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Investigating the Impact of Socio-economic Factors on Mental Health: Income, Employment, and Social Support

Sicheng Nie[1,a,*]

[1]*International School of Nanshan Shenzhen, Shenzhen, 518073, China*
a. gordnie2024@163.com
**corresponding author*

Abstract: Mental health is a complex issue influenced by a variety of circumstances, including economic issues like income, work, and social support. The purpose of this article is to look into the impact of economic factors on mental health outcomes, namely income, employment, and social support. The paper begins with an introduction to the topic, followed by a review of the available literature on the association between economic circumstances and mental health outcomes. The section on research gaps emphasizes the need for additional study on the long-term consequences of economic recession on people with mental health problems, as well as the influence of changes in individual and household income on mental health and well-being outcomes. The approach used to study the impact of economic factors on mental health, including the use of multiple regression models, is then described in the paper. Finally, the report provides the study's findings and examines their implications for mental health policy and practice.

Keywords: mental health outcomes, socio-economic factors, economic recession, mental health policy.

1. Introduction

In today's fast-changing world, mental health has risen to the top of the list of societal concerns. Understanding the delicate connection between economic conditions and mental health is critical. This research investigates the tremendous impact of economics on mental health, focusing on income, employment, and social support. This investigation is significant beyond academia; it speaks to the heart of our society. Mental health is no longer an afterthought but a fundamental obligation of a caring society. Mental health is a serious problem that affects individuals, families, and communities all around the world. Income, work, and social support have all been found to have a major impact on mental health outcomes [1]. The purpose of this article is to investigate the impact of economic factors on mental health outcomes, namely income, employment, and social support. These socio-economic factors are more than just numbers; they constitute the bedrock of psychological well-being [2]. This research conducts a thorough literature analysis to uncover the link between economic determinants and mental health outcomes, emphasizing the importance of understanding the long-term consequences of economic recession on those dealing with mental health issues. Furthermore, using advanced statistical models, the dynamic impact of changes in individual and household income on mental health and well-being outcomes is studied. Finally, the findings are given, and their

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implications for the creation of mental health policy are examined to shape a more resilient, empathic, and supportive society in an era when mental health concerns define our collective human experience.

2. Literature Review

Existing research indicates a clear relationship between social and economic inequality and poor mental health [3]. Income disparity is associated with a higher frequency of mental illness [4]. Despite this, psychiatric and psychological approaches have dominated mental health research and policy, masking the underlying socioeconomic factors [5]. However, research gaps remain, emphasizing the need for additional research on the long-term consequences of economic hardship on people with mental health disorders. additional crucially, additional research is needed to determine the impact of changes in individual and household income, employment, and social support, three of the most prevalent socioeconomic determinants [6], on mental health and well-being outcomes.

3. Research Gap

Existing research indicates a clear relationship between social and economic inequality and poor mental health outcomes [3]. Similarly, during times of financial crisis, mental stress and psychological strain can have a major impact [7]. More research on the long-term consequences of economic recession on people with mental health disorders is needed, however. More study on the influence of changes in individual and household income on mental health and wellbeing outcomes is also required [4]. The absence of study on the impact of social support on mental health outcomes in the setting of economic issues is the primary gap in the available literature. This research seeks to fill that vacuum by investigating the impact of economic determinants on mental health outcomes, such as income, employment, and social support. This study can encourage intelligent ideas and suggestions for establishing effective strategies in managing mental health problems by identifying the most important socioeconomic component.

4. Methodology

Three regression models will be built to evaluate the impact of economic circumstances on mental health, with mental health score as the dependent variable and income, employment, and social support as independent variables. To create a representative sample of the population, data will be gathered from various trustworthy sources, including Statistica, the US Census Bureau, the Bureau of Labour Statistics, and the OECD database. To assure the relevance of this paper, all relevant data sets from the most recent five years, between 2017 and 2021, are collected. To assess the data from the three socioeconomic components and their relationship to the number of mental treatment cases, regression models will be developed. The findings will be analyzed to discover the link between economic factors and mental health outcomes. Based on these quantitative data, an analysis will be performed to discover which component has the most impact on mental health outcomes. This paper's methodology will provide a more thorough and holistic knowledge of the impact of economic determinants on mental health outcomes, which can drive policies and interventions aimed at improving mental health.

5. Results & Analysis

The first figure below shows the total number of mental health treatment cases over the years. However, this paper will only focus on the most recent five years, from 2017 to 2021.

