

Nonfinancial Impact from Nonwork: Review of Research-Based Evidence

by

**Erik Randolph
Director of Research
Georgia Center for Opportunity**

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Abstract

This working paper reviews academic literature for research-based evidence on the impact of nonwork on the non-wealthy. It is not an exhaustive review but an attempt to glean sufficient and appropriate literature through traditional search methods in order to answer the basic questions. Seventy-eight sources were reviewed among many disciplines, including economics, medicine, and social studies, including four meta-analyses and several literature reviews. Most studies were regression analyses, but other methodologies were found, including in a sociography. The literature focused on impacts from unemployment, prime-working-age non-labor force participation, lessons from rehabilitative care, and associated studies, such as impact of poverty. The review also uncovered some research on the benefits of work. In general, the studies found effects in varying degrees, and a few claimed causal relationships, in non-work that negatively impacted children and familial relationships, increased stress and distress, increased isolation from civic engagement and societal institutions, created poorer mental health, increased substance abuse risk for some groups, created poorer physical health for some groups, increased mortality, and decreased future employability.

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Executive Summary

The financial disadvantages from nonwork among non-wealthy people are well understood and easy to explain. There are also nonfinancial disadvantages, which is the concern of this paper. Most literature on the nonfinancial aspects of nonwork comes from the perspective of short-term or long-term unemployment, including layoffs from plant closures. More recently, research has emerged on the declining rates of labor force participation, and these studies have touched on the question from the perspective of the non-wealthy who do not seek employment despite being prime-working-age. Additional literature can be found from the rehabilitative professionals who work with persons suffering from injuries, disability, or sickness. This literature includes strategies to get these individuals back to work and discusses consequences of not getting them back to work. Included in this paper are associated studies, such as on poverty. Finally, the review touches on emerging research on the nonmonetary benefits from work.

This review is not exhaustive due to time constraints. It is written as a working paper in recognition of that limitation. However, concerted effort was made to glean sufficient and appropriate recent literature to answer the basic question. No doubt, there is relevant recent literature that was not captured. Without knowing what they are, it cannot be known whether they would confirm or contradict the findings. The methodology used to find the literature included corresponding with and interviewing experts who recommended sources, searching National Bureau of Economic Research studies, and traditional library search methods using university databases.

The results are interdisciplinary in nature. Seventy-eight sources were selected among journal articles, papers, books, and book chapters from the categorical fields of economics, medicine, public health, social studies (e.g., child development and social work), interdisciplinary publications (e.g., social sciences and medicine), business/industry publications (e.g., human resources), psychiatry/psychology, plus other fields. The sources included four meta-analyses and several literature reviews that in combination searched through tens of thousands of studies and selected about 900 for analysis.

Most studies were regression analyses that do not prove causation but find correlations. A few studies tested and claimed causality. Other literature resulted from clinical interviews, professional experience, essays, and one sociography. Most studies focus on the U.S. population, but many studies included international populations.

The results of the search are categorized as follows: impact on children and familial relations; stress, distress, and social impact; mental health; substance abuse; physical health and mortality; future employability; lessons from rehabilitative care; and benefits of employment and reemployment.

On the impact on children and familial relations, literature was found demonstrating associations between unemployment and worse school performance of the children, including repeating grades and less attainment of post-secondary degrees. Children who experienced parental job

loss are at risk of earning less income in their adulthood. Loss of parental employment was associated with worse parental-adolescent relationships, and the adolescents exhibited associated cognitive distress, depressive symptoms, anxiety, and lack of self-esteem. One study found an association between increased divorce and job loss unless the loss resulted from a plant closure. A single study found an association between infant health and paternal job loss.

Literature also focused on stress and distress. Several studies were reviewed on stresses due to poverty, including the relationship with child abuse and neglect. One economic study surveyed long-term unemployed and documented emotional challenges, including self-perceived stress, being depressed, anxiety, and feelings of helplessness that manifested themselves in physical distress, isolation, restlessness, disturbed sleeping patterns, or substance abuse. The classic Marienthal sociography was reviewed, which gives a detailed account of the impact of a factory closure during an economic depression in Austria between the world wars. The sociography is an extensive study with great detail on the impact on individuals, families, and the community. It showed the negative impact on many families, most who became resigned to their plight while a smaller percentage were classified as broken, i.e., suffering from despair, deep depression, or complete apathy. A minority of the population was classified as handling the situation well. These impacts spilled over to the community and reduced engagement. In his major work *When Work Disappears*, William Julius Wilson compared common features of the Marienthal sociography to jobless poverty in American. He argued that jobless poverty is far worse than poverty with work because of the breakdown of community organizations and institutions. His findings corroborate well with recent work by Sarah Halpern-Meekin on social poverty that describes how impoverished individuals get isolated from community resources and institutions, including extended family. Finally, recent research on prime-working-age males found similar features, including the lack of involvement in civic society.

The literature on the associated impact of unemployment on mental health is voluminous. Unemployment has been linked to higher risk of distress, depression, anxiety, psychosomatic symptoms, subjective well-being, and self-esteem. It is also associated with increased suicide risk. Studies focusing on happiness found the unemployed tend to be sadder than the employed. Even sadder than the unemployed tend to be prime-working-age individuals not participating in the labor force, except for women who have home responsibilities.

