

Depression and Socioeconomic Status in West Virginians

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The purpose of the current study was to determine the relationship between depression and socioeconomic status in West Virginians. A survey was posted to various social media accounts as well as a classroom forum and data was collected from thirty-three individuals who were permanent residents of West Virginia. A variation of the Depression Test gathered from Mental Health America was used in the study with added questions regarding socioeconomic status and descriptive questions, both of which were summed individually and compared using SPSS. Researchers hypothesized that higher depression rates would be associated with lower socioeconomic status. A Pearson correlation analysis revealed that depression and socioeconomic status in West Virginians was negatively correlated. Future researchers can use the current study as a basis for their research in order to determine if there are other factors that could be associated with depression in West Virginians.

Introduction

A significant amount of research has been published regarding the relationship between depression and socioeconomic status in West Virginia. This study was able to find data on depression being a factor of socioeconomic status in West Virginia as well as data on other possible risk factors. Muntaner and Barnett found that forty-two percent of participants who made less than \$15,000 annually showed symptoms of depression². In 2017, Gallup and Sharecare found that West Virginia residents reported the lowest levels of well-being out of the fifty states for the ninth year in a row and there seems to be no signs of improvement³. When researchers Hendryx and Innes-Wimsatt looked specifically at coal mining to see if there was a correlation, they found that participants that lived near mountaintop removal mining had higher depressive states⁴. This relationship is problematic considering the prevalence of mines, including mountaintop removal mining areas, within West Virginia. Several studies have concluded that low education and marital status (widowed or divorced) played a role in the depressive symptoms and substance abuse displayed in West Virginians^{2, 4, 5}. It is important to note that West Virginia is

currently in the middle of an opioid epidemic and it currently leads the nation in drug overdoses; 52.8 per 100,000 people overdose in West Virginia and die as a result⁶.

Two studies that were examined explained the significance of socioeconomic status on depression. Muntaner and Barnett showed a correlation between those who make less than \$15,000 a year². Post et al. found that younger, less educated women (less likely to have good paying jobs) were more likely to be depressed⁷. These studies suggest that when examining factors that cause depression, a lower average salary and lower education levels seem to have a significant effect.

In the current study, the researchers examined the correlation between depression and socioeconomic status in permanent West Virginia residents. How depression is affected by socioeconomic status in West Virginians is an important question to psychologists studying depression in the state, because so little is known about the subject in this specific demographic. Thus, further research is needed. The purpose of the current study was to fill this gap in the literature. A self-report survey created through Survio was used to determine how participants judged their socioeconomic status, and questions were

summed regarding depression rates to determine if the scores were correlated. Researchers for this study hypothesized that lower socioeconomic status would be related to higher depression rates.

Methods

Participants

A convenience sample was taken of 33 people. There were originally 42 participants but 9 were dropped from the study due to not having a permanent residence in West Virginia. Those who qualified participated via an online survey which they accessed from the social media accounts of one of the researchers (Facebook, Twitter, Snapchat, and Google Classroom). The sample consisted of participants who were still in high school or had dropped out (7.1%), participants who graduated high school (11.9%), participants who had attended or completed some college (73.8%), and participants who had graduated college (7.1%). The sample consisted of 11.9% of participants who have a household income of less than \$15,000, 19% of participants who make between \$16,000 and \$29,000, 11.9% of participants who make between \$30,000 and \$49,000, 9.5% of participants who make between \$50,000 and \$69,000, 14.3% of participants who make between \$70,000 and \$89,000, 9.5% of participants who make between \$90,000 and 119,999, and 23.8% of participants who make over \$120,000. Participants were recruited from friends, family, and classmates who saw the survey on the social media platforms.

Materials

Participants were given a five to ten minute survey (appendix A) assessing West Virginia residency and questions derived from the depression test such as, "I have little interest or pleasure in doing things¹." Questions related to socioeconomic status were also included, e.g., "What is your annual household income?" Participants with a household income below

\$49,000 were considered low socioeconomic status, \$50,000 to \$69,000 were considered the median group, and participants with a household income of over \$70,000 were considered high socioeconomic status.

In order to assess depression, questions four through thirteen were coded 0-3: "not at all" being 0, "several days" being 1, "more than half of days" being 2, and "nearly every day" being 3, which allowed for a minimum score of 0 and a maximum score of 30. The last question on household income was coded on a scale of 1-7 in order to determine socioeconomic status: less than \$15,000 being 1, \$16,000 - \$29,000 being 2, \$30,000 - \$49,000 being 3, \$50,000 - \$69,000 being 4, \$70,000 - \$89,000 being 5, \$90,000 - \$119,999 being 6, and anything over \$120,000 being 7.