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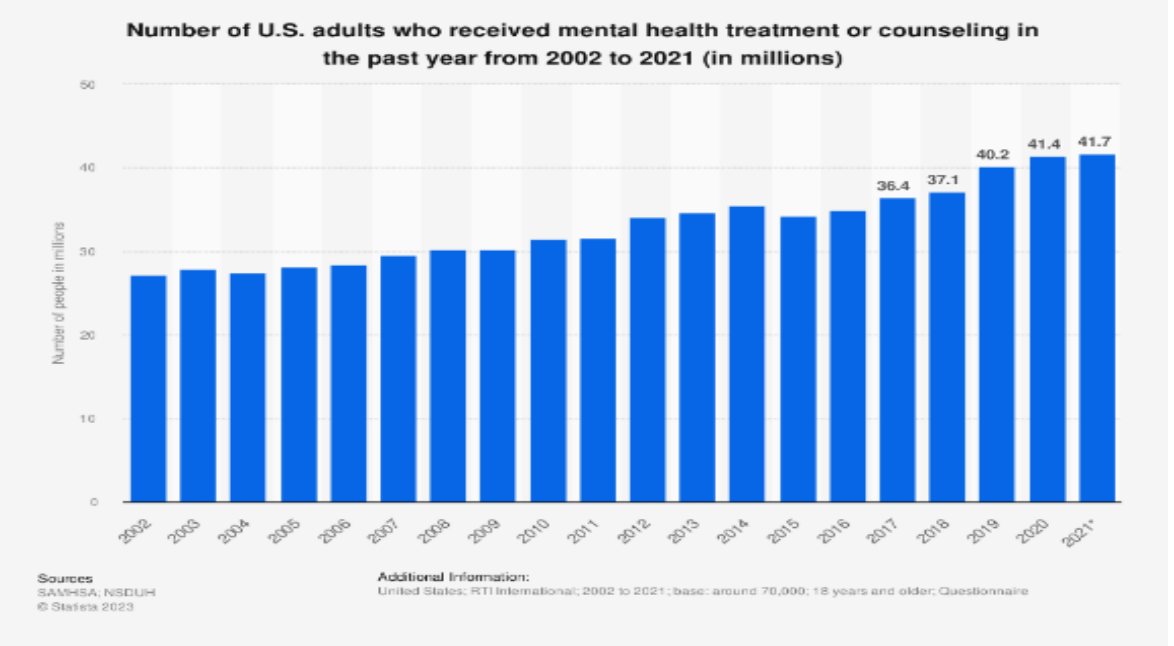

Figure 1: Annual Mental Health Treatment Number from 2002 to 2021 [8].

According to Figure 1, the reported number of mental health treatment numbers has generally increased. There is a modest increase from 2018 to 2019 between 2017 and 2021. According to a Southern New Hampshire University publication, Serious mental health problems can impact relationships, professions, educational pursuits, and long-term goals. As the global rate of mental disease continues to climb, addressing these issues as they arise can have a significant impact on one's life, potentially modifying or preserving it [9].

5.1. Factor 1 – Income

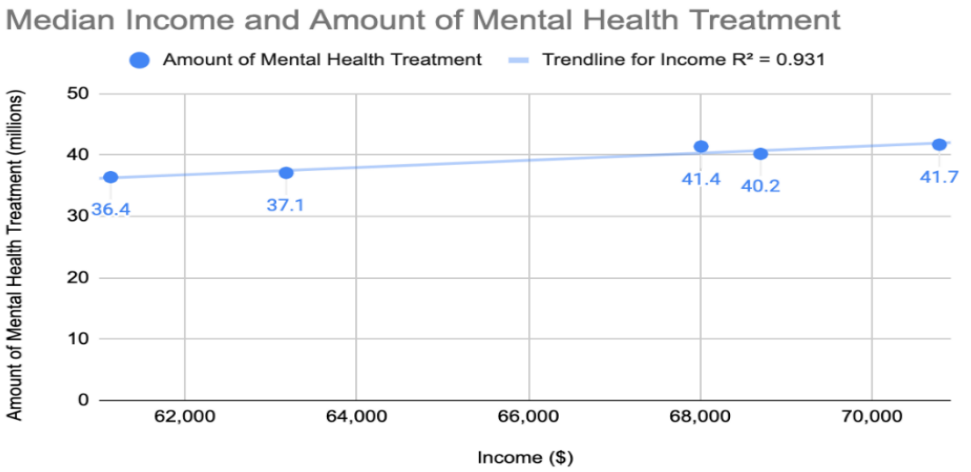

Figure 2: Correlation of Median Income and Amount of Mental Health Treatment [10].