Literature on substance abuse among the unemployed was more mixed. There was indirect evidence of potentially more alcohol abuse from associated increases in alcohol-related diseases. One study found the associated increase related to only those who were predisposed to alcohol abuse. Among prime-working-age males not participating in the labor force, the indications of a relationship are stronger.

Literature on physical health found stronger links to nonwork than substance abuse but not as strong as mental health. Sleep problems necessary for both mental and physical health were associated with unemployment. Increased risks for cancer, circulatory, and alcohol related diseases were found for some population groups. One study found evidence of poorer self-

assessments on health who suffered involuntary job loss. Another study found women can exhibit associated higher risk for physical health problems even after 25 years. One study had contradictory evidence of less tobacco use, more weight loss, and increased exercise during economic downturns from 1987 to 2000. Another study and a meta-analysis showed increased mortality risk due to unemployment. Another study linked increased mortality to the loss of wealth.

Future employability is negatively linked to unemployment. The studies linked longer unemployment with loss of skills, greater difficulty in finding jobs, and less pay. Those who have never participated in the labor force would likely face much greater challenges.

Some literature on rehabilitative care was reviewed, which correlated negative impacts from not getting back to work. Prolonged separation tends to lead disabled persons to adopt low-expectations and resource-diminished lifestyles. Early intervention to get these individuals back to work is imperative for their well-being and overall produces better results.

Finally, some literature was uncovered arguing the evidence shows work is beneficial beyond financial benefits. In comparison to nonwork, those who work have better mental health and physical health. The literature includes essays on the need to change the definition of health used by the World Health Organization to include the ability to adapt, an article by psychiatrists encouraging their profession to promote work, a review of literature arguing for self-management strategies for workers as well as what employers can do to help, and an article about getting those who suffered myocardial infarction back to work sooner than later as an effective patient-centered outcome. One author argues that after a threshold, pay no longer becomes the most important reward for work. There are more important intrinsic rewards than simply pay. In that regard, one journal article reviewed research linking a good sense of life purpose with improved mental health, physical health, and decreased mortality. A major report for the British Department of Pensions and Work found evidence for benefits from work but with important exceptions for certain circumstances, such as hazardous work or among newly employed persons who left educational establishments but who were employed in unsatisfactory jobs.

Introduction

The financial disadvantages from nonwork among non-wealthy people are well understood and easy to explain. There are also nonfinancial disadvantages, which is the concern of this paper. Most literature on the nonfinancial aspects of nonwork comes from the perspective of short-term or long-term unemployment, including layoffs from plant closures. More recently, research has emerged on the declining rates of labor force participation, and these studies have touched on the question from the perspective of the non-wealthy who do not seek employment despite being prime-working-age ([Council of Economic Advisors, 2016](#); [Eberstadt, 2016](#); [Hipple, 2015](#); [Krueger, 2017](#); [Tüzemen, 2018](#); [Winship, 2017](#)). Additional literature can be found among rehabilitative professionals who work with persons suffering from injuries, disability, or sickness. This literature includes strategies to get these individuals back to work and conversely reveals consequences of not getting them back to work. This paper also includes some associated studies, such as on poverty. Finally, this paper touches on emerging research on the benefits from work itself.

The obvious impact of nonwork is financial, i.e., lost wages and benefits, such as health insurance. Beyond hindering the current standard of living of the individual, it also hinders the future standard of living. The loss of employment impacts savings for education, retirement savings (including putting away for social security), and personal savings necessary to supplement social security and employ-based retirement plans for one to enjoy more fully one's retirement years.

Literature on involuntary unemployment has associated less future earnings potential, especially with prolonged unemployment. An early study showed involuntary job displacements resulted in significant financial loss of long-term earnings potential, estimated to be 10% to 13% less after four years than those who were not displaced ([Ruhm, 1991](#)). Another study showed laid off workers lose on average 14.4% of future predicted earnings and displaced workers from plant closings lost 5.7% ([Barnette & Michaud, 2011](#)). One study on young men found early work experience seemed to have a sizable impact on future wages by 10% to 20% but not on future employability ([Ellwood, 1982](#)). A study using national longitudinal survey data demonstrated human capital depreciation from women leaving the workforce and lower returning wages, but those wages could grow rapidly upon return ([Mincer & Ofek, 1982](#)). However, another study of Ohio workers who received Job Training Partnership Act services found the opposite, i.e., that rapid recovery in wage rates was uncommon ([Hollenbeck, 1990](#)). Multiple job losses were found to exacerbate the effect on lost earning potential, estimated at 9% below expectation, as opposed to those who had only one displacement, which was between 1% and 4% ([Stevens, 1997](#)).

This paper is not an exhaustive literature review due to time constraints. However, effort was made to glean sufficient and appropriate literature to answer the basic questions on what the research-based evidence says. No doubt, relevant literature exists that was not captured. Without knowing what they are, it cannot be known whether they would confirm or contradict the findings. The methodology used to find the literature included corresponding with and

interviewing experts who recommended sources, searching National Bureau of Economic Research studies, and queries using traditional university library search engines.

