Studying Disparities in Depression across Genders

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ABSTRACT:

The study 'Studying Disparities in Depression across Genders' aims to assess depression levels experienced by males and females across two age groups-adolescents [13-19] and young adults [20-30]. Data collected via Google Forms from a sample of 120 individuals, and SPSS was utilized to conduct t-tests. The results indicated no statistically significant difference in depression levels between male and female.

Consequently, the study concludes that no significant disparity in depression levels on the individuals, the research was conducted on.

Keywords: Cognitive Patterns, Diagnostic Tool, Depression Assessment, Self- Report Questionnaire.

I. Introduction*:*

The self-report tool Beck's Depression Inventory is conducted on individuals to gauge the severity of depression on the age of 13 years and older. The famous Psychologist Aaron T. Beck created it in the 1960s.

The 21-item BDI measures mood, pessimism, guilt sentiments, social disengagement, and somatic symptoms, among other characteristics of depression. People select the statement that most accurately sums up their experiences during the previous two weeks from a list of statements presented by each item. The intensity of the symptom is then indicated by assigning a score to each response on a range of 0-3. The higher scores conclude high depressive symptoms. The overall scores can vary from 0-63.. The BDI is widely used in clinical practice to aid in diagnosing depression, treatment planning, and monitoring the progress of individuals with depression. It also serves as a valuable tool to explore the effectiveness of interventions. However, it's important to remember that the BDI is a self-report measure and should not be clinical evaluation conducted by a qualified mental health professional. In clinical practice, the BDI is frequently utilized to help with depression diagnosis, therapy planning, and tracking the advancement of depressed patients. It's also a useful instrument for studies looking into the efficacy of interventions and the connection between depression and other Psychological aspects.

This research says the BDI works best when combined with a thorough clinical assessment carried out by a licensed mental health practition. *[Psychiatry Investig, National Library of Medicine, 2017]*

II. Review Literature*:*

1. Brinc-Claussen et al:

The Collabri model, that is a collaborative care [CC] approach, was established to address depression in Danish general practice, aiming to improve symptoms. This model integrates two detection techniques, highlighting the importance of systematic patient identification. Despite the prevalence of depression and its impact on the economy and human resources, CC has yet to be implemented in Denmark.

[*Brinck Claussen, 2017*]

2. Stefica Miksic et al:

Postpartum depression typically emerges between the second and sixth week post-delivery, with breastfeeding identified as a protective factor. This essay examines nursing's impact on child development, postpartum depression, and anxiety. Data from 209 pregnant women, 197in the postpartum period, and 160at three months post-delivery were collected using the Edinburgh Postpartum Depression Scale [EPDS], Beck's Anxiety Inventory [BAI], and Beck's Depression Inventory [BDI].

*[*Mikšić, Š, 2020 *]*

3. Kekäläinen et al:

This research intent to investigate the impact on the training program that is of nine-month duration of the sense of coherence and depressive symptoms among aged individuals, while comparing different training frequencies. A total of 106 participants aged 65 to 75 those was subsequently allotted to 4 groups- RT1, RT2, RT3, with a control group that is untrained. All coaching groups engaged in twice-weekly supervised resistance training for three months, followed by maintenance coaching at various frequencies [one, two, or three times per week] for the next six months. Psychological functioning was assessed using WHOQOL-Bref, Antonovysky's SOC13, and BDI II at baseline, three months, with nine months.

[Kekäläinen, *2018]*

4. Biracyaza et al:

Depression in prevalent among cancer patients, underscoring the need for effective screening and treatment. Despite the widespread use of depression screening tools, such as the BDI-II, research evaluating its psychometric analysis in cancer patients from developing nations is limited. They conducted a cross-sectional study with 425cancer patients at the Butaro Ambulatory Cancer Center [BACC] in Rwanda to assess the BDI-II's psychometric qualities.

[*Biracyaza, 2021*]

5. G Olsson et al:

The study of secondary school students aged sixteen to seventeen in a Swedish town was conducted. Beck's Depression Inventory showed strong reliability and the relationship between individual item scores and total scores was examined, revealing that a diagnostic interview confirmed depressive diagnoses in 73% of those with high scores and 13% of those with low scores. The questionnaire demonstrated greater efficacy among girls, who exhibited higher mean scores and higher rates of moderate depression compared to boys (14.2% vs. 4.8%). Girls reported experiencing more frequent and severe symptoms, including feelings of failure, guilt, self-dislike, feeling unattractive, and suicidal ideation, with 20% reporting suicidal ideation, whereas boys reported suicidal ideation less frequently [*Ollson, 1997*]

6. Madia M Biasi et al:

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[*Biasi*, 2023]

7. Clarence K Zhang et al:

In this study, we examined how depression and disease activity affect the health-related quality of life of 105 patients diagnosed with either Crohn's disease or ulcerative colitis. Disease activity was determined through specific indices, while depressive symptoms were measured using Beck's Depression Inventory-II and Beck Depression Inventory for Primary Care [BDI-PC]. The Short Inflammatory Bowel Disease Questionnaire was utilized to assess HR-QOL. Regression analyses were performed to investigate the association between quality of life scores and different demographic and clinical factors.

