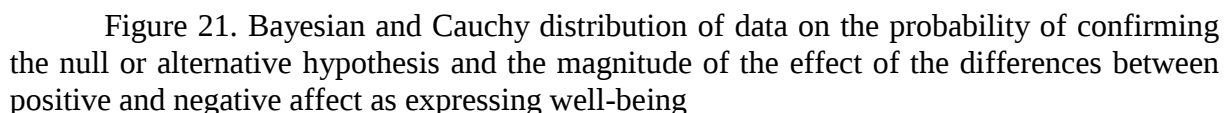
The internal consistency coefficient of Cronbach's Alpha on the negative affect scale is 0.877, which means good internal consistency (Glen, 2014b; Kula, 2011) or very good internal consistency (Price, 2012, p. 117). There is no item that, if removed from the scale, would increase its internal consistency. The 95% confidence interval for Cronbach's alpha on the well-being scale as no negative affect ranges from 0.862 to 0.891, as recommended by Dunn, Baguley, & Brunsden (2013). The value of the McDonald's coefficient ω as a measure of the internal consistency of the well-being scale as a lack of negative affect is 0.879, which value exceeds the recommended value of 0.75 by McDonald (1999, p.123). The mean correlation between items as a measure of the homogeneity of items in the well-being scale as no negative affect (Briggs & Cheek, 1986, p.115) is 0.540, with a minimum correlation between items on the scale of 0.399 and a maximum of 0.762. It is above the minimum acceptable value of the mean correlation between the items of 0.3 (Cristobal, Flavian, & Guinaliu, 2007, p.327), so that the obtained mean correlation between the items in the well-being scale as lack of negative affect indicates high homogeneity of the items. These values indicate that well-being as a lack of negative affect is a specific construct in which the value of the average correlation between the items in the scale is higher - over 0.5 (Clark & Watson, 1995, p.316). Since there are no correlations between items in the negative affect scale that exceed 0.85, this means that there are no overlapping items (Awang, n.d.). Gutmann's coefficient for reliability in dividing the halves of the scale for well-being as the absence of negative affect is 0.816, and the Spearman-Brown coefficient for dividing two halves of equal length is 0.826, which are high enough because according to Furr (2010, p.1412) reliability in dividing a scale into two halves above 0.70 is acceptable for research purposes.

The Cronbach's Alpha internal consistency ratio on the positive affect scale is 0.875, which means good internal consistency (Glen, 2014b; Kula, 2011) or very good internal consistency (Price, 2012, p. 117). If the „I feel relaxed“ item is removed, its internal consistency will increase to 0.889, but since the correlations between the items in the scale are positive and significant, it was decided to keep the item in the scale so that the scales of the positive and the negative affect, each with six items. The 95% confidence interval for Cronbach's alpha on the well-being scale as positive affect ranges from 0.860 to 0.890, as recommended by Dunn, Baguley, & Brunsden (2013). The value of the McDonald's ω coefficient as a measure of the internal consistency of the scale for well-being as a positive affect is 0.880, which value exceeds the recommended value of 0.75 by McDonald (1999, p. 123). The average correlation between items as a measure of the homogeneity of items in the well-being scale as positive affect (Briggs & Cheek, 1986, p.115) is 0.540, with a minimum correlation between items on the scale of 0.350 and a maximum of 0.693. It is above the minimum acceptable value of the average correlation between the items of 0.3 (Cristobal, Flavian, & Guinaliu, 2007, p.327), so that the obtained average correlation between the items in the well-being scale as a positive affect indicates high homogeneity of the items. These values indicate that well-being as a positive affect is a specific construct in which the value of the average correlation between the items in the scale is higher - over 0.5 (Clark & Watson, 1995, p.316). Since there are no correlations between items in the positive affect scale that exceed 0.85, this means that there are no overlapping items (Awang, n.d.). The Gutmann coefficient for reliability when dividing the halves of the well-being scale as a positive affect is 0.870, and the Spearman-Brown coefficient when dividing two halves of equal length is 0.872, which are high enough because according to Furr (2010, p.1412) reliability in dividing a scale into two halves above 0.70 is acceptable for research purposes.

Comparison of welfare scores as positive affect and as negative affect by t-test in related samples using bootstrapping (based on 5000 sub-samples of data) and Bayesian procedure shows significant differences ($t(634) = 10,469$; $p < 0,001$ with a difference between the mean values of 3,131 and 95% confidence interval of the difference between the mean values from 2,542 to 3,725, and p bootstrap $< 0,001$, bias = 0,003, ie there is a very slight tendency to slightly exaggerate the difference between the variables; Cohen's $d = 0.415$ with a 95% confidence interval of the effect size ranging from 0.334 to 0.496, ie small to medium effect size according to Cohen, 1988 and small to moderate effect size according to Vasilev, 2014) with a predominance of well-being as a positive affect ($M = 8,844$ with a 95% confidence interval from 8,491 to 9,189; $SD = 4,455$ with a confidence interval from 4,273 to 4,618) over negative emotional experiences ($M = 5,713$ with a confidence interval from 5,376 to 6,043 ; $SD = 4,364$ with a confidence interval of 4,136 to 4,586) - see Figure 20. With increasing well-being as a positive affect decreases the frequency and intensity of negative emotional experiences ($r = -0,460$ with a confidence interval of -0,530 to -0,387; $p < 0,001$; $N = 635$; Bias = 0, ie the assessment is without prejudice) and the dependence is moderate (Stoyanova, S. and Peneva, I., 2013, p. 76).



The Bayesian factor in favor of confirming the null hypothesis and rejecting the alternative is equal to BF01 = 0,0000000000000000000000309, ie the null hypothesis of no effect and statistically significant differences between positive and negative affect ($H_0: \delta = 0$ according to Kelter, 2020, p.3) is not more likely than the alternative hypothesis for the presence of an effect of the difference between positive and negative affect ($H_1: \delta \neq 0$, where $\delta = (\mu_1 - \mu_2) / \sigma$ is the magnitude of the Cohen d effect according to Kelter , 2020, p.3). The Bayesian factor in favor of confirming the alternative hypothesis and rejecting the zero is equal to BF10 = 3241000000000000000000, ie millions of times more likely to confirm the alternative hypothesis than the zero hypothesis, which is very strong evidence (Rouder, Speckman , Sun, Morey, & Iverson, 2009) in support of the alternative hypothesis of effect and statistically significant differences between positive and negative affect as measures of well-being, with a percentage of possible error in the calculations equal to 0.0000000000000000000000004511%.



Note: BF10 means Bayesian factor in support of the alternative hypothesis and rejection of the null hypothesis; BF01 means Bayesian factor in support of the null hypothesis and rejection of the alternative hypothesis; Evidence for H1 means evidence in support of the alternative hypothesis; Evidence for Ho means proof in support of the null hypothesis; effect size is the size of the effect.

Figure 21 shows that the data support the alternative hypothesis and there is almost no evidence to support the null hypothesis of no effect size. The Cauchy distribution is an alternative to the calculation of the Bayesian factor (Rouder, Speckman, Sun, Morey, & Iverson, 2009, p.231), setting values of the coefficient r according to theoretical assumptions for the effect size and the data show confirmation of the alternative hypothesis and zero rejection even when the effect is expected to be small. The distribution of the size of the effect shows the predominance of the positive values over the negative ones, ie the predominance of the positive affect over the negative one in the difference between the welfare scores as a positive affect, from which the values of the negative affect scores are subtracted.

Regarding socio-demographic gender differences in the experiences of positive affect, negative affect and emotional well-being during the coronavirus pandemic, the results of the application of the t-test in independent samples, bootstrapping (based on 5000 sub-samples of data) and Bayesian statistical procedure showed that there were statistically significant differences between men and women in their emotional well-being (Cohen's $d = 0.363$ with a 95% confidence interval of the effect size ranging from 0.201 to 0.525, ie a small effect size according to Cohen, 1988; Vasilev, 2014) and experiences of positive affect (Cohen's $d = 0.250$ with a 95% confidence interval of the effect size ranging from 0.089 to 0.412, ie a small effect size according to Cohen, 1988; Vasilev, 2014) and negative affect (Cohen's $d = -0.243$ with 95% confidence interval of the effect size ranging from -0.404 to -0.081, ie small effect size according to Cohen, 1988; Vasilev, 2014) - see Table 67. experienced a more pronounced positive affect and had higher emotional well-being than women, and women experienced stronger and more frequent negative emotions than men (see Table 66 and Figure 22) during a coronavirus pandemic such as the values of the prejudice coefficient in Table 66 and Table 67 are close to 0, which means that the differences between the sexes in the positive, negative affect and emotional well-being experienced by them are not underestimated or overestimated.

Table 66 . Mean values, standard deviations, confidence intervals and prejudices in calculating the scores on positive and negative emotions, and emotional well-being of men and women

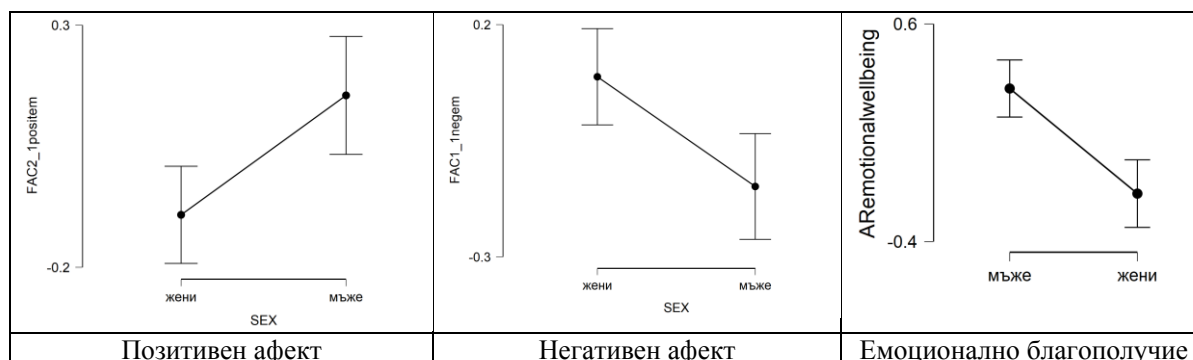
Balls by the method of Anderson-Rubin	Gender (number)	Statistical indices	Values	Bias (Bias) for the calculation of averages
Positive emotions	men (N = 236)	Arithmetic mean	0 , 155	- 0 , 001
		Standard deviation	0 , 949	- 0 , 005
	women (N = 399)	Arithmetic mean	- 0 , 092	0 , 001
		Standard deviation	1,019	- 0 , 002
Negative emotions	men (N = 236)	Arithmetic mean	- 0 , 148	- 0 , 001
		Standard deviation	0 , 887	- 0 , 006
	women (N = 399)	Arithmetic mean	0 , 088	0 , 00003
		Standard deviation	1,052	- 0 , 002
Emotional well-being	men (N = 236)	Arithmetic mean	0.303	0.0001
		Standard deviation	1,022	-0.003
	women	Arithmetic mean	-0.179	0.001

	(N = 399)	Standard deviation	1,575	-0.003
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Table 67 . Values of the t-test and bootstrapping - the procedure for detecting differences between men and women in their scores on positive and negative emotions, and emotional well-being

Statistical indices	Positive emotions	Negative emotions	Emotional well-being
Leven 's test for equality of variances	4,745	6,325	52,328
Level of significance of the Levene test	0 , 030	0 , 012	<0.001
t-test	3,076	-3,021	4,677
Degrees of freedom	521,490	559,960	627,649
Level of significance of the t-test	0 , 002	0 , 003	<0.001
Differences between averages	0 , 2465	-0.236	0.4826
Prejudice (Bias) of the difference between the mean values	- 0 , 002	- 0 , 001	-0.0006
Level of significance of the bootstrap procedure	0 , 003	0 , 002	<0.001
Bootstrap 95% confidence interval of the differences between the average values	Lower limit	0 , 087	- 0 , 389
	upper limit	0 , 3998	- 0 , 085

Note: In the bootstrap procedure, zero does not fall between the lower and upper limit of the confidence interval, which shows statistically significant differences (Zarbova , B., 2019; Preacher & Hayes , 2008; Rouder , Speckman , Sun , Morey , & Iverson , 2009).



Positive affect / Negative affect / Emotional well-being

Figure 22. Differences between men and women in positive affect, negative affect and emotional well-being

The Bayesian factor in favor of confirming the null hypothesis and rejecting the alternative is equal to $BF_{01} = 0.131$, ie the null hypothesis of no effect and statistically significant differences between men and women in positive affect ($H_0: \delta = 0$ according to Kelter, 2020, p.3) is not more probable than the alternative ($H_1: \delta \neq 0$, where $\delta = (\mu_1 - \mu_2) / \sigma$ is the magnitude of the Cohen d effect according to Kelter, 2020, p.3). The Bayesian factor in favor of confirming the alternative hypothesis and rejecting the zero hypothesis is equal to BF_{10}

= 7.66, ie 7 times more likely to confirm the alternative hypothesis than the zero hypothesis, which is proof (Rouder, Speckman, Sun, Morey, & Iverson, 2009) or moderate evidence (Kelter, 2020) in support of the alternative hypothesis of effect and statistically significant differences between men and women in positive affect, with a possible calculation error rate of 0, 00001156%.

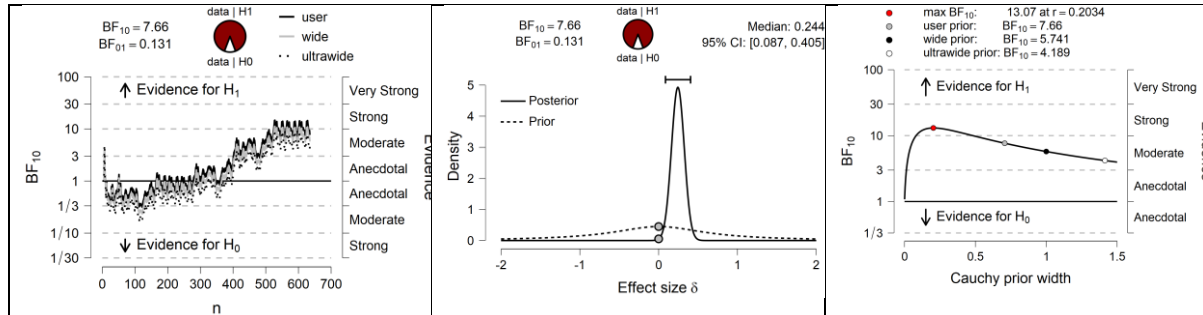


Figure 23. Bayesian and Cauchy distribution of data on the probability of confirming the null or alternative hypothesis and the magnitude of the effect of differences between men and women on positive affect

Note: BF_{10} means Bayesian factor in support of the alternative hypothesis and rejection of the null hypothesis; BF_{01} means Bayesian factor in support of the null hypothesis and rejection of the alternative hypothesis; Evidence for H_1 means evidence in support of the alternative hypothesis; Evidence for H_0 means proof in support of the null hypothesis; effect size is the size of the effect; very strong evidence is very strong evidence; strong is strong evidence; moderate is moderate evidence; anecdotal means amazing

Figure 23 shows that the data support the alternative hypothesis, fewer subjects who have evidence to support the null hypothesis of lack of effect size and significant differences between men and women in their positive emotional experiences. The Cauchy distribution is an alternative to the calculation of the Bayesian factor (Rouder, Speckman, Sun, Morey, & Iverson, 2009, p.231), setting values of the coefficient r according to theoretical assumptions for the effect size and the data show confirmation of the alternative hypothesis and zero rejection even when the effect is expected to be small. The distribution of the size of the effect shows the predominance of the positive values over the negative ones, ie the predominance of the positive affect of men, who are the first compared group, over the experiences of positive affect by women.

The Bayesian factor in favor of confirming the null hypothesis and rejecting the alternative is equal to $BF_{01} = 0.189$, ie the null hypothesis of no effect and statistically significant differences between men and women in negative affect ($H_0: \delta = 0$ according to Kelter, 2020, p.3) is not more probable than the alternative ($H_1: \delta \neq 0$, where $\delta = (\mu_1 - \mu_2) / \sigma$ is the magnitude of the Cohen d effect according to Kelter, 2020, p.3). The Bayesian factor in favor of confirming the alternative hypothesis and rejecting the zero hypothesis is equal to $BF_{10} = 5,303$, ie 5 times more likely to confirm the alternative hypothesis than the zero hypothesis, which is proof (Rouder, Speckman, Sun, Morey, & Iverson, 2009) or moderate evidence (Kelter, 2020) in support of the alternative hypothesis of effect and statistically significant differences between men and women in negative affect, with a percentage of possible calculation error equal to 0.00001686% .

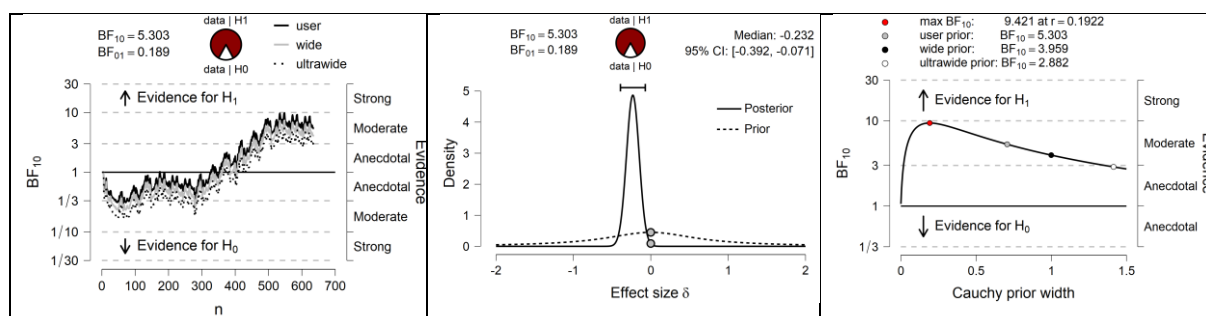


Figure 24. Bayesian and Cauchy distribution of data on the probability of confirming the null or alternative hypothesis and the magnitude of the effect of differences between men and women on negative affect

Note: BF10 means Bayesian factor in support of the alternative hypothesis and rejection of the null hypothesis; BF01 means Bayesian factor in support of the null hypothesis and rejection of the alternative hypothesis; Evidence for H1 means evidence in support of the alternative hypothesis; Evidence for H0 means proof in support of the null hypothesis; effect size is the size of the effect; very strong evidence is very strong evidence; strong is strong evidence; moderate is moderate evidence; anecdotal means amazing.

Figure 24 shows that the data support the alternative hypothesis, fewer subjects who have evidence to support the null hypothesis of lack of effect size and significant differences between men and women in their negative emotional experiences. The Cauchy distribution is an alternative to the calculation of the Bayesian factor (Rouder, Speckman, Sun, Morey, & Iverson, 2009, p.231), setting values of the coefficient r according to theoretical assumptions for the effect size and the data show confirmation of the alternative hypothesis and zero rejection even when the effect is expected to be small. The distribution of the size of the effect shows a predominance of negative values over positive ones, ie the predominance of negative affect of women, who are the second compared group, over the experiences of negative affect by men, who are the first compared group.

The Bayesian factor in favor of confirming the null hypothesis and rejecting the alternative is equal to $BF_{01} = 0.00211$, ie the null hypothesis of no effect and statistically significant differences between men and women in emotional well-being ($H_0: \delta = 0$ according to Kelter, 2020, p.3) is not more likely than the alternative ($H_1: \delta \neq 0$, where $\delta = (\mu_1 - \mu_2) / \sigma$ is the magnitude of the Cohen d effect according to Kelter, 2020, p.3). The Bayesian factor in favor of confirming the alternative hypothesis and rejecting the zero hypothesis is equal to $BF_{10} = 473$, ie 473 times more likely to confirm the alternative hypothesis than the zero hypothesis, which is very strong evidence (Rouder, Speckman, Sun, Morey, & Iverson, 2009) in support of the alternative hypothesis of the presence of effect and statistically significant differences between men and women in emotional well-being, with a percentage of possible calculation error equal to 0.0000001687%.

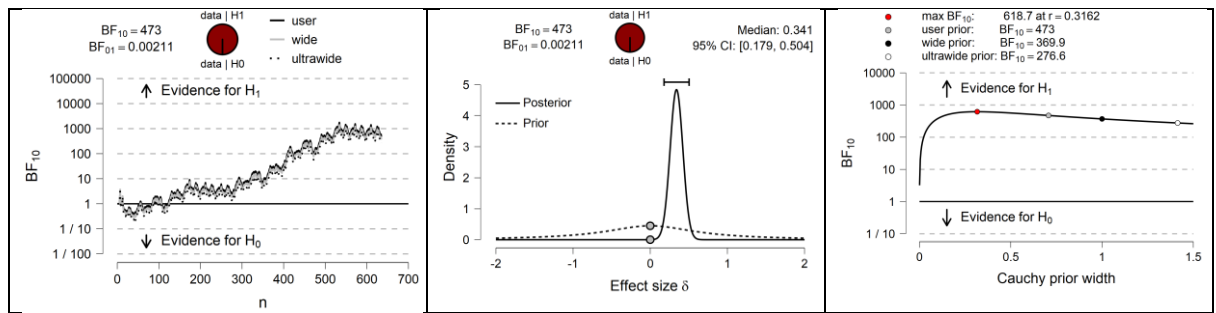


Figure 25. Bayesian and Cauchy distribution of data on the probability of confirming the null or alternative hypothesis and the magnitude of the effect of differences between men and women on emotional well-being

Note: BF₁₀ means Bayesian factor in support of the alternative hypothesis and rejection of the null hypothesis; BF₀₁ means Bayesian factor in support of the null hypothesis and rejection of the alternative hypothesis; Evidence for H₁ means evidence in support of the alternative hypothesis; Evidence for H₀ means proof in support of the null hypothesis; effect size is the size of the effect

Figure 25 shows that the data support the alternative hypothesis, there is almost no evidence to support the null hypothesis of lack of effect size and significant differences between men and women in their emotional well-being. The Cauchy distribution is an alternative to the calculation of the Bayesian factor (Rouder, Speckman, Sun, Morey, & Iverson, 2009, p.231), setting values of the coefficient r according to theoretical assumptions for the effect size and the data show confirmation of the alternative hypothesis and zero rejection even when the effect is expected to be small. The distribution of the size of the effect shows a predominance of the positive values over the negative ones, ie the predominance of the emotional well-being of the men, who are the first compared group, over the emotional well-being of the women.

Regarding socio-demographic differences by marital status (with or without an intimate partner) in the experiences of positive affect, negative affect and emotional well-being during the coronavirus pandemic, the results of the application of t-test in independent samples, bootstrapping (based on 5000 sub-samples of data) and Bayesian statistical procedure show that there are no statistically significant differences between the studied Bulgarians without and with an intimate partner on their emotional well-being (Cohen's $d = 0.044$ with 95% confidence interval of the effect size ranging from -0.113 to 0.201, ie no effect according to Cohen, 1988), although they differ significantly in the experiences of positive affect (Cohen's $d = -0.240$ with a 95% confidence interval of the size of the effect ranging from -0.397 to -0.083, which means a small size of the effect according to Cohen, 1988; Vasilev, 2014) and the experience of negative affect (Cohen's $d = -0.300$ with a 95% confidence interval of the size of the effect ranging from -0.457 to -0.142, i.e. small effect size according to Cohen, 1988; Vasilev, 2014) - see Table 69.