The results are interdisciplinary in nature. Seventy-eight sources were selected among journal articles from journals, papers, books, and book chapters from the categorical fields as follows:

- Economics
- Medicine or public health
- Social studies, e.g., child development, social work
- Interdisciplinary, e.g., social sciences and medicine
- Business/industry, e.g., human resources
- Psychiatry/psychology
- Other, i.e., library services

The sources include 49 journal articles spread among 37 publications. The articles included four meta-analyses and several literature reviews that literally searched through tens of thousands of studies and analyzed approximately 900 studies.

Most literature were regression analyses that do not prove causation but find correlations with negative or positive associations among variables. However, a few studies tested and claimed causality. Other literature extended from clinical interviews, professional experience, essays, and one sociography. Most studies focused on the U.S. population, but many studies included international populations.

The paper is organized by categorizing the effects due to nonwork as follows: impact on children and familial relations; stress, distress, and social impact; mental health; substance abuse; physical health and mortality; future employability; lessons from rehabilitative care; and benefits of employment and reemployment.

Impact on Children and Familial Relationships

It is common knowledge that events during childhood can have a lifelong impact on a person, and negative childhood events can cause an array of problems during adulthood. Research bears this out. A panel study using nationally sampled data from 1999-2015 of African-Americans, Hispanics, and white men and women found a relationship among individuals who experienced high adversity childhoods with significantly more work disability and shorter lives than those who experienced no adversity. These findings provide evidence that childhood adversity is associated with substantial disability and a reduction in life expectancy of at least a decade ([Laditka & Laditka, 2018](#)). Likewise, a study that followed kindergartners into adulthood found that children who were physically abused can have long-term detrimental effects that impact education, economic stability, physical health, mental health, substance abuse, and criminal activity ([Lansford et al, 2021](#)). Even witnessing violence, substance abuse, or other adverse circumstances as a child associated negative health outcomes, poor healthy behaviors, and socioeconomic challenges as adults, according to a study using a behavioral risk factor surveillance system from twenty-five states for 2015-17 ([Merrick et al, 2019](#)).

It should come as no surprise, then, that parental job loss is associated with negative impacts on children. In the area of education, a Norwegian study found a relationship between paternal job loss and a decline in children's school performance. The study ruled out associations with father's income, employment status, a shift in maternal time towards employment, marital dissolution, and residential relocation, suggesting some other trigger, such as distress from the job loss impacting the family ([Rege et al, 2011](#)). An American study using 1996, 2001, and 2004 panel data from the Survey of Income and Program Participation found a robust increased risk of children repeating grades in school from parental job loss that the authors suggest is a causal link estimated as a 15% increase chance for the children to repeat the grade ([Stevens & Schaller, 2010](#)). The impact extends to post-secondary education, according to research using the Panel Study of Income Dynamics. With a sample of 2,948 individuals between 1968 and 1989, the study estimated between 10% to 50% reduction in the probability of attaining any post-secondary education associated with parental job loss. This study ruled out the loss of income and wealth as explanations for the decreased probability ([Wightman, 2012](#)).

One would expect that a negative impact on a child's education extending to post-secondary education would also impact future earnings of that child, and research gives evidence to this expectation. A Canadian panel study of 39,000 father-son pairs from 1978 to 1999 found such an association. According to the study, sons whose fathers experienced unemployment earned 9% less than those sons whose fathers did not experience unemployment, especially for those sons near the bottom of the income distribution ([Oreopoulos et al, 2008](#)).

Considering that income and wealth loss from parental job displacement do not appear to be factors impacting school performance suggests that the reasons run deeper. A study that interviewed 241 single African-American mothers with seventh and eighth grade children gives some evidence of what those factors might be. Sampling the mothers using a multi-step screening process from two public schools in a mid-sized midwestern city characterized by a cyclical economy based primarily on the automobile industry, the study revealed maternal unemployment and work interruption indirectly affected socioemotional functioning, and directly impacted the mothers' psychological functioning, parenting behavior, and mother-child relationships. These stresses manifested themselves on the mothers as depressive symptoms, negative perceptions of the maternal role, and on disciplinary punishments deployed. It impacted the adolescents in terms of cognitive distress, depressive symptoms, general anxiety, diminished self-esteem, and a negative perception of the mother-child relationship ([McLoyd et al, 1994](#)).

In addition to child-parent relationships, marital relationships appear to be potentially impacted. Research using data on 2,290 families from the Panel Study of Income Dynamics from 1968 through 1993 demonstrated an association between job loss and divorce. The regression analyses deployed by the researcher demonstrated that job loss from a layoff, "whether experienced by a husband or a wife, raises the risk of divorce by a large and statistically significant degree" ([Charles & Stephens, 2004](#)). In contrast, the same study did not find an increased risk of divorce from an event causing a disability or a plant closing. This caused the authors to conclude that the increased divorce rate risk due to layoffs did not have to do with income loss but some

other factor, and the researchers speculated it may be related to the perception of the partner's fitness to be a mate.