Figure 2 depicts a correlation study between median income and the amount of mental health care received from 2017 to 2021, providing insight into the relationship between these two factors. The independent variable, median income, is displayed along the horizontal x-axis, with values for the respective years of $61,136, $63,179, $68,070, $68,010, and $70,784. The dependent variable, the

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amount of mental health treatment, is shown on the vertical y-axis in millions, with values for the corresponding years of 36.4, 37.1, 40.2, 41.4, and 41.7.

This figure instantly demonstrates the substantial positive association. There is a definite upward trend in the amount of mental health therapy sought or supplied as median income rises. This implies a considerable association between income and mental health care, with higher median salaries for greater use of mental health services. The consistent rise in both median income and the amount of mental health treatment over the five years is a striking feature of this data. This steady rising trend suggests that when people's incomes rise, they are more likely to seek or get mental health therapy. However, because the relationship revealed is a straight proportionality between the variables, policies to raise income levels will not reduce the severity of the mental health problem [11]. According to the regression model, increasing income levels may contribute to higher mental health problems. However, it is critical to evaluate potential extrinsic factors that may impact this relationship. While this graph gives useful information, it does not establish causation. Other factors, such as changes in healthcare policies, increased mental health awareness, or external stressors such as economic recessions or the COVID-19 pandemic, may have influenced these trends, as the pandemic may have put a large population under much pressure and stress [12]. While there is a high association, more research is needed to demonstrate causality and investigate the underlying mechanisms.

The R^2 value of 0.931 is an important statistic that validates the magnitude of the association seen in the picture. An R^2 value close to 1.0 suggests that changes in median income may explain 93.1% of the variation in the quantity of mental health treatment. Because of the strong R^2 value, median income is an effective predictor of the quantity of mental health care sought or given. This suggests that changes in income levels significantly impact mental health treatment utilization, highlighting the importance of economic considerations in mental health outcomes. Finally, Figure 2 shows a substantial positive association between median income and the quantity of mental health care received, implying that as earnings rise, so does the use of mental health services. While other factors may impact this association, the high R^2 value emphasizes the significance of income in predicting mental health treatment habits. This analysis emphasizes the need for policies and initiatives that address income disparities to enhance mental health outcomes and treatment access [13].

5.2. Factor 2 – Employment

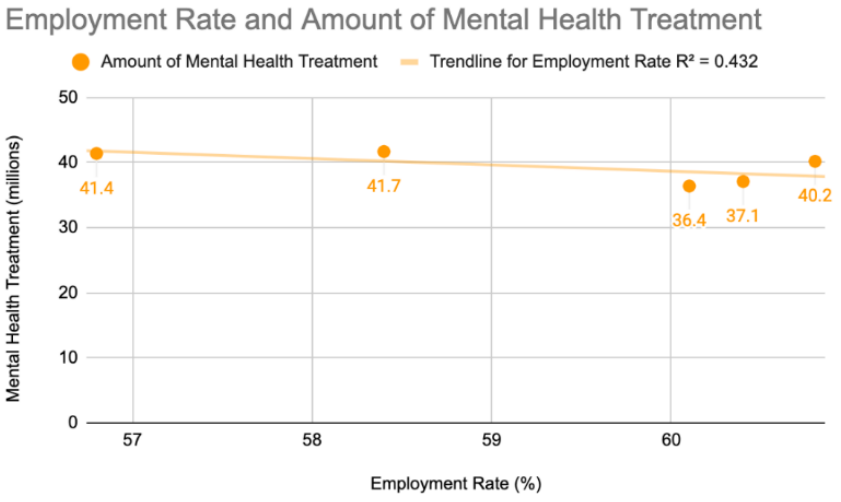

Figure 3: Correlation of Employment Rate and Amount of Mental Health Treatment [14].

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Figure 3 depicts a correlation analysis of the employment rate and the quantity of mental health treatment received in the United States from 2017 to 2021. The independent variable, the employment rate (measured as a population percentage), is displayed on the horizontal x-axis, with values for the various years of 60.1%, 60.4%, 60.8%, 56.8%, and 58.4%. The dependent variable, the amount of mental health therapy (measured in millions), is depicted on the vertical y-axis, with values for the corresponding years of 36.4, 37.1, 40.2, 41.4, and 41.7.

Figure 3 shows a less prominent association between median income and mental health care, unlike the strong positive correlation seen in Figure 2. The data points appear dispersed, demonstrating a weaker link between employment and mental health treatment than income and employment. As the employment rate fluctuates, the amount of mental health treatment sought or delivered becomes less predictable. This implies that, while employment rate may have some influence, it does not strongly predict mental health treatment utilization.

