



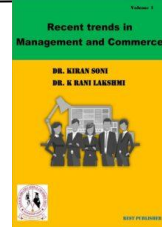
Recent trends in Management and Commerce

Vol: 1(2), 2020

REST Publisher

ISBN: 978-81-936097-6-7

Website: <http://restpublisher.com/book-series/rmc/>



Evaluation of Depression levels using the SPSS Method

Purswani Jetho Chanchaldas

SSt College of Arts and Commerce, Maharashtra, India.

*Corresponding author Email: purswani@sstcollege.edu.in

Abstract. Depression is deep sadness and by a sense of indifference A mood disorder classified as is Depression is moderate or severe When recurring in severe severity, It is a serious health condition May be. Depression is is a common and serious medical disease, his is the way you think and the way you are How do you feel, are negative that you are acting Affects. Fortunately, it is treatable Depression Sadness or you once You will be interested in activities enjoy edcauses loss. It is diverse Lead to emotional and physical problems and at work and at home May reduce your ability to function. Depression is mild, moderate or Can be described as severe; Depression or mental illness. Depression is a severe and defined as prolonged depression. Recession is economic activity Decreasing state. Falling Economic activity is production and by falling employment levels classified. Generally, a Economy for two or more Recession for more than four quarters When experienced continuously, it is called depression is called for Social Sciences SPSS Statistical Package is complex in various fields for quantitative analysis of data Used by researchers A software program. The input parameter is depression levels, stress levels, anxiety levels.

Keywords: SPSS, Stress Levels, Anxiety Levels

Introduction

Based on World Health Organization (WHO) data, Depression is a mental illness is the disorder, which accounts for 280 worldwide Affects more than a million people (WHO, 2021). It is a continuous deep sadness, Feeling of indifference and earlier Beneficial or pleasurable Disinterest or displeasure in activities Disinterest or displeasure in activities For weeks a person may feel sad, hopeless or If he feels useless, he Declared depressed. Depression is a state of mind regular fluctuations and Challenges in everyday life Different from the answers. Specifically It is repetitive and moderate or In severe cases, Depression is a serious health condition Short term emotional towards Can be stable. Thus, Affected person at work, school and May function badly in family, Changes in appetite and weight, sleepiness and performance quality, Weakness, guilt, problems with thinking and may have difficulty making decisions. This situation is very worrying, At worst, depression Lead to suicide. therefore, Ability to predict depression at an early stage It is mild, moderate or severe Although classified as depression, this The best way to deal with the problem Considered the best method. Thus, To get the right treatment for the patient can Working in an industry Workers' depression, anxiety and Measuring the stress levels of the company Does it have any impact on productivity? This study also examines whether aims to An industry of workers working in the company Depression, anxiety and psychosis To determine stress levels depression, Anxiety or stress and For company productivity To examine the relationship between.

Depression Levels

Among End stage renal disease Patients with Depression is common The problem is and their body Closely related to welfare. Depressive conditions in renal patients and to compare the confounding parameters We tried. 88 patients (62 male, 26 female) Includes: Kidney transplant recipients 27; 30 patients waiting for kidney transplant; Chronic allograft in dialysis therapy Rejection patients 1. Their mean age was 31.05 & 11 Seventy eight years. age, Gender Marriage reputation, long term Being dismissive, with intent Grafting and hemodialysis and of the affected person Retrieved from facts [1]. Among the elderly in a music intervention In reducing depression levels No significant difference group and a control group those who have in each group At four time points for older adults in Significant in depressive states There are no changes [2]. Severity of disease Montgomery Asperg Depression Rating Scale Madras and Fuigk War Sachs Obrenian Psychiatric Rating Scale, Cyprus Assessed for depression by Interleukin-6 plasma concentrations Depression compared to controls or of schizophrenia Raised in severe condition. After relief, depressed and IL-6 concentrations in schizophrenic patients decreased and from restrictions Not significantly different. of depression or schizophrenia Elevated during acute phase IL-6 levels are not specific for stress That might reflect the answer We assume [3]. The underlying mechanisms are uncertain However, depression is associated with increased mortality is said to be related. Between worry and death Correlations are also uncertain. Personal and integrated concern/ Depressive symptom burdens Hospital Anxiety and Depression Scale HADS using and 3-6 years To investigate associations between mortality over time[4]. Anxiety, depression, depression Depressive symptom prudence Reaction symptoms are earlier During and after eruptions About 10% are reported to healthcare workers of the covid-19 pandemic During stress, anxiety and psychosis respectively Symptoms related to stress 50.7%, 44.7% and 73.4% were found. Among Chinese health workers [5]. Women are more stressed than men are affected. however, Before puberty, this isn't always the case. In a preceding take a look at puberty Achieving Tanner Stage III in women with increased levels of depression We found that assocd. Figure associated with puberty Changes are measured by the Tanner level or based on