Two other studies discovered in this literature search revealed two other potential impacts. The first showed a reduced fertility rate among white collar woman using samples from the Austrian Social Security Database from 1990 to 1998 due to employment loss by a factor of 5% to 10%. These researchers attributed the association more to the disruption in the career than to income loss ([Bono et al, 2008](#)). Another study using data from the American Panel Study of Income Dynamics and the Childbirth and Adoption History Supplement found an association between a husband's job loss and negative effects on the health of infants, including low birth weights by a factor of about 4.5% compared to those who did not have a job loss ([Lindo, 2011](#)).

Stress, Distress, and Social Impact

The joblessness impact on children and family reveals intrafamilial stresses and is similar to the impact from poverty. Take, for example, the incidence of child neglect. Research has linked child neglect to the stresses of poverty as parents cope, or fail to cope adequately, with the conditions of living in poverty. For example, poor families make up the majority of child protective service cases, and it is prevalent among single-parent households as well as teen mothers ([Besharov & Laumann, 1997](#)). Poverty is more than a financial condition. It is also a social phenomenon manifested as isolation from community resources and institutions, including extended family ([Halpern-Meehin, 2019](#)). Research has shown that neglectful mothers exhibited more stress in their lives than non-neglectful mothers, and social isolation from extended family was identified as an indicator ([Giovannoni and Billingsley, 1970](#)). Studies in Appalachia and Philadelphia found that poverty and neglect are associated with each other. The character of the mothers was also associated with neglect but not due to the mothers not knowing how to raise their children, but rather by failure to carry out what was known to be necessary ([Polanski et al, 1981](#)).

Job loss, or not having a job, can produce similar stresses. The John J. Heldrich Center for Workforce Development of the Edward J. Bloustein School of Planning and Public Policy at Rutgers University published surveys of displaced workers in May 2010 that give some insight to stresses due to long-term unemployed. For those with little success in finding a job, just over half expressed pessimism about their futures. Seventy-seven percent reported that the lack of finding employment was having a major impact on themselves and families. Beyond the obvious financial stress, including missed payments and canceling projects and vacations, there were the emotional challenges. Nearly 80% reported being emotionally stressed. In some cases, the stress was manifested by physical distress, isolation, restlessness, disturbed sleeping patterns, or substance abuse. The emotional toll negatively impacted self-worth, self-esteem, and confidence ([Borie-Hotz et al, 2010](#)).

The Marienthal sociography is a classic in studying the stresses and emotional responses of widespread joblessness on individuals and a community. The sociography examined the impact of a plant closure in a one-factory village about a 35 minute train ride from Vienna, Austria. The plant closure extended over several months in 1929 and into 1930. The timing was devastating

because it occurred during an economic depression that began in 1926, eliminating the possibility of finding work in neighboring areas for most inhabitants. The elaborate study consisted of compiling lengthy records of 478 families with extensive detail, including personal information. Comprehensive histories were created for 32 men and 30 women to understand the personal impact of the current conditions. Detailed records were kept on a variety of activities and circumstances, including following purchases and budgets, meal records, clothing, time sheets, and even Christmas gifts given to children. The researchers were tasked with embedding into the community as they methodically observed the community, interviewed residents, and collected information ([Jahoda et al, 1971](#)).

The financial stress on the living standards was documented based not only on family income and budgets, including unemployment benefits, but also on purchases and conditions and the measures taken to stretch income to meet needs. Meals became plain, flour purchases shifted from wheat to the cheaper rye, sugar became uncommon in households, and 54% of families had meat just once a week—and usually the cheaper horse meat. Another 15% did not eat any meat at all. New clothing and shoes were no longer purchased but self-repaired. Some children missed school days when their shoes needed repair, and children’s clothing was often made out of adult garments. Spending on activities dwindled, including no longer going to the pub or traveling to Vienna.

The emotional response varied among the residents. The meaning of time changed. No longer did they exhibit the “material and moral incentives to make use of their time.” Especially among the men, things lost their urgency, and they tended to drift aimlessly or hang out in the streets. For most women, their time was consumed with caring for the household, the children, and trying to make ends meet, which, when contrasted with the lack of providing help with household work among many men, stressed marriages. Community activity appeared to disappear. The once proud community park no longer was cared for, despite everyone having more time on their hands. People lost enthusiasm for participating in community activities. The authors estimated that about 23% of families were unbroken from the deprivation, 70% resigned to the condition, and 7% were classified as broken, showing either despair, deep depression, or complete apathy. A feature of resignation, which was the most common response, was the lack of long-term plans without the expectation that things would get better. Teenagers old enough to think about their careers showed dampened hopes of what careers they might be able to pursue along with little motivation to improve themselves.

