Determining How the Mental Health of a Nation Influences its Economic Prosperity

Adrián Serrano¹ and Johnny Lopez²

¹Commonwealth-Parkville School, Puerto Rico
²Advisor

ABSTRACT

The purpose of this investigation is to analyze the relationship between the general mental health of a population and how it can affect the economy of that population's nation. With the severity of mental health being more and more acknowledged in today's world, it is crucial to understand how mental diseases can affect economies in order to properly guide laws and healthcare on the mental health. Through a rigorous electronic search, a total of 10 articles were analyzed closely to investigate this relationship. After weeks of analysis, this study found that there is a considerable influence that the mental health of people can have on their economy, regardless of its size. It is stressed that decision-makers acknowledge the importance of mental health in affecting economies, and act accordingly to provide a better outcome for everyone.

Introduction

As of the writing of this paper, the world is going through a widespread pandemic. But this pandemic is very different from any other experienced by previous generations. Previous diseases to become this widespread normally had origins from external forces like viruses or bacteria. This is a unique kind of condition never truly addressed by humanity. This time, it is a problem in our minds. According to the World Health Organization, 1 in every 8 people are currently living with mental disorders around the world, which is around 970 million people around the world. That is around 11.41% of the global population. These illnesses range from depression and anxiety to Schizophrenia and bipolar disorder, among many, many others. For a long time, these diseases were not properly treated, leading to misguided diagnoses and mistreatment. Luckily, there has been a wider global awareness brought to the importance of mental health, and a variety of countries are pushing towards a healthier lifestyle for their people.

But with all of these issues, one must wonder: how does the mental health of a population affect its nation's economy? Does a negative mental state for the majority of citizens affect productivity or employment rates? And if the impact on the economy is negative, what can both policymakers and the average citizen do to lighten the burden of mental health disease on the world? This study aims to answer these questions, to prove that mental health issues do harm the economy of countries, through the analysis of other sources from like-minded individuals.

Research Question

How does the mental health of a population affect its nation's economy?

Does a negative mental state for the majority of citizens affect productivity or employment rates?

And if the impact on the economy is negative, what can both policymakers and the average citizen do to lighten the burden of mental health disease on the world?
Literature Review

The Power of Mental Health, and its Impact on Economies

After extensive study, the impact stated here can be considered true since this study strives to demonstrate how poor mental health affects a population's productivity and economy while offering suggestions for how the general public and policymakers may collaborate to address mental health issues. The investigation looks into different elements of the subject. First, mental diseases and their financial impact are clearly displayed across the globe. Then, practical alternatives are presented, along with arguments for their underutilization. We explore the effects of undertreatment, the outcomes of prevention, and the study's implications for the social sciences. Eventually, the conclusion explains that mental health seriously impacts a nation's finances. Recognizing mental health as a factor in every situation and enhancing it could be one of the most essential steps forward in the twenty-first century. The following article elucidates this fact by indicating that:

William Beveridge identified as the main problems of society five great giants which needed to be slain: they were poverty, unemployment, poor education, bad housing and disease. But there is still widespread misery - and what surveys we have of happiness and misery suggest things have changed little since Beveridge wrote. So, what did he and his fellow reformers miss? They overlooked the human factor - the problems that come from inside ourselves (and not mainly from externals). It is because of the human factor that, despite unparalleled prosperity and mostly high employment, we now observe more family conflict, less trust and more crime, than when Beveridge wrote. (Layard, 2013)

All the summarized information within this source backs up the current hypothesis. It strongly suggests that mental health is a factor concerning economics. Not only that, but it also suggests how we can solve these problems through cost-effective treatments. However, as with any source, it is recommended that one applies skepticism here. The researchers only searched for information through other sources, and while the graphs and statistics shown are strong evidence, alternative investigations that performed actual experimental trials should serve as primary sources. Still, the source is a good collection of data that can help serve as background information to be a launch point for other sources. And it sets an example for conducting investigations like this for inexperienced investigators in the field.