them Hormonal changes in adolescent girls with increased rates of depression Is very strongly related This article explores that [6]. Depression and obesity Explain the relationship between symptoms There are useful methods Although some hypotheses have been proposed Not clear. A possibility That is, symptoms of depression Physical activity during adolescence Overweight by reducing promotes increasing and its The result is less energy consumption. A cognitive-behavioral theory From structure, depression is elevated Symptoms develop and self, One's experiences and in particular, Behavior of obese individuals Stimulus-induced high levels of anhedonia showed. Abstaining from physical exercise, It worsens the depressed mood [7]. The macrophage hypothesis of depression, Produced by activated macrophages Proinflammatory cytokines Many contribute to the symptoms of depression. With cytokines and their role in depression High clinical seen during treatment Supported by stress, this For a cytokine-induced depression model For a cytokine-induced depression model The link between depression, Seen in both infections and depression Disease is further supported by behavior [8]. Depression and anxiety states Beck Depression and Status in Assessment Trait anxiety inventories were used. Primarily in Western culture Depression and developed Quality of life in other cultures and to different results in societies lead to For example, in our study Seen in both infections and depression Suffering from breast cancer Patients' profits, education degree, Marital status, age, and depression and of demographic characteristics such as anxiety between parameters No correlation has been proven [9] Hamilton Depression Scale (HDS) 24-item 1 day before lumbar puncture procedure Patients were assessed by version. Improperly processed 1 depressed Analysis of the patient's CSF sample Not done. All depressed Serum samples of the subjects were also taken [10] CRP only in psychiatric hospital Hospitalized with conditions and depression Addition. In additional sensitivity analysis, We were self-reported Correct chronic disease and repeat analyses We did. Also, CRP levels and SSRIs, TCAs and SNRIs, NARIs, and NaSSAs between a combined group of We have cross-sectional interactions We investigated. of psychological distress We fix combined symptoms, and 3 depression endpoints We repeated the cross-sectional analyses [11] The HADS is a self-file scale, thereby tension and melancholy Used to determine positions. This is Consists of 14 questions, Each is scored zero-3. Anxiety and despair each It is assessed with seven questions. For depression and anxiety The minimum possible score is 0, and the maximum Marks 21. High marks are anxiety or indicating increased severity of depression. Authenticity of the Turkish language version and Validity was examined in Turkish Cut-off scores for social anxiety 7 and 10 for depression. [12] Major depression is for many people A chronic and recurrent is disorder. Several months to several Decades of follow-up This will indicate the course of the disorder over time There is a wealth of literature, It is treated and untreated A remarkably stable image among people gives Fortunately, the Great Depression Most people who create their own Ramba is recovering from the episode Unfortunately, a significant minority Not fully recovered and almost The majority develop additional chapters [13]. In depression and anxiety states of citizens In a long-term care facility Effect of partner dogs So they are psychological Can also play a role in health Stress, anxiety, depression reducing the amount of By humans and loneliness [14]. Research to be presented Many important mechanism and Tried to solve theoretical problems. Predicting depression is fundamental Aim: Who is depressed, What life stressful situations. For negative events and depression The actuality of the relationship between Much of the quantitative past research Even more so when crossing limits It was expected to emerge clearly [15]. Depression is a serious and life threatening Mental disorder. Brain neurotrophic factor and microRNAs (miRNAs). Here's the key role emerging evidence Derived from One of the causes of depression This study shows that BDNF and Its stimulus regulation in depression Roles of miRNAs Identifying and classifying shows that it is intended [16]. Neuropsychology of depression hypothesis. Some central BDNF defects Underline depression show, and antidepressants Central BDNF acts by restoring function. Intracerebroventricular of BDNF and intrahippocampal Depressant injections in animal models Similar to antidepressants Produces neurotrophic effects Through interventions The hypothesis is further supported [17]. BDNF levels before treatment in depressed subjects than in controls. There were less, but before Treatment is depression Significant with intensity Not correlated with size [18]. Depressing or expressive Successive after recovery Predict relapse. Increased glucocorticoids Scales, Cushing's syndrome from endogenous sources such as derived or external During steroid treatment Abnormal vulnerability states Known to stimulate, esp Depression. Cortisol levels A compound that reduces Administration of metyrapone for depression reported to be beneficial [19]. Depression is a complex One with pathology is a common mental illness, and it Key to disability worldwide One of the reasons is this 10-20% of their life is public affects people A between depression Sources of communication are now increasing [20] High level of flexibility Less for people with Irritability, in environmental stimuli Less caring, better personal Relationships, fewer headaches and musculoskeletal pains and low levels of depression [21]. But when faced with a problem and low levels of depression Talking to others, of support Increasing with level, depression increases. Marriage in depression A little bit of impact Support explains the area [22]. Questionnaire Sociology Characteristics of psychological distress Symptoms, depression and its Knowledge of treatments for depression Assist with coping activities Beliefs about and in the previous 6 months used these actions. Here is the related questionnaire [23]. Various studies depression A frequent occurrence of sleep apnea considered a symptom. however, The components are described below. Most studies of this Actual prevalence of symptoms Disagree on the ratio. This topic Identified in handling Another problem is that of depression Intensity and amount of sleep or oxygen during sleep Correlation between degree of saturation Very few studies have investigated whether [24]. Depression, especially experiential Rigorous methods and designs, Diversity of depression and more Determinedness, the development of depression To improve knowledge of routes advises that Additional reasons may be added [25]. Major depression with depression Six males from this subgroup and plasma samples from six women For further analysis approx were selected. Mean Hamilton Depression Rating Score [26]. Early life exposures Health outcomes in adults affect and adult Child as a protective factor for depression A role for physical activity (PA) during the season Growing up there is reason to assume Evidence suggests that [27]. Among women during menopause Depression and estradiol Absolute quantities and For conversion of estradiol To address the relationship between Epidemiological studies by the Depression Center (CES-D) scale Measured key The result is depression [28]. 16% of older adults are depressed Reporting symptoms, this Depression in the