In his major work *When Work Disappears*, William Julius Wilson compared the story of Marienthal to the plight of the new urban neighborhood in America. Poverty is not unique to American urban neighborhoods, especially among African-Americans. In the 1950s, for example, there was poverty, but there was also work, including among African-Americans. Wilson argued that the feature of the new poverty is joblessness that he termed “ghetto poverty” to distinguish it from poverty where work is pervasive. While Wilson attributed racial discrimination as a contributing factor, he did not think it explains the entire problem. He concluded that the disappearance of work and the pervasiveness of joblessness within impoverished neighborhoods

are far worse than poverty with work. The characteristics are very different. With joblessness, there is the loss of social organization and institutions. Much of what went wrong in urban neighborhoods that is common today—from higher levels of crime to gang violence to drug trafficking to family breakups to lack of family life—can be attributed to the loss of work. The links to community institutions—such as churches, schools, political organizations, businesses, civic clubs, etc.—are weakened, allowing further disorganization. Surveys among the impoverished confirmed the lack of participation with these institutions as community disorganization worsens despite surveys of African-Americans who expressed belief in basic American values of individual initiatives ([Wilson, 1997, *When Work Disappears*](#)). His findings corroborate well with recent work, already cited, by Halpern-Meekin on social poverty that describes how impoverished individuals get isolated from community resources and institutions, including the extended family ([Halpern-Meekin, 2019](#)).

Recent studies on declining labor force participation among prime-working-age males also corroborate with Wilson's and Halpern-Meekin's theses. The withdrawal from the labor force coincides with a more general withdrawal from civic engagement as well as from caring for others or their own households. These men participate less in community activities, voluntary organizations, or religious activities than their working counterparts ([Eberstadt, 2016](#)). They also tend to be more entangled with the criminal justice system ([Eberstadt, 2016](#) and [Winship, 2017](#)). Their social withdrawal is often accompanied by isolation where they spend on average 30% of their time alone ([Krueger, 2017](#)).

Mental Health

The literature connecting relationships between unemployment and mental health is voluminous. A meta-analysis across 237 cross-sectional and 87 longitudinal studies found a “solid medium effect” ($d=0.51$ where between 0.40 to 0.59 is considered medium effect) from unemployment on mental health indicators consisting of mixed symptoms of distress, depression, anxiety, psychosomatic symptoms, subjective well-being, and self-esteem when compared to employed persons (35% versus 16%). The study additionally found the effects are worse for blue collar workers ([Paul & Moser, 2009](#)).

Published in 1999, two Australian researchers examined sixteen longitudinal studies from America, Australia, Britain, Denmark, Finland, Germany, the Netherlands, and Norway. Their meta-analysis found two effects of employment on mental health. Losing employment had a negative effect of 0.36 on mental health. Gaining employment had a stronger effect of 0.54 on mental health ([Murphy & Athanasou, 1999](#)).

Depression among the unemployed was a common theme studied. In a study of 5,115 adult workers ages 18 to 30 year from four U.S. cities of African-American and white men and women in equal proportions associated depression with subsequent unemployment and family income loss ([Whooley et al, 2002](#)). A study using two large population longitudinal samples of the Wisconsin Longitudinal Study and the American's Changing Lives Study found more self-rated health problems and more depressive symptoms to be associated among those who

experienced involuntary job loss, even after accounting for numerous social background characteristics and baseline health ([Burgard et al, 2007](#)). Another study looked at the impact of stress on 300 men every six months. A group of them became unemployed and was studied relative to those who were still employed. Using a multivariate analysis, the researchers showed the unemployed were associated with a higher degrees of depression, anxiety, and somatization ([Linn et al, 1985](#)). An international study from six European nations and Chile showed increased risk of depression after 12 months of job separation ([Jefferis et al, 2011](#)). The results of another study using data from the European Union implied unemployment can lead to long-term depression even after twenty-five years ([Schröder, 2013](#)).

Increased suicide risk is also associated with unemployment. Researchers using administrative data of all persons in Denmark from 1980 to 2006 were able to isolate the impact from plant closures on male workers and found a 62% increased risk within one to four years after the event, and a weaker effect thereafter ([Browning & Hienese, 2012](#)). A U.S. Panel Study from 1996 to 2005 found associations of suicide risk with layoffs as follows: up to five weeks no increase in suicide risk, from five weeks to 14, positive association with suicide risk, and from 15 to 26 weeks, a stronger risk ([Classen & Dunn, 2012](#)). A meta-analysis of 16 studies on long-term unemployment found an associated suicide incidence within five years, and a lesser but still elevated risk thereafter ([Milner et al, 2013](#)).

A number of studies linked happiness, or life satisfaction, with work. Using the British Household Panel Study, researchers determined that the unemployed in Great Britain had less mental well-being than the employed ([Clark & Oswald, 1994](#)). A study in Germany found non-financial reasons are more important than loss of income on life satisfaction among the unemployed ([Winkelmann & Winkelmann, 1998](#)). A study on American prime-working-age men not participating in the labor force found among them low levels of subjective well-being, high levels of emotional distress, and “relatively little meaning from their daily activities.” In general, it was found they were less “less happy, more sad, and more stressed than unemployed men.” In general, employed prime-working-age men are more satisfied with their lives than either the unemployed or those who are not participating in the labor force. For prime-working-age women, the relationship was more complex. If the women were taking care of home responsibilities, they did not share the same associated adverse effects as those not in the labor force. The sense of well-being was only worse for those not participating in the labor force and not taking care of home responsibilities ([Krueger, 2017](#)).