The Institutions or the Community: The Deinstitutionalization of Mental Health Services and its Effects

As stated, for years now multiple countries have begun a process of deinstitutionalizing their mental health care systems. That is why the study's goal is to provide evidence on the economic effects of deinstitutionalizing mental health services in the three countries under consideration (the United Kingdom, Germany, and Italy), as well as whether community-based services are more cost-effective and of higher quality than large institutions. Working on behalf of the European Commission, the researchers initially investigated numerous sources before identifying four key issues that needed to be addressed for the investigation to be regarded as successful. They also spoke with subject matter experts to uncover sources that almost went overlooked after an electronic search. As a result of this technique, they learned a lot. First and foremost, the treatment's location had little impact on
the national economy. Second, regardless of where patients receive treatment, the expenditure and economic consequences are felt more because of the quality of care. This was found after extensive investigation into the subject. The following article elucidates this fact by indicating that:

The evidence reviewed here suggests a number of evidence-based pointers to success. In a good care system, the costs of supporting dependent people are usually high wherever those people live. Policymakers must not expect costs to be low in community settings, even if the institutional services they are intended to replace appear to be relatively inexpensive. Potential economies of scale in large-scale institutions are complicated by the question of service quality; low-cost institutional services are almost always delivering low-quality care. (Knapp et al, 2010)

The presented information is paramount for the advancement of this investigation because of various reasons. Firstly, it provides possible solutions to the problems which might stem from low-quality mental care. Secondly, it serves as a more specific look at mental care in certain countries. While the UK, Germany, and Italy are not the whole world, they are still a good base to make some inferences about the rest of the world, or at least of the European continent. It is a verifiable source since it talks with experts and uses controlled search methods. However, it has a big problem in how it centers on people in institutions who do not directly contribute to the economy. But other than that, it supplies a good idea of the costs and treatments necessary to help these people.

**The Burden of Noncommunicable Diseases and Mental Health Issues on the Economies of Costa Rica, Jamaica, and Peru**

When talking about mental Noncommunicable diseases (NCDs), one must clarify that mental issues are a form of NCD, since they are not transmissible. They are an important research topic, which is why the goal of this study is to examine the macroeconomic impact of mental health disorders and other non-communicable diseases (NCDs) on the economies of three nations (Costa Rica, Jamaica, and Peru). As previously stated, the source investigated using the WHO's EPIC model, specifically the EPIC-H variation for acquiring more precise data. The researchers eventually changed this model into what is referred to as the EPIC-H Plus model extension. This model had the advantage of including more data. Using this method, they calculated the overall GDP lost by these countries due to NCDs and mental health concerns, which was more than expected. Knowing this, the investigation determined the spending on mental health that these countries were required to make. They concluded from these findings that the conditions had a substantial impact on an economy's production. The following article elucidates this fact by indicating that: “These results indicate that the economic impact of NCDs and mental health conditions i substantial and that interventions to reduce the prevalence of chronic conditions in countries of Latin America and the Caribbean are likely to be highly cost-beneficial.”(Bloom et al, 2018)

The data that is extrapolated from this source, and its pertinence to this investigation, is that it provides accurate statistics of how mental health and other diseases affect economies. At first glance, one might not think this source contributes much to the investigation. It constantly mentions conditions like diabetes, cancer, and cardiovascular disease, and does not focus solely on the mental side of the argument. Yet it still helps considerably for the described purposes. Mental health conditions are technically NCDs since they are not transmissible. And while it provides a more general view into how all chronic illnesses affect economies, it still gives a good idea of what happens when mental health issues are prevalent in society. Plus, they might be more relevant to the research than once thought. The study was conducted in countries in Latin America and the Caribbean, so it might have more relation to Puerto Rico, this investigation's study area, than once thought.

**Analyzing the Current State of Economics and Mental Health**
The current state of mental health in the world is a very complex topic to analyze, and even more so to find relationships connecting it to economic outputs. To elucidate this connection in other articles, the purpose of this study is to investigate the current challenges involved with using economic data to enhance a population’s mental health, as well as proposed answers to these concerns, while also providing a basic overview of the mental health situation of different populations. The study begins by discussing the strong relationship between the economy and mental health and then reviews the various approaches taken by independent studies to investigate this relationship. They then look into how the current mental conditions of two different populations affect key financial elements. First, they address mothers’ mental health before and after pregnancy, as well as the costs of treating depression in some cases. They then look at issues in child and adolescent mental health, as well as the effects of various mental diseases like sorrow and worry. Finally, they consider the aging population, which is plagued by dementia and depression, among other things, as well as the cost of interventions for them in addition to other treatments:

Some economic effects of mental illness and treatment may be missed. Mental illness may interfere with an individual’s ability to complete his/her education, participate in family life, or be fully productive in the workplace. It may impact, as just noted, on the health and wealth of family members and unpaid carers. Although less “visible” in some sense, these effects may nevertheless be pivotal in shaping lives and generating well-being. The challenge is to ensure that economic evaluations measure these wider impacts (i.e., take a societal perspective), and (especially) that users of evaluation findings take these impacts into account in decision-making. (Knapp et al., 2020)

This study is of incredible importance to this investigation for two simple reasons. First, it analyzes the potential challenges with how research is conducted on the area of relating mental health to economics. It explains how it is hard to convince decision-makers of the benefits of interventions and investing in treatments when the benefits are mainly in the long-term, while policymakers are thinking in the short term. This, alongside other reasons, explains why treatments are harder to come by for mental health issues in different populations. Secondly, and arguably more importantly, the article provides responses to these challenges. For example, some of the suggestions presented are to build up the evidence base, having separate medical professionals coordinate to offer the best treatment since many people with mental disorders also have some other medical problems and to make sure every person is accounted for, regardless of their socioeconomic status. These responses are essential to find resolutions that can improve minds and economies.

The Importance of Mental Health to Financial Outcomes: Why Employers Should Take Care of their Employee’s Minds

Most of the contributions a person makes to the economy is through their work, and if they are in a faulty mental state, this affects their productivity. So, it is pertinent to consider that the purpose of this research is to look into the financial and productivity effects of depression and similar illnesses in the workplace, as well as to assist employers with solutions to potential productivity barriers presented by the condition. The source reflected on a variety of labor data as well as despair. It cited the HERO (Health Enhancement Research Organization) study, which found that depressed employees were 70% more expensive than non-depressed staff, as well as other alarming stress data. The purpose of the article was to examine this impact on the workplace and to identify effective remedies that firms could utilize to decrease expenses while avoiding the necessity to fire these depressed workers as a claimed expensive liability. They looked through numerous materials to discover how depression and other mental problems are as detrimental as heart disease and cancer. Fortunately, numerous treatment options are available, such as better assistance programs and depression education, as well as therapy, and they have been shown to reduce sick days taken by employees and motivate people to work at optimum performance. However, they acknowledge the difficulties in making these treatments more widely available, ranging from a stigma attached to therapy and the risk of being labeled as a "mental patient" (as
described in the paper on page 7) for doing so, to a lack of trust in the health-care system as a result of previous shortcomings. The study finds that depression is a significant determinant in employee productivity and that appropriate treatment of it and similar diseases is required to maximize their job to optimal performance:

A new type of employee, often referred to as a "knowledge worker," now exists. This employee needs to be creative, flexible, innovative, and team-oriented and can respond to business challenges such as increased global competition, reduced cycle time for product development, increased reliance on technology, the need to deal effectively with information overload, and figuring out how to do more with less. These are all highly developed cognitive and psychosocial skills very different from the types of physical skills and aptitudes required of workers only a few decades ago. How can organizations increase the productive output of workers? Some, very simply, require employees to put in longer hours. But intensive work output cannot be sustained over the long-term. Faced with these new job challenges, some workers may feel uncomfortable about their new job demands; this stressor may leave employees at greater risk for depression. They may worry about their job tenure. They may have a sense of being left out there with little organizational support. Their loyalty to their jobs may founder. They may experience detachment, depersonalization, and diminished motivation to perform at peak performance. (Goetzel et al., 2002)

The prevalence of this source for this investigation is in the fact that it takes a deep dive into one of the most common mental illnesses in the world: depression. One in every five Americans suffers from depression, so providing an insight into this specific condition is helpful.

Furthermore, they study specifically the workplace, which is an important detail. It's normally in these workplaces where most of the money going into the economy comes from, so having an understanding of this environment helps with any conclusion about mental health's influence on the economy. The other benefit of specifically studying workspaces is that the source provides a clearer picture of how the problems and solutions regarding this topic work. From the source, we can acquire information on the thought process of both employers and employees in their decisions on the treatments offered for depression in the office. Also, the research provides several possible solutions to help depressed, anxious, or stressed-out workers, such as regular screening for these conditions, teaching them skills to manage their stress, and offering therapy from appropriate health professionals; regardless, all resolutions to mental illness are of course appreciated.