People with an intimate partner experience a more pronounced negative affect than people without an intimate partner (see Table 68 and Figure 26) during a coronavirus pandemic, with the values of the prejudice coefficient in Table 68 and Table 69 being very close to zero, which means that the differences between the compared groups are not underestimated or overestimated. People with an intimate partner also experience a more pronounced positive affect than people without an intimate partner (see Table 68 and Figure 26) during a coronavirus pandemic, with the values of the prejudice coefficient in Table 68 and Table 69 being very close to zero, which means that the differences between the compared groups are not underestimated or overestimated.

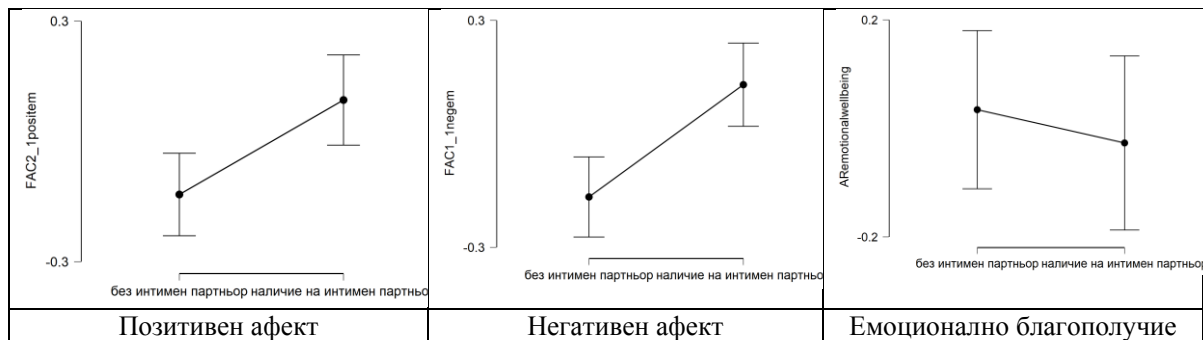
Table 68 . Mean values, standard deviations, confidence intervals and prejudices in the calculation of scores on positive and negative emotions, and emotional well-being of surveyed Bulgarians with and without an intimate partner

Anderson-Rubin scores	Marital status (number)	Statistical indices	Values	Bias in calculating averages
Positive emotions	No intimate partner (N = 278)	Arithmetic mean	-0.132	0.0002
		Standard deviation	0.871	-0.003
	With an intimate partner (N = 357)	Arithmetic mean	0.103	0.0001
		Standard deviation	1.0799	-0.003
Negative emotions	No intimate partner (N = 278)	Arithmetic mean	-0.167	-0.0004
		Standard deviation	0.897	-0.002
	With an intimate partner (N = 357)	Arithmetic mean	0.1299	-0.0005
		Standard deviation	1.0565	-0.003
Emotional well-being	No intimate partner (N = 278)	Arithmetic mean	0.0345	0.0005
		Standard deviation	1,234	-0.004
	With an intimate partner (N = 357)	Arithmetic mean	-0.0268	0.0006
		Standard deviation	1,541	-0.003

Table 69 . Values of the t-test and the bootstrapping procedure for detecting differences between people with and without an intimate partner in their scores on positive and negative emotions, and emotional well-being

Statistical indices	Positive emotions	Negative emotions	Emotional well-being
Leven's test for equality of variances	20,588	3,538	10,461
Level of significance of the Levene test	< 0.00 1	0.060	0.001
t-test	-3,041	-3,748	0.556
Degrees of freedom	632,207	633	632,502
Level of significance of the t-test	0.002	< 0.00 1	0.578
Differences between averages	-0.2355	-0.297	0.061
Prejudice (Bias) of the difference between the mean values	0.00002	0.0001	-0.0001
Level of significance of the bootstrap procedure	0.002	< 0.00 1	0.577
Bootstrap 95% confidence interval of the differences between the average values	Lower limit	-0.385	-0.447
	upper limit	-0.085	-0.144

Note: In the bootstrap procedure, when the zero does not fall between the lower and upper limit of the confidence interval, this shows statistically significant differences (Zarbova, B., 2019; Preacher & Hayes, 2008; Rouder, Speckman, Sun, Morey, & Iverson, 2009).



Positive affect / Negative affect / Emotional well-being

Figure 26. Differences between people with and without an intimate partner in terms of positive affect, negative affect and emotional well-being

The Bayesian factor in favor of confirming the null hypothesis and rejecting the alternative is equal to $BF_{01} = 0.158$, ie the null hypothesis of no effect and statistically significant differences between people with and without an intimate partner in positive affect ($H_0: \delta = 0$ according to Kelter, 2020, p.3) is less likely than the alternative ($H_1: \delta \neq 0$, where $\delta = (\mu_1 - \mu_2) / \sigma$ is the magnitude of the Cohen d effect according to Kelter, 2020, p.3). The Bayesian factor in favor of confirming the alternative hypothesis and rejecting the zero hypothesis is equal to $BF_{10} = 6.332$, ie 6 times more likely to confirm the alternative hypothesis than the zero hypothesis, which is proof (Rouder, Speckman, Sun, Morey, & Iverson, 2009) or moderate evidence (Kelter, 2020) to confirm the alternative hypothesis of effect and statistically significant differences between people with and without an intimate partner in a positive affect, with a possible calculation error of 0,00001940%.

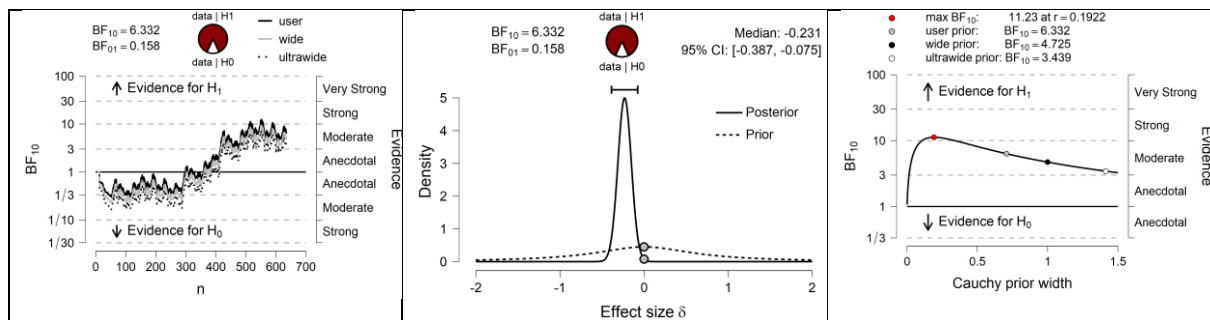


Figure 27. Bayesian and Cauchy distribution of data on the probability of confirming the null or alternative hypothesis and the magnitude of the effect of differences between people with and without an intimate partner by positive affect

Note: BF_{10} means Bayesian factor in support of the alternative hypothesis and rejection of the null hypothesis; BF_{01} means Bayesian factor in support of the null hypothesis and rejection of the alternative hypothesis; Evidence for H_1 means evidence in support of the alternative hypothesis; Evidence for H_0 means proof in support of the null hypothesis; effect size is the size of the effect; very strong evidence is very strong evidence; strong is strong evidence; moderate is moderate evidence; anecdotal means amazing

Figure 27 shows that the data support the alternative hypothesis of effect and significant differences between Bulgarians with and without an intimate partner in their positive emotional experiences during the coronavirus pandemic, fewer subjects with evidence to support the null

hypothesis. The Cauchy distribution is an alternative to the calculation of the Bayesian factor (Rouder, Speckman, Sun, Morey, & Iverson, 2009, p.231), setting values of the coefficient r according to theoretical assumptions for the effect size and the data show confirmation of the alternative hypothesis and zero rejection even when the effect is expected to be small. The size distribution of the effect includes negative values, which show a tendency for the second group of people with an intimate partner to experience more frequent and intense positive affect compared to the first group of people without an intimate partner.

The Bayesian factor in favor of confirming the null hypothesis and rejecting the alternative is equal to $BF_{01} = 0.0125$, ie the null hypothesis of no effect and statistically significant differences between people with and without an intimate partner in negative affect ($H_0: \delta = 0$ according to Kelter, 2020, p.3) is not more probable than the alternative ($H_1: \delta \neq 0$, where $\delta = (\mu_1 - \mu_2) / \sigma$ is the magnitude of the Cohen d effect according to Kelter, 2020, p.3) . The Bayesian factor in favor of confirming the alternative hypothesis and rejecting the zero hypothesis is equal to $BF_{10} = 80.1963$, ie about 80 times more likely to confirm the alternative hypothesis than the zero hypothesis, which is very strong evidence (Rouder, Speckman, Sun, Morey, & Iverson, 2009) in support of the alternative hypothesis of the presence of effect and statistically significant differences between people without and with an intimate partner in negative affect, with a percentage of possible calculation error equal to 0.000001455% .

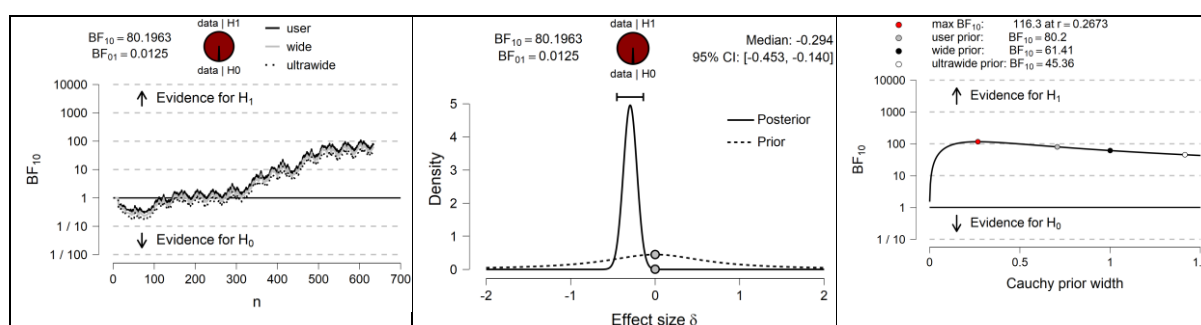


Figure 28. Bayesian and Cauchy distribution of data on the probability of confirming the null or alternative hypothesis and the magnitude of the effect of differences between people with and without an intimate partner by negative affect

Note: BF_{10} means Bayesian factor in support of the alternative hypothesis and rejection of the null hypothesis; BF_{01} means Bayesian factor in support of the null hypothesis and rejection of the alternative hypothesis; Evidence for H_1 means evidence in support of the alternative hypothesis; Evidence for H_0 means proof in support of the null hypothesis; effect size is the size of the effect

Figure 28 shows that the data support the alternative hypothesis, fewer subjects who have evidence to support the null hypothesis of lack of effect size and significant differences between people without and with an intimate partner in their negative emotional experiences. The Cauchy distribution is an alternative to the calculation of the Bayesian factor (Rouder, Speckman, Sun, Morey, & Iverson, 2009, p.231), setting values of the coefficient r according to theoretical assumptions for the size of the effect and the data show confirmation of the alternative hypothesis and zero rejection even when the effect is expected to be small. The distribution of the size of the effect shows the predominance of negative values over positive ones, ie the predominance of the negative affect of people with an intimate partner over the experiences of negative affect by people without an intimate partner. It is possible that the imposed social distance and social isolation has negatively affected the relationship in the

couple, increasing the negative emotional experiences due to limited opportunities to spend time together and joint activities.

The Bayesian factor in favor of confirming the null hypothesis and rejecting the alternative is equal to $BF_{01} = 9,719$, ie the null hypothesis of no effect and statistically significant differences between people without and with an intimate partner on their emotional well-being ($H_0: \delta = 0$ according to Kelter, 2020, p.3) is more probable than the alternative ($H_1: \delta \neq 0$, where $\delta = (\mu_1 - \mu_2) / \sigma$ is the magnitude of the Cohen effect d according to Kelter, 2020, p.3) approximately 9 times, which is evidence (Rouder, Speckman, Sun, Morey, & Iverson, 2009) or moderate evidence according to Kelter (2020) in support of the null hypothesis. The Bayesian factor in favor of confirming the alternative hypothesis and rejecting the zero hypothesis is equal to $BF_{10} = 0.103$, ie it is less likely to confirm the alternative hypothesis compared to the zero hypothesis, with a percentage of possible error in the calculations equal to 0.001 %.

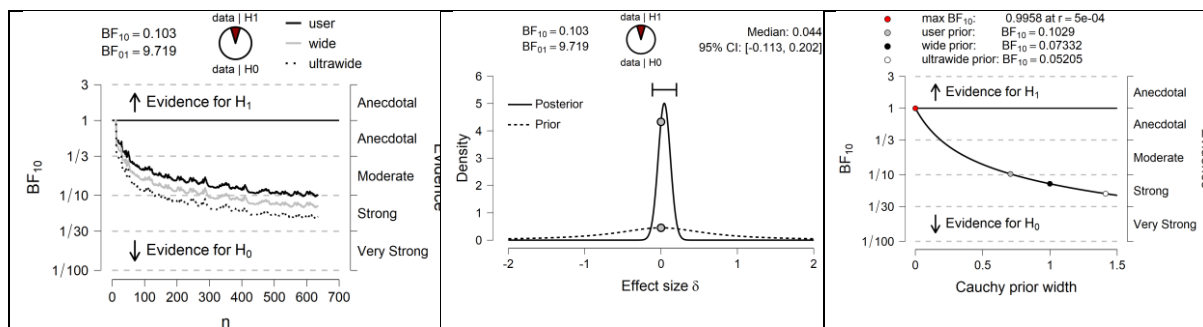


Figure 29. Bayesian and Cauchy distribution of data on the probability of confirming the null or alternative hypothesis and the magnitude of the effect of differences between Bulgarians with and without an intimate partner in emotional well-being

Note: BF_{10} means Bayesian factor in support of the alternative hypothesis and rejection of the null hypothesis; BF_{01} means Bayesian factor in support of the null hypothesis and rejection of the alternative hypothesis; Evidence for H_1 means evidence in support of the alternative hypothesis; Evidence for H_0 means proof in support of the null hypothesis; effect size is the size of the effect; very strong evidence is very strong evidence; strong is strong evidence; moderate is moderate evidence; anecdotal means amazing

Figure 29 shows that the data confirm the null hypothesis, there is almost no evidence to support the alternative hypothesis of lack of effect size and significant differences between people without and with an intimate partner in their emotional well-being. The Cauchy distribution is an alternative to the calculation of the Bayesian factor (Rouder, Speckman, Sun, Morey, & Iverson, 2009, p.231), setting values of the coefficient r according to theoretical assumptions for the size of the effect and the data show confirmation of the null hypothesis and rejection of the alternative with the expected small effect size ($r = 0.0005$). The size distribution of the effect shows no effect.

Regarding socio-demographic differences by marital status (with or without children) in the experiences of positive affect, negative affect and emotional well-being during the coronavirus pandemic, the results of the application of t-test in independent samples, bootstrapping (based on 5000 sub-samples from the data) and Bayesian statistical procedure show that there are no statistically significant differences between the studied Bulgarians without and with children in their emotional well-being (Cohen's $d = 0.161$ with 95% confidence interval of the effect ranging from -0.003 to 0.325, ie no effect according to Cohen, 1988), nor on the experiences of negative affect (Cohen's $d = 0.110$ with a 95% confidence interval of the size of the effect ranging from -0.053 to 0.274, ie no effect according to Cohen, 1988), but differ significantly in the experiences of positive affect (Cohen's $d = 0.339$ with a 95% confidence interval of the

effect size ranging from 0.174 to 0.504, which means a small amount of effect according to Cohen, 1988; Vasilev, 2014) - see Table 71. The values of the prejudice coefficient in Table 70 and Table 71 are very close to 0, which means that the differences between the compared groups are not underestimated or overestimated.

People with children experience a more pronounced positive affect than people without children (see Table 70 and Figure 30) during the coronavirus pandemic.

Table 70 . Mean values, standard deviations, confidence intervals and prejudices in the calculation of scores on positive and negative emotions, and emotional well-being of surveyed Bulgarians with and without children

Balls by the method of Anderson-Rubin	Marital status (number)	Statistical indices	Values	Bias (Bias) for the calculation of averages
Negative emotions	With children (N = 219)	Arithmetic mean	0.072	0.0004
		Standard deviation	1,017	-0.005
	Without kids (N = 416)	Arithmetic mean	-0.038	-0.0003
		Standard deviation	0.9898	-0.002
Positive emotions	With children (N = 219)	Arithmetic mean	0.223	-0.0001
		Standard deviation	1,055	-0.003
	Without kids (N = 416)	Arithmetic mean	-0.117	-0.0009
		Standard deviation	0.950	-0.002
Emotional well-being	With children (N = 219)	Arithmetic mean	0.1509	-0.0005
		Standard deviation	1.4898	-0.004
	Without kids (N = 416)	Arithmetic mean	-0.079	-0.0005
		Standard deviation	1,368	-0.003

Table 71 . Values of the t-test and bootstrapping - the procedure for detecting differences between people with and without children on their scores on positive and negative emotions, and emotional well-being

Statistical indices	Negative emotions	Positive emotions	Emotional well-being
Leven 's test for equality of variances	0.080	6,068	7,636
Level of significance of the Levene test	0.778	0.014	0.006
t-test	1,322	3,999	1,904
Degrees of freedom	633	405,142	411,844
Level of significance of the t-test	0.187	< 0.001	0.058
Differences between averages	0.1103	0.3406	0.2303
Prejudice (Bias) of the difference between the mean values	0.0007	0.0008	0.0001
Level of significance of the bootstrap procedure	0.199	< 0.001	0.060
Lower limit	-0.059	0.174	-0.010

Bootstrap 95% confidence interval of the differences between the average values	upper limit	0.280	0.512	0.482
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Note: In the bootstrap procedure, when the zero does not fall between the lower and upper limit of the confidence interval, this shows statistically significant differences (Zarbova , B., 2019; Preacher & Hayes , 2008; Rouder , Speckman , Sun , Morey , & Iverson , 2009).

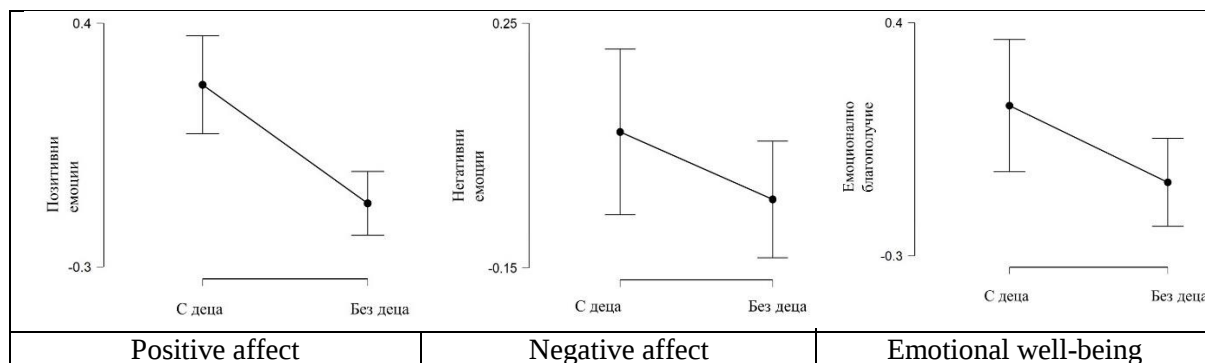


Figure 30. Differences between people with and without children in positive affect, negative affect and emotional well-being

The Bayesian factor in favor of confirming the null hypothesis and rejecting the alternative is equal to $BF_{01} = 0.00287$, ie the null hypothesis of no effect and statistically significant differences between people with and without children in positive affect ($H_0: \delta = 0$ according to Kelter, 2020, p.3) is less probable than the alternative ($H_1: \delta \neq 0$, where $\delta = (\mu_1 - \mu_2) / \sigma$ is the magnitude of the Cohen effect d according to Kelter, 2020, p.3). The Bayesian factor in favor of confirming the alternative hypothesis and rejecting the zero hypothesis is equal to $BF_{10} = 348$, ie 348 times more likely to confirm the alternative hypothesis than the zero hypothesis, which is very strong evidence (Rouder, Speckman , Sun, Morey, & Iverson, 2009) for the confirmation of the alternative hypothesis for the presence of effect and statistically significant differences between people with and without children in positive affect, with a percentage of possible error in the calculations equal to 0.0000001793%.

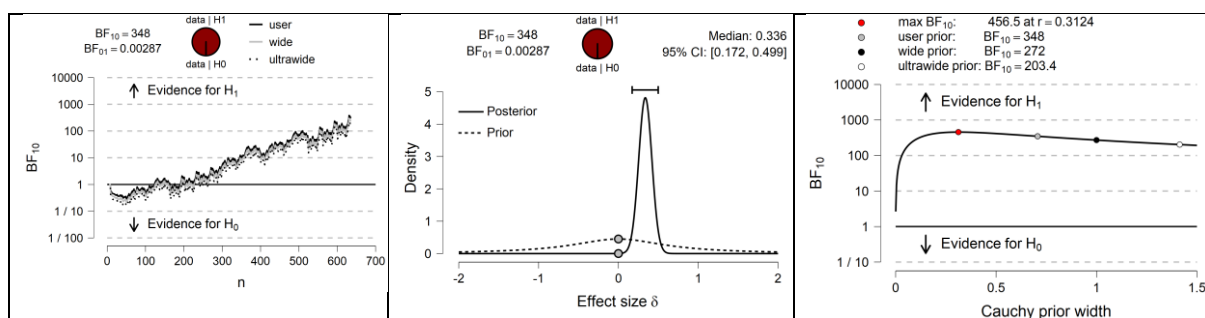


Figure 31. Bayesian and Cauchy distribution of data on the probability of confirming the null or alternative hypothesis and the magnitude of the effect of differences between people with and without children on positive affect

Note: BF_{10} means Bayesian factor in support of the alternative hypothesis and rejection of the null hypothesis; BF_{01} means Bayesian factor in support of the null hypothesis and rejection of the alternative hypothesis; Evidence for H_1 means evidence in support of the alternative

hypothesis; Evidence for H_0 means proof in support of the null hypothesis; effect size is the size of the effect

Figure 31 shows that the data confirm the alternative hypothesis of the presence of effect and significant differences between Bulgarians with and without children in their positive emotional experiences during the coronavirus pandemic, fewer subjects with evidence to support zero hypothesis. The Cauchy distribution is an alternative to the calculation of the Bayesian factor (Rouder, Speckman, Sun, Morey, & Iverson, 2009, p.231), setting values of the coefficient r according to theoretical assumptions for the effect size and the data show confirmation of the alternative hypothesis and zero rejection even when the effect is expected to be small. The distribution of the effect size includes positive values, which show a tendency for the first group of people with children to experience more frequent and intense positive affect compared to the second group of people without children.

The Bayesian factor in favor of confirming the null hypothesis and rejecting the alternative is equal to $BF_{01} = 4,593$, ie the null hypothesis of no effect and statistically significant differences between people with and without children in negative affect ($H_0: \delta = 0$ according to Kelter, 2020, p.3) is 4 times more likely than the alternative ($H_1: \delta \neq 0$, where $\delta = (\mu_1 - \mu_2) / \sigma$ is the magnitude of the Cohen d effect according to Kelter, 2020, p.3), which is evidence (Rouder, Speckman, Sun, Morey, & Iverson, 2009) or moderate evidence (Kelter, 2020) in support of the null hypothesis. The Bayesian factor in favor of confirming the alternative hypothesis and rejecting the zero hypothesis is equal to $BF_{10} = 0.218$, ie it is not more likely to confirm the alternative hypothesis compared to the zero hypothesis, with a percentage of possible error in the calculations equal to 0 , 0003608%.