The British Department of Work and Pensions sponsored a major 2006 report to address the relationship between work and health and well-being. This study reviewed hundreds of reports and studies on the question, mostly from the United Kingdom and the United States. It found that unemployment is associated with poorer mental health and psychological well-being, more psychological distress, psychological morbidity, and increased rates of parasuicide. These associations also exist for young adults and those entering the workforce while exiting educational or training programs, except they are less severe and do not exist if they return to education with a sense of purpose. The report also discovered a few studies for a minority of

people ranging from approximately 5% to 10% where unemployment can lead to improved health and well-being. Older workers, too, were found to have worse associated mental health ([Waddell & Burton, 2006](#)). These findings included a study on older American workers who experienced job loss ([Gallo et al, 2000](#)).

Substance Abuse

Not many studies were found relating substance abuse to unemployment, but there is some mixed evidence of an adverse relationship. A study on male workers in Denmark, *op. cit.*, alluded to greater alcohol use because it found an increased risk of alcohol-related disease ([Browning & Hienese, 2012](#)). A similar study in Sweden that followed displaced workers from establishment closures for twelve years also found increased risk for alcohol-related hospitalizations for not just men but also for women ([Eliason & Storrie, 2009](#)). An econometric study using nationally representative data on U.S. workers between the ages of 51 and 61 from six waves from 1992 to 2002 found evidence of increased alcohol consumption among those already at risk due to plant closings ([Deb et al, 2009](#)). A Swedish study on the impact on unemployed workers born between 1931 and 1965 and evaluated from 1997 to 2002 found a small increased risk for alcohol-related diseases among women but a larger risk for men ([Garcy & Vågerö, 2012](#)). The 2006 report sponsored by the British Department of Work and Pensions, already cited, found conflicting information on whether unemployment is associated with risky behavior, e.g., alcohol consumption, smoking, not exercising ([Waddell & Burton, 2006](#)).

Among prime-working-age males not participating in the labor force, the evidence appears to be stronger. One study reported survey results with significantly higher drug abuse and tobacco use versus working men (31% versus 8%) as well as higher abuse among the unemployed men (31% versus 22%) ([Eberstadt, 2016](#)). Another study linked the opioid crisis with non-labor force participation, concluding the two phenomena are intertwined ([Kreuger, 2017](#)). A third study raised the possibility of a link between non labor force participation among working-age-males with dependence on pain medication ([Winship, 2017](#)).

Physical Health and Mortality

Given the higher levels of stress, the impact on mental health and life satisfaction, the higher risk for substance abuse for the unemployed already predisposed to the risk, and the higher prevalence of substance abuse among those not participating in the labor force, it should come as no surprise that studies also found associations with physical health and mortality.

One study focused on sleep, which is important for both mental and physical health. The short-term unemployed were found to have higher risk for either short or long sleep patterns than the employed. For the long-term unemployed, the risk of having sleep problems were found to be worse ([Blanchflower & Bryson, 2020](#)).

The study of male workers in Denmark, *op. cit.*, found overall increased risk of mortality and circulatory diseases as well as hospitalizations ([Browning & Hienese, 2012](#)). The study on older

U.S. workers, *op. cit.*, found job loss associated with poor physical health. The Swedish study, *op. cit.*, found for men an increased risk for mortality that peaked at mid-levels of unemployment related to cancer, circulatory, and alcohol related diseases ([Garcy & Vågerö, 2012](#)). The U.S. study, *op. cit.*, finding increased risk of alcohol consumption from plant closures among those predisposed to the behavior also found an increase in unhealthy behaviors increasing the body mass index ([Deb et al, 2009](#)). Research using the Wisconsin Longitudinal Study and the American's Changing Lives Study, *op. cit.*, found poorer self-assessments on health from those who suffered involuntary job loss. The effect on those who suffered from poor health prior to losing employment was unsurprisingly larger while those who did not had a smaller but still statistically-significant effect ([Burgard et al, 2007](#)).

Even after twenty-five years among women who suffered job loss, the study using data from the European Union, *op. cit.*, associated poorer health, more chronic conditions, and more obesity. However, the study did not detect much change for men ([Schröder, 2013](#)). Likewise, another study using data from the U.S. Behavioral Risk Factor Surveillance System from 1987 to 2000, in a somewhat contrary finding, correlated declines in tobacco use among heavy smokers, weight loss among the obese, and increase in exercise during temporary economic downturns ([Ruhm, 2004](#)).

The review of studies for the British Department of Work and Pensions, already cited, also found evidence that unemployment is linked with poorer physical health, including increased cardiovascular risk factors and susceptibility to respiratory infections. For young workers, the evidence was mixed. However, young workers with disadvantaged backgrounds, lower levels of education, or lacking social support were more likely to have associated physical health effects ([Waddell & Burton, 2006](#)).