[*Zhang*, 2013]

8. Angelina Pelzer et al:

This research examined whether medical students demonstrate higher depression scores upon entering medical school or if the demands of medical education contribute to depressive symptoms. During the winter semester of 2018/2019, 148 medical students at a German university filled out a questionnaire at the beginning (TO) and end (T1) of their first semester. This questionnaire evaluated different factors related to initial depressive symptoms and their development, with severity measured using Beck's Depression Inventory (BDI-II). Additionally, a section of the NEO-FFI questionnaire explored the personality trait of neuroticism.

[*Pelzer, 2022*]

9. Melike Elif Teker Acikel:

This clinical research seeks to evaluate the levels of depression and anxiety among patients undergoing coronary artery bypass graft (CABG) surgery, both before and after the procedure. Sixty-five patients diagnosed with coronary artery disease and awaiting CABG surgery were enrolled in this prospective study. The study utilized Beck's Depression Inventory (BDI) and Beck's Anxiety Inventory (BAI) tests to assess symptoms of anxiety and depression, recognizing their importance in evaluating these conditions within this specific patient group.

[*Açıkel, 2019*]

10. Ansa Talvikki Rantanen et al:

The objective of this study was to investigate the correlation between awareness of hypertension and depressive symptoms, along with identifying factors that might predispose individuals with hypertension to such symptoms. This cross-sectional study was carried out within a primary care population

residing in two semi-rural towns in Finland. The survey involved 2,676 middle-aged individuals who did not have diagnosed cardiovascular or renal disease or type 2 diabetes. Findings indicated that 47.9% of participants had been diagnosed with hypertension, with 34.5% of them being previously unaware of their condition.

[*Rantanen, 2018*]

11. Esther W Kariuki et al:

This cross-sectional research conducted to conclude postnatal depression [PND] susceptibility among 567 mothers engaging in Lang'ataand Riruta Maternal and Child Health Clinics in Nairobi's slum areas. PND prevalence was 27.1%. Factors associated with higher odds of PND included being aged 18-24, dissatisfaction with body image, unplanned pregnancy, and fatigue.

[Kariuki, *2022*]

12. Rocio Fausor et al:

This research investigated how personality traits relate to depression by combining the Big Five personality model and Beck's cognitive theory. The study involved 221 Spanish adults who completed assessments such as the Revised NEO Personality Inventory, Dysfunctional Attitude Scale, and Beck Depression Inventory. The results of multiple linear regression analyses revealed that only the depression facet of personality was significantly associated with depressive symptoms. The study underscores the significance of considering third variables to prevent misleading correlations.

[*Fausor, 2022*]

13. Raquel Mateos-Fernandez et al:

The pilot study investigated the effectiveness of an art-based intervention for undocumented immigrants with psychosocial disorders in southern Spain. Eleven participants were assessed using various questionnaires ante and post intervention, alongside qualitative content analysis interviews. Results showed a significant decrease in depressive symptoms, with a notable increase in reflexive discourse and sense of belonging. The study indicates that the intervention effectively reduced depressive symptoms and stress while promoting a positive outlook and community cohesion.

[Mateos, 2022]

14. Sared Ariapooran et al:

This study in Malayer city, Iran, surveyed 315nurses from different hospital departments during the COVID-19 outbreak to assess Secondary Traumatic Stress [STS] prevalence and its association with depression, anxiety, and Suicidal Ideation [SI], Results showed 51.11% of nurses experienced STS symptoms, particularly in specific departments. Nurses with STS symptoms had significantly higher scores in depression, anxiety, and SI compared to those without. The study highlights the need to address STS symptoms among nurses during the pandemic to safeguard their mental health.

[Ariapooran, 2022]

15. Tina Ramineni et al:

This research investigates how peripheral nerve stimulation (PNS) influences the quality of life, particularly focusing on its effects on depression and disability among individuals with chronic pain. Patients receiving permanent PNS implants filled out five established questionnaires to evaluate depression symptoms, daily functional abilities, and pain intensity. Data were gathered at three time points: baseline, six months, and one year. Analysis involved repeated measures ANOVA and bivariate analysis to examine alterations in functioning levels across the study period.

[*Ramineni, 2016*]

16. Kaveh Qaderi Bagajan:

This research evaluated the reliability and validity of the Persian adaptation of the Children's Depression Inventory (CDI) in a group of 480 Iranian adolescents aged 12-18. Findings indicated strong internal consistency (Cronbach's alpha=0.907) and satisfactory construct validity, as evidenced by the CDI accounting for 50.11% of the variability observed. Negative correlations were observed between CDI scores and social skills, and positive correlations with BDI-II responses. Overall, the Persian CDI version demonstrated sufficient reliability and validity, suggesting its utility for early depression screening in adolescents.

