

Fall 12-10-2019

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The Relationship Between Socioeconomic Status and Mood Disorders

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Honors thesis

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### Abstract

According to the Fundamental Cause Theory, socioeconomic status (SES) is comprised of multiple variables, including money, prestige, social status, and power (Phelan, 2010). The scientific literature has continued to reveal a robust relationship between SES and mental health outcomes. The same literature also highlights the role played by race, age, and gender in modulating this relationship. There are a multitude of models and theories from various disciplines that attempt to explain why and how SES impacts mental health. This literature review will include prominent theories and models in the field of psychology and public health. Specifically, the present literature review will examine the previous literature and findings on the relationship between SES and mental health, specifically depression and anxiety. Prominent previous empirical findings will be presented and interpreted through the lens of the Fundamental Cause Theory as well as through the framework of Intersectionality.

### The Relationship Between Socioeconomic Status and Mood Disorders

It is well documented that people of low SES suffer a disadvantage, not only socially and economically, but also in terms of poorer health outcomes. SES refers to the income, education, and social standing of a person or group of people. The disadvantaged are often less healthy throughout their lives and die younger than those of higher SES (Phelan, 2010). Although there is a multitude of literature surrounding the impact low SES has on physical health, studies have shown that SES impacts mental health and well-being as well. SES is known to play a large role in affecting health because it influences living conditions, behaviors, and ultimately health conditions. For example, in relation to mental health, the stress of living in a situation of prolonged economic hardship puts individuals at a higher risk for mental illness (Everson et al., 2002). Environmental and social stressors have been known to influence mental health outcomes by shaping the conditions of a person's life and can be tied to SES. For example, if a person cannot afford adequate housing, they may be subjected to unsafe and adverse living conditions, which could then have an influence on mental health.

### **Literature Review**

The broadness of the relationship between SES and mental health has prompted many researchers in the field to create models and theories in an attempt to explain and operationalize it in a useful way. The present literature review will focus on the public health framework of the Social Determinants of Health and their influence on the relationship between SES and mental health, the framework of the Fundamental Cause Theory, and the nuances of Intersectionality.

### **Social Determinants of Health**

A comprehensive literature review done by the World Health Organization stated that 70 percent of published research on socioeconomic status and health revealed a positive association between poverty and mental illness (WHO, 2014). In the field of public health and psychology, the framework known as the “Social Determinants of Health” can be a useful starting point when interpreting the relationship between mental illness and SES. According to the model, mental health is influenced by factors of multiple levels in various aspects of a person’s life (Barry, 2008). For example, mental illness can be influenced by broader environmental factors associated with low socioeconomic status, such as unsafe or adverse living conditions. Mental health can also be influenced by factors at a community and interpersonal level, and may include neighborhood quality, social engagement and social relationships (Barry, 2008). The Social Determinants of Health are comparable with Link and Phelan’s Fundamental Cause Theory, in the ways that these models attempt to explain the way that larger factors in an individual’s environment can affect mental health and well-being (Phelan, Link & Tehranifar, 2010).

### **Fundamental Cause Theory**

The health disparities related to SES are the main subjects of the Fundamental Cause Theory. This theory was introduced by Link and Phelan in 1995 and can be used as an explanation for the association between SES and mortality (Phelan, Link & Tehranifar, 2010). The Fundamental Cause Theory describes the association between SES and health related mortality through “flexible resources,” defined by Masters, Link, and Phelan as resources that can be used to avoid adverse health outcomes and to engage in behaviors that can protect against health issues (2015). These resources include money, knowledge, power, social connections, and prestige. Health-related mortality in relation to resources refers to the death of individuals

due to certain health problems that are influenced by the flexible resources such as those included in the Fundamental Cause Theory (Masters, Link & Phelan, 2015). Although the literature continues to provide evidence for the strong association between SES and health, the Fundamental Cause Theory goes further into the role of SES as a social determinant of health. The Fundamental Cause Theory frames the relationship between SES and health in a broader context, with “flexible resources” playing a role in the context of SES. These flexible resources, have all been linked in some way to mortality, specifically to preventable causes of death (Phelan, Link & Tehranifar, 2010).