population Associated with character and mortality. As a result, among the elderly Depression symptoms Mitigation strategies are needed. Physical activity in this population and between depression Very accurate communication Among older people to represent Depression is needed [29]. Maladaptive cognitions in depression Trying to clarify the roles, Two types of cognition and three dignities of depression Differences between phases We create. Additionally, Existing theoretical and empirical Based on the literature, alternative or Outline competing models are displayed and evaluated [30]. Depression is a severe and Defined as prolonged depression. Recession is economic A state of decreased activity. A declining economy Action, production and Due to falling employment levels classified. Generally, an economy Two or more Following the recession for quarters While enjoying, it is It's called depression.

Anxiety Levels

Anxiety is fear, apprehension and a sense of restlessness. It makes you sweat, restlessness and tension and Causes rapid heartbeat. This May be a reaction. For example, Facing a difficult problem at work A normal for stress During, before or after a trial Before you make an important decision can worry For you to deal with Let's help. Worry gives you energy Can give Or assist consciousness. But for human beings with anxiety problems, Fear is not brief, both Could be extra. Anxiety issues are situations wherein you're nervous, It does now not depart and over time will get worse. Signs and symptoms work performance, School work and relationships May interfere with daily activities such. Anxiety is tension, worry Thoughts and increased blood pressure Due to physical changes like An emotion that is categorized. For those with anxiety disorders Usually repetitive intrusive thoughts Or have concerns. They are worried Due to this, some situations can be avoided. They have sweating, tremors, dizziness or such as a rapid heartbeat Physical symptoms may also occur. Anxiety is not the same as fear. But they are often mutually exclusive are used interchangeably. concern is on a widespread threat A broadly focused future Anxiety is not the same as fear. Dependent, long-acting considered as the answer.