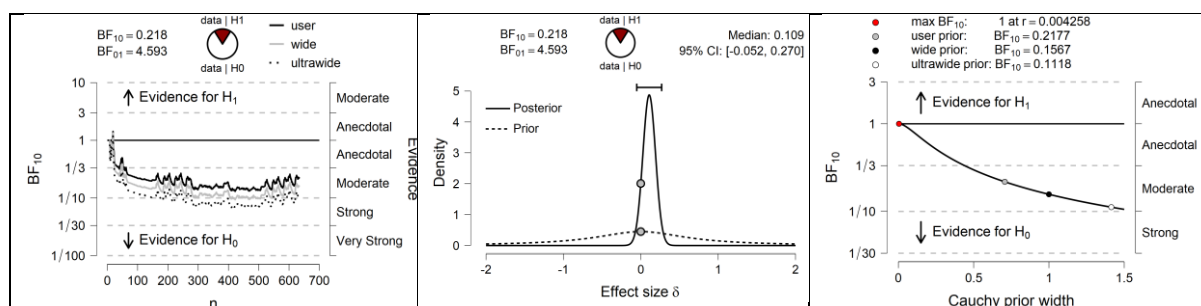


Figure 32. Bayesian and Cauchy distribution of data on the probability of confirming the null or alternative hypothesis and the magnitude of the effect of differences between people with and without children on negative affect

Note: BF_{10} means Bayesian factor in support of the alternative hypothesis and rejection of the null hypothesis; BF_{01} means Bayesian factor in support of the null hypothesis and rejection of the alternative hypothesis; Evidence for H_1 means evidence in support of the alternative hypothesis; Evidence for H_0 means proof in support of the null hypothesis; effect size is the size of the effect; very strong evidence is very strong evidence; strong is strong evidence; moderate is moderate evidence; anecdotal means amazing

Figure 32 shows that the data confirm the null hypothesis of a lack of effect size and significant differences between people without and with children in their negative emotional experiences. The Cauchy distribution is an alternative to the calculation of the Bayesian factor (Rouder, Speckman, Sun, Morey, & Iverson, 2009, p.231), setting values of the coefficient r according to theoretical assumptions for the size of the effect and the data show confirmation of the null hypothesis and rejection of the alternative even when expected for a small amount of effect. The size distribution of the effect shows no effect - values around zero.

The Bayesian factor in favor of confirming the null hypothesis and rejecting the alternative is equal to $BF_{01} = 1,677$, ie the null hypothesis of no effect and statistically significant differences between people without and with children on their emotional well-being ($H_0: \delta = 0$ according to Kelter, 2020, p.3) is more probable than the alternative ($H_1: \delta \neq 0$, where $\delta = (\mu_1 - \mu_2) / \sigma$ is the magnitude of the Cohen effect d according to Kelter, 2020, p.3) approximately 2 times , which is not sufficient evidence (Kelter, 2020; Rouder, Speckman, Sun, Morey, & Iverson, 2009) to support the null hypothesis. The Bayesian factor in favor of confirming the alternative hypothesis and rejecting the zero hypothesis is equal to $BF_{10} = 0.596$, ie it is less likely to confirm the alternative hypothesis compared to the zero hypothesis, with a percentage of possible error in the calculations equal to 0 , 0001273%.

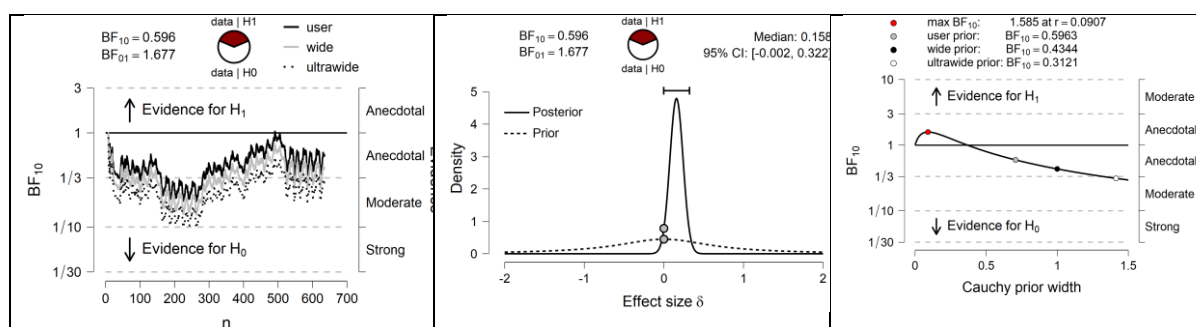


Figure 33. Bayesian and Cauchy distribution of data on the probability of confirming the null or alternative hypothesis and the magnitude of the effect of differences between Bulgarians with and without children on emotional well-being

Note: BF_{10} means Bayesian factor in support of the alternative hypothesis and rejection of the null hypothesis; BF_{01} means Bayesian factor in support of the null hypothesis and rejection of the alternative hypothesis; Evidence for H_1 means evidence in support of the alternative hypothesis; Evidence for H_0 means proof in support of the null hypothesis; effect size is the size of the effect; very strong evidence is very strong evidence; strong is strong evidence; moderate is moderate evidence; anecdotal means amazing

Figure 33 shows that the data support the null hypothesis, there is almost no evidence to support the alternative hypothesis of lack of effect size and significant differences between people without and with children in their emotional well-being. The Cauchy distribution is an alternative to the calculation of the Bayesian factor (Rouder, Speckman, Sun, Morey, & Iverson, 2009, p.231), setting values of the coefficient r according to theoretical assumptions for the size of the effect and the data show confirmation of the null hypothesis and rejection of the alternative when the small size of the effect is expected. The distribution of the effect size shows no effect, values around zero.

Regarding socio-demographic differences by age groups in the experiences of positive affect, negative affect and emotional well-being during the coronavirus pandemic, the results of the application of ANOVA in independent samples, bootstrapping (based on 5000 sub-samples of data) and Bayesian statistical procedure show that there are no statistically significant differences between surveyed Bulgarians of different ages on the negative emotions they experienced (see Table 74 and Table 75). However, in Table 75 the bootstrapping procedure shows statistically significant differences between the surveyed Bulgarians aged 24-27 and 28-35 on the negative emotions they experienced, with 24-27-year-olds experiencing more negative emotions than the 28-35-year-olds. the time of the coronavirus pandemic (see Table 73) and the magnitude of the effect of the differences between these two age groups is small (Cohen, 1988; Vasilev, 2014), but still significant. The bootstrapping procedure, which does

not require requirements for the distribution of variables or the sample size, seems to be a very sensitive statistical method to small differences.

The Bayesian factor in favor of confirming the alternative hypothesis and rejecting the zero is equal to $BF_{10} = 0.034$, i.e. there is no evidence to confirm the alternative hypothesis for the presence of effect and statistically significant differences between people of different ages on negative affect, at a percentage of possible calculation error equal to 0.013%. Age explains 0.9% of the variance of the negative affect experienced ($R^2 = 0.009$). Bayesian factors in favor of confirming the alternative hypothesis and rejecting the zero in comparisons of the negative affect experienced by each age group are presented in Table 72 and their values are very low, which means that there is no evidence to confirm the alternative hypotheses for the presence of effect and statistically significant differences between people compared every two age groups by negative affect.

Table 72 . Bayesian factors for comparisons between age groups on the negative affect they experienced

Compared age groups		Bayesian factor in favor of the alternative hypothesis BF_{10}	Percentage of possible error
20-23 years	24-27 years	0.172	0.00002178%
	28-35 years	0.279	0.00002678%
	36-65 years	0.120	0.00008557%
24-27 years	28-35 years	0.823	0.000005549%
	36-65 years	0.151	0.00001288%
28-35 years	36-65 years	0.274	0.000003401%

The surveyed Bulgarians of different ages differ significantly in their experiences of positive affect and emotional well-being - see Table 74 , as 12.1% of the experienced positive emotions are explained by the effect of age, but only 6.1% of emotional well-being is due to the effect. of age, according to Brown's (2008) interpretation of the coefficients η^2 (eta squared) and η^2_p (partial eta squared) . Bulgarians aged 24 to 27 were less likely to experience positive emotions than the other three age groups, and Bulgarians aged 36 to 65 were most likely to experience positive emotions and emotional well-being compared to the other three age groups (see Table 73 , Table 75). and Figure 34). Probably social isolation has greatly changed the lifestyle of 24-27-year-olds and they lack opportunities to maintain social contacts, to assert themselves in professional and personal life, and for entertainment.

As in Table 74 the interpretation of the effect size values varies from insignificant to medium effect in emotional well-being, a chi-square analysis was performed to compare the theoretical and expected frequencies of negative affect, positive affect and emotional well-being experienced by age groups, and checking the size of the Cramer's V effect . There are statistically significant differences in levels of emotional well-being between age groups - $\chi^2 (N = 635; df = 6) = 101,113$; $p < 0.001$; Cramer's V = 0.282, which means the average size of the effect according to the "IBM Knowledge Center " (nda1.), But means a small size of the effect according to V. Goev (1996, pp. 128-129). Different authors interpret the same effect size values differently, which makes it difficult to refer to a correct interpretation of the effect size, so that reporting more effect size measures contributes to a more accurate orientation by virtue of the relationship between variables. Only people aged 36 to 65 experience high emotional well-being more often than expected, the other age groups experience high emotional well-being less often than expected.

Table 73 . Mean values, standard deviations, confidence intervals and prejudices in the calculation of scores on positive and negative emotions, and emotional well-being of surveyed Bulgarians of different ages

Balls by the method of Anderson-Rubin	Age groups (number)	Statistical indices	Values	Bias (Bias) for the calculation of averages
Negative emotions	20-23 years (N = 189)	Arithmetic mean	-0.009	-0.001
		Standard deviation	0.928	-0.004
	24-27 years (N = 139)	Arithmetic mean	-0.097	-0.001
		Standard deviation	0.948	-0.005
	28-35 years (N = 150)	Arithmetic mean	0.129	0.002
		Standard deviation	0.995	-0.007
	36-65 years (N = 157)	Arithmetic mean	-0.026	-0.002
		Standard deviation	1,123	-0.008
Positive emotions	20-23 years (N = 189)	Arithmetic mean	-0.075	-0.001
		Standard deviation	0.921	-0.004
	24-27 years (N = 139)	Arithmetic mean	-0.422	0.001
		Standard deviation	0.811	-0.003
	28-35 years (N = 150)	Arithmetic mean	-0.099	0.001
		Standard deviation	0.967	-0.005
	36-65 years (N = 157)	Arithmetic mean	0.5595	-0.001
		Standard deviation	1,038	-0.005
Emotional well-being	20-23 years (N = 189)	Arithmetic mean	-0.066	0.0004
		Standard deviation	1,425	-0.007
	24-27 years (N = 139)	Arithmetic mean	-0.325	0.003
		Standard deviation	1,226	-0.005
	28-35 years (N = 150)	Arithmetic mean	-0.229	-0.001
		Standard deviation	1,152	-0.007
	36-65 years (N = 157)	Arithmetic mean	0.586	0.001
		Standard deviation	1,608	-0.008

Table 74 . Values of the F -test and the Welch test to detect differences between people of different ages in their scores on positive and negative emotions, and emotional well-being

Statistical indices	Negative emotions	Positive emotions	Emotional well-being
Leven 's test for equality of variances (degrees of freedom: 3, 631)	4,644	2,548	7,641
Level of significance of the Levene test	0 , 003	0 , 055	< 0.00 1
F -criterion (degrees of freedom : 3, 631)	1,311	28,855	13,633
Level of significance of the F- criterion	0 , 270	< 0.00 1	< 0.00 1
Welch test for equality of the means	1,355	27,879	11,600
Degrees of freedom of the Welch test	3; 340,571	3; 343,616	3; 344,910
Significance level of the Welch test	0.256	< 0.00 1	< 0.00 1
Effect size η^2 (eta squared)	-	0.121, small	0.061, insignificant
Effect size η^2_p (partial eta squared)	-	0.121, average	0.061, average
Effect size ω^2 (omega squared)	-	0.116, average	0.056, small

Note: The test of Welch was used instead of F -kriteriya in uneven dispersion of the compared groups („ IBM Knowledge Center “, n . D . I 1.). The source of the interpretation of the effect size is Goss-Sampson (2018).

Balls by the method of Anderson-Rubin	Compared age groups		Differences between averages	Level of significance of the post - hoc test for comparison between groups	Prejudice (Bias) of the difference between the mean values	Bootstrap 95% confidence interval of the difference between the mean values		Size of the effect Cohen's d (interpretation according to Cohen , 1988)
						lower limit	lower limit	
Negative emotions (differences with the Games- Howell post - hoc test)	24- 27 years	20- 23 years	-0.087	0.839	-0.0004	-0.297	0.117	0.093
	28- 35 years	20- 23 years	0.138	0.556	0.003	-0.069	0.356	-0.145
		24- 27 years	0.226	0.199	0.003	0.005	0.464	-0.232, small
	36- 65 years	20- 23 years	-0.017	0.999	-0.001	-0.233	0.209	0.016
		24- 27 years	0.071	0.935	-0.0004	-0.152	0.314	-0.068
		28- 35 years	-0.155	0.575	-0.004	-0.388	0.0796	0.146
Positive emotions (differences with Bonferroni's post - hoc test)	24- 27 years	20- 23 years	-0.347	0.006	0.002	-0.533	-0.162	0.396, small
	28- 35 years	20- 23 years	-0.024	1,000	0.002	-0.217	0.179	0.026
		24- 27 years	0.323	0.022	-0.0002	0.123	0.523	-0.361, small
	36- 65 years	20- 23 years	0.635	< 0.00 1	-0.0006	0.427	0.841	-0.651, average
		24- 27 years	0.982	< 0.00 1	-0.002	0.771	1,185	-1,046 , large
		28- 35 years	0.659	< 0.00 1	-0.002	0.436	0.887	-0.657 , average
Emotional well-being (differences with the Games- Howell post - hoc test)	24- 27 years	20- 23 years	-0.259	0.292	0.002	-0.549	0.023	0.193
	28- 35 years	20- 23 years	-0.163	0.652	-0.001	-0.433	0.123	0.124
		24- 27 years	0.097	0.901	-0.003	-0.176	0.366	-0.081
	36- 65 years	20- 23 years	0.651	0.001	0.0003	0.332	0.966	-0.431, small
		24- 27 years	0.911	< 0.00 1	-0.002	0.582	1,227	-0.632, average

		28-35 years	0.814	< 0.00 1	0.002	0.503	1,134	-0.580, average
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Table 75 . Comparisons between age subgroups in pairs according to their scores on negative affect, positive emotions and emotional well-being by Bonferoni or Game -Howell criteria according to the equality of variances of age subgroups, by bootstrapping , as well as the size of the effect
Note: In the bootstrap procedure, when the zero does not fall between the lower and upper limit of the confidence interval, this shows statistically significant differences (Zarbova , B., 2019; Preacher & Hayes , 2008; Rouder , Speckman , Sun , Morey , & Iverson , 2009). Values are shown in bold, which show statistically significant differences between the compared age groups, as well as the presence of the size of the effect.

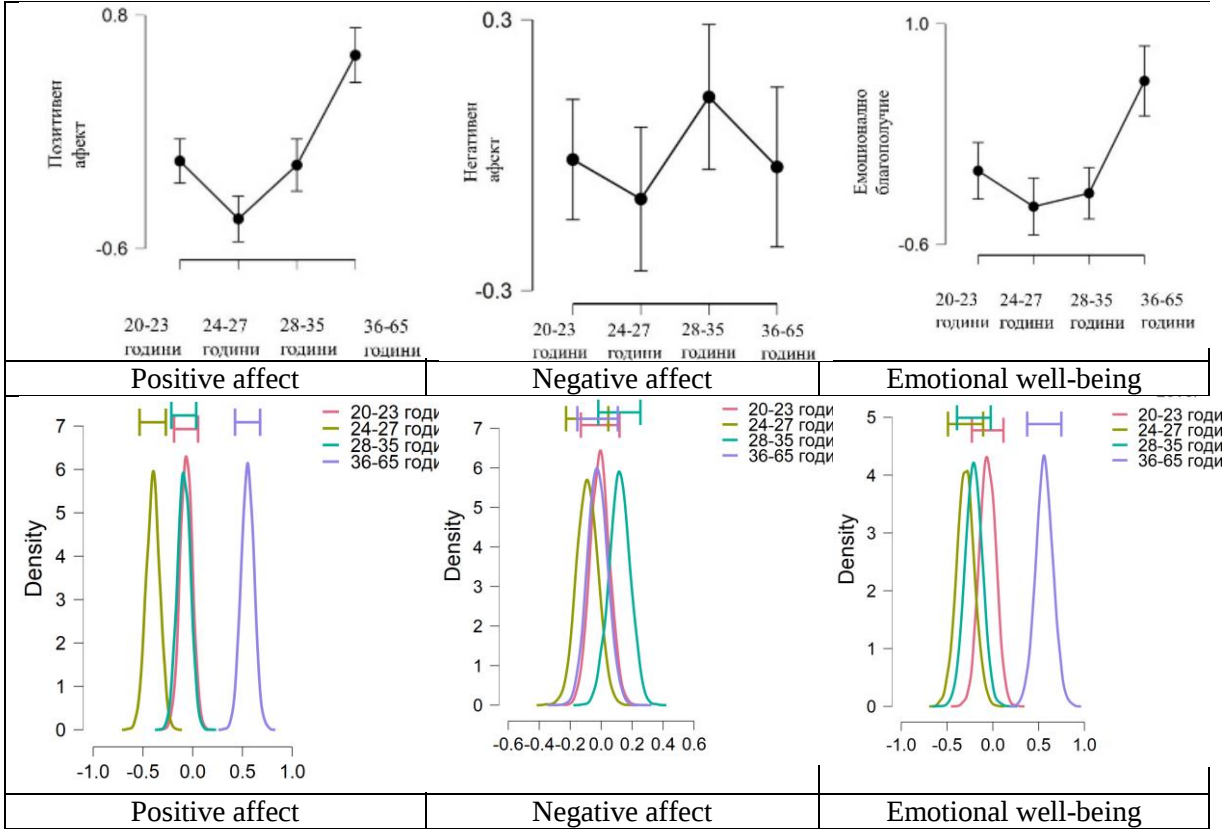


Figure 34. Differences between age groups in positive affect, negative affect and emotional well-being

The Bayesian factor in favor of confirming the alternative hypothesis and rejecting the zero is equal to $BF_{10} = 303600000000000$, which means that the alternative hypothesis is millions of times more likely than the zero and there is very strong evidence to confirm the alternative hypothesis for effect and statistical significant differences between people of different ages in positive affect, with a percentage of possible calculation error equal to 0.0009481%. Age explains 11.7% of the variance of the experienced positive affect ($R^2 = 0.117$), which is a similar percentage as measured in the variance analysis by bootstrapping (see Table 74 the effect size value η^2 multiplied by 100). Bayesian factors in favor of confirming the alternative hypothesis and rejecting the zero in comparisons of the positive affect experienced by each age group are presented in Table 76 and their values are very

high in all pairs of comparisons, without comparison between the ages 20-23 and 28-35 years on their positive emotions, which means that there is very strong evidence for the confirmation of alternative hypotheses for the presence of effect and statistically significant differences between people from any age group compared to negative affect, with one exception - the null hypothesis is confirmed for lack of effect and significant differences in experienced positive emotions between 20-23-year-olds and 28-35-year-olds, as found in the bootstrapping analysis of variance (see Table 75).

Table 76 . Bayesian factors for comparisons between pairs of age groups on the positive affect experienced by them

Compared age groups		Bayesian factor in favor of the alternative hypothesis BF10	Percentage of possible error
20-23 years	24-27 years	46,115	0,00000002010%
	28-35 years	0.124	0.00006426%
	36-65 years	2189000	0,0000000000004772%
24-27 years	28-35 years	10,758	0.0000006354%
	36-65 years	14610000000000	0,0000000000000000004500%
28-35 years	36-65 years	483538,685	0,00000000001602%

The Bayesian factor in favor of confirming the alternative hypothesis and rejecting the zero is equal to $BF_{10} = 668013,096$, which means that the alternative hypothesis is thousands of times more likely than zero and there is very strong evidence to confirm the alternative hypothesis for the presence of effect and statistically significant differences between people of different ages on their emotional well-being , with a percentage of possible calculation error equal to 0.018% . Age explains 5.9% of the variance in emotional well-being ($R^2 = 0.059$), which is similar to the percentage measured in the variance analysis by bootstrapping (see in Table 74 the value of Effect Size η^2 multiplied by 100). Bayesian factors in favor of confirming the alternative hypothesis and rejecting the zero in comparisons of emotional well-being for each age group are presented in

Table and 77 and their values are very high at half pairs comparisons, without comparison between the ages of 20-23 years and 24-27 years in their positive emotions, without comparison between the ages of 20-23 years and 28-35 years in

their positive emotions without comparing the ages 24-27 and 28-35 on their positive emotions, for which the evidence is in favor of the null hypothesis, and there is very strong evidence to confirm the alternative hypotheses of effect and statistically significant differences between people from the age group 36-65 years and the other age groups by positive affect, as found in the bootstrapping analysis of variance (see Table 75).

Table 77 . Bayesian factors for comparisons between age groups on their emotional well-being

Compared age groups		Bayesian factor in favor of the alternative hypothesis BF10	Percentage of possible error
20-23 years	24-27 years	0.511	0.000005780%
	28-35 years	0.223	0.00003408%
	36-65 years	219,800	0,00000002374%
24-27 years	28-35 years	0.163	0.00001902%
	36-65 years	95094,982	0,00000000009723%
28-35 years	36-65 years	19131,042	0,0000000003512%

It can be summarized that during the coronavirus pandemic in the period from the end of May 2020 to the middle of June 2020, when the study was conducted, the largest share of the surveyed Bulgarians (48%) had a moderately expressed emotional well-being during a coronavirus pandemic, expressed as a balance between positive and negative affect. They are followed by the share of study participants who experience strong emotional well-being during the coronavirus pandemic, expressed as a predominance of positive affect over negative - 28.7%. The least number of subjects experienced emotional distress during the coronavirus pandemic, expressed as the predominance of negative affect over positive - 23.3%.

The largest share of the surveyed Bulgarians with moderately experienced experiences of negative affect during the coronavirus pandemic (70.1%) and with moderately expressed experiences of positive affect (63%), followed by the number of surveyed Bulgarians with very strong experiences of positive affect (20%), then - with very low experiences of positive affect (17%), then - with very strong experiences of negative affect during the coronavirus pandemic (15.4%), at least are people with very low experiences of negative affect during the coronavirus pandemic (14.5%).

The most common and strong positive emotions during a coronavirus pandemic are experienced by men aged 36 to 65 who maintain an intimate partnership and have children. Children give meaning to life, which makes parents happy.

