Subjective Well-Being and Mental Health during the COVID-19 Pandemic in Hungary

HTA151

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I. OBJECTIVE

➢*Purposes of the research*
Research aims to examine if mental health problems and well-being, namely depression, anxiety symptoms and life satisfaction were experienced differently based on the socio-demographic characteristics and COVID-19 related characteristics during the pandemic.

II. METHODS

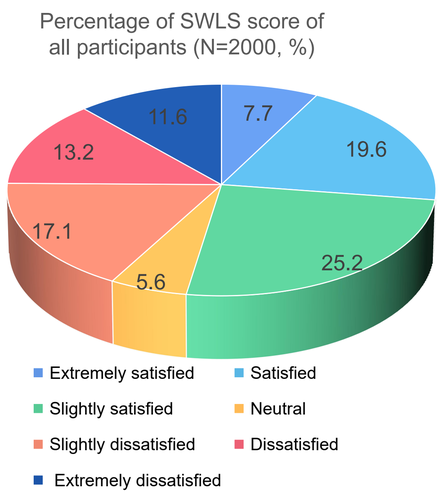
➢*Data collection*
A cross-sectional survey was conducted with a targeted sample size of 2000 members of the Hungarian adult general population from May 25 to June 8, 2021 by a third-party survey company during the COVID-19 pandemic.

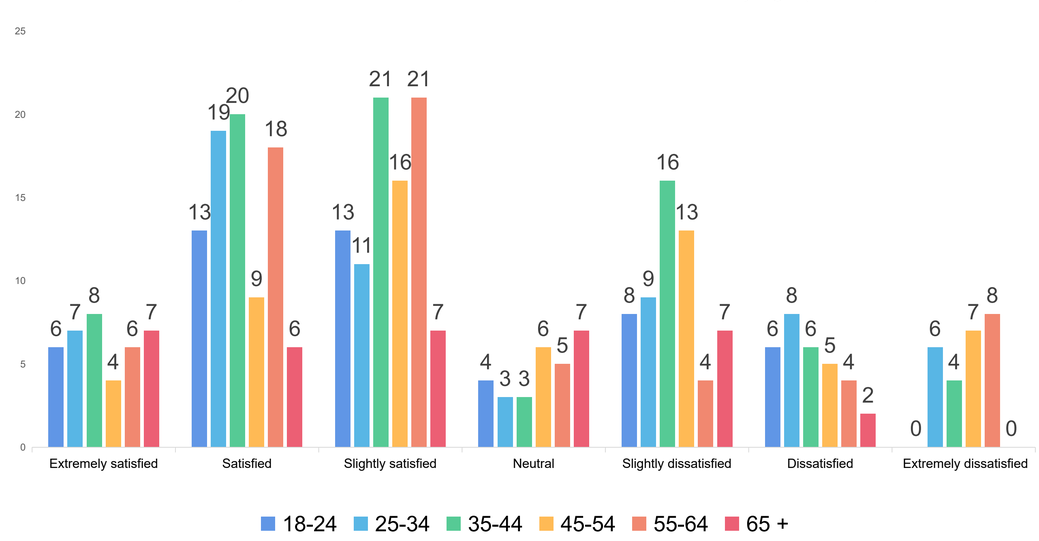
➢*Content of data*
A self-perceived survey was designed for the study. All respondents completed a set of standardized questionnaires, including the list of mental health conditions which were chosen according to the 9-item patient health questionnaire (PHQ-9), 7-item generalized anxiety disorder (GAD-7) scale, and satisfaction of life that chosen from satisfaction with life scale (SWLS) and questions related to socio-demographic characteristics.

➢ *Data analysis*
❖ One-way analysis of variance(ANOVA) tests was conducted to assess how SWLS scores were influenced by marital status, education level, occupational type, monthly income, anxiety (GAD-7), depression (PHQ-9) and COVID-19 related characteristics. Using the Pearson's product-moment correlations and Spearman's Rho for correaltion examination. Anxiety and depression were used as covariate in a one-way analysis of covariance (ANCOVA) for comparing the SWLS score of people
❖ Two-way ANOVA was used to investigate the effects of marital status and age groups on depression and anxiety and SWLS score. Two-way ANCOVAs were performed to analyze the relationships of marital status and age with total SWLS with income categories included as covariate.
❖ PROCESS (model 1) was employed to investigate whether age served as a moderator between SWLS and depression and anxiety scores.

III. RESULTS

➢ *Socio-demographic characteristics of the sample*
The sample distribution (n=2000) exhibited altogether 24.8%, 21.6% and 16.3% respondents reported that having at least dissatisfied of life, moderate depression and anxiety, respectively. Specifically, 16% of COVID-19 infected participant reported that they are at least dissatisfied of life.