The potential impact on health also extends to mortality. In general, a study of 8,174 adults over 50 years of age using representative U.S. data found loss of wealth over two years is associated with increased risk of mortality ([Pool et al, 2018](#)). More specific to loss of work, the study on male workers in Denmark who lost employment to plant closures, *op. cit.*, also found an overall risk to mortality ([Browning & Hienese, 2012](#)). More broadly, an earlier random-effects meta-analysis of 42 studies using 235 mortality risk estimates showed unemployment to be associated with increased mortality risk for those early or middle in their careers, but less for those later in their careers ([Roelfs et al, 2011](#)). Using discontinuity regression design, a study published in the *Journal of Public Economics* examined national data on the entire U.S. population from the National Center for Health Statistics' Multiple Cause of Death files for 1979 to 2012. They found a statistically significant and robust 1.5% increase in mortality for males at age 62, especially among unmarried males and males with low education levels. They did not find similar results for females. The researchers concluded that "the results suggest decreased labor force participation upon turning 62 as a key reason for a discontinuous increase in male mortality, although other factors may also play a role" ([Fitzpatrick & Moore, 2018](#)). These studies are consistent with the findings of the 2006 report sponsored by the British Department of Work and Pensions, *op. cit.*,

that found associations between unemployment and overall mortality, mortality from cardiovascular disease, lung cancer, and suicide ([Waddell & Burton, 2006](#)).

Future employability

The impact of job loss on future wages was already discussed in the [introduction](#). It is also well known that the longer someone is out of the workforce, the more their industry specific skills deteriorate, making subsequent employment more difficult. For example, using U.S. data from the Current Population Survey matched to Longitudinal Employer-Household Dynamics micro-data, a recent study using regression analysis found evidence that the longer the duration of unemployment, the less likelihood of subsequent employment ([Abraham et al, 2016 & 2019](#)). Using Swedish data from two waves (1994 and 1998), other researchers found a strong association between work disruptions and a decline in general skills ([Edin & Gustavsson, 2008](#)).

These findings are for individuals who had participated in the workforce but lost their jobs, discovering from hard experience that their skills can decline or become obsolete over time. For persons who never entered the workforce, they have the additional disadvantage of never having the opportunity to prove themselves with the ability to hold down a job that involves much more than simply the technical skills required for the job. They also need to know how to show up for work on time, put in a good faith effort to do a good job, and get along and work with others.

Lessons from Rehabilitative Care

Some literature on rehabilitative care were also reviewed. The findings of the 2006 report sponsored by the British Department of Work and Pensions, already cited, show that getting sick and disabled people back to work has positive impacts. There is broad consensus that work can be therapeutic, promotes recovery and rehabilitation, minimizes physical and mental effects of long-term illness, and provides a better quality of life and sense of well-being. In addition to the personal benefits to the sick and disabled, it has societal benefits by reducing poverty and increasing civic engagement ([Waddell & Burton, 2006](#)).

In general, when someone suffers an injury or otherwise becomes disabled or is limited due to sickness, the sooner the person can get back to work, the better the overall results will be. The benefits manifest themselves as better earnings, improved mental health, and even better physical health, suggesting early intervention and plans to get them back to work as soon as practical are imperative ([Smalligan & Boyens, 2019](#)).

Once someone becomes disabled, and if they cannot get themselves back to employment where they can contribute their skills and become part of society, they will eventually lose hope, which often happens within two years of becoming disabled. Once they adopt a disabled mindset, they live with low expectations, little money, little hope, and little motivation to seek work ([Interview with Dr. Jennifer Christian](#)). The impact on these individuals compares well with the impact on the psyche as described in the Marienthal sociography where they can become resigned to their conditions or even broken with despair, depression, and apathy ([Jahoda et al, 1971](#)). It also

compares well with Wilson's description of the modern ghetto poverty in urban America ([Wilson, 1997, *When Work Disappears*](#)).

The emerging consensus is to focus on the positive impact on helping persons with disabilities to become employed again, and the sooner, usually the better. A systematic review of 39 peer-reviewed empirical studies showed "benefits for people with disabilities included improved quality of life and income, enhanced self-confidence, expanded social network, and a sense of community" ([Lindsay et al, 2018](#)).

Benefits of Employment and Reemployment

The British Health Development Agency published a 2005 report reviewing evidence on job satisfaction and psychological health. While the authors of the report recognized ample research showing negative impacts due to the absence of work, they concluded that there was little research and statistical analysis on the relationship between work and health benefits. However, they did lay out a preliminary case that work allowing for job satisfaction, discretion, and control has health benefits, especially in regard to lower mortality rates. Jobs lacking those features had fewer benefits and were likely higher in morbidity and mortality. And the absence of work had considerable negative effects ([Bartley et al, 2005](#)).

The report sponsored by the British Department of Work and Pensions, already cited, found positive associations with getting the unemployed back to work. The review found evidence that reemployment is associated with improved health, self-esteem, self-satisfaction, and physical health. Other studies reviewed by the authors found reduced psychological distress and psychiatric morbidity. The report concluded that these benefits may be mitigated by the security of the new job, motivation of the individual, and poor employment patterns. These benefits are also associated with young adults and those entering the workforce directly from education, except if they fall into employment deemed unsatisfactory. They also found that reemployment was associated with improved physical functioning and mental health for older workers. However, the authors pointed out that there are some cases where there can be hazardous jobs that pose risks to health ([Waddell & Burton, 2006](#)).