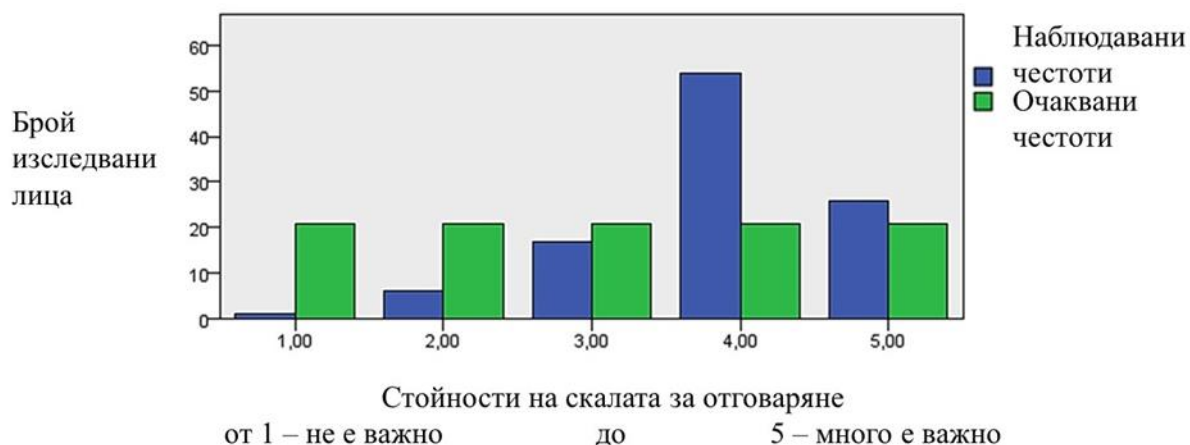
The most common and strong negative emotions during a coronavirus pandemic are experienced by women aged 24 to 27 who maintain an intimate partnership but are childless. In social exclusion greatly changed their lifestyle and lack

opportunities to maintain social contacts and relationships with people who do not live together, impeding assertiveness in professional and personal life, limited to entertainment, making them upset.

2. 2. CONSUMER PROSPERITY DURING THE CORONAVIRUS PANDEMIC

Two studies of consumer welfare during the coronavirus pandemic were conducted. One is to study the impact of organizational practices aimed at improving the well-being of society on the purchase decision. The other study concerns the consumption of products that are supposed to improve health. The influence of corporate social responsibility on consumer decision-making for purchase and their behavior after purchase was studied through a survey based on the ideas of Paganikova (2020). The data were processed using the software SPSS 20.0 (IBM Corp., 2011) and JASP 0.11.1.0 (JASP Team, 2019) using chi-square analysis, Binomial test and descriptive statistics.

Surveyed online in May-June 2020. 104 people - 73 women (70.2%) and 31 men (29.8%) aged 18 to 65 years, and from 18 to 25 years are 55 respondents (9%), from 26 to 35 years are 31 subjects (29.8%), from 36 to 45 years are 11 subjects (10.6%) and over 46 years are 7 subjects (6.7%). 66 students (63.5%), 26 working (25.0%), 7 unemployed (6.7%), 4 entrepreneurs (3.8%), 1 pensioner (1%) were studied. All respondents were presented with a definition of corporate social responsibility: „Corporate social responsibility is a commitment by a company to improve public welfare through voluntary business practices and use of own resources through social initiatives“ (Boneva, M. and Kolev, G., 2016, p. 189). The question „To what extent is it important for you that the company from which you buy a product is socially responsible?“ Is answered on a scale of 1 - not important, up to 5 - very important, the median and fashion of the answers is 4, t f) corporate social responsibility was assessed as important by the respondents (see Figure 35) and there were statistically significant differences between those who chose the individual answers on the scale ($\chi^2_{(N = 104; df = 4)} = 84,365, p < 0,001$) as the answers „important“ and „very important“ are significantly more frequent than expected, and the answers „not important“, „unimportant“ are significantly less common than expected.



Number of subjects / answer scale values – from 1 – unimportant to 5 – very important/ Observed frequencies/ Expected frequencies

Figure 35. Frequency distribution of the answers to the question „To what extent is it important for you that the company from which you buy a product is socially responsible?“

When asked what makes a company socially responsible, people’s answers vary between ethical practices in the company’s activities, such as fair treatment of its employees (N = 48; 46.2%); use of renewable energy, recycled materials, reduction of carbon dioxide emissions, environmentally friendly production and materials, products that have not been tested on animals, organic products, etc. (N = 45; 43.3%); fair, equitable commercial practices (N = 34; 32.7%); donations for charitable activities (N = 20; 19.2%); participation in voluntary activities in the local community (N = 19; 18.3%); avoiding tricks to reduce taxes (N = 1; 1%); non-inclusion of additional fees to the price (N = 1; 1%); offering quality products cheaply (N = 1; 1%); providing employees with free food (N = 1; 1%), as the respondents gave more than one answer.

To the question „If you learned that a company engages in irresponsible or fraudulent business practices, would you stop buying its products?“ 83 respondents answered „yes” and 21 respondents answered „no” and the differences in the answers were statistically significant (the expected frequencies were 50% for both answer options, Binomial test statistic = 83; $p < 0.001$).

To the question „Would you share with your family and friends about the company’s efforts to take corporate social responsibility?“ 84 respondents answered „yes” and 20 respondents answered „no” and the differences in the answers were statistically significant (the expected frequencies were 50% for both answer options, Binomial test statistic = 84; $p < 0.001$).

To the question „To what extent do these factors affect you when you buy a product?“ with possible responses „strongly affect”, „affect to a small extent” and „do not affect” the answers vary (see Figure 36).

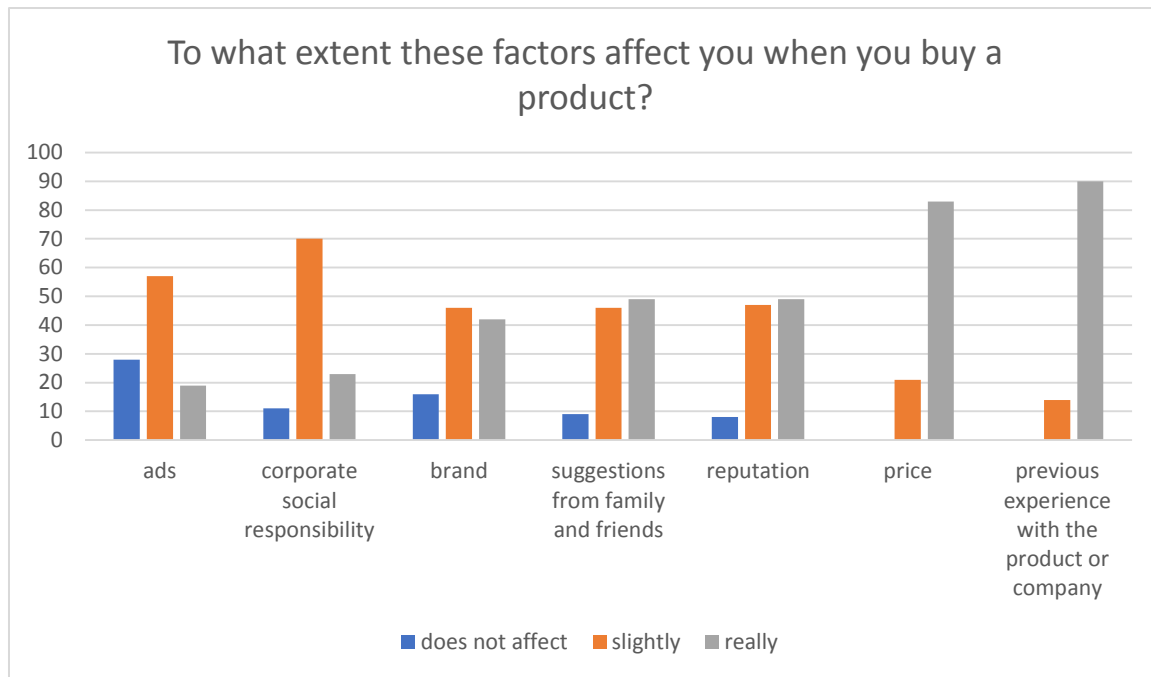


Figure 36 . Frequency distribution of responses on factors that influence the decision to purchase a product

Most often the decision to buy a product is strongly influenced by previous experience with the product and the company from which the customer buys it, also by the price, less often strongly influenced by the company's reputation, suggestions of family and friends and the product brand, and is rarely strongly influenced by the corporate social responsibility assumed by the company, as well as by promotional and advertising campaigns, yet the last two factors strongly influence one in five people (see Figure 36). Approximately 89% of consumers are influenced to some extent in their decision to purchase a product from corporate social responsibility.

When asked whether they know the company from which they buy a product to participate in activities related to corporate social responsibility, 49 people (47.1%) answered „yes“ and 55 people answered „no“. %) and the differences in responses were not statistically significant (expected frequencies were 50% for both response options, Binomial test statistic = 49; $p = 0.624$).

Consumers say that the companies that supply them with goods and services like organic products; quality products; availability of a large selection of products; corporate social responsibility shown by the company; the location of the company; friendly attitude of the company's staff; free provision of product samples; the design of the products and the smell of the products are important; the absence of trade fraud; respect for the client; the appointment of women to management positions; products that have not been tested on animals; ethical and equal treatment of company employees during the coronavirus pandemic; large stocks; reasonable price of the products; organic natural products; providing discounts; good customer service; support for solving social problems of the

community where they produce their products; the company to protect the environment; providing unique products; products that lead to relaxation; durable product packaging.

Consumers say they don't like high prices when shopping; the presence of too many people in the store; annoyance on the part of traders; too strong smell in stores; racist treatment by staff; unattractive packaging, flashy colors; lack of variety of products; certain ingredients of products; certain activities related to corporate civil liability; some products; animal testing of products; the non-acceptance back of plastic packaging for recycling; poor product quality.

There is a tendency during the coronavirus pandemic for consumers to support companies that take corporate social responsibility, but this is not the most important factor influencing the purchase decision or consumer satisfaction, even some consumers are dissatisfied with certain activities related to corporate social responsibility, which create some personal inconvenience for themselves, although according to the company's design they should be beneficial to society.

The second study linked consumer well-being and health well-being during the coronavirus pandemic.

In June 2020, 231 people were surveyed with an online survey on the consumption of supplements, vitamins and minerals during the coronavirus pandemic, designed by Ali (2020). Data were processed by SPSS 20 using chi-square analysis and descriptive statistics. The subjects were from 16 to 75 years old, as from 16 to 23 years 60 people were examined (23%), from 24 to 40 years were 149 subjects (64.5%), from 41 to 55 years were 17 subjects (7, 4%), from 56 to 75 years are 5 subjects (2.2%). 155 men (67.1%) and 76 women (32.9%) were studied. Subjects were informed that dietary supplements in this study related to packaged vitamins, minerals, multivitamins, energy drinks, protein supplements, energy bars, weight loss drugs, weight gain drugs, fish oil, edible plant products, probiotic drinks, etc. - Everything that a person can consume in addition to his usual diet to meet certain nutritional needs of the body can be considered as a dietary supplement.

To the question „How would you rate your daily diet?“ With answers from 1 - very unhealthy to 5 - very healthy, the majority of respondents rated it halfway between the two poles - the median and fashion are 3, ie the fluctuation between unhealthy and healthy (see Figure 37). There are statistically significant differences between the selected individual responses on the scale ($\chi^2_{(N = 231; df = 4)} = 227,723, p < 0,001$) and the answers „fluctuate between healthy and unhealthy“ and „rather healthy“ are significant more frequently than expected, and the responses „very healthy“, „very unhealthy“ and „rather unhealthy“ are significantly less common than expected (see Figure 38).

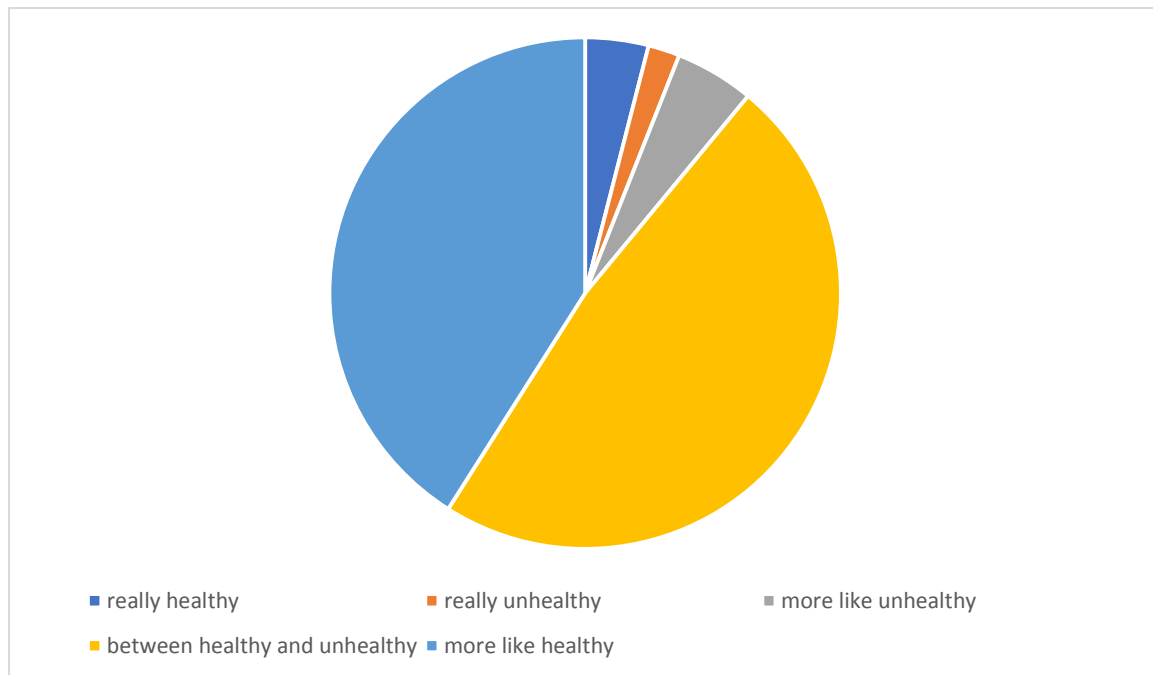


Figure 37. Percentage of answers to the question „How would you rate your daily diet?“

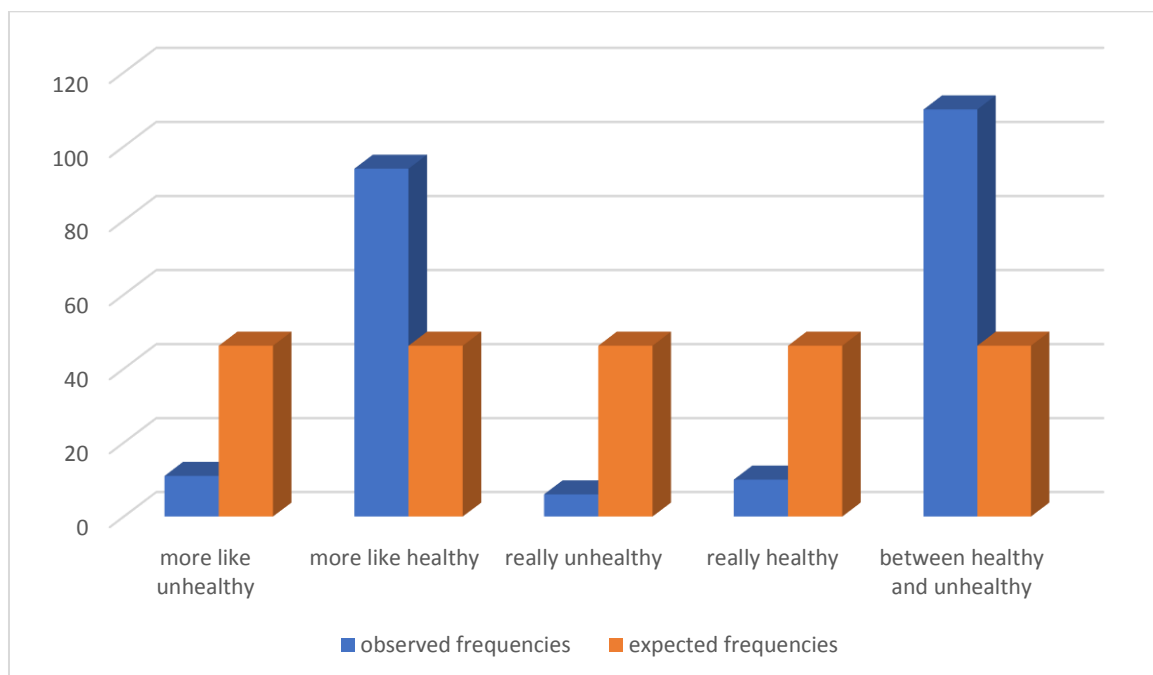


Figure 38. Frequency distribution of the answers to the question „How would you rate your daily diet?“

To the question „Before the COVID19 pandemic, which answer was most relevant to you in terms of your immunity, health, physical condition?“, The most common answer was „I have always taken preventive measures regarding my health and

physical condition.“ „(N = 114), followed by the answer“ I usually acted after being diagnosed with a health problem „(N = 104) and the answer“ Immunity, health, physical condition were unimportant to me „was rarely given (N = 13) (see Figure 39). There were statistically significant differences between those who chose the individual answers on the scale (χ^2 (N = 231; df = 2) = 80,442, p <0,001) as the answers „I always took preventive measures regarding my health and physical condition“ and „I usually acted after I was diagnosed with a health problem “are significantly more common than expected, and the response“ Immunity, health, physical condition were unimportant to me ”is significantly less common than expected (see Figure 40).

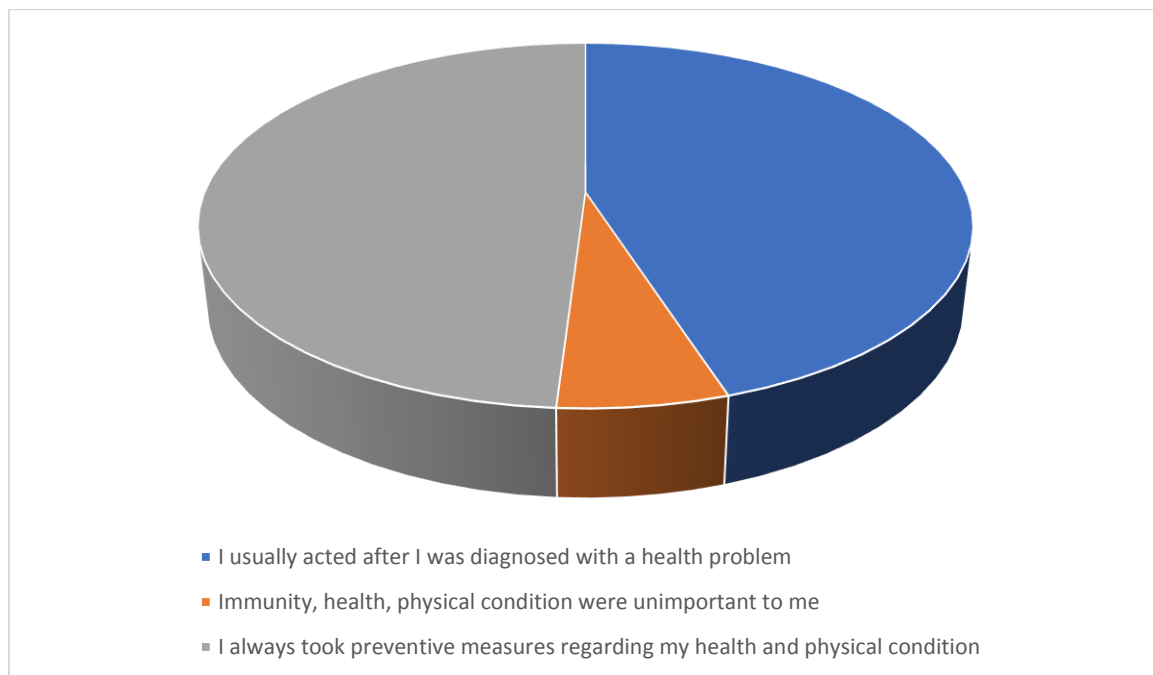


Figure 39. Percentage distribution of answers to the question „Before the COVID19 pandemic, what was most relevant to you in terms of your immunity, health, physical condition?“

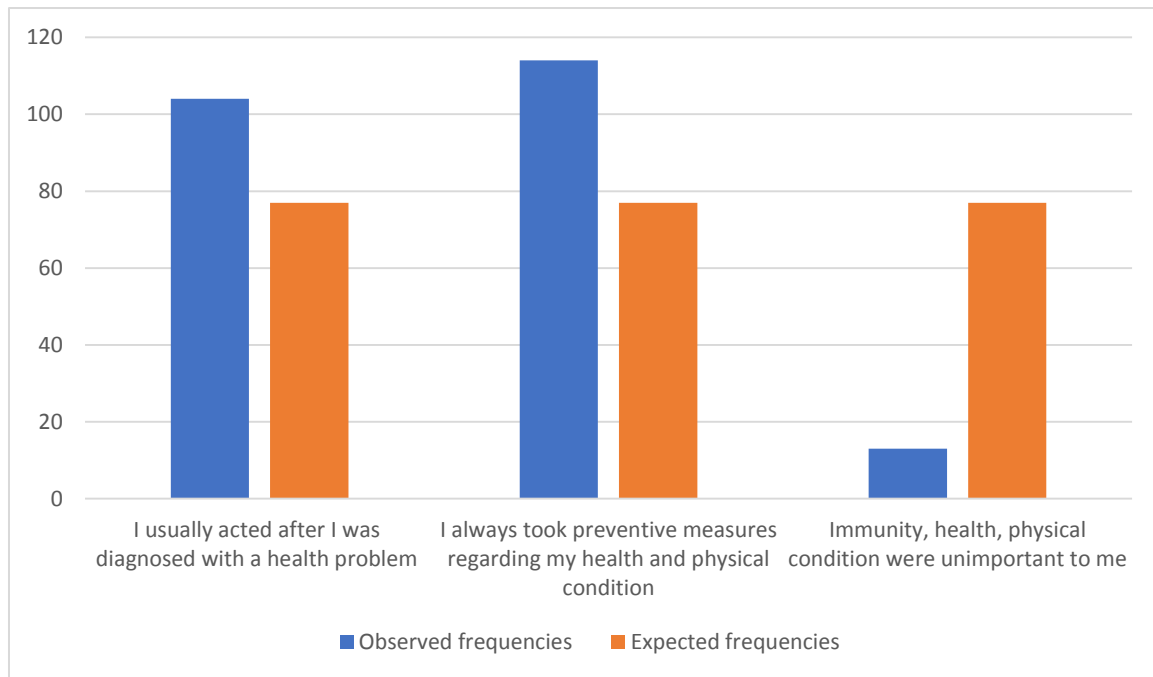


Figure 40. Frequency distribution of the answers to the question „How would you rate your daily diet?“

Regarding the question „Once the coronavirus crisis is over, I would prefer to take precautions in advance to avoid health problems in the future“ with answer options from 1 - completely disagree to 5 - fully agree, the answers „completely agree“(45%), followed by“ rather agree ”(42%) responses (see Figure 41). There are statistically significant differences between those who chose the individual responses to the statement „Once the coronavirus crisis is over, I would prefer to take precautions in advance to avoid future health problems“ (χ^2 (N = 231; df = 4) = 219,801, $p < 0,001$) with the answers „completely agree” and „rather agree” occur significantly more often than expected, and the answers „I cannot judge as much as I agree as much as I disagree” (10.4%), „Rather disagree” (2.2%) and „completely disagree” (0.4%) are significantly less common than expected (see Figure 41).