### **Intersectionality**

In addition to the Fundamental Cause Theory, as well as the Social Determinants of Health, it is also useful to refer to the theory of Intersectionality. According to the theory of Intersectionality, multiple aspects of an individual’s identity interact to shape health outcomes. Such identities include race, gender, age, and other personal identities. Intersectionality can affect an individual’s access to resources, including mental healthcare, and may shape an individual’s perception of stress and mental health conditions. In comparison to Link and Phelan’s Fundamental Cause Theory, it is also important to note that aspects of a person’s identity will also have an influence on their ability to deploy resources. For example, African American women are often subjected to wage discrimination due to their dual identities of gender and race. Previous research has also shown that African Americans of middle-level SES may not enjoy the resources associated with this level of SES at the same rates as other populations due to discrimination associated with their race (Lewis and Van Dyke, 2018). Intersectionality works within the Fundamental Cause theory due to its influence on all aspects

of a person's life. A person's identity and access to resources is linked to SES, which in turn influences mental health outcomes (Keith and Brown, 2018).

Race serves as an aspect of a person's identity, specifically when considering intersectionality. Unfortunately, a person's race (or other identities) will sometimes bring about discrimination. For example, African Americans do not actually have higher rates of mental illness in comparison to whites. However, a racial disparity appears when SES is included in the relationship between race and mental health (Keith and Brown, 2018). In addition to the health outcomes influenced by SES alone, disparities are also influenced by stressors associated with their personal identity. For example, African Americans experiencing higher levels of racism are at a higher risk of adverse mental health outcomes (Lewis and Van Dyke, 2018). Discrimination and racism do not just happen at an interpersonal level. Institutionalized and societal racism can also affect mental health outcomes. For example, segregated neighborhoods may force African Americans to live in worse living conditions than their white counterparts, exposing them to additional stressors that can impact their mental health (Keith and Brown, 2018). It is clear that the relationship between SES and mental health is complicated and influenced by various phenomena, including stress and identity. The Social Determinants of Health, theory of Intersectionality, and the Fundamental Cause Theory are all important players in the attempt to understand how SES affects mental health.

While race is commonly represented in research on mental health and SES, it is also important to consider other aspects of identity such as age and gender. For example, age has been taken into account in studies that focus on specific cohorts of participants. Previous research has explored the role of SES in mental health throughout the life course. Early adulthood is a period of time in which higher rates of anxiety have been reported, possibly due to financial strain

occurring at this time in an individual's life (Drentea, 2000). It is also important to note that the presence of a mental disorder such as anxiety or depression early in life will likely persist into advanced age (Green and Benzeval, 2013). Additional previous research has also shown that mental health disparities in depression and anxiety increase with age (Green and Benzeval, 2013).

In specific reference to gender, women experience anxiety and depression at higher rates than men (McLean et al., 2011). Women are also more likely than men to be living in poverty, according to the US Census Bureau (2018). Although rates of mental illness do not differ among men and women, there is a gender disparity in the types of mental illnesses that occur in men and women. Men are more likely to experience externalizing disorders such as substance abuse and antisocial personality disorder (McLean et al., 2011). Women, however, are more likely than men to experience most types of internalizing disorders, which include depression and anxiety disorders (McLean et al., 2011). In addition to occurring at higher rates in women than in men, anxiety and depression are more debilitating in women who have a diagnosis, and women who have been diagnosed with an anxiety disorder are then at an increased risk for the presence of another anxiety disorder (McLean et al., 2011).

### **Socioeconomic Status (SES)**

SES is a term that applies to multiple components, including income, education level, assets, and even amount of debt. In some studies, education level was the defining factor of SES, such as in the 2008 study by Breslau et al. Whereas in other studies both education level and income were taken into consideration. In an earlier study, such as the study conducted by Everson et al. in 2002," SES was defined as a measure of both income level and education level (Everson et al., 2002). Debt, although used less commonly to measure SES than income level



and education has also been used in previous research to examine its impact on mental health, specifically in anxiety (Drentea, 2000). In a study done by Drentea, researchers examine the association between credit card debt and anxiety (2000). Although the specific variables taken from SES as a broader measure may be subject to change, the overarching definition of SES is the social standing of a person or group of people, and even includes access to resources and power within its definition.