Mental Illness Stigma and How it Changes Economic Aspects

Of course, mental health stigma is a very real thing, which can limit the opportunities of work for people with these kinds of conditions, and in turn diminish their economic output. To further examine the limiting factors in the way of employees with mental health disorders, the goal of this source is to look into the economic consequences of ignoring mental health and avoiding effective treatment for mental diseases. The source searched several electronic databases, including PsycINFO, EMBASE, and MEDLINE. They discovered 30 publications out of 27 research that fulfilled their criteria using these databases and some hand-searching of reference lists. The study discovered, through the analysis of separate surveys, that the general public opinion is that most people would prefer to find more healthcare funding for physical ailments than for psychological ailments; however, this is not always the case when the people surveyed are familiar with these illnesses. Another finding includes how companies frequently had negative perceptions of potential candidates who might be receiving psychiatric care, resulting in only 3% of managers being prepared to hire a former mental patient. Similar stigmas and discrimination were discovered among the staff. Eventually, it was shown that mental health stigma and discrimination against individuals with diseases such as depression and schizophrenia induce a decline in hiring for organizations, ultimately resulting in lower economic output and a worse financial situation for afflicted personnel: "Given that attitudes towards vulnerable groups have been shown to affect policymakers' allocation of funds for programs to help them (Skitka & Tetlock, 1992; 1993) it is clear. that if
individuals hold stigmatized views of individuals with mental illness, they may be less likely to prefer giving funds to them and more likely to prefer coercive treatments. (Sharac, 2010)"

The importance of this source concerning this investigation is that it focuses on the economic consequences of mental illness stigma on the average people. The source explains the thought process of the employers and the reasons they might not recruit someone they know who has a history of mental health problems, ranging from doubting they can handle their positions to cultural differences, exemplified by how it elucidated that employers from Beijing or Hong Kong were more reluctant to hire because the culture in the area promotes discrimination of people with mental health. Sadly, this has eventually led to most employers surveyed communicating that they would be open to allowing mentally disabled patients to work in theory but in practice would rarely accept them. Similarly, the study explores the thought process and stress brought to the employees because of this discrimination. Employees with schizophrenia and similar conditions expressed a need to hide previous medical treatment for their illnesses and a reluctance to sign papers that asked for a history of psychiatric treatment. Overall, the discrimination towards people with mental disorders has noticeably affected their income. Understanding this employer-employee mental health relationship is important for this investigation so that individual changes can be made to workplaces that can benefit the livelihoods of afflicted individuals and the economy as a whole.

A Country's Mental Health and the Way it Affects its Economic Growth

The United States of America, being the current dominant global superpower, is heavily dependent on its economy for its prosperity, so if mental health issues can have a serious effect on economies, it must be taken into consideration for decision making. This is why the primary goal of the source is to investigate how the mental health of residents in diverse US counties has affected their economic productivity. The inquiry started with a look at some of the assumptions that led to the conclusion that there is a link between mental health and the economy. One of these assumptions is that happy employees are more likely to perform at their best, resulting in increased national economic output. They then went county by county, evaluating the number of poor mental health days (PMHDs) and looking for a link with each county's economic decline using a conventional economic growth model. Finally, the research discovered that PMHDs had a considerable negative influence on a county's economic output:

We estimated that the potential total economic costs, if all patients with mental illnesses had sought professional care services, would have been $484.1 billion. Many mental disorders, if not properly treated and cared, may cause more severe symptoms and more fatal and non-fatal accidents to the society [29], which further increases the economic burden. Moreover, the risk of cardiovascular disease increases in patients with mental illness, but proper treatment of mental disorders may reduce the care costs of somatic disorders [30]. Thus, the unmet needs of professional care for patients with mental disorders are inexcusable. (Xu et al., 2005-2013)

The importance of this source concerning this investigation is that it has analyzed past events in which poor mental health has negatively influenced the economy. Looking at the past gives credibility to the claims made in this investigation since the effects claimed are not just theoretical anymore. Another takeaway when regarding this source is that it utilizes real statistics of how economies have suffered due to poor mental health. Providing readers with accurate numbers of how much money was lost due to mental illness is essential for the prediction of economic outcomes when utilizing poor mental health as a factor. For example, at the time of its writing, the source claimed that it found how $100 - $170 billion are lost every year in the United States due to mental illness. This puts it among the top 10 costliest diseases for employers in the US. Such statistics are essential to look at to elucidate the burden of mental health issues on the economies of populations.