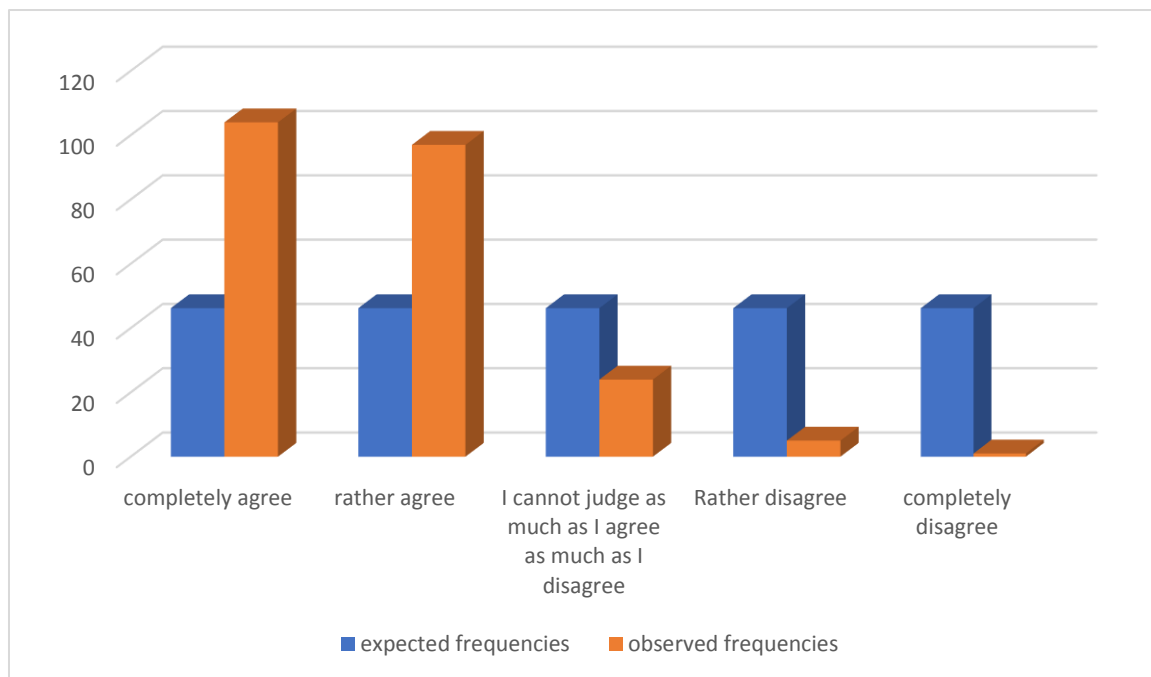


Figure 41. Frequency distribution of responses to the statement „Once the coronavirus crisis is over, I would prefer to take precautions in advance to avoid future health problems“

To the question „Do you take any food supplement?“ The answer „Yes, regularly“ is given by 25 people (10.8%), the answer „Yes, but not regularly“ is given by 36 people (15.6%), the answer „In the past I took 47 people (20.3%) gave the answer „I have never tried, but I could use in the future“ 41 people (17.7%) gave, and only the answer „I have never tried / a “give 82 people (35.5%), ie the predominant subjects who did not take dietary supplements either during the coronavirus pandemic or before it (a total of 53.2%), but some of them intend to start using them (17.7%). Accordingly, the respondents rated the food supplements as a not very important addition to their regular diet - the answer „not important at all“ was given by 32 people (13.9%), the answer „rather not important“ was given by 68 people (29.4 %), the answer „I can’t judge whether they are important or unimportant“ was given again by 68 people (29.4%), the answer „rather important“ was given by 41 people (17.7%), and the answer „very important „22 people give (9.5%).

Those who have used supplements in the past, or who are currently using supplements, do so because their diet lacks some essential nutrients and their body lacks some essential elements (N = 63; 27.3%); to improve the functioning of their immune system (N = 54; 23.4%); nutritional supplements are in addition to fitness activities (N = 39; 16.9%), in order to lose weight (N = 18; 7.8%), in order to gain

weight (N = 15; 6.5%) and etc., as the respondents indicated more than one reason for the use of food supplements.

To the question „Nutritional supplements available for purchase help to stimulate immunity, health or physical condition“ with answer options from 1 - completely disagree to 5 - fully agree, the answers „as much as I agree, so I disagree, I can not judge“ (43 , 7%) and „rather agree“ (39%) were chosen significantly more often than expected (χ^2 (N = 231; df = 4) = 178,848, p <0,001), and the remaining answers - „completely disagree“ , „Rather disagree“ and „fully agree“ were chosen significantly less frequently than expected (see Figure 42).

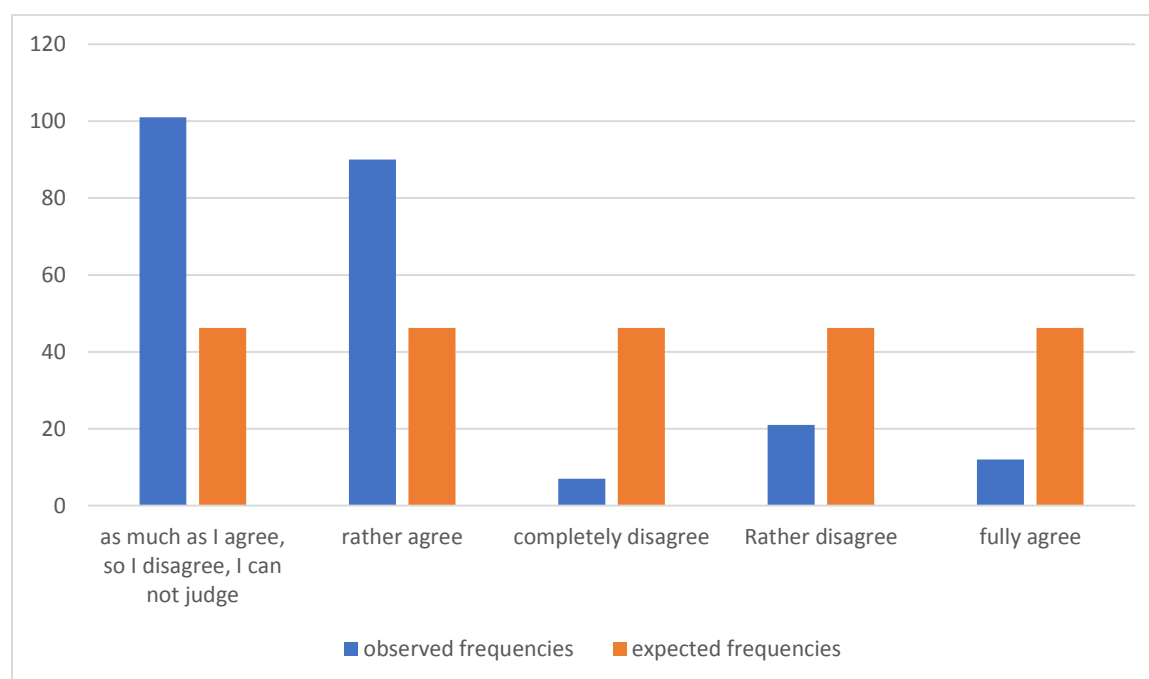


Figure 42 . Frequency distribution of responses to the statement „Nutritional supplements available for purchase help to stimulate immunity, health or physical condition“

The question „How likely are you to buy a dietary supplement in the future?“ Is answered on a 7-point scale from 1 - very unlikely to 7 - very likely. The arithmetic mean is 4.4, with a standard deviation of 1.8, the median and fashion are 5, ie there is a tendency for those studied to be more likely to buy nutritional supplements in the future. In terms of what food supplements they are likely to buy in the future, the subjects correspond to „proteins“ (N = 125; 54.1%); multivitamins (N = 90; 45.5%); vitamins (N = 83; 41.9%); supplements to improve immunity (N = 73; 36.9%); probiotics(N = 52; 26.3%); energy drinks (N = 52; 26.3%); minerals (N = 50; 25.3%); fish oil (N = 49; 24.7%); supplements for use before and after exercise (N = 33; 16.7%); weight loss supplements (N = 27; 13.6%); weight gain

supplements (N = 5; 2.5%); as the subjects gave more than one answer to this question.

To the question „How do you prefer to buy food supplements?“, The answer „online“ is chosen (N = 26; 12.9%); answer „offline“ choose (N = 26; 12.9%), and both methods choose (N = 137; 68.2%), ie 189 respondents (81.8%) express a preference for some way of shopping for food supplements, and the rest answer „No, I would not buy“ (N = 42; 18.2%).

In summary, during a coronavirus pandemic, subjects were hesitant to assess whether their diet was healthy or unhealthy (48%), and tended to judge it to be rather healthy (41%). The largest share of respondents seek to take preventive measures regarding their health and physical condition - both before the coronavirus pandemic (49%) and after the crisis with the coronavirus (87%), as part of these preventive measures are related to the use of food supplements or intentions for their use in the future - in 64.4% of those surveyed. About 18% of those surveyed are adamant that they would not buy nutritional supplements, whether they shop online or offline. The food supplements used are perceived not so much as part of the diet (rather important or very important for the diet are according to 38.9% of respondents), but rather as drugs that can improve health by improving performance of the immune system and the supply of substances and elements missing in food and the body (according to 50.7%), as well as to improve the physical shape of the body (according to 31.2% of the studied). Only 12.1% of respondents do not believe to some extent that the food supplements available for purchase help stimulate immunity, health and physical condition. Rather, respondents are more likely to buy supplements in the future - the most common answer is 5 on a scale of 1 to 7. Most often, respondents intend to buy protein (about 54%), multivitamins (45.5%) and vitamins (about 42%), supplements to improve immunity (about 37%). Consumer well-being is associated with the pursuit of healthy well-being, which the majority of respondents believe that dietary supplements contribute.

3. 3. WELL-BEING EXPRESSED IN MAINTAINING POSITIVE RELATIONS DURING THE CORONAVIRUS PANDEMIC

A study of well-being during the coronavirus pandemic in terms of maintaining positive relationships showed that cases of problem-free understanding with other people prevailed in the last two weeks before the study - see Figure 43 , which indicates high well-being and social satisfaction in 47% of the surveyed Bulgarians.

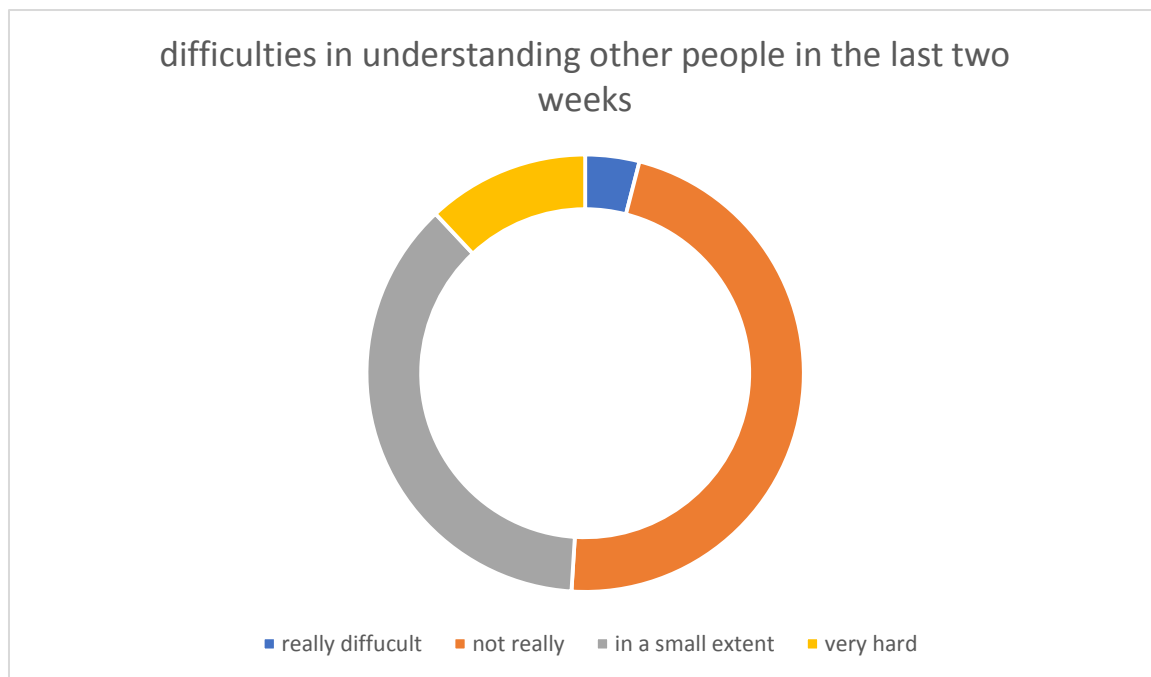


Figure 43 . Percentage of responses to communication difficulties with other people in the last two weeks before the study during the coronavirus pandemic

Difficulties in understanding other people were reported by some subjects who were quarantined - see Table 78 .

Table 78 . Frequency distribution of answers to questions about understanding with other people during a coronavirus pandemic among those diagnosed with the virus and those at risk for the disease

Questions and answers to them		Number diagnosed with COVID-19	Number included in the risk group for COVID-19
If you had any problems in the last 2 weeks, how difficult was it for you to get along with other people?	it was not difficult for me at all	18	9
	slightly difficult	9	12
	very hard	6	6

People with an intimate partner are significantly more likely to report difficulties in understanding others in the last two weeks than people who do not have an intimate partner - see Table 79 , $\chi^2 (N = 635; df = 3) = 5.488; p = 0.003$; Cramer's $V = 0.148$, which is a small size of the effect (Goev, V., 1996; IBM Knowledge Center , nda1.). Probably the difficulties in understanding with others refer to problems in understanding with the intimate partner - very big and exceptional difficulties in understanding with other people are reported by 19.9% of those who have an intimate partner against 10.8% of people without an intimate partner and this difference from 9% are probably related to difficulties caused perhaps not so much by the nature of the intimate partner as by the imposed social isolation that hinders communication between people who do not live together.

Table 79 . Differences between subjects with and without an intimate partner on difficulties experienced in understanding others in the last two weeks prior to the study during the coronavirus pandemic

		How difficult was it for you to get along with other people?			
		it was not difficult for me at all	slightly difficult	very hard	extremely difficult
without an intimate partner	Observed frequencies	126	122	24	6
	Theoretical / expected frequencies	129.6	104.2	34.1	10.1
	% of without an intimate partner	45.3%	43.9%	8.6%	2.2%
presence of an intimate partner	Observed frequencies	170	116	54	17
	Theoretical / expected frequencies	166.4	133.8	43.9	12.9
	% of the presence of an intimate partner	47.6%	32.5%	15.1%	4.8%

Regarding contacts with friends, the majority of respondents use social networks online for their maintenance ($N = 561; 88.3\%$) against 74 people

(11.7%) who do not consider social networks to be a valuable opportunity to contact with your friends.

Some of the difficulties with understanding with other people relate to work relationships, as there is a tendency for significantly more people with difficulties at work than expected to experience difficulties in understanding with people, and people who do not complain about difficulties at work, less also suffer from difficulties with human understanding - see Table 80 , $\chi^2 (N = 635; df = 9) = 161.128$, $p < 0.001$; Likelihood Ratio = 108.055, $p < 0.001$; Cramer's $V = 0.291$, which is a small size of the effect (Goev, V., 1996) or an average size of the effect ("IBM Knowledge Center ", nda1.). Very large and exceptional difficulties in work are reported by 57.4% of people with very large and extreme difficulties in understanding other people against 42.6% of people who had difficulties in understanding other people but did not have great difficulties. at work and this difference of 14.8% is probably related to difficulties caused by work relationships.

Table 80 . Compared frequency distributions of the answers for the presence of difficulties in understanding with other people and difficulties in work

			How hard was it for you to do your job?			
			it was not difficult for me at all	slightly difficult	very hard	extremely difficult
How difficult was it for you to get along with other people?	it was not difficult for me at all	Observed frequencies	136	112	29	19
		Theoretical / expected frequencies	110.5	107.7	48.9	28.9
		% of understanding with other people	45.9%	37.8%	9.8%	6.4%
	slightly difficult	Observed frequencies	79	98	42	19
		Theoretical / expected frequencies	88.8	86.6	39.4	23.2
		% of understanding with other people	33.2%	41.2%	17.6%	8.0%

	very hard	Observed frequencies	19	21	31	7
		Theoretical / expected frequencies	29.1	28.4	12.9	7.6
		% of understanding with other people	24.4%	26.9%	39.7%	9.0%
	extremely difficult	Observed frequencies	3	0	3	17
		Theoretical / expected frequencies	8.6	8.4	3.8	2.2
		% of understanding with other people	13.0%	0.0%	13.0%	73.9%

It can be summarized that high well-being, expressed in maintaining positive relationships during the coronavirus pandemic, was experienced by 47% of the surveyed Bulgarians (see Figure 43), ie the majority of the respondents experienced distress in the relationships, expressed in more small (at 37%) or greater (at 16%) degree. Relationship failure is more common in those at risk of becoming infected with COVID- 19 (see Table 78), in people with an intimate partner (see Table 79), and in people with difficulty at work (see Table 80).

4. 4. WELL-BEING AS AN ORIENTATION TO CONTROL DURING THE CORONAVIRUS PANDEMIC

Conducted a study of well-being during the coronavirus pandemic, expressed in perceived control over the situation showed that prevail varietal loss of control in difficult situations around 22% of the studied and taken control over the difficult situation is present in about 35% of the surveyed , the remaining 43% are undecided how to assess their perceived control over the situation . The perceived loss of control is also associated with a feeling of helplessness in a difficult situation in about 47% of the surveyed Bulgarians , and about 31% do not feel helpless in a difficult situation, the remaining 21% are hesitant how to respond. Difficult situations make about 35% of the surveyed to feel worried and ill, and about 40% of the surveyed do not feel in this way in difficult situations remaining 25% sometimes have experienced such feelings in other difficult situations - not (see Table 81).

Table 81 . Frequency distributions of responses regarding perceived control over a difficult situation, feelings of helplessness and anxiety in a difficult situation

		it is not typical for me at all	rather it is not typical for me	it is neither atypical nor typical of me	rather it is typical of me	it is completely characteristic of me
Sometimes I feel helpless when I find myself in a very difficult situation	number	85	114	136	212	88
	percentage	13.4	18	21.4	33.4	13.9
I tend to lose control during difficult situations	number	97	126	273	99	40
	percentage	15.3	19.8	43	15.6	6.3
In difficult situations, I feel anxious and ill	number	70	182	158	163	62
	percentage	11	28.7	24.9	25.7	9.8

Women are significantly more likely than men to feel helpless in difficult situations. Table 82 , $\chi^2 (N = 635; df = 4) = 29.123$; $p < 0.001$; Cramer's $V = 0.214$, which means the average size of the effect („IBM Knowledge Center “, nda1.), But according to another interpretation it is a small size of the effect (Goev, V., 1996).

People without children significantly more often than expected than people with children feel helpless in difficult situations (see Table 83 , $\chi^2 (N = 635; df = 4) = 51.094$; $p < 0.001$; Cramer's $V = 0.284$, which means average size of the effect („IBM Knowledge Center “, nda1.), but according to another interpretation it is a small size of the effect (Goev, V., 1996).

Table 82 . Differences between men and women in terms of helplessness in a difficult situation

	Sometimes I feel helpless when I find myself in a difficult situation.
--	--

		it is not typical for me at all	rather it is not typical for me	it is neither atypical nor typical of me	rather it is typical of me	it is completely characteristic of me
men	Observed frequencies	51	42	52	72	19
	Expected frequencies	31.6	42.4	50.5	78.8	32.7
	% of men	21.6%	17.8%	22.0%	30.5%	8.1%
women	Observed frequencies	34	72	84	140	69
	Expected frequencies	53.4	71.6	85.5	133.2	55.3
	% of women	8.5%	18.0%	21.1%	35.1%	17.3%

Table 83 . Differences between people with and without children in terms of helplessness in a difficult situation

		Sometimes I feel helpless when I find myself in a difficult situation.				
		it is not typical for me at all	rather it is not typical for me	it is neither atypical nor typical of me	rather it is typical of me	it is completely characteristic of me
They have no children	Observed frequencies	31	79	81	151	74
	Expected frequencies	55.7	74.7	89.1	138.9	57.7
	% of people without children	7.5%	19.0%	19.5%	36.3%	17.8%
They have children	Observed frequencies	54	35	55	61	14
	Expected frequencies	29.3	39.3	46.9	73.1	30.3

	% of people with children	24.7%	16.0%	25.1%	27.9%	6.4%
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People without an intimate partner significantly more often than expected than people with an intimate partner feel helpless in difficult situations (see Table 84 , $\chi^2 (N = 635; df = 4) = 32.044$; $p < 0.001$; Cramer's $V = 0.225$, which means an average size of the effect („IBM Knowledge Center ”, nda1.), but according to another interpretation it is a small size of the effect (Goev, V., 1996).

The youngest subjects felt significantly more often than expected helpless in a difficult situation compared to the oldest subjects (see Table 85 , $\chi^2 (N = 635; df = 12) = 113.766$; $p < 0.001$; Cramer's $V = 0.244$, which means the average size of the effect („IBM Knowledge Center “, nda1.), But according to another interpretation it is a small size of the effect (Goev, V., 1996).

Table 84 . Differences between people with and without an intimate partner in terms of helplessness in a difficult situation

		Sometimes I feel helpless when I find myself in a difficult situation.				
		it is not typical for me at all	rather it is not typical for me	it is neither atypical nor typical of me	rather it is typical of me	it is completely characteristic of me
without an intimate partner	Observed frequencies	16	54	52	110	46
	Expected frequencies	37.2	49.9	59.5	92.8	38.5
	% of people without an intimate partner	5.8%	19.4%	18.7%	39.6%	16.5%
presence of an intimate partner	Observed frequencies	69	60	84	102	42
	Expected frequencies	47.8	64.1	76.5	119.2	49.5

	% of people with an intimate partner	19.3%	16.8%	23.5%	28.6%	11.8%
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Table 85 . Differences between age groups in feelings of helplessness in a difficult situation

		Sometimes I feel helpless when I find myself in a difficult situation.				
		it is not typical for me at all	rather it is not typical for me	it is neither atypical nor typical of me	rather it is typical of me	it is completely characteristic of me
20-23 years	Observed frequencies	12	27	30	67	53
	Expected frequencies	25.3	33.9	40.5	63.1	26.2
	% of age	6.3%	14.3%	15.9%	35.4%	28.0%
24-27 years	Observed frequencies	12	12	41	59	15
	Expected frequencies	18.6	25.0	29.8	46.4	19.3
	% of age	8.6%	8.6%	29.5%	42.4%	10.8%
28-35 years	Observed frequencies	19	30	42	42	17
	Expected frequencies	20.1	26.9	32.1	50.1	20.8
	% of age	12.7%	20.0%	28.0%	28.0%	11.3%
36-65 years	Observed frequencies	42	45	23	44	3
	Expected frequencies	21.0	28.2	33.6	52.4	21.8
	% of age	26.8%	28.7%	14.6%	28.0%	1.9%

It can be summarized that there are slightly more people who experience perceived control over a difficult situation (about 1/3 of the subjects) than those who perceive loss of control in a difficult situation (about 1/5 of the subjects), but the majority of people find it difficult to categorically assess their perceived control over a situation. However, almost half of the respondents feel helpless in a difficult situation, and about 1/3 do not feel helpless in a difficult situation. About 1/3 feel anxious in a difficult situation and feel bad, approximately 1/3 do not worry and do not feel bad in a difficult situation, and the rest are hesitant about how to respond.

More often helplessness in a difficult situation is experienced by women aged 20 to 23, without children, without an intimate partner. Men from 36 to 65 years old, with children and maintaining partnerships, rarely experience helplessness in a difficult situation. Single people are more likely to feel helpless and probably find it difficult to rely on social support.