Researchers often obtain a measure of SES by simply asking participants what their income or education level is. If, for example, education was the defining variable of SES, the participant's responses could be classified into different levels, such as "high school education, some college, or college degree or higher," which are categorical and easily defined (McFarland & Wagner, 2015). In addition to education level, SES is commonly defined and studied through income. For example, in a study in which education, income, and assets were used to specify SES, income level was assessed in comparison to the poverty line, creating separate variables, with low-income being poverty line and below, low-average income (1.5-3x poverty line), high-average income (3-6x poverty line), and high income (6x poverty line) (Roy-Byrne et al., 2009).

Income level is a defining factor of SES, often measured by yearly income (wages, social security, pension, etc.) and can be used to categorize people into varying levels of SES. Income level can be used as a variable through which to understand the socioeconomic level of a person or group of people. Previous and ongoing research continues to reveal the association between SES and health, with those of lower SES suffering from poorer health than those of higher SES (Everson et al., 2002). When viewed through the Fundamental Cause Theory, it is important to understand that with higher income comes more access to services and flexible resources. These

resources include access to healthcare and support services, both of which can play a major role in mental health and well-being (Phelan, Link & Tehranifar, 2010).

### **Mental Health**

Depression is a debilitating mental illness that has been linked to stress level. Depression serves as a major measure of mental health, due to its prevalence in today's society. This mental disorder is also the leading cause of disability worldwide. On a biological level, chronic stress can affect the hypothalamus-pituitary-adrenal (HPA) axis, which causes changes in the neuroendocrine system, with potential consequences for the manifestation of depressive symptoms (Everson et al., 2002). Although "depression" is often used in research to define mental health, it is important to note that there are different ways in which this mental disorder can be operationalized. Commonly, the word "depression" is used to refer to major depressive disorder, or symptoms of this disorder. Previous research studies have also used suicidality, suicide attempts, and use of antidepressants to operationalize depression as a measure in their studies.

### **Anxiety**

Previous research has not focused on anxiety and SES as extensively as depression and SES. Anxiety is another extremely common mental disorder that is known to be influenced by stress. According to the Diagnostic and Statistical Manual for mental disorders (DSM-V), anxiety is a set of disorders characterized by excessive and unreasonable levels of worrying (American Psychiatric Association, 2013). Anxiety, in much of the literature in the field, is classified by either specific disorders (generalized anxiety disorder, panic disorder), or anxiety symptoms. When viewed through the lens of the Fundamental Cause Theory, it is possible that

heightened levels of anxiety may be related to high levels of stress, which is likely stemming from stressors associated with low SES.

Intersectionality can also play a role in anxiety and its relationship with SES. For example, if an aspect of a person's identity, such as their race, gender and/or age, is causing them to suffer harassment or discrimination from others, they may feel unsafe in their day to day lives. Anxiety and SES are intertwined and may both have an influence on the other. Previous research has shown that individuals with untreated anxiety have more impairment in social relationships, lower work productivity, and higher rates of unemployment (Remes et al., 2015). Being unemployed will likely cause an individual to fall to lower levels of SES, causing heightened levels of stress due to the struggle to make ends meet, which in turn could create even more anxiety. The relationship between SES and anxiety is bidirectional, with each factor influencing the other.

### **Comorbidity of Anxiety and Depression**

Anxiety and depression are often known to be comorbid with each other, meaning that a diagnosis of one of these disorders often occurs along with the other. In addition to the comorbidity of depression and anxiety, the presence of one disorder can predict the eventual diagnosis of the other. For example, an early diagnosis of an anxiety disorder may be considered a risk factor for depression occurring later in the life course (Green and Benzeval, 2013). Along with the common comorbidity of depression and anxiety, these disorders are often persistent throughout the lifespan, especially when considering the role of SES. Green and Benzeval's 2013 study examining the relationship between anxiety, depression, and SES, found that younger adults with less education either experienced persistent depression, or progressed from anxiety to depression (Green and Benzeval, 2013). The presence of a mental disorder is debilitating,

however, the disability may be amplified twofold when an individual is suffering from two mental disorders, while also living with lower SES.