Revising Economic Evaluations of Cost-Effective Treatments of Psychiatric Disease
With the correlation established between mental health and economics, one essential question arises: how can we solve mental health issues to help the economy in a cost-effective way? To answer this, the purpose of the source was to update current research on the cost-effectiveness of mental health interventions and see if they had a positive impact on the economic position of patients of various ages. The researchers began their investigation by examining electronic databases such as MEDLIFE, PsycINFO, and CINAHL for publications on the subject published in the past 12 years (at the time of writing, of course). They found 65 relevant studies to look into, with the majority (35 studies) directed at adults. After thorough consideration, they discovered that mental health therapies were extremely cost-effective. One intriguing discovery was that specialized therapies were less expensive than their general counterparts. The general agreement was that most of the literature was accurate and provided valid cost-effective treatments:

We estimated that the potential total economic costs, if all patients with mental illnesses had sought professional care services, would have been $484.1 billion. Many mental disorders, if not properly treated and cared, may cause more severe symptoms and more fatal and non-fatal accidents to the society [29], which further increases the economic burden. Moreover, the risk of cardiovascular disease increases in patients with mental illness, but proper treatment of mental disorders may reduce the care costs of somatic disorders [30]. Thus, the unmet needs of professional care for patients with mental disorders are inexcusable. (Xu et al., 2005-2013)

The relevant data from this source outlines the fact that treatment and interventions of mental health illnesses are pertinent to the economic stability of people. Most of this investigation's sources ask the question: "How does mental illness affect the economy?". Meanwhile, this source inquires: "Do the treatments work and benefit financially?" Begging this question is urgent for decision-makers to make effective choices. Another very important point is that the study found that targeted interventions were more effective at treating the mentally impaired than generalized interventions. Such information implies that investment in the individual's mental health is a lot more pertinent when improving people's mental and financial well-being. While the study only focuses on the financial status of individuals, utilizing what we know from other sources, we can conclude that these interventions for individuals will translate to a better economic output at large.


Similarly to a previous source, China has become one of the main global superpowers in the world, with big plans for its future. However, these plans are heavily supported by their economy, and if mental illness is a significant factor in how this economy occurs, its primary decision-makers would naturally be interested in how this relationship works. To elucidate this relationship, the project sought to investigate the economic impact of mental illness in China. From 2005 to 2013, the study focused on the mental health of persons aged 18 and up in China.

It initially calculated the amount of money lost in China owing to mental illnesses. Following that, the incidence of mental illness was discovered through a national survey completed by 12% of the Chinese adult population. Finally, the source looked through two separate hospitals' databases to evaluate reports of direct medical expenditures, direct non-medical costs, and indirect costs in two separate hospitals. According to the findings, the total cost of treating mental disorders in Chinese society climbed from $21 billion in 2005 to $88 billion in 2013. According to the source, mental illnesses, both severe and moderate, impose a significant economic burden on China, and the government must implement a strategic plan to reduce the prevalence of mental illness across the country:
Regarding mental health promotion, preventive interventions for bullying have demonstrated good value for money with an ICER of KRW$131,250 (or $16,744) per QALY [35]. A parenting-after-divorce programme targeting both mothers and their children evaluated in a RCT was cost saving; it demonstrated a reduction in mental health costs and justice system service use during a follow-up time of 15 years [36]. The cost-effectiveness of other interventions could not be determined due to the absence of a willingness-to-pay threshold for clinical outcomes (e.g., behaviour scores and cases of maltreatment avoided) used in these studies [37,38]. A modelled evaluation found that a school-based intervention for prevention of cannabis use might be cost saving in the US context but not in the Swedish context [39]. A parenting programme targeting divorced women, with or without an additional child focus, was also cost saving given that it improved mental health and well-being in both parents and their children [36]. (Le, 2021)

The information presented in this source validates the fact that the economic costs of mental diseases can affect any country or population in an influential manner. China is known as one of the greatest industrial superpowers in the modern world, with more than a billion people living there. As of writing this, everyone around the globe can agree that it is one of the most influential countries acting in politics and the economy. And knowing this makes it so much more impactful that China could lose such a huge amount of money due to mental illness. Mental health proved to be 15% of the expenditures made in health care by the Chinese government, around 1.1% of its total GDP. Such estimates are not negligible and just as the paper suggested, China should adopt strategies to minimize this burden. Likewise, this study proves that other governments should also pay attention to their countries’ mental health if they expect to improve their economic situation.