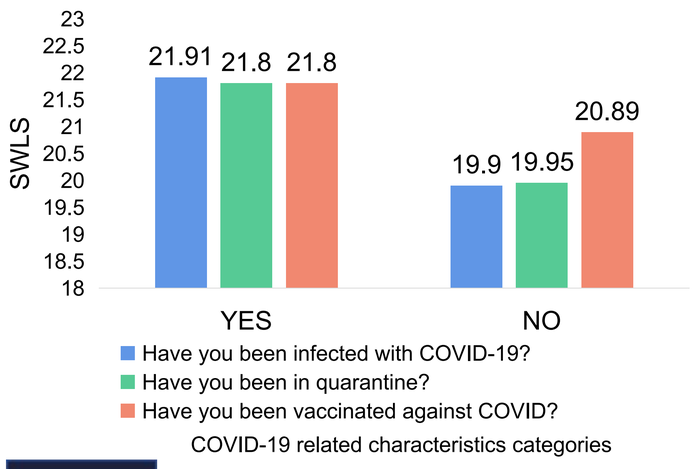


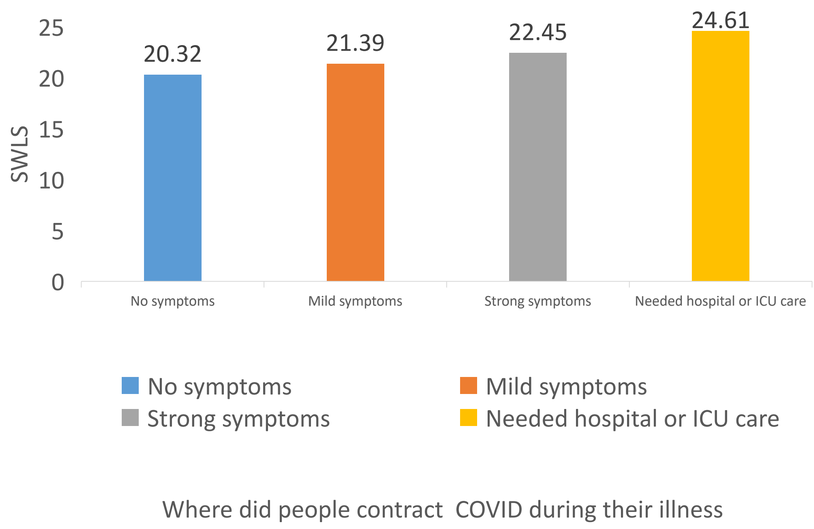
➢Correlations
The correlation between total SWLS scores and anxiety (GAD-7 r= -0.364) and depression (PHQ-9 r= -0.426) scores was negative and strong. Moreover, negative correlations were found between previous COVID-19 infection (COVID-19 1-6) and SWLS (rho= -0.094, -0.054, -0.071, -0.05, -0.072 respectively, n = 1,693). All correlations information were included in the following table.

rho	Age	Gender	Marital status	Educatio nl level	Employm ent status	Monthly income	Anxiety	Depressio n	COVI D-19 1	COVI D-19 2	COVI D-19 3	COVI D-19 4	COVI D-19 5	COVI D-19 6	Severit y of COVI D-19	Qurant ined status	Vaccin ation status
Anxiety	**-.214****	**.163****	0.015	**.079****	**.053***	**.086****	1	**.834****	0.031	**.071****	**.054***	0.036	0.012	0.013	**-.244****	-0.026	**.115****
Dpressio n	**.834****	**.178****	**.070****	0.046	0.001	**.118****	**.834****	1	-0.008	0.045	0.032	**.053***	0.008	0.038	**-.243****	-0.011	**.110****
SWLS	-0.021	0.017	**.082****	**.138****	-0.032	**.148****	**-.364****	**-.426****	**-.094****	**-.054***	**-.071****	**-.050***	**-.072****	-0.014	0.11	**.076****	**.108****

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).
COVID-19 1: Have you been infected with COVID-19?, COVID-19 2: Have your family member in the same household been infected with COVID-19? COVID-19 3: Have your family member not in the same household been infected with COVID-19? COVID-19 4: Have your friend or relatives been infected with COVID-19?, COVID-19 5: Have your schoolmate or colleague been infected with COVID-19? COVID-19 6: Have your schoolmate or colleague who had distant acquainted been infected with COVID-19?
Correlations with values between 0.01 - 0.09, 0.10 - 0.29, 0.30 - 0.99, 1 were deemed weak, moderate, strong and the strongest, respectively.

➢*SWLS Differences According to COVID-19-related Factors*
Anxiety-adjusted ANCOVAs showed that SWLS scores also varied by COVID-19-related characteristics. Participants with previous COVID-19 infection had a higher SWLS score than those without (M = 21.91, SD = 7.29), (M = 19.9, SD = 7.12) [F (24.2) = 3.89, R^2 = 0.138, p < 0.05]. The results of the others and COVID-19 related characteristics were displayed in the below graphs. Gender played a role in moderating the relationship between SWLS and depression scores. The overall model was significant (R^2 = 0.218, [F (185.12) = 4.32, p <0.05]). It showed that SWLS and depression had a negative relationship while gender as moderating variable. (Coeff. = 0.114, t= 2.08, p < 0.05).





IV. CONCLUSION

These findings illuminate disparities in the effects of socio-demographic and COVID-19-related characteristics on life satisfaction and mental health in Hungarians during COVID-19. The results indicate that female, young (aged 25-34 years), single individuals are probably especially vulnerable to the influence of the COVID-19 pandemic on mental health and life satisfaction, however, participants who have COVID-19 experience previously maybe not have worse SWLS score than the opposite group. Gender plays an important role in moderating the relationship between SWLS and depression scores.