The drop in the employment rate recorded from 2017 to 2021 is one notable element of this statistic. The employment rate in 2017 was 60.1%, progressively growing to 60.8% in 2019 before plummeting to 56.8% in 2020, owing to the economic impact of the COVID-19 pandemic [15]. In 2021, the employment rate will have rebounded to 58.4%. However, these changes in employment do not appear to be directly related to changes in the amount of mental health care, which has continued to climb over the same period. This shows that other variables, such as increasing mental health awareness or legislative changes, may affect higher mental health treatment utilization. As a result, the overall employment rate may be regarded as a less influential socioeconomic determinant of the amount of mental health treatment compared to income.

Compared to Figure 2, the R^2 value 0.432 suggests a weaker association. With an R^2 value of 0.432, fluctuations in the employment rate explain just 43.2% of the variation in the quantity of mental health treatment. This lower R^2 value shows that, as compared to median income, employment rate is a less efficient predictor of mental health treatment patterns. Finally, Figure 3 shows a smaller association between employment rate and amount of mental health therapy than Figure 2. While there is some influence, the association is weaker, and the data points appear dispersed. Changes in the employment rate do not directly correlate with changes in mental health treatment, implying that other factors are likely at work. The lower R^2 value supports the notion that employment rate alone is not a reliable predictor of mental health treatment utilization [16]. More research would be required to identify the other elements contributing to the rise in mental health care over time.

5.3. Factor 3 - Social Support

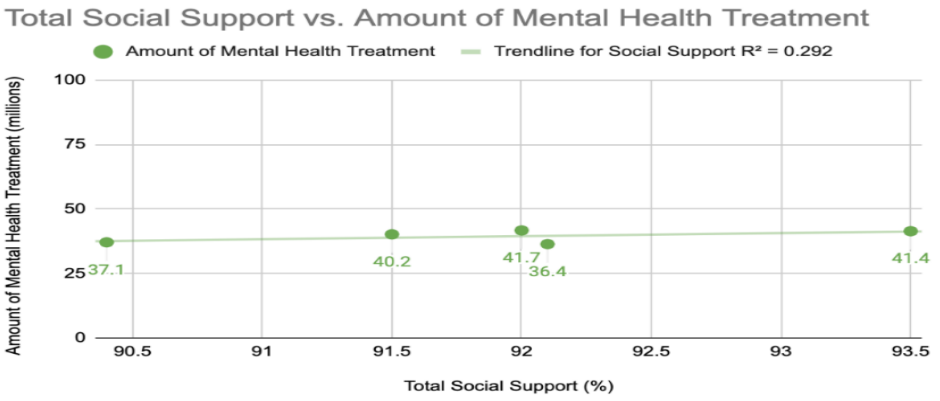

Figure 4: Correlation of Social Support and Amount of Mental Health Treatment [17].

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Figure 4 depicts a correlation analysis between the percentage of social support and the amount of mental health treatment received in the United States from 2017 to 2021, where social support refers to the percentage of people who report having friends or relatives on whom they can rely in times of trouble. The independent variable, the percentage of social support (the proportion of people who report having friends or family they can rely on in times of trouble), is shown on the horizontal x-axis, with values for the five years of 92.1%, 90.4%, 91.5%, 93.5%, and 92%. The dependent variable, the amount of mental health therapy (measured in millions), is depicted on the vertical y-axis, with values for the corresponding years of 36.4, 37.1, 40.2, 41.4, and 41.7.

Figure 4 shows no clear association between the percentage of social support and the amount of mental health therapy. In contrast to the patterns exhibited in Figures 2 and 3, the data points in this section do not show a continuous rising or decreasing trend. The dots are dispersed throughout the graph, demonstrating that changes in the percentage of social support do not appear to have a direct impact on the quantity of mental health treatment sought or supplied. As a result, there is no obvious relationship between social support and mental health.

One important finding is that the percentage of social support has remained consistent over the last five years, fluctuating within a tight range (90.4% to 93.5%). Despite this constancy, the overall amount of mental health treatment has increased over the same period, implying that factors other than social support may drive the need for mental health care. Again, given that the population has been slowly recovering from the COVID-19 epidemic in recent years, there may be many difficulties in detecting a relationship between social support and mental health because of this condition [18].

The R^2 value of 0.432 suggests a modest association, consistent with the data in Figure 3. This number shows that changes in the percentage of social support can account for just 43.2% of the variation in the quantity of mental health therapy. This low R^2 value shows that in this setting, social support is not a strong predictor of mental health treatment practices.