Stress Levels

Your stress levels are high Some physical signs of excess include Your head, chest, stomach or Pain or tension in the muscles. When you're stressed When your muscles tense up, Over time it causes headaches, monotony Headache or muscle spasms cause problems. mental stress is a feeling of emotional or physical tension. It makes you frustrated or angry or make you feel nervous From any event or thought can come Stress is a challenge Or your body's reaction to the request. In short bursts, stress As positive as it may be, it's risky Avoid or timeout While helping to meet. But mental When stress is prolonged, It can harm your health. It is short-term stress, It disappears quickly. You brake When slapped on, your When fighting with a mate or You while skiing on a steep slope You feel it. It is dangerous Helps manage situations. When you do something new or exciting It happens. One for all people At one time or another There is severe stress. It is stress that lasts for a long time. You have money problems, unhappy In marriage or at work If you have a problem May be chronic stress. Lasting for weeks or months Any stress is chronic Stress. Chronic mental You can get very used to stress, That is a problem You don't realize. To manage stress You don't find ways If so, it is health can lead to problems.

Analysis and Discussion

TABLE 1. Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.335	.332	3

Table 1 shows the Cronbach's Alpha Reliability result. The overall Cronbach's Alpha value for the model is 0.332 which indicates 30% reliability. From the literature review, the above 30% Cronbach's Alpha value model can be considered for analysis.

TABLE 2. Descriptive Statistics

	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance	Skewness	Kurtosis			
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error	
Depression Levels	21	4	1	5	65	3.10	.238	1.091	1.190	.050	.501	-.732	.972
Stress Levels	21	4	1	5	69	3.29	.220	1.007	1.014	-.318	.501	.079	.972
Anxiety Levels	21	4	1	5	70	3.33	.270	1.238	1.533	-.362	.501	-.610	.972

Table 2 shows the descriptive statistics values for analysis N, range, minimum, maximum, mean, standard deviation, Skewness, Kurtosis. Depression Levels, Stress Levels, Anxiety Levels this also using.

TABLE 3. Frequencies Statistics

Frequencies Statistics				
		Depression Le- vels	Stress Levels	Anxiety Levels
N	Valid	21	21	21
	Missing	0	0	0
Std. Error of Mean		.238	.220	.270
Median		3.00	3.00	3.00
Mode		2 ^a	3	3 ^a
Std. Deviation		1.091	1.007	1.238
Variance		1.190	1.014	1.533
Skewness		.050	-.318	-.362
Std. Error of Skewness		.501	.501	.501
Kurtosis		-.732	.079	-.610
Std. Error of Kurtosis		.972	.972	.972
Range		4	4	4
Minimum		1	1	1
Maximum		5	5	5
Percentiles	25	2.00	3.00	2.50
	50	3.00	3.00	3.00
	75	4.00	4.00	4.00
a. Multiple modes exist. The smallest value is shown				

Table 3 shows the Frequency of a particular value (f) is the number of times the value occurs in the data. The distribution of a variable is the pattern of frequencies, the set of all possible values and the frequencies associated with these values. Frequency distributions are frequency tables or depicted as illustrations. Depression Levels, Stress Levels, Anxiety Levels this also using Variance curve values are given