### **Mental Health and SES (Fundamental Cause Theory)**

Delving deeper into the Fundamental Cause Theory, there is evidence that SES is related to multiple disease outcomes due to multiple risk factors. Risk factors are intertwined, for example, if an individual has low SES, they may find themselves struggling to access adequate health services, or find themselves practicing dysfunctional health behaviors, leading to adverse health outcomes (Masters et al., 2015). It is also important to note that the deployment of resources plays a significant role in the association between SES and health, such that the education available to people of low SES will likely be of lower quality than that available to populations of high SES, possibly reducing the type and number of resources available to low SES individuals in the future (Masters et al., 2015). If a person is limited in their educational opportunities, they will most likely struggle more than people who were privileged in their educational opportunities. This is, once again, related to the deployment of resources. If a person did not attend college due to low income level, they will be less likely to obtain a higher paying job, limiting them in their ability to rise in SES. Deployment of resources is linked to the persistence and widening disparity of mental disorders throughout the lifespan (Green and Benzaval, 2013).

In addition to education level and income level, debt has also been used to measure the relationship between SES and mental health. In relation to the Fundamental Cause Theory, credit card debt can be indicative of various factors that may influence mental health. Excessive amounts of debt may be indicative of prolonged financial strain, job loss, or a health crisis. In

this specific research study, done by Drentea, which examined age, debt, and anxiety; it was found that high levels of credit card debt was linked to higher levels of anxiety (Drentea, 2000)

The Fundamental Cause Theory can be used to explain the relationship between SES and health throughout history, and this relationship continues today (Phelan, Link & Tehranifar, 2010). Intervening mechanisms, as defined within the Fundamental Cause Theory, serve as dynamic variables through which the relationship between SES and health continues to prevail. Historically, individuals of high status had more access to resources, and thus better health outcomes. For example, new screening measures have become available for certain cancers. However, these screening measures have consistently been given to the majority of high SES individuals who are able to access these health services. While these intervening mechanisms change, their cost and accessibility has proven to serve people of higher SES at much greater rates (Phelan, Link & Tehranifar, 2010).

In the 2002 literature review by Everson et al., four different studies with varying populations were used to display the association between income level and chronic illnesses, including depression. The various studies in this paper included Alameda county study, Kuopio Ischemic Heart Disease Risk Factor Study, the Detroit Study, and the Consumers Survey. For all the populations included, it was found that people of lower income level and education had the highest number of depressive symptoms (Everson et al., 2002). The findings of these research studies attest to the widespread impact of SES on mental health. In a study done by the University of Cambridge, women who were living in impoverished areas were significantly more likely to be suffering from anxiety (Remes et al., 2016). This study included over 20,000 participants from the UK, and considered Generalized Anxiety disorder's presence in areas of "deprivation" (Remes et al., 2016).

If an individual is able to access health services, previous literature on the relationship between SES and mental health has also shown that SES can predict treatment outcomes. For example, in a study done on older adults who were being treated for depression, it was found that the presence of anxiety, as well as low SES and the barriers to treatment that come along with low SES, predicted worse treatment outcomes (Cohen et al., 2008). This particular study, done by Cohen et al., concluded that older adults who were being treated for depression were more likely to respond to treatment and reported lower levels of suicidal ideation if they were of middle to upper class SES level (Cohen et al., 2008). Once again, this demonstrates the prevalence of SES in mental health outcomes, influencing the treatment of the disorder itself.

Roy-Byrne et al., (2009) examined a more specific relationship within the topic of income level and mental health. This study examined the mental health service use among respondents to the National Comorbidity Survey Replication (NCS-R). This study provided contradictory evidence, which deserves to be included in this literature review, to represent differing results. This study aimed to understand the relationship between SES and mental health service use. This particular study also considered the type of care (basic health service care and mental health specialty care), and the quality of the care (low to average quality). While the results of this study revealed that there was no significant association between mental health service use and depression, there were also additional findings that may be best viewed through the Fundamental Cause theory. In the final multivariate analysis, results of this study revealed that individuals with less than a 12<sup>th</sup> grade education predicted less adequate care in the field of mental healthcare (Roy Byrne et al., 2009). Once again, this result demonstrates the impact of SES on mental health, not only in its direct impact on the individual, but also in the way that it affects the inequalities of healthcare and services available to people with lower SES.