Chapter 3 . Well-being, adaptability and health

In the third chapter of the dissertation the following problems are theoretically considered:

- Well-being related to health, healthy well-being
- Well-being as adaptability
- Models of inculturation, acculturation and adaptation to a new cultural environment

Empirically, in Chapter 3, a large-scale independent study was conducted, which I will discuss in more detail.

1. Health-related well-being during a coronavirus pandemic

Health well-being was studied during the difficult life situation related to the COVID-19 pandemic. Among the studied Bulgarians, 33 (5.2%) were diagnosed with coronavirus, and 27 (4.3%) were included in the risk group for Covid-19 (returned from a country with an unfavorable epidemiological situation or had close contact with those infected with coronavirus). There is a tendency for the coronavirus pandemic to be perceived more as a threat to their relatives than to themselves. Those more likely to be at risk for possible Covid-19 infection perceive the coronavirus as a threat to themselves than those diagnosed with the disease (see Table 86), and the latter are likely to reassure that they have so far managed to cope with the severity of symptoms, as evidenced by the answers that most do not

have great difficulty taking care of their household. The majority of people in both groups were aware of the value of human life, the importance of the family, and the importance of communicating with relatives (see Table 86). Most became closer to their intimate partner and their parents, and all became closer to their children when they had them (see Table 86). The family income of those infected with coronavirus and those at risk of infection most often did not change, decreased less frequently, and did not increase in any of these subjects (see Table 86). Those infected with coronavirus and those at risk of coronavirus infection have a deteriorating well-being related to their health, but their family well-being is high, expressed through closeness to family members and preservation of family income.

Table 86 . Frequency distribution of answers to questions about family well-being during the coronavirus pandemic among those diagnosed with the virus and included in the risk group for the disease

Questions and answers to them		Number diagnosed with COVID-19	Number included in the risk group for COVID-19
COVID-19 poses a threat to you personally	Yes	12	15
	no	21	12
COVID-19 poses a threat to your relatives	Yes	30	21
	no	3	6
Has your family income changed after the restrictions imposed by COVID-19?	decreased	9	3
	did not change	24	24
Isolation helped me realize the value of human life:	Yes	24	21
	no	9	6
Isolation helped me realize how important my family was to me:	Yes	27	21
	no	6	6
Isolation helped me get closer to my children	Yes	3	6
	not applicable	30	21
	Yes	9	6

Isolation helped me get closer to my romantic partner / husband / s	no	6	3
	not applicable	18	18
Isolation helped me get closer to my parents	Yes	24	18
	no	9	9
Restrictive measures because of COVID-19 have shown the importance of communicating with my relatives	Yes	24	21
	no	9	6
If you had any problems in the last 2 weeks, how difficult was it for you to take care of the household?	it was not difficult for me at all	6	12
	slightly difficult	24	9
	very hard	3	3
	extremely difficult	0	3

The majority of the respondents reported that they did not have chronic diseases (N = 566; 89.1%). The remaining 69 subjects (10.9%) suffer from chronic diseases such as anemia, diabetes, cardiovascular disease, osteoarthritis and cancer. In addition, respondents assessed how healthy they felt, with more than half (59%) feeling highly or moderately healthy - see Figure 44.

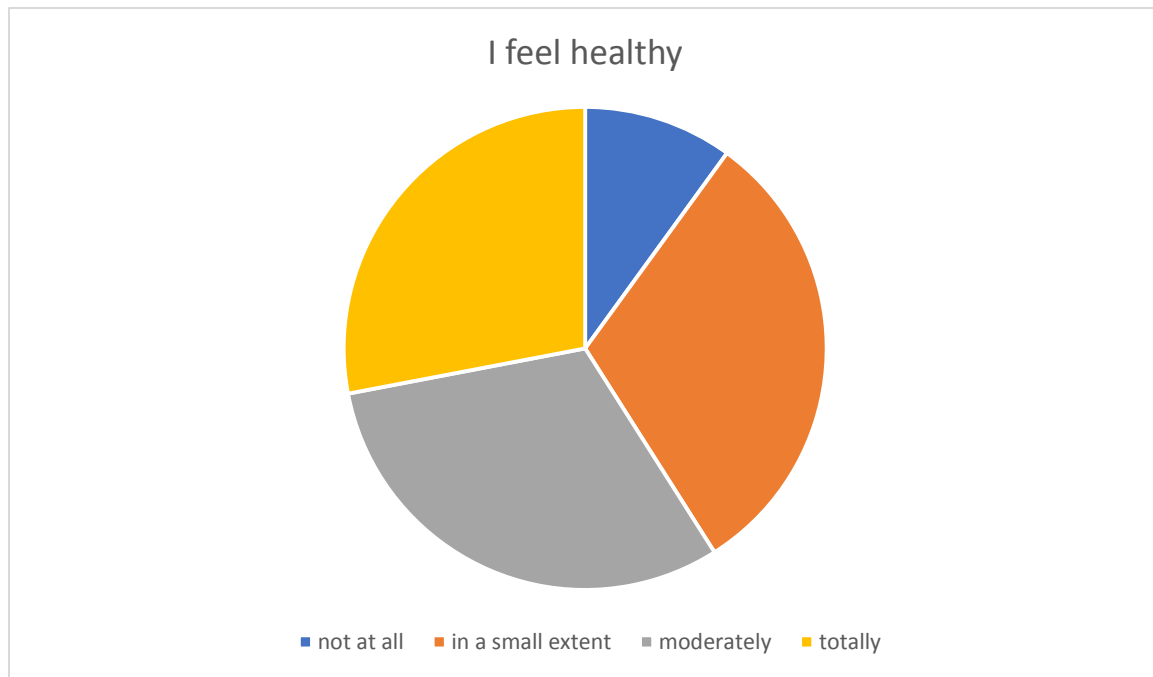


Figure 44 . Frequency distribution of respondents' responses to whether they feel healthy during a coronavirus pandemic

People with children feel healthier than expected compared to people without children (see Table 87 , $\chi^2 (N = 635; df = 3) = 102.438$; $p < 0.001$; Cramer's $V = 0.402$, which means average effect size (Goev, V., 1996; IBM Knowledge Center , nda1.) .

Table 87 . Differences between people with and without children in how healthy they feel

		I feel healthy			
		not at all	to a small extent	in moderation	largely
Without kids	Observed frequencies	48	164	138	66
	Expected frequencies	42.6	126.4	129.1	117.9
	% of people without children	11.5%	39.4%	33.2%	15.9%

With children	Observed frequencies	17	29	59	114
	Expected frequencies	22.4	66.6	67.9	62.1
	% of people with children	7.8%	13.2%	26.9%	52.1%

Older subjects had more chronic disease than expected compared to younger subjects (see Table 88 , $\chi^2 (N = 635; df = 3) = 56.038$; $p < 0.001$; Cramer's $V = 0.297$, meaning small size of the effect (Goev, V., 1996), and according to other sources is a medium size of the effect („IBM Knowledge Center “, nda1.) .

Table 88 . Differences between age groups in the incidence of chronic diseases

			Do you have chronic diseases	
			no	Yes
age groups	20-23 years	Observed frequencies	174	15
		Expected frequencies	168.5	20.5
		% of age	92.1%	7.9%
	24-27 years	Observed frequencies	133	6
		Expected frequencies	123.9	15.1
		% of age	95.7%	4.3%
	28-35 years	Observed frequencies	144	6
		Expected frequencies	133.7	16.3
		% of age	96.0%	4.0%

	36-65 years	Observed frequencies	115	42
		Expected frequencies	139.9	17.1
		% of age	73.2%	26.8%

In terms of health well-being, 9.5% of subjects were generally diagnosed with coronavirus or in risk groups for coronavirus disease, but more than half did not perceive COVID-19 as a threat to them personally, but almost everyone sees it as a threat to their relatives. Health well-being refers not only to one's own health, but also to that of loved ones during a coronavirus pandemic. Health well-being is also associated with family well-being and emotional well-being, insofar as coronavirus has brought the majority of those diagnosed and at risk closer to their family members (see Table 86). The majority of the surveyed Bulgarians are not included in risk groups for coronavirus disease (90.5%), do not have chronic diseases (about 89%) and feel healthy to a large or moderate degree (59%). People with children and subjects aged 20 to 35 experience more pronounced health-related well-being. Health unhappiness is more common in people aged 36 to 65 without children. Children give meaning to life and a person experiences joy, caring for them makes a person feel useful, which further increases his well-being. Older people are more likely to report chronic illness and are at greater risk of contracting COVID- 19 .

CHAPTER 4. DIFFICULT LIFE SITUATIONS

The COVID-19 pandemic can be described as an exceptional, critical, stressful, problematic, difficult life situation that affects the lives of many people and is ambiguously perceived in society and has led to negative experiences, lifestyle changes. There are various types of difficult life situations described in the scientific literature, and it is difficult to distinguish some types of difficult life situations. It seems that each author has a preference for his own term, referring to a difficult life situation. Stress is a characteristic experience for difficult life situations, so the first such situation is considered stressful.

In chapter 4 of the dissertation the following problems are theoretically considered in detail:

- Stressful situation, systemic stress
- Symptoms of stress
- Emotional symptoms of stress
- Behavioral symptoms of stress

- Health effects caused by stress (physiological and physical symptoms of stress)
- Types of stressors
- Types of stress
- Distress
- Eustress / eustress
- Hypostress / substress
- Minimal stress
- Hyperstress / overstress
- Mental / mental stress
- Affective / emotional stress
- Depressive stress
- Financial stress
- Psychosocial stress
- Social stress
- External stress
- Internal stress
- Information stress
- Personal stress
- Psychogenic stress
- Organizational stress
- Stress, according to the life sphere of the stressor and the manifestation of the symptoms
- Occupational or workplace stress
- Fatigue from compassion as a result of stress at work, instead of satisfaction from compassion
- Burn-out as a result of stress at work
- Burnout symptoms
- Socio-demographic differences in the burnout experience
- Personality traits related to burnout; stress resistance
- Work environment conditions related to burnout
- Burnout with educators
- Burnout for healthcare professionals
- Problem situation
- Exceptional / extreme situations
- Critical situation
- Crisis situation
- Conflict situation

CHAPTER 5. STRATEGIES FOR OVERCOMING DIFFICULT LIFE SITUATIONS, FOR MAINTAINING OR INCREASING WELL-BEING

In the fifth chapter of the dissertation the following problems are theoretically considered:

- Burnout prevention and strategies for dealing with burnout symptoms 371
- Coping strategies for dealing with stress and life difficulties
- Emotionally-oriented and emotionally-focused coping strategies, passive coping, avoiding coping strategies, disengagement from the problem
- Problem-focused coping strategies, active coping, engaging with the problem
- Seeking social support as a coping strategy
- Coping and satisfaction, well-being
- Adaptive / constructive / positive / effective / successful and non-adaptive / non-constructive / negative / inefficient / unsuccessful copings
- Stages of coping
- Cognitive coping strategies
- Behavioral coping strategies
- Coping as a condition; coping strategies determined by the situation
- Coping strategies as habits
- Copings as personality traits or dispositions, coping styles
- Coping and professions
- Perceived self-efficacy / self-efficacy, „I“ -efficiency / „I“ -effectiveness as a coping strategy
- Copings during the coronavirus pandemic
- Protective mechanisms to increase well-being
- Specific measures to improve well-being during a coronavirus pandemic

Empirically, a large-scale independent study was conducted in Chapter 5, which I will discuss in more detail.

1. COUPONS DURING THE CORONAVIRUS PANDEMIC

A survey conducted from March 22 to 28, 2020 among 1,365 Bulgarians revealed that they most often use strategies to deal with the spread of coronavirus behavioral coping and optimism, followed by the frequency of emotional coping, esoteric and superstitious thinking („Institute for Population and Human Studies „, 2020 a ;“ Institute for Population and Human Studies „, 2020 b).

A survey conducted from April 25 to May 2, 2020 among 868 Bulgarians reveals that they self-assess that they follow safety measures to avoid coronavirus infection with an average score of about 8 on a scale of 1 - I do not follow them at all to 10- I fully comply with them (Institute for Population and Human Studies, 2020 c).

During the coronavirus pandemic, small-scale behavior of helping to improve the well-being of others is typical (see Table 89). The tools used to collect the data and the sample description are presented.

Table 89 . Frequency distribution of answers to questions about volunteering

questions	Answer „Yes“		Answer „No“		Not applicable	
	Number	Percentage	Number	Percentage	Number	Percentage
Are you currently volunteering (helping with food and medicine, cooking for the needy, entertaining quarantined people with concerts on the Internet, telling funny stories, etc.)?	50	7.9	585	92.1	0	0
If you are not volunteering , are you ready to volunteer in the current situation?	220	34.6	365	57.5	50	7.9

Have you volunteered before?	343	54	292	46	0	0
Do you donate money to those in need due to COVID-19 restrictions?	126	19.8	509	80.2	0	0

About 1/3 of the surveyed Bulgarians declare their readiness to support the well-being of other people during the coronavirus pandemic through volunteer activities, approximately one in five Bulgarians make financial donations for this purpose, and less than one in ten Bulgarians perform other volunteer activities. , although more than half of the subjects in their previous experience have also been involved in volunteering.

Significantly more women than expected (observed frequencies 236, theoretical frequencies 215.5 of women volunteering) were volunteers before the coronavirus pandemic, while significantly fewer men than expected (observed frequencies 107, theoretical frequencies 127.5 per men engaged in volunteering) were volunteers before - χ^2 (N = 635; df = 1) = 11,384, $p < 0,001$; Cramér's V = 0.134, ie weak effect size (IBM Knowledge Center, nda1). Significantly more people without children than expected (observed frequencies 245, theoretical frequencies 224.7 of childless volunteers) were volunteers before the coronavirus pandemic, while significantly fewer people with children than expected (observed frequencies 98, theoretical frequencies 118.3 of volunteering people with children) were volunteers earlier - χ^2 (N = 635; df = 1) = 11,557, $p < 0,001$; Cramér's V = 0.135, ie weak effect size (IBM Knowledge Center, nda1). Significantly more people between 24 and 27 years of age than expected (observed frequencies 93, theoretical frequencies 75.1) were volunteers before the coronavirus pandemic, while significantly fewer people between 36 and 65 years of age than expected (observed frequencies 67, theoretical frequencies 84 , 8) were volunteers before the coronavirus pandemic - χ^2 (N = 635; df = 3) = 17,474, $p < 0,001$; Cramér's V = 0.166, ie weak effect size (IBM Knowledge Center, nda1). During the coronavirus pandemic, there was no such significant differentiation in volunteering by gender and age, people from different social groups provided as much help as possible.

Significantly more people with an intimate partner than expected (observed frequencies 41, theoretical frequencies 28.1 of people engaged in volunteering with

an intimate partner) volunteer during the coronavirus pandemic, while significantly fewer people without an intimate partner than expected (observed frequencies 9, theoretical frequencies 21.9 of people involved in volunteering without an intimate partner) engage in volunteering during the coronavirus pandemic - χ^2 (N = 635; df = 1) = 14,655, p < 0.001; Cramér's V = 0.152, ie weak effect size (IBM Knowledge Center, nda1). Significantly more people without an intimate partner than expected (observed frequencies 79, theoretical frequencies 55.2 of donating money to needy people without an intimate partner) donate money to the needy during a coronavirus pandemic, while significantly fewer people with an intimate partner from the expected (observed frequencies 47, theoretical frequencies 70.8 of donating money for needy people with an intimate partner) donate money for needy people during the coronavirus pandemic - χ^2 (N = 635; df = 1) = 22,859, p < 0.001; Cramér's V = 0.190, ie weak effect size (IBM Knowledge Center, nda1).

The emotional well-being experienced is related to volunteering during the coronavirus pandemic (χ^2 (N = 635; df = 2) = 17,700; p < 0.001; Cramer's V = 0.167, ie a small amount of effect according to IBM Knowledge Center ”(nda1.) And V. Goev (1996) Volunteers have a higher emotional well-being than expected - see Table 90 .

Volunteer activity probably increases mental well-being, a component of which is activity (Deci & Ryan, 2000), increases the sense of usefulness and thus improves psychosocial well-being, whose component is the sense of usefulness (Melyokhin, A., 2015), gives meaning to life and it also improves the well-being experienced.

Table 90 . Comparison between the frequency distributions of volunteering during the coronavirus pandemic and the levels of emotional well-being experienced

			levels of emotional well-being		
			low emotional well-being, emotional distress	average emotional well-being, balance between positive and negative affect	high emotional well-being, the predominance of positive affect over negative ones
Are you currently volunteering (helping	Yes	Observed frequencies	3	21	26

with food and medicine delivery, cooking food for the needy, entertaining quarantined people with concerts on the Internet, etc.)		Expected frequencies	11.7	24.0	14.3
	no	Observed frequencies	145	284	156
		Expected frequencies	136.3	281.0	167.7

Mediator analysis was performed by bootstrapping with set 5000 samples and the assessment is performed by the method of maximum probability, applied with the software JASP 0.11.1.0 (JASP Team, 2019). The results of age-predicted mediator analysis, mediator variable (indirect effect) - tendency to lose control during difficult situations, and result variable - emotional well-being during a coronavirus pandemic are presented in Table 91 , Table 92 , Table 93. , and Figure 45 .

Table 91 . Direct effect of age on the emotional well-being during the pandemic with coronavirus

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95 % prejudice-adjusted confidence interval	
							Lower limit	Upper limit
Age	→	Emotional well-being	0.012	0.004	3,238	0.001	0.005	0.018

When examining the direct effect of age on emotional well-being during a coronavirus pandemic, a significant non-standardized impact factor is found , presented in Table 91 and Figure 45 . Based on bootstrapping procedure with set 5000 samples from the data file, confidence intervals are generated to determine the significance of the direct effect as the calculated value of the direct effect is the middle of this interval and since zero does not fall within the confidence interval, it is found that the direct effect of age on emotional well-being during a coronavirus pandemic is significant. As you age during a coronavirus pandemic, emotional well-being increases.

Table 92 . Indirect effect of age on emotional well-being, mediated by the tendency to lose control in difficult situations

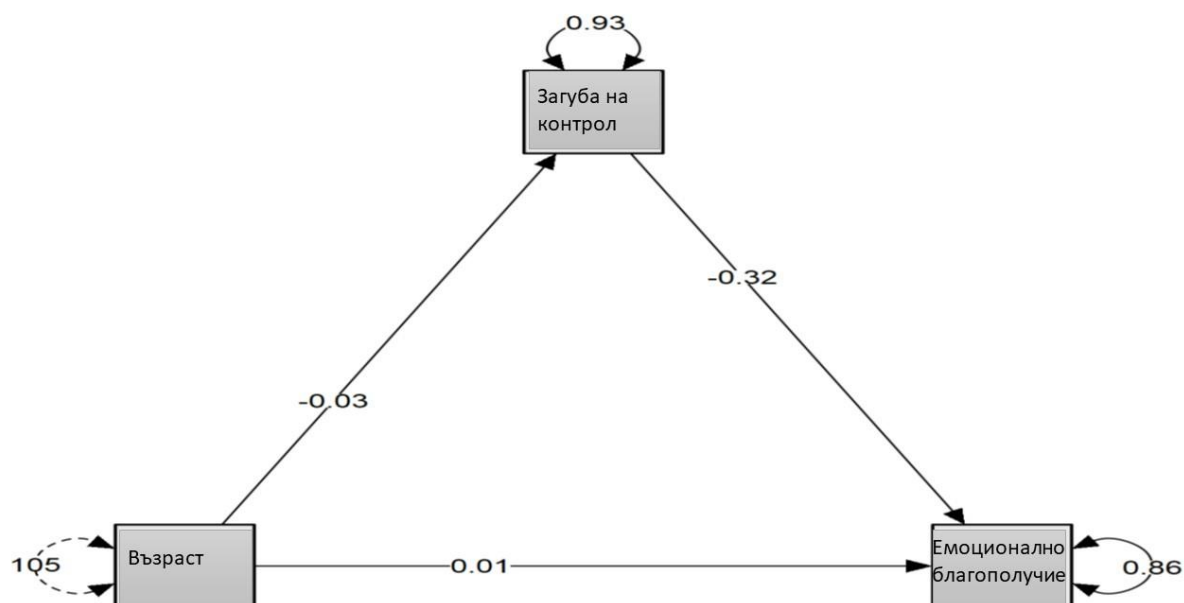
Independent variable		Mediator variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
									Lower limit	upper limit
Age	→	Tendency to lose control in difficult situations	→	Emotional well-being	0.008	0.002	5,261	<0.001	0.005	0.012

Examination of the indirect effect of age on emotional well-being, mediated by the tendency to lose control in difficult situations, found a significant non-standardized impact factor, presented in Table 92 and Figure 45 . Based on a bootstrapping procedure with set 5000 samples from the data file, confidence intervals are generated to determine the significance of the indirect effect as the calculated value of the indirect effect is the middle of this interval and since zero does not fall into the confidence interval, it is found that age on emotional well-being is mediated by the tendency to lose control in difficult situations. With age, the tendency to lose control in difficult situations decreases, which increases emotional well-being - see Figure 45 .

Table 93 . Overall effect of age on emotional well-being during a coronavirus pandemic

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95 % prejudice-adjusted confidence interval	
							Lower limit	Upper limit
Age	→	Emotional well-being	0.020	0.004	5,315	< 0.001	0.013	0.026

The overall effect includes a combination of the direct and indirect effects of the variables. Emotional well-being increases with age - see Table 93 and Figure 45 . The coefficient of determination for the change in emotional well-being is $R^2 = 0.138$, which means that the model explains 13.8% of the variations (Zarbova , B., 2019) in the change in emotional well-being, which is the average size of the effect (Awang , 2015 , p.105). The coefficient of determination for the tendency to lose control in difficult situations is $R^2 = 0.067$, which means that the model explains 6.7% of the variations (Zarbova , B., 2019) in the level of the tendency to lose control in difficult situations and this is a small amount of effect (Awang , 2015, p.105). With age, the tendency to lose control in difficult life situations decreases and emotional well-being increases. With a greater loss of control in difficult life situations, emotional well-being deteriorates.



Age/ Control Loss/ Emotional well-being

Figure 45. Indirect influence of age on emotional well-being with a mediator tendency to lose control in difficult situations

Mediator analysis was performed by bootstrapping with set 5000 samples and the assessment is performed by the method of maximum probability, applied with the software JASP 0.11.1.0 (JASP Team, 2019) The results of the mediator analysis with predictor tendency to lose control during difficult situations, mediator variables (with indirect effect) - difficulties in work and difficulties with understanding with other people and result variable - emotional well-being during the coronavirus pandemic, are presented in Table 94 , Table 95 , Table 96 , Table 97 and Figure 46 .

Table 94 . Direct effect propensity for losing control during difficult situations on the emotional well-being during the pandemic with coronavirus

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95 % prejudice-adjusted confidence interval	
							Lower limit	upper limit
Tendency to lose control in	→	Emotional well-being	-0.261	0.030	-8,677	< 0.001	-0.320	-0.200

difficult situations								
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Examining the direct effect of the tendency to lose control in difficult situations on emotional well-being during a coronavirus pandemic reveals a significant non-standardized impact factor, presented in Table 94 and Figure 46 . Based on a bootstrapping procedure with set 5000 samples from the data file, confidence intervals are generated to determine the significance of the direct effect as the calculated value of the direct effect is the middle of this interval and since zero does not fall within the confidence interval, it is found that the direct effect of the tendency to lose control in difficult situations on emotional well-being during a coronavirus pandemic is significant. As the tendency to lose control increases in difficult situations during a coronavirus pandemic, emotional well-being decreases.