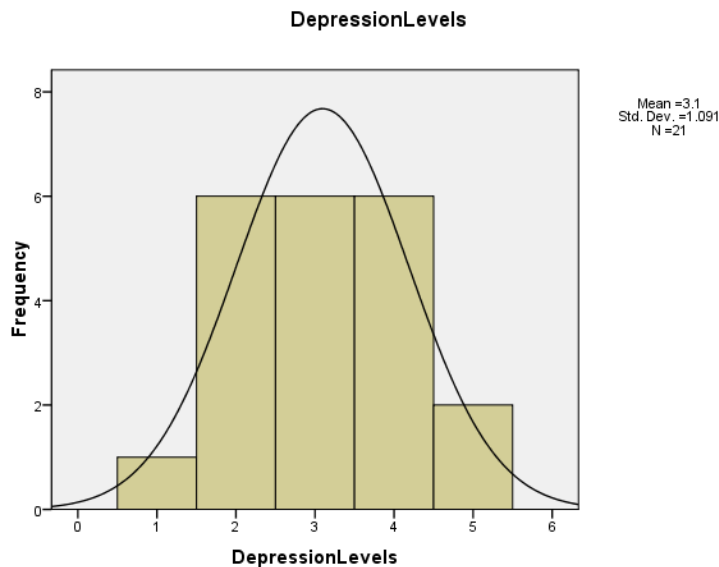


FIGURE 1. Depression Levels

Figure 1 shows the histogram plot for Depression Levels from the figure it is clearly seen that the data are slightly Left skewed due to more respondent chosen 3 for Depression Levels except the 3 value all other values are under the normal curve shows model is significantly following normal distribution

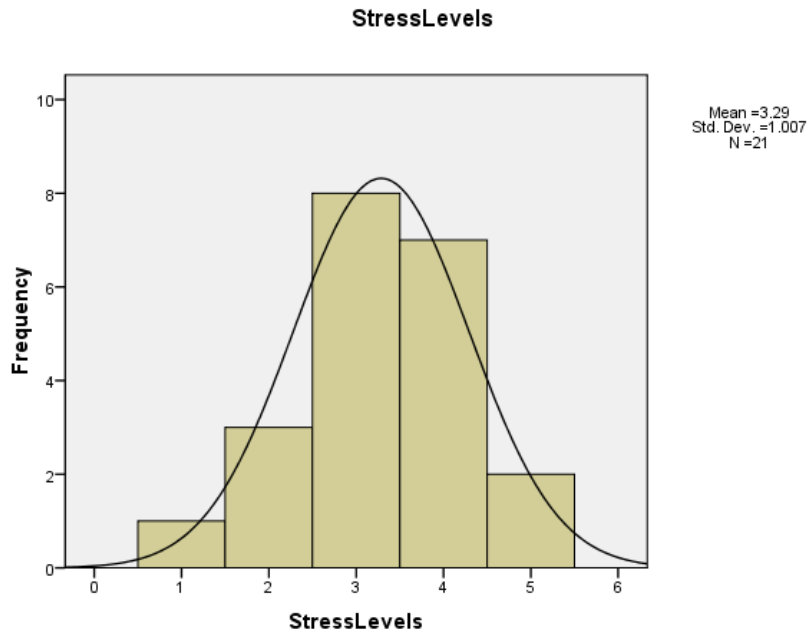


FIGURE 2.Stress Levels

Figure 2 shows the histogram plot for Stress Levels from the figure it is clearly seen that the data are slightly Left skewed due to more respondent chosen 1 for Stress Levels except the 2 value all other values are under the normal curve shows model is significantly following normal distribution