[*Qaderi, 2022*]

17. Tihitina Sisay:

This research conducted at the University of Gondar Specialized Hospital in Ethiopia aimed to determine the prevalence of depression and anxiety among 379 stable adult clients with cardiovascular disease. Data were gathered using structured questionnaires, and statistical analyses were performed using SPSS version 21, with a significance level set at $p<0.5$. The results showed that 61.6% of patients experienced anxiety, while 53.51% were affected by depression. These findings emphasize the significance of recognizing and managing psychosocial factors in cardiovascular disease patients to enhance the quality of care provided.

[*Sisay, 2024*]

18. Kiran Kumar Ganji:

The study assessed stress levels during the COVID-19 pandemic among 217students and faculty members at Jouf University, Saudi Arabia. Participants completed a web-based survey including BAI and BDI between April 1, 2020, and June 30, 2020. Results revealed that individuals aged 20-30, Saudi nationals, females, those in lockdown for over three months, and students reported the highest levels of moderate anxiety.

[*Ganji, 2022]*

19. Marko Elovanio:

This study examined the reliability and validity of three Psychological assessment tools: the GHQ-12, BDI-6. And MHI-5. Analyzing data from 4270adults, the study found acceptable construct validity and internal consistency for all instruments, though BDI-6 item scoring was suboptimal. Minimal gender differences were observed in optimal cut-off points. However, all scales had weak sensitivity and specificity in predicting cognitive healthiness service use, and ML did not improve model predictions. Overall, while these scales quantify different aspects of cognition stability, they aren't strong foretellers of service utilization.

[*Elovanio, 2020]*

20. Marei Salama-Younes:

The analysis is doomed to assess the developing style and internally stilled of the GHQ-12 and the Subjective Vitality Scale [VS] in aged foreign individuals, and to examine their relationship. Both instruments were translated into French using a standard procedure and completed by 217 adults aged 58-72 years. Internal consistency was satisfactory for both the GHQ-12 [Cronbach's alpha=0.78] and the VS [Cronbach's alpha-0.83]. Confirmatory factor analysis [CFA] was used to extract factor structures, and correlation analysis assessed the relationship between the two scales.

[*Salama-Younes M, 2009*]

III. Methodology*:*

1. Objective- To analyze the level of depression between male and female of the age group from 13-30.

2. Hypothesis-

H0- There is no significant difference in level of depression between males and females.

H1- There is a notable difference in level of depression between males and females.

3. Variables-

Dependent Variable- Depression.

Independent Variable- Age and gender.

Extraneous Variable- Socioeconomic status and cultural background**.**

4. Criteria-

Inclusion- Male and female, age group from 13-30 as adolescents and young adults.

Exclusion- Religion, race and third gender.

	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Score	.743	.390	.115	118	.909	.25000	2.17	-4.05160	4.55160
			.115	115.196	.909	.25000	2.17	-4.05268	4.55268

5. Sample-

Sample- Conducted on two genders male and female on the age groups from age range of 13-19 as adolescents and 20-30 as young adults irrespective of the genders.

Sample Size- 120 people.

Sample Technique- Convenience Sampling Technique.

6. Tools of Study-

The Beck's Depression Inventory Questionnaire.

7. Administration-

Introduction and Explanation.

Informed Consent and Instructions.

Scoring and time frame and providing the BDI form.

Answering the items and Answer Clarification.

Completion and Collection

Table*:*

Group Statistics

	Gender	n	Mean	Std. Deviation	Std. Error Mean
Score	Male	60	14.23	10.93	1.41
	Female	60	12.79	12.79	1.65

IV. Results and Discussions*:*

Results-

The t- test analysis comparing depression scores between male and female participants revealed no statistically significant difference in depression levels (t(118)=0.115, p= 0.909). The mean depression score for female participants was 13.98 (SD=12.79).

Discussions-

The findings of this study suggest that there is no significant gender difference in depression levels among the participants. Despite slight variations in mean depression scores between male and female participants, these differences were not statistically significant. This study proves the hypothesis 1 that connotes no significant difference in the level of depression between male and female.

While mean depression scores were slightly higher for females compared to males, the difference lacked statistical significance. This contradicts previous research showing higher depression rates among females. However, interpretation should consider the specific sample and population size.

V. Conclusion*:*

In conclusion, the results of this study suggest that there is no significance difference in depression levels between male and female participants in the studied population. While previous research has often highlighted gender disparities in depression, the findings of this study do not support such distinctions within this particular sample. Furthermore, hypothesis 1 is proved, no significant difference in the level of depression found between male and female.

VI. Scope of Study*:*

The study finds underscore the importance for considering sample size and population homogeneity when examining gender differences in depression. Cultural, social, and individual factors may influence symptom expression, challenging traditional gender-based assumptions. This suggests a need for tailored mental health interventions addressing individual needs rather than solely focusing on gender disparities. Future research should explore the multifaceted influences of biology, psychology, and socio-cultural factors on depression across genders.

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