Table 95 . Indirect effects of the tendency to lose control during difficult situations on emotional well-being during a coronavirus pandemic, mediated by difficulties at work and difficulties with understanding with other people

Independent variable		Mediator variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
									Lower limit	Upper limit
Tendency to lose control in difficult situations	→	Difficulties at work	→	Emotional well-being	-0.039	0.013	-2,913	0.004	-0.063	-0.012
	→	Difficulty understanding with other people	→		-0.026	0.009	-2,827	0.005	-0.048	-0.008

Examining the indirect effects of the tendency to lose control in difficult situations on emotional well-being, mediated by difficulties at work and difficulties with understanding with other people, found significant non-standardized impact factors, presented in Table 95 and Figure 46 . Based on a bootstrapping procedure with 5000 samples from the data file, confidence intervals are generated to determine the significance of the indirect effects as the calculated value of the indirect effects

is the middle of this interval and since zero does not fall into the confidence intervals, it is found that the tendency to lose control in difficult situations over emotional well-being is mediated by difficulties at work and by difficulties in understanding other people. As the tendency to lose control in difficult situations increases, so do difficulties at work, as well as difficulties with understanding with other people, which reduces emotional well-being - see Figure 46 .

Table 96 . Overall effect of the tendency to lose control during difficult situations on emotional well-being during a coronavirus pandemic

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95 % prejudice-adjusted confidence interval	
							Lower limit	upper limit
Tendency to lose control in difficult situations	→	Emotional well-being	-0.326	0.034	-9,479	< 0.001	-0.397	-0.253

The overall effect includes a combination of the direct and indirect effects of the variables. As the tendency to lose control in difficult situations decreases, emotional well-being increases - see Table 96 and Figure 46 .

Table 97 . Overall indirect effect of the tendency to lose control during difficult situations on emotional well-being during a coronavirus pandemic

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95 % prejudice-adjusted confidence interval	
							Lower limit	upper limit
Tendency to lose control in difficult situations	→	Emotional well-being	-0.064	0.018	-3,627	<0.001	-0.100	-0.026

The overall indirect effect is a combination of the two indirect effects of the tendency to lose control in difficult situations on emotional well-being, decreasing

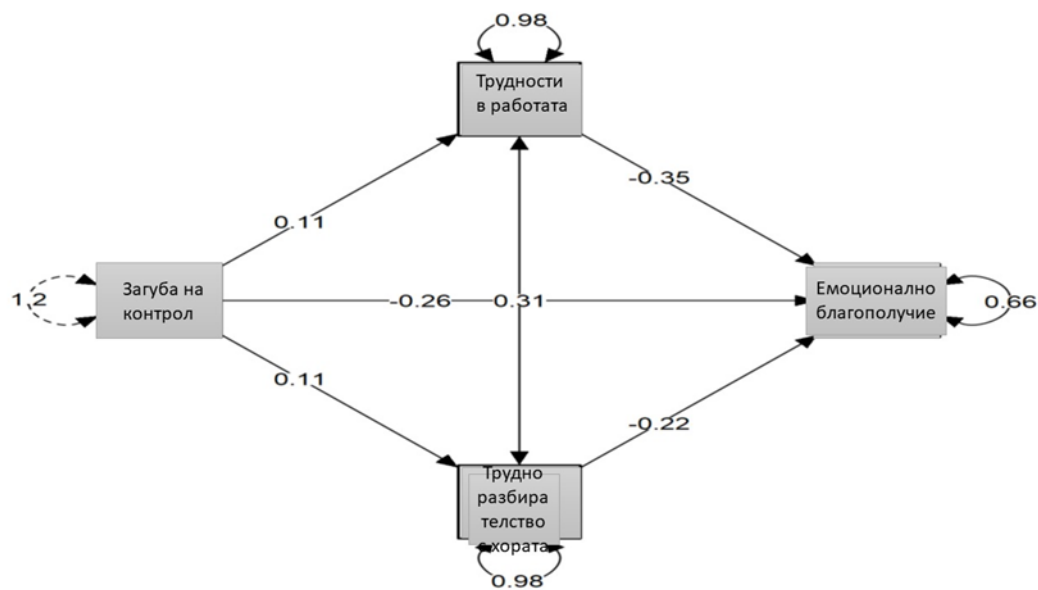
as the tendency to lose control in difficult situations increases, mediated by the two mediator variables - difficulties at work and difficulties in understanding. with humans (see Table 97).

Table 98 . Residual covariations of the interaction between difficulties at work and difficulties in understanding people

Variable		Variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95 % prejudice-adjusted confidence interval	
							Lower limit	upper limit
Difficulties at work	↔	Difficulty understanding with other people	0.308	0.041	7,532	<0.001	0.226	0.403

In Table 98 presents significant non-standardized coefficient of interaction between the mediator variables in the model - hard work and difficulties in understanding people. The results of the mediator analysis through bootstrapping show that they interact statistically significantly and as the difficulties in the work increase, the difficulties with understanding with other people increase, and vice versa.

The coefficient of determination for the change in emotional well-being is $R^2 = 0.341$, which means that the model explains 34.1% of the variations (Zarbova , B., 2019) in emotional well-being, which is a large amount of effect (Awang , 2015, p. .105). The coefficient of determination for work difficulties is $R^2 = 0.014$, which means that the model explains 1.4% of the variations (Zarbova , B., 2019) in the level of work difficulties and this is a small amount of the effect (Awang , 2015 , p.105). The coefficient of determination for difficulties in understanding other people is $R^2 = 0.015$, which means that the model explains 1.5% of the variations (Zarbova , B., 2019) in the level of difficulties in understanding other people and this is a small amount. of the effect (Awang , 2015, p.105).



Control Loss/ Difficulties in work/ difficult relationship/ emotional well-being

Figure 46. Indirect effect of the tendency to lose control in difficult situations on emotional well-being with mediators difficulties in work and difficulties in understanding people

Mediator analysis was performed by bootstrapping with set 5000 samples and the assessment is performed by the method of maximum probability, applied with the software JASP 0.11.1.0 (JASP Team, 2019). The results of the mediator analysis with a predictor perception of the coronavirus as a threat to themselves and / or their relatives, mediators (indirect effect) - a sense of helplessness in difficult situations and perceived self-efficacy in dealing with difficult situations, and a result variable - emotional well-being. time of the coronavirus pandemic are presented in Table 99 , Table 100 , Table 101 and Figure 47 .

Table 99 . Direct effect on the perception of coronavirus as a threat to themselves and / or their relatives on the emotional well-being during the pandemic with coronavirus

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	upper limit

Perception of the coronavirus as a threat to themselves and / or relatives	→	Emotional well-being	-0.068	0.041	-1,661	0.097	-0.152	0.007
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Examining the direct effect of perceiving coronavirus as a threat to oneself and / or one's relatives on emotional well-being during a coronavirus pandemic reveals a negligible non-standardized impact factor, presented in Table 99 and Figure 47 . Based on a bootstrapping procedure with 5000 samples from the data file, confidence intervals are generated to determine the significance of the direct effect as the calculated value of the direct effect is the middle of this interval and since zero falls within the confidence interval, it is found that the direct The effect of perceiving coronavirus as a threat to oneself and / or one's relatives on emotional well-being during a coronavirus pandemic is insignificant when mediators are both a sense of helplessness and perceived self-efficacy.

Table 100 . Indirect effects of perceiving coronavirus as a threat to oneself and / or one's relatives on emotional well-being during a coronavirus pandemic, mediated by feelings of helplessness in difficult situations and perceived self-efficacy in difficult situations

Independent variable		Mediator variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
									Lower limit	Upper limit
Perception of the coronavirus as a threat to themselves and /	→	Feeling helplessness in difficult situations	→	Emotional well-being	-0.060	0.021	-2,850	0.004	-0.106	-0.021

or relatives	→	Percei ved self- effica cy in difficu lt situati ons			-0.028	0.010	- 2,8 37	0.005	- 0.0 53	- 0.0 11
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Examining the indirect effects of perceiving coronavirus as a threat to self and / or relatives on emotional well-being, mediated by feelings of helplessness in difficult situations and perceived self-efficacy in difficult situations, found significant non-standardized impact factors presented in Table 100. and in Figure 47 . The influence of the perception of the coronavirus as a threat to oneself and / or relatives on emotional well-being is mediated by a feeling of helplessness in difficult situations and perceived self-efficacy in difficult situations. As the perception of the coronavirus as a threat to oneself and / or relatives increases, so does the feeling of helplessness, which worsens emotional well-being - see Figure 47 . As the perception of the coronavirus as a threat to oneself and / or relatives increases, the perceived self-efficacy in difficult situations decreases, which worsens emotional well-being, and with higher perceived self-efficacy in difficult situations, emotional well-being increases - see Figure 47 .

Table 101 . Overall effect of perceiving coronavirus as a threat to oneself and / or one's relatives on emotional well-being during a coronavirus pandemic

Independe nt variable		Result variable	Evaluati on	Standar d error	z- valu e	Level of significan ce	Bootstrap 95% prejudice- adjusted confidence interval	
							Low er limit	uppe r limit
Perception of the coronaviru s as a threat to themselve s and / or relatives	→	Emotion al well- being	-0.156	0.047	- 3,32 0	< 0.001	- 0.250	- 0.06 6

The overall effect includes a combination of the direct and indirect effects of the variables, and in this case the perception of the coronavirus as a growing threat to oneself and / or relatives reduces emotional well-being - see Table 101 and Figure 47 .

Table 102 . Overall indirect effect of perceiving coronavirus as a threat to oneself and / or one's relatives on emotional well-being during a coronavirus pandemic

Independent variable		Result variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	upper limit
Perception of the coronavirus as a threat to themselves and / or relatives	→	Emotional well-being	-0.089	0.025	-3,503	<0.001	-0.137	-0.040

The overall indirect effect is a combination of the two indirect effects of perceiving the coronavirus as a threat to oneself and / or one's relatives on emotional well-being, decreasing as the perceived threat of the coronavirus to oneself and one's relatives increases, mediated by the two mediators. variables - feeling helpless in difficult situations and perceived self-efficacy in difficult situations (see Table 102).

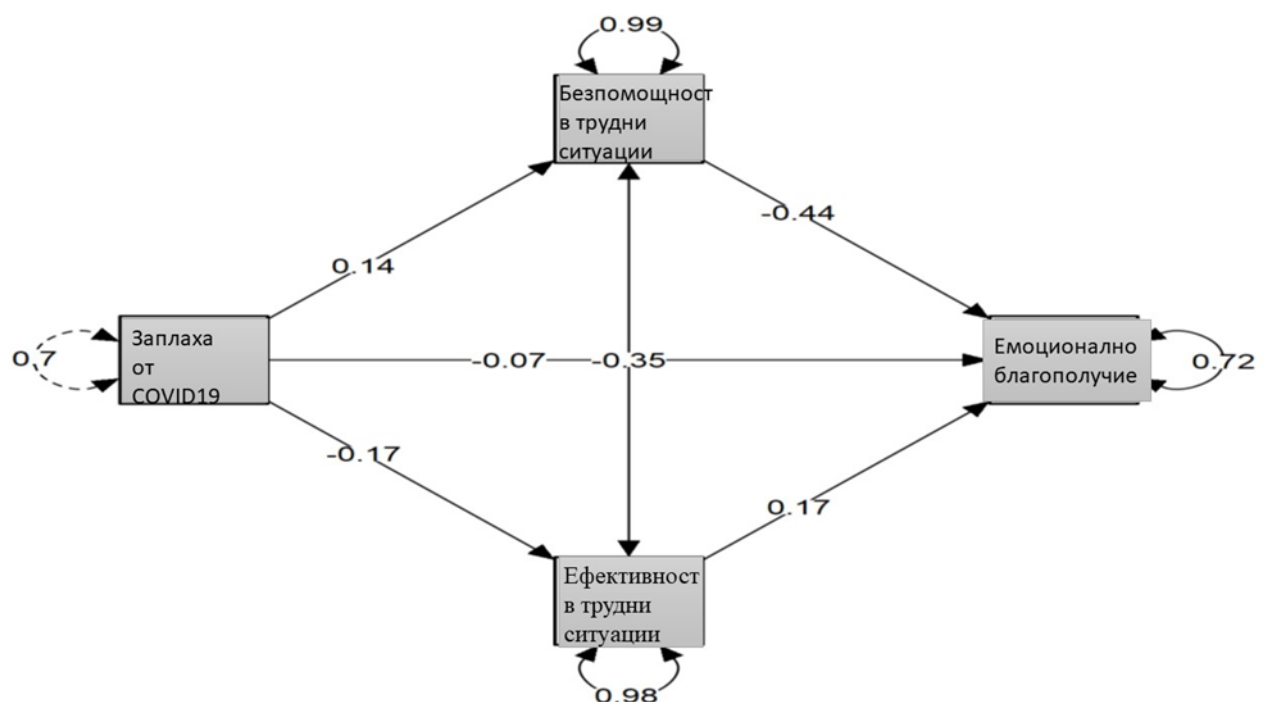
Table 103 . Residual covariations of the interaction between feelings of helplessness in difficult situations and perceived self-efficacy in difficult situations

Variable		Variable	Evaluation	Standard error	z-value	Level of significance	Bootstrap 95% prejudice-adjusted confidence interval	
							Lower limit	upper limit

Feeling helpless in difficult situation s	↔	Perceive d self- efficacy in difficult situation s	-0.347	0.041	- 8,39 7	<0.001	- 0.431	- 0.26 7
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In Table 103 are represented significant non-standardized coefficients of interaction between the mediator variables in the model - a sense of helplessness in difficult situations and perceived self-sufficiency in difficult situations. The results of the mediator analysis through bootstrapping show that they interact statistically significantly and as the feeling of helplessness in difficult situations increases, the perceived self-efficacy in difficult situations decreases, and vice versa.

The coefficient of determination for the change in emotional well-being is $R^2 = 0.283$, which means that the model explains 28.3% of the variations (Zarbova, B., 2019) in the change of emotional well-being, which is a large amount of effect (Awang, 2015, p.105). The coefficient of determination for the feeling of helplessness in difficult situations is $R^2 = 0.013$, which means that the model explains 1.3% of the variations (Zarbova, B., 2019) in the feeling of helplessness and this is a small amount of the effect (Awang, 2015, p.105). The coefficient of determination for perceived self-efficacy in difficult situations is $R^2 = 0.020$, which means that the model explains 2% of the variations (Zarbova, B., 2019) in the perceived self-efficacy in difficult situations and this is a small amount of effect (Awang, 2015, p.105).



Threat of COVID-19/ Helplessness in demanding situations/ effectiveness in demanding situations/ emotional well-being

Figure 47. Indirect effect of perceived coronavirus threat to oneself and one's relatives on emotional well-being with mediators feeling helpless in difficult situations and perceived self-efficacy in difficult situations

It can be summarized that effective coping strategies during a coronavirus pandemic are maintaining control in difficult situations and perceived self-efficacy, which increase emotional well-being, in addition to maintaining control in difficult situations reduces difficulties in working and understanding with people. which further enhances emotional well-being. Maintaining control in difficult situations improves with age, probably due to accumulated life experience, so that emotional well-being increases with age. Difficulties at work and difficulties in understanding people are interrelated and increasing them reduces emotional well-being.

As the perception of the coronavirus as a threat to oneself and / or relatives increases, the feeling of helplessness increases and the perceived self-efficacy in difficult situations decreases, which worsens emotional well-being. When perceived self-efficacy in difficult situations reduces the feeling of helplessness and increases emotional well-being. As the feeling of helplessness increases in difficult situations, the perceived self-efficacy in difficult situations decreases, which worsens emotional well-being.

CONCLUSION

For the purposes of the dissertation - establishing the level of well-being during difficult life situations, such as the coronavirus pandemic, three studies were conducted. With regard to consumer welfare, the influence of corporate social responsibility on consumer decision-making and purchase behavior after purchase was studied through a survey based on ideas from Paganikova (2020), which surveyed online in May-June 2020. 104 people. In June 2020, 231 people were surveyed with an online survey on the consumption of supplements, vitamins and minerals during the coronavirus pandemic, designed by Ali (2020). In May-June 2020, a survey was conducted with 635 participants to measure various aspects of well-being with a questionnaire modeled on questionnaires proposed by M. Butovskaya (2020), Delve Pvt Ltd (2020), as well as on the basis of Spielberger's questionnaire for situational and personal anxiety adapted for Bulgarian conditions (Shchetinski, D. and Paspalanov, I., 1989), also similar to the short form of the scale for assessment of the positive and negative affect PANAS, adapted in Bulgarian (Zankova , K., 2015; Pileva, I., 2018).

In many measuring instruments of well-being and life satisfaction, the items are formulated only in positive terms, which is a disadvantage of measuring instruments (Westerhof, Dittmann-Kohli, & Thissen, 2001, p.197), direct the thinking of the subject in one direction of reasoning, so the current study also measures negative emotional experiences associated with lack of well-being. On the other hand, in the study of well-being, there is often a tendency towards negative asymmetry (ie predominance of high responses on the response scale), which could be in the nature of subjective well-being (Vittersø, Røysamb, & Diener, 2002) due to general positive self-perception (Wagner et al., 2007).

It is recommended that the items answered on the Likert scale have the same number of positively formulated and negatively formulated items, but the psychometric characteristics and data collected on the life satisfaction questionnaire over time show that it does not harm the qualities of the questionnaire. , if all items are positively worded (McIntosh, 2001). Satisfaction is present as a term almost exclusively in positively completed sentences (Westerhof, Dittmann-Kohli, & Thissen, 2001, p.193), but scores on the overall individual life satisfaction questionnaire are not characterized by greater asymmetry than others used. measuring tools in social psychology (Vittersø, Røysamb, & Diener, 2002).

The limitations of the studies conducted to determine the severity of well-being in difficult life situations, such as the coronavirus pandemic, are related to the dependence of the results on the bias and prejudices of respondents, as self-report of the subjects is used and no scale is applied. social desirability. To overcome this limitation, the consistency of the answers was checked by comparing the answers to individual questions. It should be borne in mind that social desirability includes two components - exaggeration of positive self-description and denial of negative self-description, which are least pronounced among students in Bulgaria from student samples in 20 countries (He et al., 2015, p. 227, p.236), and part of our sample are Bulgarian students who seem more inclined to sincere answer according to He et al. (2015). It is possible for subjects to simulate, when answering personal questionnaires in the direction of pathological or normal responses (Mikesell, Calhoun, & Lottman, 1970), to show social desirability. Answering artifacts are not a source of concern in the case of self-assessment questionnaires measuring subjective well-being (McIntosh, 2001). Assessing life and areas of life with questionnaires or incomplete sentences leads to similar assessments, regardless of the method (Westerhof, Dittmann-Kohli, & Thissen, 2001, p.193). Content analysis found similarities between freely constructed responses to well-being when completing incomplete sentences and responses to well-being questionnaires (Westerhof, Dittmann-Kohli, & Thissen, 2001). Most of the scales that measure subjective well-being and consist of a single item have good psychometric

characteristics to be used if a short measuring instrument is sought (McIntosh, 2001).

Another limitation is the lack of comparison with data from other methodologies measuring relevant welfare characteristics during a coronavirus pandemic. The application of more data collection methods would increase the objectivity of the obtained results. Longitudinal research could give more accurate results on the dynamics of well-being and clarify additional factors that affect it. The study of more representatives of different social groups would provide an opportunity to generalize the results. To overcome these limitations, the dissertation describes the results of research by many authors on aspects of well-being, tracing its dynamics in chronological order over the years, describes intergroup differences and factors that affect the level of well-being, and cites data from other well-being studies during the coronavirus pandemic, which provide follow-up to the dynamics of well-being in March and April 2020 (Institute for Population and Human Studies, 2020a; Institute for Population and Human Studies, 2020b; „Institute for Population and Human Studies“, 2020c), which data are supplemented by the research in the dissertation conducted in May-June 2020.

The basic hypothesis was partially confirmed that in the difficult life situations created by the COVID-19 pandemic, well-being (subjective, emotional, work-related, healthy, mental, psychosocial) is rather low because the perceived threat of the coronavirus to health (their own, relatives and friends), the imposed social isolation and perceived loss of personal control over the situation generate frequent and intense negative emotions, associated with difficulties in relationships and at work.

The perception of the coronavirus as a threat to oneself is typical for 43.6% of the studied, and as a threat to relatives is typical for 69.9% of the studied, which is essentially a type of stressor. 29% of the surveyed Bulgarians do not perceive the coronavirus as a threat to themselves or their relatives, and since 20.5% of them do not think that the situation with the coronavirus is a fraud, it means that they perceive the coronavirus as a challenge. . This is a prerequisite for maintaining control in a difficult life situation, because when events and situations are assessed as threatening, it is difficult to distinguish between what can be controlled and what cannot be controlled, creating tension and relationships with other people. are threatened (Stamatov, R. and Minchev, B., 2003, p. 110). About 1/3 of the respondents are adamant that they maintain control in difficult situations and that they do not feel helpless in a difficult situation. Assessing stressors as a challenge stems from requirements that one feels confident can handle (Krohne, 2001). Stressful situations are assessed as a challenge when they have the potential for positive results, improvements, growth (Greenaway et al., 2015). Stress-resistant, resilient people resist the harmful effects of stress due to their style of dealing with

stressful events - instead of perceiving stressful events as a threat, they see them as a challenge and believe they can control and influence the course of their lives (Stoyanova, S., nd). Stress resistance, endurance (hardiness) involves perceived control and acceptance of challenges that reduce the effect of stressful life events and prevent the onset of disease symptoms (Kobasa, Maddi, & Kahn, 1982). Part of the components of stress resilience are internal localization of control and perception of challenge instead of threat (Krohne, 2001).

The main hypothesis was confirmed with regard to low subjective well-being. During the coronavirus pandemic, lower life satisfaction prevailed (in 57% of the study participants) than higher life satisfaction (in 43% of the surveyed Bulgarians - see Figure 1) as an expression of subjective well-being.

The main hypothesis was not confirmed in terms of emotional well-being. It was found that during the coronavirus pandemic in the period from the end of May 2020 to the middle of June 2020, when the study was conducted, the largest share of the surveyed Bulgarians (48%) had a moderate emotional well-being. time of the coronavirus pandemic, expressed as a balance between positive and negative affect. They are followed by the share of study participants who experience strong emotional well-being during the coronavirus pandemic, expressed as a predominance of positive affect over negative - 28.7%. The lowest number of respondents experienced emotional distress during the coronavirus pandemic, expressed as a predominance of negative affect over positive ones - 23.3%.

The largest share of the surveyed Bulgarians with moderately experienced experiences of negative affect during the coronavirus pandemic (70.1%) and with moderately expressed experiences of positive affect (63%), followed by the number of surveyed Bulgarians with very strong experiences of positive affect (20%), then - with very low experiences of positive affect (17%), then - with very strong experiences of negative affect during the coronavirus pandemic (15.4%), at least are people with very low experiences of negative affect during the coronavirus pandemic (14.5%).