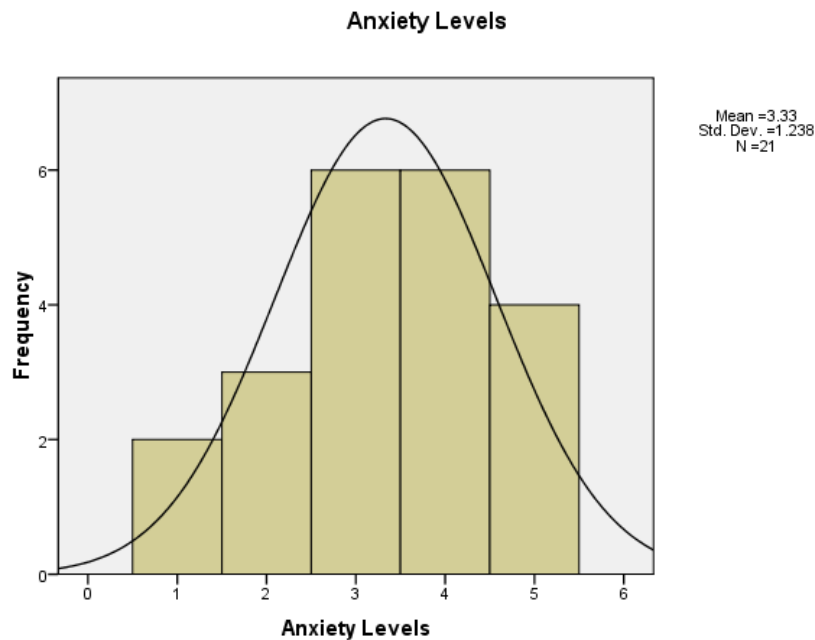


FIGURE 3.Anxiety Levels

Figure 3 shows the histogram plot for Anxiety Levels from the figure it is clearly seen that the data are slightly Left skewed due to more respondent chosen 4 for I like learning that integrates English Language education into the learning process except the 3,4 value all other values are under the normal curve shows model is significantly following normal distribution.

TABLE 4. Correlations

	Depression Levels	Stress Levels	Anxiety Levels
Depression Levels	1	.065	.160
Stress Levels	.065	1	.200
Anxiety Levels	.160	.200	1

Table 4 shows the correlation between motivation parameters for Depression Levels for Anxiety Levels is having highest correlation with and Stress Levels having the lowest correlation. Next the correlation between motivation parameters for Stress Levels for My understanding of Anxiety Levels is having highest correlation with and Depression Levels having lowest correlation. Next the correlation between motivation parameters for Anxiety Levels for My understanding of Stress Levels is having highest correlation with and Anxiety Levels having lowest correlation.

TABLE 5. Regression

Dependent Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sum of Squares	df	Mean Square	F	Sig.
Depression Levels	.043 ^a	.002	-.051	1.118	.044	1	.044	.035	.853 ^a
Stress Levels	.160 ^a	.026	-.026	1.020	.518	1	.518	.497	.489 ^a
Anxiety Levels	.246 ^a	.061	.011	1.231	1.860	1	1.860	1.227	.282 ^a

Table 5 shows the result of R, R squared, adjusted R squared, sum of squares, df, F, significance. The overall R squared value for the model is above 0.6, so this is reliable data. From the literature review, R value above 0.2 can be considered to analyze the model. The sum of squares value for the model is greater than 1.8, so this is reliability data. From the literature review, the value of squares above 1 can be considered to analyze the model. The overall F value for the model is above 1.2, so this is reliability data. From the literature review, a value above 10 can be considered to analyze the model. The overall identity value for the model is Sig. 0.2, so this is reliability data. From the literature review, a value less than 0.5 can be considered to analyze the model.

Conclusion

Based on World Health Organization (WHO) data, Depression is a mental illness is the disorder, which accounts for 280 worldwide Affects more than a million people (WHO, 2021). During the Covid-19 outbreak Anxiety of doctors, mental Stress and depression levels Research, medical and general site Examine the associated factors. Depression is severe and persistent Defined as recession. nervousness is fear, dread and restlessness sense of It makes you sweat, restlessness and tension and Causes rapid heartbeat. It is a stress reliever Could be a normal reaction. Your stress levels are high Some body to be more Symptoms: Your head, chest, stomach or pain in the muscles or tension Working in a factory Anxiety among workers and The prevalence rate for depression is around 18- The study found that 36%. Large scale studies, Ind Psychiatric conditions in the workplace It helps to understand the effect. The overall Cronbach's Alpha value for the version is 0.332 which indicates 30% reliability. From the literature review, the above 30% Cronbach's Alpha value model can be considered for analysis.