Education is a dynamic and influential factor that can have a lasting impact on a person's life. With increased education, people can have access to the flexible resources described the Fundamental Cause theory model. With higher levels of education, people can get higher paying jobs and find themselves with increased access to power, prestige, and resources, such as healthcare. In the literature of this topic, education level has a well-documented link to mental health, specifically depression. In 2015, McFarland and Wagner examined the relationship between education attainment and depression levels (Mcfarland & Wagner, 2015). The results of this study showed that participants who had a higher level of education displayed lower levels of depression. While this particular study was done using a twin sample, it is still notable that the association between education level and depression was significant. Those with a college degree rather than a high school diploma differed in depressive symptoms approximately equal to that seen with a ½ standard deviation reduction in neuroticism, which is a robust predictor of depression (McFarland & Wagner, 2015).

While depression does have an association with income level, anxiety disorders are also known to have a relationship with educational attainment. For example, early education termination was found to be related to the presence of an anxiety disorder in a significant number of adults in a study done by Van Ameringen, Mancini and Farvolden in 2003. In addition to in some cases causing early education termination, anxiety disorders are also found to occur in higher rates among populations of lower education level (Bjelland et al., 2007).

The relationship between education and mental disorders has been a topic of interest for a very long time. One prominent theory about this relationship is the Social Drift Hypothesis, which states that mental illness can cause individuals to fall into low SES, or prevent them from rising out of low SES (Mossakowski, 2014). These individuals often drift into lower SES as their

mental health condition worsens. This hypothesis is closely related to the study done by Breslau et al., which found that that mental disorders significantly predicted subsequent termination of schooling at each of the four educational milestones, and the presence of a mental disorder in college students significantly predicted termination prior to obtaining a college degree (Breslau, 2008). Rather than SES mental health outcomes, the mental health of an individual can have an impact on their level of SES. While this study was slightly different in its design and focus than others listed, it highlights how mental illness can influence SES, which reveals the bidirectionality of the relationship between SES and mental health.

While the Fundamental Cause Theory is a useful framework through which to understand the relationship between SES and health, the theory is not without its limitations. For example, countervailing mechanisms; harmful behaviors that high SES individuals participate in (Phelan, Link & Tehranifar, 2010). Countervailing mechanisms are a limitation of the Fundamental Cause Theory because they contradict the premise of the theory, which is built on the idea of flexible resources and their influence on mortality. Countervailing mechanisms can cause higher SES individuals to have poorer health. These mechanisms, such as dieting and extreme exercise practices, are often linked to status attainment, and act as behaviors linked to social norms, specifically to those of high SES (Phelan, Link & Tehranifar, 2010).

One such study that demonstrated the presence of countervailing mechanisms was a study conducted in Japan on adolescents. The researchers in this study had a goal of examining the relationship between SES and depression and anxiety in a non-western country. The authors of this paper concluded, based on their results, that higher parental education level was linked to higher levels of anxiety in male participants, possibly portraying achievement related anxiety (Ochi et al., 2014). While these countervailing mechanisms do occur, and are important to



include in this literature review, the overwhelming majority of literature continues to validate the relationship between low SES and poor health.

### **Empirical Results**

The present literature review highlights the relationship between SES and mental health outcomes, and the empirical findings of previous research studies empirically define the extent of this relationship. For example, in a study conducted by Vine et al., a negative association was found between income level and certain anxiety disorders such as panic disorder and physical symptoms (Vine et al., 2014). In the study conducted by Remes et al., women living in areas that were especially impoverished (measured as non-homeownership, non- car ownership, and household overcrowding), were 60 percent more likely to be diagnosed with Generalized Anxiety disorder compared to women who were not living in a deprived area (2016). In relation to education level and mental illness, a 2007 study done by Bjelland et al. revealed that low education level was significantly associated with anxiety (Bjelland et al., 2007). In the study by Bjelland et al., researchers found that education level had a significant association with both depression and anxiety, and high education level had the ability to serve as a protective factor against mental illness (2007).

Previous research on anxiety disorders and education have also revealed empirical results indicative of the relationship and influence of anxiety disorders and SES. In a study by Van Ameringen, Mancini, and Farvolden, it was found that, out of 201 participants, 24 percent of them reported early school termination due to an anxiety disorder. These empirical results reveal that the relationship between mental health and SES is multi-faceted, with one factor influencing the other. If a person leaves school due to a debilitating mental disorder, they may be less likely to climb into higher SES, which may, in turn influence further mental health outcomes.