Design and Procedure

Participants accessed the survey link via one of the four social media platforms it was posted to (Facebook, Twitter, Snapchat, Google Classroom). After following the link, participants were prompted by a screen informing them that the survey would take 5-10 minutes. Participants had the ability to exit the browser and end the study if they desired. After completing the survey, participants were given the national suicide hotline phone number and directions on how to text the suicide hotline if they were feeling depressed. Each participant was given an ID number which had no meaning and could not be traced back to them.

Data Analysis

Data analysis was performed using SPSS software for statistical analysis. A Pearson correlation analysis was conducted with an alpha level of 0.05 to determine the relationship between socioeconomic status and depression.

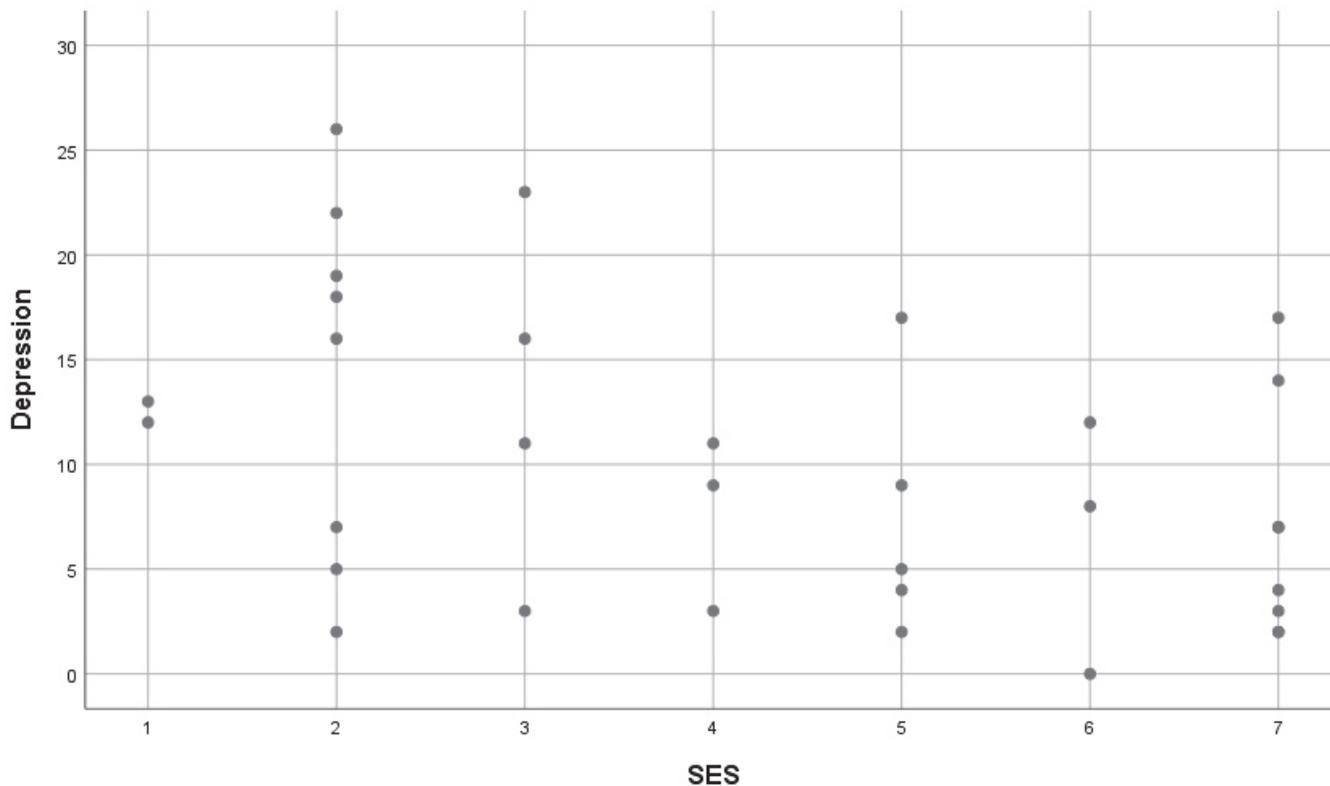


Figure 1. Depression scores as a function of socioeconomic status.

Results

Participants with higher socioeconomic status scores ($M = 4.27$, $SD = 2.096$) had much lower depression scores ($SD = 7.748$) than participants with lower socioeconomic status scores who had higher depression scores ($M = 9.97$, $SD = 7.020$). Figure 1 shows the negative correlation between socioeconomic status and depression. The Pearson correlation indicated that participants with lower socioeconomic scores ($M = 4.27$, $SD = 2.096$) had higher depression scores ($SD = 7.748$) and did have significantly lower depression scores than students with higher socioeconomic scores, $r = -0.412$, $p < 0.05$.