References

- [1]. Akman, B., F. N. Özdemir, S. Sezer, H. Miçoçkadioğlu, and M. Haberal. "Depression levels before and after renal transplantation." In *Transplantation proceedings*, vol. 36, no. 1, pp. 111-113. Elsevier, 2004.
- [2]. Chan, Moon Fai, Engle Angela Chan, Esther Mok, and Fionca Yuk Kwan Tse. "Effect of music on depression levels and physiological responses in community-based older adults." *International Journal of Mental Health Nursing* 18, no. 4 (2009): 285-294.
- [3]. Frommberger, Ulrich H., Joachim Bauer, Peter Haselbauer, Andrea Fräulin, Dieter Riemann, and Mathias Berger. "Interleukin-6-(IL-6) plasma levels in depression and schizophrenia: comparison between the acute state and after remission." *European archives of psychiatry and clinical neuroscience* 247, no. 4 (1997): 228-233.
- [4]. Mykletun, Arnstein, OttarBjerkset, Martin Prince, Michael Dewey, and Robert Stewart. "Levels of anxiety and depression as predictors of mortality: the HUNT study." *The British Journal of Psychiatry* 195, no. 2 (2009): 118-125.
- [5]. Elbay, RümeyyaYeni, Ayşe Kurtulmuş, SelimArpacioğlu, and EmrahKaradere. "Depression, anxiety, stress levels of physicians and associated factors in Covid-19 pandemics." *Psychiatry research* 290 (2020): 113130.
- [6]. Angold, Adrian, E. J. Costello, A. Erkanli, and C. M. Worthman. "Pubertal changes in hormone levels and depression in girls." *Psychological medicine* 29, no. 5 (1999): 1043-1053.
- [7]. Esposito, Maria, Beatrice Gallai, Michele Roccella, Rosa Marotta, Francesco Lavano, Serena Marianna Lavano, Giovanni Mazzotta et al. "Anxiety and depression levels in prepubertal obese children: a case-control study." *Neuropsychiatric disease and treatment* (2014).
- [8]. Dahl, Johan, Heidi Ormstad, Hans Christian D. Aass, Ulrik Fredrik Malt, Lil TräskmanBendz, LeivSandvik, Lena Brundin, and Ole A. Andreassen. "The plasma levels of various cytokines are increased during ongoing depression and are reduced to normal levels after recovery." *Psychoneuroendocrinology* 45 (2014): 77-86.