Mental Health's Economic Burden on Spain

Understanding the burden mental illness might have on a nation’s economy is the crux of this investigation, and this source, through the studying of the Spanish economy, helps truly understand this crucial relationship. To explain this, the purpose of this research was to examine the direct and indirect costs of mental illness on the Spanish economy in 2002. Using a prevalence-based approach, the source first assessed the direct and indirect medical and nonmedical expenses of mental illness. This strategy did not take into consideration the loss of labor productivity caused by mortality. The researchers determined that over 2.777 million euros are spent in hospitals in Spain treating mental illness, with in-patient costs accounting for 48% of this amount. Meanwhile, the estimated cost of lost labor production due to mental illness is 2.997 million euros. 7.019 million euros were spent on mental health-related expenses in 2002. As a result, the study concluded that mental illness has a significant financial impact on the Spanish economy, which policymakers should consider:

The present study estimates the total costs of mental illness at € 7,019 million, with direct medical costs representing 39.6% of the total. Thus, the direct medical costs of mental illness represent 7.3% of total National Health System expenditure in Spain. On remaining question is why, in spite of the problems outlined above, do policy makers and the pharmaceutical industry continue to support this type of study [17]. One answer might be that government policymakers would like to know something about the economic impact of an illness. This information cannot substitute, but can complement, epidemiological data on the morbidity/mortality and disabilities caused by a disease. (Oliva-Moreno et al., 2008)

The application of the focal point of this source concerning this investigation is that it focuses on the economic side of this discussion. We get specific numbers for how the economy of Spain is affected by the prevalence of mental health issues. It is stated that up to 7.019 million euros were spent on mental treatment in 2002 and that these costs have increased from previous years. Such a fact also elucidates how mental health has had an influence on the economy for a much longer time than once thought. Another important thing this source provides is that it also provides the composition of where the most money gets spent. For example, 48% of all
direct medical costs were from in-patient costs, while 39% were from paying for the necessary drugs for treat-
ment, and 13% came from outpatient costs. Such information is pertinent for effective decision-making on
where to diminish costs in a way that does not lower quality.

Materials and Methods

The research project used a computer with an internet connection and a web browser (Google Chrome). The
Google search engine was essential for finding the necessary sources to elucidate the research issue and find
the papers required for this investigation. Although the internet connection was occasionally inconsistent, it
was sufficient to conduct all of the needed components of this investigation. Even though some sources were
not peer-reviewed, the investigation mentor updated and validated them by checking their veracity.

A documentary analysis design was used to finish this inquiry. The goal of each of the ten sources
used had to be specified to populate this research. Furthermore, it was necessary to identify the source's design
and approach, identify the intended audience, emphasize their limitations, and assess the suggestions and con-
clusions in each. A descriptive content analysis methodology was required for this investigation since an ana-
lytical component detailing the relevance of the data offered in the inquiry was developed. All these elements
together generated the ideal conditions for the project's completion.

Results

Google Scholar was the most effective search engine for the sources included in this investigation. The order
in which these sources appear in the Literature Review will determine the number given to them (e.g., first
source, second source, etc.); nevertheless, these findings will be delineated by publication date, going from the
oldest to the newest. The fifth source was published in 2002, the tenth source was published in 2008, the second
and sixth sources were published in 2010, the first source was published in 2013, and the eighth source was
published in 2016. These sources are not recent, as it has been more than six years since they were published.
Both the third and seventh sources were published in 2018, which makes them recent. The Fourth article was
published in 2020, and the ninth article was published in 2021.

The first source argued the power of mental health and its impact on economies. The second source
synthesized the deinstitutionalization of mental health services and its effects. The third source was able to
outline the burden of non-communicable diseases and mental health issues on the economies of Costa Rica,
Jamaica, and Peru. The fourth source analyzed the current state of economics and mental health. The fifth source
discussed the importance of mental health to financial outcomes. The sixth source discussed the stigma sur-
rounding mental health and how it changes economic aspects. The seventh source analyzed a country's mental
health and how it affects its economic growth. The eighth source was able to revise economic evaluations of
cost-effective treatments for psychiatric diseases. The ninth source was able to delineate the economic burden
of Chinese mental illness. Finally, the tenth source delineated the economic burden of mental health on health in Spain.