The studies in this literature review display a wide array of results about the studies conducted to examine the relationship between SES and mental health. However, some of the results are slightly contradictory. For example, there was a positive association between SES (income and education level) and depressive symptoms in all the populations examined in the Everson et al.'s study (2002). There was also a relationship found in the sample of the study conducted by Breslau et al. (2008) between mental disorders and subsequent education termination, although there was no significant relationship between education termination and specifically depression (2008). However, there was a significant negative association between education attainment (obtaining 4-year college degree) and depression in the study conducted by McFarland and Wagner in 2015.

When focusing on health service use and treatment outcomes, there was no multivariate relationship found between income level and use of mental health resources in the study done by Roy-Byrne et al. (2010). While this study seems to be contradictory from the others, the health service use may not be representative of the prevalence of depressive symptoms found in populations of low SES. This could be related once again to the Fundamental Cause Theory. While low SES individuals may be suffering from mental illnesses such as depression, they may not be seeking the mental health services that they need, tying into the flexible resources that people of higher SES have access to.

### **The relationship between SES and mental health in relation to age, gender & race**

Age, gender, and race have all been found to have an influence on the relationship between SES and mental health disorders such as anxiety and depression. In reference to the theory of intersectionality, aspects of an individual's identity, including age, gender, and race all have an influence on an individual's access to resources and health outcomes, shaping the

association of mental health and SES. It is important to consider the relationship between SES and mental health through the framework of Intersectionality, after considering the basic empirical results of prominent research in this field. It is important to keep in mind when considering the results of previous research, that women have higher rates of poverty overall, as well as higher rates of anxiety overall. In relation to race, segregation and discrimination are prominent in the health disparities between whites and African Americans. A study by Williams and Collins portrayed the way that racial segregation in neighborhoods impacts health outcomes. Residential segregation impacts educational quality and employment opportunities, both of which can influence SES, and thus affect health (Williams and Collins, 2001). It is also important to consider the interaction between culture and mental illness, the populations studied most commonly in research, and the fact that much of the research on this topic is centered upon western samples. For example, the only study included in this literature review that was not based on a western sample was conducted by Ochi et al., in Japan, and some of the results were contradictory to the empirical findings of western samples (Ochi et al., 2014).

Previous literature has provided evidence surrounding the ways that people experience access to healthcare and resources, and factors such as race and gender influence SES in almost all the studies included in this literature review. For example, mental health service use was influenced by race and gender in the nationally representative sample of the NCS-R, with Hispanic and non-Hispanic Blacks being less likely to receive mental health services than non-Hispanic whites, and with a finding that is consistent with previous research (Roy-Byrne et al., 2009). In the 2016 study on education gradients and mortality, Masters et al., found a stronger education gradient in mortality for men than for women (2016). The researchers explained this phenomenon by theorizing that men and women have differing demands and responsibilities in

their lives, which may lead to different health behaviors. These factors then influence biological risk for adverse health outcomes as well as education's role in affecting those risks (Masters et al., 2016).

Anxiety disorders are almost two times more common in women than in men, this is without taking into account other aspects of identity (McLean et al., 2011). In addition to having higher rates of anxiety disorders, women also have higher rates of other internalizing disorders such as depression, even before taking into account the influence that SES has on this relationship. This phenomenon may also be linked to the comorbidity of anxiety and depression (McLean et al., 2011). It is also important to remember that women worldwide have higher rates of poverty than men. This may be due to income inequality stemming from the pay gap, which increases with various races of women, or can also be linked to the access to resources and the ability to deploy these resources (Keith and Barry, 2018).

When examining racial and cultural differences in the prevalence of anxiety disorders, Asnaani et al., found that African Americans were most likely to suffer from PTSD, a specific type of anxiety disorder. Previous research has also shown that European (white) Americans experience anxiety disorders such as Generalized Anxiety disorder, Panic disorder, and Social Anxiety disorder at higher rates than African Americans (Asnaani et al., 2010). When comparing the difference in the rates of specific mental disorders, this empirical finding may suggest that the relationship between race and mental disorders is much more nuanced than social theories may suggest. While these findings reveal that there is not a difference in rates of mental disorders across races, bringing SES into the equation changes the outcome. Mental health disparities are present among races when SES is taken into account, possibly due to the difference in the level of SES in different races (Keith and Brown, 2018).