- [9]. Karakoyun-Celik, Omur, IlknurGorken, SemaSahin, EsmahanOrcin, HilmiAlanyali, and MunirKinay. "Depression and anxiety levels in woman under follow-up for breast cancer: relationship to coping with cancer and quality of life." *Medical oncology* 27, no. 1 (2010): 108-113.
- [10]. Levine, Joseph, Y. Barak, K. N. R. Chengappa, A. Rapoport, M. Rebey, and V. Barak. "Cerebrospinal cytokine levels in patients with acute depression." *Neuropsychobiology* 40, no. 4 (1999): 171-176.
- [11]. Wium-Andersen, Marie Kim, David DynnesØrsted, SuneFallgaard Nielsen, and BørgeGrønneNordestgaard. "Elevated C-reactive protein levels, psychological distress, and depression in 73 131 individuals." *JAMA psychiatry* 70, no. 2 (2013): 176-184.
- [12]. Özdin, Selçuk, and ŞükriyeBayrakÖzdin. "Levels and predictors of anxiety, depression and health anxiety during COVID-19 pandemic in Turkish society: The importance of gender." *International Journal of Social Psychiatry* 66, no. 5 (2020): 504-511.
- [13]. Mueller, Timothy I., and Andrew C. Leon. "Recovery, chronicity, and levels of psychopathology in major depression." *Psychiatric Clinics of North America* 19, no. 1 (1996): 85-102.
- [14]. Le Roux, Marieanna C., and Rene Kemp. "Effect of a companion dog on depression and anxiety levels of elderly residents in a long-term care facility." *Psychogeriatrics* 9, no. 1 (2009): 23-26.
- [15]. Hammen, Constance, Arlene Mayol, Robert DeMayo, and Terry Marks. "Initial symptom levels and the life-event-depression relationship." *Journal of Abnormal Psychology* 95, no. 2 (1986): 114.
- [16]. May, Heidi T., Tami L. Bair, Donald L. Lappé, Jeffrey L. Anderson, Benjamin D. Horne, John F. Carlquist, and Joseph B. Muhlestein. "Association of vitamin D levels with incident depression among a general cardiovascular population." *American heart journal* 159, no. 6 (2010): 1037-1043.
- [17]. Li, You-Jie, Mei Xu, Zong-Hua Gao, Ya-Qi Wang, Zhen Yue, Yan-Xia Zhang, Xin-Xin Li, Can Zhang, Shu-Yang Xie, and Ping-Yu Wang. "Alterations of serum levels of BDNF-related miRNAs in patients with depression." *PLoS one* 8, no. 5 (2013): e63648.
- [18]. Wolkowitz, Owen M., Jessica Wolf, Wendy Shelly, Rebecca Rosser, Heather M. Burke, George K. Lerner, Victor I. Reus, J. Craig Nelson, Elissa S. Epel, and Synthia H. Mellon. "Serum BDNF levels before treatment predict SSRI response in depression." *Progress in Neuro-Psychopharmacology and Biological Psychiatry* 35, no. 7 (2011): 1623-1630.
- [19]. Michael, Albert, Alison Jenaway, Eugene S. Paykel, and Joe Herbert. "Altered salivary dehydroepiandrosterone levels in major depression in adults." *Biological psychiatry* 48, no. 10 (2000): 989-995.
- [20]. Osimo, Emanuele Felice, Luke James Baxter, Glyn Lewis, Peter B. Jones, and Golam M. Khandaker. "Prevalence of low-grade inflammation in depression: a systematic review and meta-analysis of CRP levels." *Psychological medicine* 49, no. 12 (2019): 1958-1970.
- [21]. Luceño-Moreno, Lourdes, Beatriz Talavera-Velasco, Yolanda García-Albuerne, and Jesús Martín-García. "Symptoms of posttraumatic stress, anxiety, depression, levels of resilience and burnout in Spanish health personnel during the COVID-19 pandemic." *International journal of environmental research and public health* 17, no. 15 (2020): 5514.
- [22]. Ross, Catherine E., and John Mirowsky. "Explaining the social patterns of depression: control and problem solving--or support and talking?." *Journal of health and social behavior* (1989): 206-219.
- [23]. Jorm, Anthony F., Kathleen M. Griffiths, Helen Christensen, Ruth A. Parslow, and Brian Rogers. "Actions taken to cope with depression at different levels of severity: a community survey." *Psychological medicine* 34, no. 2 (2004): 293-299.
- [24]. Sanchez, Ana Isabel, G. U. A. L. B. E. R. T. O. BUELA-CASAL, Maria Paz Bermudez, and F. R. A. N. C. I. S. C. O. CASAS-MALDONADO. "The effects of continuous positive air pressure treatment on anxiety and depression levels in apnea patients." *Psychiatry and clinical neurosciences* 55, no. 6 (2001): 641-646.
- [25]. Hankin, Benjamin L. "Future directions in vulnerability to depression among youth: Integrating risk factors and processes across multiple levels of analysis." *Future Work in Clinical Child and Adolescent Psychology* (2018): 155-178.
- [26]. Cowen, P. J., M. Parry-Billings, and E. A. Newsholme. "Decreased plasma tryptophan levels in major depression." *Journal of affective disorders* 16, no. 1 (1989): 27-31.
- [27]. Jacka, F. N., J. A. Pasco, L. J. Williams, E. R. Leslie, Seetal Dodd, G. C. Nicholson, M. A. Kotowicz, and Michael Berk. "Lower levels of physical activity in childhood associated with adult depression." *Journal of science and medicine in sport* 14, no. 3 (2011): 222-226.
- [28]. Avis, Nancy E., S. Crawford, R. Stellato, and C. Longcope. "Longitudinal study of hormone levels and depression among women transitioning through menopause." *Climacteric* 4, no. 3 (2001): 243-249.
- [29]. Loprinzi, Paul D. "Objectively measured light and moderate-to-vigorous physical activity is associated with lower depression levels among older US adults." *Aging & mental health* 17, no. 7 (2013): 801-805.
- [30]. Kwon, Seok-Man, and Tian PS Oei. "The roles of two levels of cognitions in the development, maintenance, and treatment of depression." *Clinical Psychology Review* 14, no. 5 (1994): 331-358.