The main hypothesis was confirmed in terms of work-related well-being. Bulgarians experiencing work-related unhappiness slightly prevail (about 52%, generalized average percentage) over those who experience more work-related well-being (about 48%, generalized average percentage). Work-related unhappiness is due to difficulties in work that reduce family income, as well as difficulties in relationships. Work-related distress during a coronavirus pandemic manifests itself in various forms, either as a predominance of work or relationship difficulties or low incomes that make it difficult to meet personal and family needs. Accordingly, work-related unhappiness is expressed in difficulties in doing the work (large difficulties are present in 27% of the surveyed, and smaller difficulties - in 36% of

the surveyed, see Figure 3), related to problematic relationships (many problematic relationships in 16% of the respondents, and to a lesser extent the presence of difficulties in the relationships in 37% of the respondents - see Figure 43), decrease or loss of income (in about 40% of the surveyed Bulgarians).

Work-related well-being manifests itself in the form of lack of difficulties at work, as well as in relationships, including with colleagues, superiors, clients, retention or, even in rare cases, an increase in income during a coronavirus pandemic. Work-related well-being is expressed in the absence of difficulties in doing the work (37% of respondents - see Figure 3), including related lack of relationship problems (in 47% of respondents - see Figure 43), and also thus through income stability (in about 55% of the surveyed Bulgarians) or increase in income (in about 5% of the surveyed Bulgarians).

As a summary of the well-being associated with work during difficult life situations in the coronavirus pandemic, it was found that about 1/3 of the surveyed Bulgarians (37%) did not experience difficulties at work in the last two weeks before the study during of the coronavirus pandemic in their view (see Figure 3). 63% of the respondents complain of some difficulties in their work, from stronger to less pronounced (see Figure 3). Difficulties at work have a direct effect on changes in family income and, as work difficulties increase during a coronavirus pandemic, family income decreases (see Table 13). Family income decreased in about 40% of study participants. Difficulties at work have a direct impact on family income by lowering it. The impact of work difficulties on the change in family income is not mediated by emotional well-being (see Table 14), which means that experienced negative emotional states in work difficulties do not lead to a reduction in family income, but work difficulties related to objective barriers, part of the nature of work in the changed social situation during the coronavirus pandemic, lead to a reduction in income - for example, not all work tasks can be performed remotely, especially without prior preparation, some industries suffer loss of customers, which makes it difficult doing work, people lose their jobs and this affects their income.

High well-being, expressed in maintaining a positive relationship during the coronavirus pandemic, was experienced by 47% of the surveyed Bulgarians (see Figure 43), i.e. the majority of the respondents experienced a breakdown in the relationship, expressed in a smaller one (37%). or greater (at 16%) degree. Some of the difficulties with understanding with other people relate to work relationships and there is a tendency for significantly more people with difficulties at work than expected to experience difficulties in understanding with people, and people who do not complain about difficulties at work, less they also suffer from difficulties in understanding people.

Relationships with other people - spouse, children, friends, are related to well-being not only directly - providing social support and assistance, but also indirectly - giving the individual the opportunity to care for others (Cantor & Sanderson, 1999), because caring for others increases the sense of personal value and significance, increases self-esteem, self-esteem and thus increases well-being. In addition, about 1/3 of the Bulgarians surveyed declare their readiness to support the well-being of other people during the coronavirus pandemic through voluntary activities, approximately one in five Bulgarians make financial donations for this purpose, and less than one in ten Bulgarians make other donations. volunteering activities that support the well-being of others, although more than half of the respondents in their previous experience have been involved in volunteering. The emotional well-being experienced is related to volunteering during the coronavirus pandemic, and those involved in volunteering have higher-than-expected emotional well-being (see Table 90). Volunteer activity probably increases mental well-being, a component of which is activity (Deci & Ryan, 2000), increases the sense of usefulness and thus improves psychosocial well-being, whose component is the sense of usefulness (Melyokhin, A., 2015), gives meaning to life and it also improves the well-being experienced.

The main hypothesis was not confirmed in its part on psychosocial well-being. The majority of surveyed Bulgarians (64.5% average percentage of indicators of trust in the official authorities) experience psychosocial well-being in the form of trust in the information provided by the official authorities during the coronavirus pandemic and in the measures and actions taken by the authorities, related to social isolation. Approximately 1/3 of the surveyed Bulgarians (35.5% average percentage of the indicators of trust in the official authorities) experience psychosocial distress in the form of distrust of the information provided by the official authorities during the coronavirus pandemic and in the measures and actions taken by the authorities, related to social isolation, and this distrust is also associated with negative emotions such as anger and guilt.

The main hypothesis was not confirmed in its section on mental well-being. During the coronavirus pandemic, mental well-being in the form of self-confidence was more pronounced (in 54% of the surveyed Bulgarians), and mental distress in the form of self-doubt was less common (in 46% of the studied Bulgarians - see Figure 2), which creates prerequisites for successfully coping with difficult life situations during the coronavirus pandemic and for maintaining their well-being.

The main hypothesis was not confirmed in terms of health well-being. 79.5% of the surveyed Bulgarians (generalized average percentage) experienced healthy well-being during the coronavirus pandemic, and the remaining 20.5% experienced healthy well-being. In terms of health well-being, 9.5% of subjects were generally diagnosed with coronavirus or at risk for coronavirus disease, but more than half

did not perceive COVID-19 as a threat to them personally, but almost everyone sees it as a threat to their relatives. Health well-being refers not only to one's own health, but also to the health of loved ones during a coronavirus pandemic. Health well-being is also associated with family well-being and emotional well-being, as far as coronavirus has brought most of those diagnosed and at risk closer to their family members (see Table 86). The majority of the surveyed Bulgarians are not included in risk groups for coronavirus disease (90.5%), do not have chronic diseases (about 89%) and feel healthy to a large or moderate degree (59%). People are likely to worry about being stigmatized with a coronavirus diagnosis and not report their health complaints.

The first working hypothesis was confirmed that there are socio-demographic differences by gender, age, marital status in the experienced well-being (subjective, emotional, family, work-related, healthy, mental, psychosocial) during the coronavirus pandemic. Well-being is differentiated by socio-demographic factors, as found by other authors, whose results are described in the dissertation.

With regard to gender differences, men experience higher subjective well-being in the form of life satisfaction, higher mental well-being in the form of self-confidence, higher work-related well-being in the form of no difficulties at work, more frequent and strong positive emotions than women. In terms of work-related well-being during difficult life situations in a coronavirus pandemic, women (67.4% of women) complain more about work difficulties than men (54.7% of men).). Women experience more frequent and strong negative emotions during a coronavirus pandemic than men. It is possible that women are more likely to share their problems than men who are brought up in the process of socialization to look strong and coping.

People with an intimate partner are more satisfied with life as an expression of subjective well-being than people without an intimate partner. People with an intimate partner experience more pronounced psychosocial well-being in the form of trust in the official authorities - the information they provide and the measures they take to prevent the spread of coronavirus infection, compared to people without an intimate partner. More frequent and strong, both positive and negative emotions during a coronavirus pandemic are experienced by people who maintain an intimate partnership. Having an intimate partner lowers emotional well-being in a coronavirus pandemic situation. The intimate partner is associated with more negative experiences during the coronavirus pandemic, perhaps due to worries about his health and the maintenance of the relationship, because with the imposed social isolation people have difficulty maintaining the relationship with their intimate partner if they do not live with him. which upsets them.

People with children are more satisfied with life as an expression of subjective well-being during a coronavirus pandemic than people without children. The birth of children is associated with higher life satisfaction (Luhmann, Lucas, Eid, & Diener, 2013). People with children experience more pronounced psychosocial well-being in the form of trust in the official authorities - in the information they provide and the measures they take to prevent the spread of coronavirus infection, compared to people without children. People who have children are more confident as an expression of mental well-being during a coronavirus pandemic, and people without children are more insecure. The increase in the number of children in the family increases the experienced emotional well-being, ie it leads to a more pronounced predominance of the positive affect over the negative affect. People who have children experience more frequent and strong positive emotions during the coronavirus pandemic. People without children experience more frequent and strong negative emotions during the coronavirus pandemic. People with children experience more pronounced health-related well-being. Healthy unhappiness is more common in people without children. Children make life meaningful and lead to greater satisfaction with their realization (Luhmann, Lucas, Eid, & Diener, 2013). Children give meaning to life, which makes parents happy, caring for them makes a person feel useful, which further increases his well-being.

People over the age of 36 are more satisfied with life as an expression of subjective well-being than people between the ages of 20 and 35. It seems that the strongest trust in the information provided by the official authorities during the coronavirus pandemic and in the measures and actions taken by the authorities related to social isolation as an expression of psychosocial well-being is shown by Bulgarians aged 36-65. The strongest distrust of the official authorities as an expression of psychosocial distress is shown by Bulgarians aged 28-35 - to the information provided by them and the measures taken by them to prevent the spread of coronavirus infection. People over the age of 36 are the most confident as an expression of mental well-being during a coronavirus pandemic. People between the ages of 24 and 27 are less confident during a coronavirus pandemic. People aged 36 to 65 experience the most common and strong positive emotions during a coronavirus pandemic. The most common and strong negative emotions during a coronavirus pandemic are experienced by people aged 24 to 27 years. People aged 36 to 65 experience more pronounced subjective well-being, psychosocial well-being, mental well-being, emotional well-being, but not health well-being. People aged 20 to 35 experience more pronounced health-related well-being. Health problems are more common in people aged 36 to 65. Older people are more likely to report chronic illness and are at greater risk of becoming infected with COVID-19. People between the ages of 36 and 65 are likely to have more experience that gives them confidence, have an established social status in society, family and profession, which are a source of income, social support and positive emotions.

In terms of socio-demographic characteristics, it cannot be stated categorically that some social groups experience the most pronounced family well-being during the coronavirus pandemic, as it happens that one social group in society experiences a strong indicator of family well-being, but according to another indicator of the same group to be in a less enviable position with less pronounced family well-being.

The most satisfied with life as an expression of subjective well-being during the coronavirus pandemic seem to be men who have established an intimate partnership with children over the age of 36. More dissatisfied with their lives during the coronavirus pandemic are young women aged 20 to 35, without an intimate partner, without children. Probably the loneliness experienced in social isolation during the coronavirus pandemic contributes to the dissatisfaction with life experienced.

The strongest distrust of the official authorities as an expression of psychosocial unhappiness is shown by Bulgarians aged 28-35 years and mostly single people without an intimate partner and without children, they mostly experience psychosocial unhappiness in the form of distrust of the official authorities - to the information they provide and the measures they take to prevent the spread of coronavirus infection. Accordingly, people from other age groups with an intimate partner and children experience more pronounced psychosocial well-being in the form of trust in the official authorities - in the information they provide and the measures they take to prevent the spread of coronavirus infection.

The most confident in themselves as an expression of mental well-being during the coronavirus pandemic are men who have children and are over 36 years old. They have achieved a certain social, family and professional status in society, support their families and seem confident in their ability to cope with difficult life situations during the coronavirus pandemic, rely on their experience, skills and social networks of contacts. Women without children, between 24 and 27 years old, are more insecure during a coronavirus pandemic. Their insecurities may be related to their expectations for fulfilling social roles as wife and mother, and perceived difficulties in starting a family, giving birth and raising a child in a coronavirus pandemic and imposed social isolation.

The most common and strong positive emotions during a coronavirus pandemic are experienced by men aged 36 to 65 who maintain an intimate partnership and have children. The most common and strong negative emotions during a coronavirus pandemic are experienced by women aged 24 to 27 who maintain an intimate partnership but are childless. Probably social isolation has greatly changed their way of life and they lack opportunities to maintain social contacts and relationships

with people with whom they do not live together, self-assertion in professional and personal life becomes difficult, entertainment is limited, which upsets them.

Relationship distress is more common in those at risk of becoming infected with COVID-19 (probably due to quarantine, see Table 78), in people with an intimate partner (see Table 79), and in people with disabilities (see Table 78). 80).

Difficulties are caused perhaps not so much by the nature of the intimate partner as by the imposed social isolation that hinders communication between people who do not live together.

People with children and subjects aged 20 to 35 experience more pronounced health-related well-being. Health unhappiness is more common in people aged 36 to 65 without children.

More often helplessness in a difficult situation is experienced by women aged 20 to 23, without children, without an intimate partner. Men from 36 to 65 years old, with children and maintaining an intimate partnership, rarely experience helplessness in a difficult situation. Single people are more likely to feel helpless and probably find it difficult to rely on social support.

During the coronavirus pandemic, there was no significant differentiation in volunteering by gender and age, people from different social groups provided all possible assistance. Significantly more people with an intimate partner than expected volunteer during the coronavirus pandemic, and significantly more people than an intimate partner than expected donate money to those in need during the coronavirus pandemic.

The second working hypothesis was confirmed that in difficult life situations created by the COVID-19 pandemic, family well-being is more likely to be experienced than family well-being, although people worry about the health, well-being and maintenance of their family members. there are difficulties in caring for the household, but on the other hand there are prerequisites for additional rapprochement between family members regarding the common danger and the greater frequency of contacts between family members during distance work and study.

Family well-being during the difficult life situation related to the coronavirus pandemic is expressed as awareness of the importance of the family (in about 75% of respondents), closeness with family members (with parents - in 53.5%; with spouse). - in 31%, with children - in 23%, bearing in mind that some of the respondents do not have living parents, spouse or children with whom to become close), giving importance to communication with relatives (in about 76%) of the surveyed), stability (in about 55% of the surveyed) or increase (in 5% of the surveyed) family income, lack of difficulties in household care (in 50% of the surveyed). Approximately 70% of the surveyed Bulgarians perceive the

coronavirus as a threat to their relatives, which expresses their attachment to their family. It can be summarized that about 70% of the studied Bulgarians experience family well-being during the coronavirus pandemic, and the rest have lower family well-being during the coronavirus pandemic.

Cognitive processes and values appear to be important in enhancing family well-being during a coronavirus pandemic. Awareness of the importance of the family in social isolation increases family well-being, expressed through rapprochement between family members. Awareness of the importance of one's family during social isolation increases the perception of the coronavirus as a threat to relatives, and one becomes even closer to one's family members. Awareness of the value of human life also leads to the rapprochement of family members. Awareness of the value of human life increases the perception of the coronavirus as a threat to themselves and their relatives, which further enhances rapprochement with family members (see Figure 12). Cognitive processes such as a clearer awareness of the importance of the family and the family as a value are important to increase family well-being during a coronavirus pandemic by enhancing some, but not all, of its components. Awareness of the value of human life is not associated with a change in family income, either directly or indirectly through the perception of the coronavirus as a threat to oneself and / or one's relatives. Convergence with family members and the change in family income as expressions of family well-being do not interact statistically significantly, ie the change in one is not related to a change in the other. With regard to family income as an expression of family well-being, family well-being is affected by work-related well-being. Family well-being is also associated with other types of well-being, such as emotional well-being. As household care difficulties increase during a coronavirus pandemic, emotional well-being decreases, and people are likely to worry about providing basic necessities when introducing social isolation during a coronavirus pandemic.

The third working hypothesis was confirmed that during the difficult life situations created by the COVID-19 pandemic, consumer well-being is linked to health and social well-being in such a way that consumers are directed to such goods and services that can contribute to improving or maintaining good health, as well as contributing to the well-being of large social groups and society.

There is a tendency during the coronavirus pandemic for consumers to support companies that take corporate social responsibility, corporate social responsibility is considered important by respondents (with a rating of 4 on a scale of 1 to 5), approximately 89% of users influence to some extent in their decision to purchase a product from corporate social responsibility. It should be borne in mind that corporate social responsibility is not the most important factor influencing the

purchase decision or customer satisfaction, even some consumers are dissatisfied with certain activities related to corporate social responsibility, which create some personal inconvenience to themselves, although the company intended them to benefit society. Consumer well-being is associated with relationship well-being and family well-being, as about 80% of respondents would share with family and friends about a company's efforts to take corporate social responsibility.

Consumer well-being is associated with the pursuit of healthy well-being, which the majority of respondents believe that dietary supplements contribute. During the coronavirus pandemic, subjects were hesitant to assess whether their diet was healthy or unhealthy (48%), and tended to judge it to be rather healthy (41%). The largest share of respondents seek to take preventive measures regarding their health and physical condition - both before the coronavirus pandemic (49%) and after the crisis with the coronavirus (87%), as part of these preventive measures are related to the use of food supplements or intentions for their use in the future - in 64.4% of those surveyed. Only about 18% of those surveyed are adamant that they would not buy nutritional supplements, whether they shop online or offline. The used food supplements are perceived not so much as part of the diet (rather important or very important for the diet are according to 38.9% of the studied), but are perceived more as medications that can improve health by strengthening of the immune system and the supply of substances and elements missing in food and the body (according to 50.7%), as well as to improve the physical shape of the body (according to 31.2% of the studied). Only 12.1% of respondents do not believe to some extent that the food supplements available for purchase help stimulate immunity, health and physical condition. Rather, respondents are more likely to buy nutritional supplements in the future - the most common answer is 5 on a scale of 1 to 7. Most often, respondents intend to buy protein (about 54%), multivitamins (45.5%) and vitamins (about 42%), supplements to improve immunity (about 37%).

The fourth working hypothesis was confirmed, that the subjective cognitive assessment of effectiveness in difficult life situations is associated with the experience of higher well-being, and the feeling of helplessness lowers it.

There are slightly more people who experience perceived control over a difficult situation (about 1/3 of those surveyed) than those who perceive a loss of control in a difficult situation (about 1/5 of those surveyed), but the majority of people find it difficult to assess definitely his perceived control over the situation. However, almost half of the respondents feel helpless in a difficult situation, and about 1/3 do not feel helpless in a difficult situation. About 1/3 feel anxious in a difficult situation and feel bad, approximately 1/3 do not worry and do not feel bad in a difficult situation, and the rest are hesitant about how to respond.

Ways of coping are thoughts and actions that individuals use to deal with stressors in everyday life (Folkman & Lazarus, 1988), so it is very important how people perceive difficult situations, what they believe in and what actions they take to successfully deal with them. Effective coping strategies during a coronavirus pandemic are maintaining control in difficult situations and perceived self-efficacy, which increase emotional well-being. In addition, maintaining control in difficult situations reduces work and communication difficulties, which further enhances emotional well-being. . Maintaining control in difficult situations improves with age, probably due to accumulated life experience, so that emotional well-being increases with age.

With the increase in the perception of the coronavirus as a threat to oneself (in 43.6% of the surveyed) and / or to relatives (in 69.9% of the surveyed), which is essentially a type of stressor, the feeling of helplessness increases and the perceived self-efficacy decreases. in difficult situations, which worsens emotional well-being. When perceived self-efficacy in difficult situations reduces the feeling of helplessness and increases emotional well-being. As the feeling of helplessness increases in difficult situations, the perceived self-efficacy in difficult situations decreases, which worsens emotional well-being.

SCIENTIFIC CONTRIBUTIONS

1. A questionnaire was created to measure positive affect, negative affect and emotional well-being. The construction of tools creates opportunities for future use of the methodology in psychological practice, as well as for revealing regularities and dependencies, interrelations between phenomena that will enrich the theoretical knowledge. The developed methodology for the study of emotional well-being can be successfully applied in future research in Bulgaria among various social categories of the population. The constructed questionnaire for measuring emotional well-being has good psychometric characteristics - high internal consistency of the extracted subscales, good construct validity, established by checking its factor structure for compliance with a theoretical model, as well as by socio-demographic differences between social categories.

2. The level of different types of well-being among Bulgarians during the difficult life situation, such as the coronavirus pandemic, which enriches the scientific knowledge - healthy well-being is experienced by 79.5% of the studied Bulgarians; about 70% of the surveyed Bulgarians experience family well-being; psychosocial well-being in the form of trust in the information provided by the official authorities during the coronavirus pandemic and in the measures and actions taken by the authorities related to social isolation, 64.5% of the surveyed Bulgarians experience; mental well-being in the form of self-confidence is characteristic of 54% of respondents; work-related well-being is experienced by 48% of study participants; 48% of the surveyed Bulgarians experience emotional well-being as a

balance between positive and negative affect; well-being, expressed in maintaining positive relationships during the coronavirus pandemic, is experienced by 47% of the surveyed Bulgarians; subjective well-being in the form of life satisfaction in a moderate and large degree is present in about 43% of the surveyed Bulgarians; emotional well-being as a predominance of positive over negative affect is present in about 29% of respondents. Subjective assessment of well-being is also a way of self-knowledge among study participants, which stimulates reflexivity and forms expectations for the future.

3. The observed socio-demographic differences in the well-being experienced by Bulgarians during the difficult life situations of the coronavirus pandemic reveal the importance of the acquired social experience and the improvement of the ability to maintain control in difficult situations with advancing age for stronger well-being, as well as the presence of children as an opportunity to increase well-being.

4. It has been established that cognitive processes and values are important for increasing family well-being during a coronavirus pandemic by strengthening some of its components - awareness of the importance of the family, i.e. high appreciation of the family and / or awareness of the value of human life increase family well-being as they lead to rapprochement between family members.

Awareness of the importance of one's family and / or awareness of the value of human life during social isolation increases the perception of the coronavirus as a threat to relatives and one becomes even closer to one's family members.

5. Relationships have been established between different types of well-being, which indicate that changes in one type of well-being are also related to changes in other types of well-being. In this regard, guidelines can be given to improve the well-being experienced. For example, consumer well-being is associated with health well-being when purchasing products and services to improve health; with family well-being in influencing the purchase decision between family members and with regard to the dependence of consumption on family income, which is why it is also associated with work-related well-being; with subjective well-being and emotional well-being, due to the experienced satisfaction-dissatisfaction with the consumption of goods and services; with mental well-being due to the consumption of products aimed at personal growth, etc. Emotional well-being directly impairs emotional well-being. As difficulties with understanding with other people increase, emotional well-being directly deteriorates, and work-related well-being also decreases, which further impairs emotional well-being. Work-related well-being changes along with family well-being, insofar as family income is their common indicator. Healthy well-being is also associated with family well-being and emotional well-being, insofar as a person is emotionally excited about their illness, and coronavirus disease has brought most of those diagnosed and at risk closer to their family members.

6. The usefulness of some copings for coping in difficult life situations and increasing well-being has been confirmed. Perceived self-efficacy in difficult life situations and maintaining control in difficult situations are associated with experiencing higher well-being, and the feeling of helplessness lowers it.

7. It has been established that volunteering provides an opportunity to increase well-being during difficult life situations - those involved in volunteering have a higher emotional well-being; volunteering gives meaning to life and thus also improves the well-being experienced; increases mental well-being, in connection with the associated activity, sense of community, motivation and enthusiasm; increases the sense of usefulness and thus improves psychosocial well-being.

8. The results of the study through mediator analyzes of relationships between variables outlined models for changing different types of well-being during the difficult life situation of a coronavirus pandemic, which can be applied to increase well-being and improve coping in difficult life situations.

8.1. Family well-being as closeness to family members increases with awareness of the value of human life, awareness of the importance of the family and perception of the coronavirus as a threat to themselves and their relatives, which is a stressor, but in this case plays a constructive role in increasing family life. well-being.

8.2. On the other hand, perceiving the coronavirus as a threat to oneself and one's relatives as a stressor impairs emotional well-being, lowers perceived self-efficacy, and increases feelings of helplessness, which further reduces emotional well-being.

8.3. Family well-being, expressed as the absence of difficulties in caring for the household, improves emotional well-being.

8.4. In the presence of children and advancing age, emotional well-being increases, and advancing age indirectly affects emotional well-being by reducing the perceived loss of control and thus further increasing emotional well-being.

8.5. As the perceived control over the situation increases, so does the well-being associated with work, as well as the well-being associated with maintaining positive relationships, which in turn also increases emotional well-being.

8.6. As work-related well-being increases, so does family well-being due to increased family income and improved relationships.