Discussion

This study was conducted to assess the relationship between socioeconomic status and depression. Researchers hypothesized that participants with a lower socioeconomic status would have higher depression rates and that those with a higher socioeconomic status

would have lower depression rates. After conducting correlation analyses, researchers found that there was in fact a negative correlation between depression and socioeconomic status, supporting the proposed hypothesis. This data found in the current study reiterates what was found in Muntaner and Barnett's work, which found that people who made less than \$15,000 a year were 42% more likely to be depressed than those who made more money annually².

Limitations

The first limitation researchers encountered was the amount of time given to conduct the study. Most research studies take a half a year or more to collect data in order to come up with a large, testable sample size, while this study had less than a week to collect data. Another limitation was lack of participants, as the study only included 33 people, making it difficult to determine if there is a real correlation or if there is a 'friend group bias' due to the survey only being sent out on social media.

Additionally, participants were not tested in a laboratory setting and could take the survey anywhere. This makes it difficult to know if participants were just submitting answers or if they actually took the survey seriously and answered truthfully. Participants could have been distracted by other people, sounds, cell phones, or anything going on in the space that researchers could have prohibited in the laboratory. Future research should include reverse coded questions in order to know whether or not participants were truthful in their answers.

Researchers are also unsure of whether or not participants lived at home or alone, as this factor could dramatically increase or decrease the number indicated for socioeconomic status. To fix this problem, researchers could add further details to the question about socioeconomic status, asking if participants live with their parents or not and what their own financial situation is.

Implications

Current and future researchers will be able to use the data collected from the current study to provide more background on depression in West Virginia. Due to the fact that this study was a replication of Muntaner & Barnett's study, both studies could be used as groundwork for anyone wanting to find more information on the topic. By finding a relationship between depression and socioeconomic status, the findings of the current study help give perspective to mental health specialists and researchers in the state. Knowing how socioeconomic status can positively or negatively affect mental health will help clinical psychologists when they are dealing with a client from a lower socioeconomic status.

Future Directions

Future research should devise a more thorough measure to determine socioeconomic status. While asking participants about their household income was a good way to

determine socioeconomic status, researchers are unsure if participants with higher socioeconomic status and higher depression scores are contributing their income to that of their parents rather than their own. Research suggests that factors like smoking and education play a role in socioeconomic status; future researchers could incorporate these other factors into their research to find more significant correlations⁷.

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Competing Interests

The author declares no competing interests.

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Appendix A

Depression and SES in West Virginia

Dear Sir / Madam,

Thank you for participating in my survey, please note that you will remain completely anonymous. By filling out this 5-10 minute survey, you will help me obtain information for a research study.

1. Do you have a permanent residence in West Virginia?

Yes

No

2. How long have you lived in West Virginia?

1-5 years

6-10 years

11-15 years

16+ years

I do not/have never lived in West Virginia

3. Do you feel depressed?

Yes

No

4. I have little interest or pleasure in doing things

Not at all

Several days

More than half of days

Nearly every day

5. I feel down, depressed, or hopeless

Not at all

Several days

More than half of days

Nearly every day

6. I have trouble falling or staying asleep, or sleeping too much

Not at all

Several days

More than half of days

Nearly every day

7. I feel tired or have little energy

Not at all

Several days

More than half of days

Nearly every day

8. I have a poor appetite -- not eating enough or overeating
Not at all
Several days
More than half of days
Nearly every day
9. I feel bad about myself -- or feel that I am a failure or have let myself or family down
Not at all
Several days
More than half of days
Nearly every day
10. I have trouble concentrating on things, such as reading or watching television
Not at all
Several days
More than half of days
Nearly every day
11. I am moving or speaking so slowly that other people could have noticed (or the opposite -- I am so fidgety or restless that other people could have noticed)
Not at all
Several days
More than half of days
Nearly every day
12. I have thoughts that I would be better off dead, or have thought of hurting myself
Not at all
Several days
More than half of days
Nearly every day
13. If you have checked off any problem, how difficult have these problems made it for you at school, work, home, or with other people
Not at all
Several days
More than half of days
Nearly every day
14. What is your highest level of education
Middle school
Some high school
High school
Some college
College
College graduate

15. Do you work

No

Casual

Part time

Full time

16. Are you a current or former smoker

No

Former

Current

17. What is your annual household income

<\$15,000

\$16,000-\$29,000

\$30,000-\$49,000

\$50,000-\$69,000

\$70,000-\$89,000

\$90,000-\$119,999

\$120,000 or more

If you're feeling depressed or are in need of someone to talk to, please call 1-800-273-8255
OR text HOME to 741741.

Thank you for participating in my survey.