Finally, Figure 4 shows a weak and erratic relationship between the percentage of social support and the amount of mental health therapy. Even though social support percentages have remained stable, these percentages do not appear to be directly related to changes in mental health treatment utilization. In this study, the low R^2 value validates the assumption that social support is not a significant driver of mental health treatment patterns. Income, employment, and external stressors, for example, may have a greater impact on mental health service consumption [19]. To better understand the dynamics of mental health treatment demand, further study is needed to investigate these aspects and their interplay.

6. Implications

The examination of three key socioeconomic variables in relation to the quantity of mental health treatment—median income, employment rate, and social support percentage—has revealed vital insights into the complex interplay between economic determinants and mental health outcomes. These implications offer useful assistance for the development of policies targeted at effectively addressing mental health issues.

6.1. Income and Mental Health

Figure 2 revealed a strong positive relationship between median income and the amount of mental health therapy received. It was clear that as income levels climbed from 2017 to 2021, so did the use of mental health services. The high R^2 value of 0.931 emphasized the importance of money as a reliable predictor of mental health treatment habits.

The message is clear: income has a significant impact on access to mental health services. As a result, measures focused on increasing income and decreasing income disparity can be very

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successful in addressing mental health difficulties. Priority should be given to initiatives such as raising the minimum wage, improving access to education and job training, and promoting economic opportunities in underserved neighborhoods. Individuals are more likely to afford and obtain mental health services if their income improves, lessening mental health difficulties.

6.2. Employment Rate and Mental Health

Figure 3 demonstrated a weaker and less convincing relationship between the employment rate and the amount of mental health therapy. Changes in employment rates did not correspond to changes in mental health service consumption. The lower R^2 value of 0.432 suggested that the employment rate alone cannot predict mental health treatment patterns.

While employment is undoubtedly important for financial stability and overall well-being, it may not be as strongly related to mental health service consumption as income. As a result, strategies focused only on increasing work possibilities should be supplemented by other measures to successfully address mental health concerns [20]. A holistic strategy should include mental health education, stigma reduction, increased awareness, and the provision of accessible and inexpensive mental health treatments.

6.3. Social Support Percentage and Mental Health

Figure 4 shows a sporadic and weak relationship between the percentage of social support and the amount of mental health therapy. Changes in social support percentages did not appear to directly impact mental health service utilization. The low R^2 value of 0.432 suggested that the percentage of social support is not a reliable predictor of mental health treatment patterns. While social support is important for overall well-being, it may not have a direct impact on mental health service consumption. As a result, strategies that focus solely on providing social support may fail to effectively treat mental health difficulties [21]. A holistic strategy that considers the complex and linked nature of mental health should be used instead.

6.4. Comprehensive Policies and Ongoing Research

To summarize, while money is a significant determinant of mental health service consumption, it should not be considered in isolation. A comprehensive approach to mental health policy is required. Income-boosting policies should be complemented by comprehensive mental health services and a detailed grasp of mental health's varied nature [22]. External issues such as economic recessions, pandemics, and societal stressors must be considered by policymakers [23,24].

Investment in mental health infrastructure, such as telemedicine programs, crisis hotlines, and community mental health centers, is critical. Furthermore, policy decisions should be guided by ongoing research and evaluation of the relationship between socioeconomic determinants and mental health care consumption. Long-term research can provide a better grasp of the changing dynamics. Policymakers may make considerable steps in effectively addressing mental health concerns and increasing the general well-being of their populations by addressing these socioeconomic aspects and encouraging mental health awareness and accessibility.

7. Conclusion

The assessment of income, employment rate, and proportion of social support in relation to mental health treatment highlights the complexities of tackling mental health concerns [25,26]. As seen in Figure 2, income is a strong predictor, with measures aimed at increasing income levels and lowering inequality being critical. However, as shown in Figure 3, the employment rate is less directly related

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to mental health service consumption. It should be viewed as one component of a larger mental health plan, demanding a comprehensive approach that includes mental health education, stigma reduction, and easily available treatments [27]. Figure 4 shows that while social support is important, it has little direct impact on mental health service consumption. Effective policies necessitate a diverse strategy that includes income increase, job possibilities, social support strengthening, mental health education, and awareness [28]. The way forward entails ongoing examination and modification of methods based on research and data. Striking a balance among these socioeconomic elements in mental health policy is critical for tackling mental health concerns and improving well-being while recognizing the issue's complexity.

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