It is also important to consider these findings in a way that considers the inequalities and limitations of science and research. In reference to this, the Blacks/Whites depression paradox, which refers to the lower rate of depression in African American populations in comparison to white populations, despite having higher levels of psychological distress (Barnes and Bates, 2017). It is possible that this paradox may be related to limitations in research in this field. In a specific instance of the intersection of race and gender, African American women are an understudied population, and the lack of research on this population may be leading to underdiagnosis. Underdiagnosis has its own set of complications, and it is also documented that white women are more likely to seek out treatment for psychiatric conditions, which could have positive health outcomes (Carrington, 2006). In relation to the Fundamental Cause Theory, race and gender can impact the effective deployment of resources, meaning that people of certain demographics have an advantage over others when it comes to accessing and utilizing resources to improve SES, thus impacting health outcomes (Masters, Link & Phelan, 2015). Mental health disparities in mental health treatment do exist when race is considered (Hudson and Kohn-Wood, 2002). It is important to take into account race and gender when discussing SES and health outcomes, due to the influence that these variables may have on the access or ability to shape SES for individuals or groups of people.

### **Limitations**

The previous literature and empirical findings included in this literature review portray a strong relationship between SES and mental health disorders such as depression and anxiety. However, the findings are sometimes contradictory, and certain factors may influence these results. For example, it is important to note that most of the studies included in this literature review were conducted on samples of European and westernized samples. One of the main

findings of the Japan study on adolescent mental disorders and SES found that there was a positive association between SES and depression and anxiety, which is contradictory with much of the research on this topic (Ochi et al., 2014). These findings may suggest that the common association between SES and mental health is specific to westernized countries. It is also important to note that while this relationship may be present in much of the previous literature on the topic, it is not completely overarching. In some specific studies, anxiety disorders such as Generalized Anxiety disorder were found to occur at higher rates in samples of middle-class adolescents, possibly in relation to the Fundamental Cause Theory's countervailing mechanisms centered upon achievement, image, and prestige.

### **Policy and Health Implications**

Due to the scientific community's knowledge and breadth of coverage on this topic, the empirical findings are plentiful, and impose a certain responsibility onto policy makers and practitioners. The Social Determinants of Health state that the environmental and social factors present in an individual's life have an impact on their (mental) health. Based on the different levels of impact included in the Social Determinants of Health framework, one such proposition for addressing the impact SES has on mental health will focus on each of the different levels of impact. For example, at the structural level, policy makers and other professionals could work to address barriers to mental health, including better educational opportunities and increased support for specifically vulnerable populations (Barry, 2008).

### **Conclusion, SES influences mental health (depression and anxiety)**

Based on the results of the studies included in this literature review, it is clear that there is a link between SES and health. While SES includes variables such as income and education level as its main factors, these variables are connected to the flexible resources included in the

fundamental cause theory, providing access to resources that play into the health and well-being of individuals or groups of people. Whether it is income, education, or both of these variables, the results of these studies reveal that low SES is associated with higher levels of depression and anxiety and can influence the access to healthcare resources and education attainment, revealing a dynamic relationship between the variables.

This literature review included a section dedicated to the role of age, race, and gender in the relationship between SES and mental health. Intersectionality, the framework used by social scientists to understand the role of identity in health, is important to the Fundamental Cause Theory in the ways that it shapes an individual's access to flexible resources. Rates of mental illness do not differ across different races or genders, but the rates of specific disorders do. It is important to consider the type of mental health problem that a person is experiencing, and what may be putting them at risk for developing that disorder.

SES has an overwhelmingly strong negative association with mental disorders such as anxiety and depression. The previous literature on this topic operationalizes SES in multiple different ways, including education level, income level, debt, and even neighborhood quality. Although the relationship between SES and mental health is nuanced and should be considered alongside factors such as age, race, and gender; SES and its concurrent variables do have an impact on an individual's mental health. Unfortunately, based on the results of previous research, it is apparent that people who have lower levels of SES are more likely to suffer from a psychiatric disorder.

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