Discussion

The first source gave some limited confirmation that there is a link between mental health and economics, that
the population's mental health could affect its economic state. This was supported by the evidence provided by
the second source, which stressed how quality treatment is important by denoting little difference in outcomes from either institutional care of patients or community-based care. The scope of the problem that deficient mental health has on economies was exemplified by the third source's analysis of how psychiatric diseases and other non-transmitted illnesses have affected a variety of economies. However, to have a balanced view on the data, the fourth source explained the difficulties of studying such an abstract concept like mental health and its impact in something so concrete like the economy. Notwithstanding this information, the fifth source went deeper into the psychological aspects of individual workplaces, examining the stresses put on employees which limit their economic productivity, while the sixth source further elucidates the mental health situation of workplace environments through the analysis of the stigmas and discrimination experienced by employees suffering through these kinds of conditions. Utilizing this individualized data, we can conclude our seventh source, as it examined on a bigger scale how these conditions affect the economic output of US counties. Generally, this study pointed out how higher numbers of mental health issues have decreased the economic output of the counties where these numbers have been found.

Knowing the actual scale of mental health issues provided by the source, it was a logical decision to search for source 8, which analyzed cost-effective mental health treatments that could effectively help with these diseases. And this investigation ends off with its final two sources, which elucidate the grave economic consequences of mental health problems in the populations of two countries: China and Spain. The investigation in China exposed how mental health expenditures have climbed up to $88 billion in 2013, and strongly encouraged that the country start to implement strategies to mitigate these expenditures. Such a task is crucial for China, which in the current century has proven to be a huge superpower in the global economy, so fixing this problem would be very beneficial to its goals; however, this might prove difficult as heavy social stigma exists in Chinese culture against patients with mental health necessities. Meanwhile, the final source was an analysis of Spain's expenses due to mental health related issues in the population, and it estimated that the Spanish economy lost 2.77 million euros ($7,641,409.82) in 2002 due to mental health treatment expenses. A majority of this was inpatient costs (48 percent to be exact), signifying the importance of individual, quality care. All this data has proven how there is a tight-knit connection between the mental health of populations, whether it is a country or a small community, and its economic output, and in turn, prosperity.

Conclusion

The presented sources were able to elucidate that mental health has a strong influence on the economy of a population. Moreover, this investigation delineated how it doesn't matter how treatment is administered to patients with mental issues, the only thing that matters is the quality of the treatment, and that individual treatment could have a more positive impact if implemented correctly. Additionally, evidence was provided that the economic consequences of mental health illnesses and other noncommunicable diseases being prominent in a population are undeniably negative. To further support and explain these findings, there was evidence found explaining the individual workplace conditions and discrimination that unfortunately affect the economic opportunities and output of employees with mental necessities. The process revealed some limitations, which might be resolved by more investigation. Generally, it would have been beneficial if the sources could outline more information on what mental diseases were causing the most harm on an economic scale. In a general sense, the sources were able to present a vignette on the relationship between mental health and economic prosperity. Almost all sources, especially the last two analyzed, pointed towards higher rates of mental illness negatively affecting the economic growth of a nation. For upcoming continuing research and data analysis, recommendations include securing more years of data and requesting more study resources. A future study could utilize a historical or longitudinal research design in order to get more direct results on the topic, and a methodology involving document analysis, interviews with experts, or surveys on the general population cross-referenced with mental disease rates in the nation. Ultimately, this investigation aimed to answer whether psychological
issues have a strong and negative impact on the economy. Sources converged to provide an answer, which is that yes, the mental health of a population does affect its economic output and that it should not be ignored if governments and people want to advance their GDP and standard of living.

**Limitations**

For the investigation to succeed, the scope of the research question had to be expanded to find additional information on the issue, allowing the best conditions to answer the research question. The essay would not have been written as well if the original research question had not been amended because the research question would have been challenging to accomplish. Most publications emphasized the significance of developing methods and treatments for mental health difficulties rather than providing solutions, though notable exceptions exist. Another drawback was that no sources provided a detailed breakdown of which mental health problems had the most significant impact on economies or produced specific economic results. Such understanding of the composition of mental illness rates would have been of great usefulness to this investigation. And of course, more sources and time to analyze these sources would have been more beneficial to the acquiring of data.

**Acknowledgments**

I would like to thank my research advisor, Prof. Johnny Lopez for his support and guidance through this process.

**References**