Corroborating with the contention of the British agency, an earlier study on older workers, already cited, found a correlation where reemployment was positively associated with better physical and mental health ([Gallo et al, 2000](#)). Likewise, a British study published in 1994 found that older men who remained continuously employed had lower mortality than those who lost employment or even retired early and were healthy even after adjusting for socioeconomic characteristics, healthy behaviors, and health conditions ([Morris et al, 1994](#)).

Since the Health Development Agency report, several studies emerged showing positive impact from the benefits of work. A systematic review of 18 studies across different populations, times, and settings showed beneficial health effects, in addition to financial benefits, associated with returning to work. The researchers concluded that at least portions of the relationship are causal ([Ruedo et al, 2012](#)). Another systematic review of 33 prospective studies by Dutch researchers

likewise found employment to be beneficial for health, particularly for depression and general mental health ([Noordt et al, 2014](#)). The Australasian Faculty of Occupational & Environmental Medicine provided a position paper in 2015 arguing that research evidence suggests work is good for promoting recovery and optimizing health and well-being. Furthermore, the position stated the converse as well: being not at work is not good for recovery and health ([Australasian Faculty of Occupational & Environmental Medicine, 2015](#)).

Sociology is one of just many disciplines examining work, and it has laid out a framework for understanding work that impacts its importance in society. Sociologist Pierre Bourdieu argued that work is more than earning a living. It provides a framework for daily living and interactions, imposing discipline and beneficial routines. Those lacking this framework are put at disadvantage compared to those who avail themselves of work ([Wilson, 1997, *When Work Disappears*](#)).

In response to the research and from experience, a number of journal articles target healthcare providers and employers on encouraging them to promote and allow reemployment more quickly. An analysis in the *British Medical Journal* cowritten by health professionals from six countries argued that the definition of health used by the World Health Organization should change to include the concept that health also includes the ability to adapt and manage. This is in response to the definition that stresses “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.” The definitional change would expand the idea of health to allow for the resilience of healthy organisms in protective responses and coping mechanisms when confronted with physiological, mental, or social stress ([Huber et al, 2011](#)). Another article by psychiatrists argues that their professional best serves patients and their employers by sustaining employment and helping their patients navigate workplace challenges and improve their work ([Couser et al, 2021](#)). A book chapter on employment and mental health argues that employment must be considered in the genesis and treatment strategies of mental illness, and that dialogue about mental illness will need to play a greater part in the employer-employee narrative ([Ditton, 2012](#)). A recent review of scientific and industry literature revealed lessons for self-management strategies among those with cancer and mental illness as well as steps employers can undertake to help accommodate those employees ([Pransky et al, 2016](#)). Another article on returning to work after acute myocardial infarction argues that work needs to be part of a patient-centered outcome. Return to work represents a critical indicator of recovery from illness—and return to a degree of normality after an acute event, such as an acute myocardial infarction. Employment is reflective of superior health and well-being, ([Dreyer & Dickson, 2018](#))

Daniel Pink, in his book *Drive*, argues that work is not just for the pay. Once pay reaches a threshold where basic needs can be met, other factors become more important. Viewing the benefits of work just on a stimulus-response framework, what Pink calls the extrinsic value of work, misses the driving factors of motivation. These intrinsic values include the feeling of a job well done, comradery of being part of a team in accomplishing something, the rewards of helping others, etc. These are all benefits received from working ([Pink, 2011](#)). Pink’s thesis is consistent

with research on life purpose that improves both mental and physical health and decreased mortality ([Alimujiang et al, 2019](#)).

Summary and Discussion

In addition to pecuniary impacts, numerous academic studies provide correlative evidence of nonfinancial impacts from nonwork. A few studies claim casual relationships. These include, to various degrees, impact on children, familial relations, the community, social and civic interactions, mental health, happiness, substance abuse, physical health, and mortality.

Most of the literature on the topic focused on the negative impact from job displacement. Sponsored by the Rockefeller Institute, a 2013 Urban Institute report on the consequences of long-term unemployment summarized the literature this way: “Loss of a job can lead to losses of income in the short run, permanently lower wages, and result in worse mental and physical health and higher mortality rates. Further, parental job loss hampers children’s educational progress and lowers their future earnings” ([Nichols et al, 2013](#)).

More recently, the book *Not Working: Where Have All the Good Jobs Gone* ([Blanchflower, 2019](#)) by David G. Blanchflower, Professor of Economics at Dartmouth College reviews literature on the negative impact from nonwork. In a National Bureau of Economic Research working paper, Blanchflower and Alex Brown, Professor of Quantitative Social Science, University College London, summarized the state of research as following:

Being unemployed can reduce the life expectancy of workers. Increases in the unemployment rate tend to be associated with increases in the suicide rate. Unemployment increases the probability of poor physical health outcomes such as heart attacks in later life. Many of the unemployed delay life decisions such as marriage and having children. There is evidence of increases in smoking after unemployment. There is a great deal of evidence to suggest that unemployment is involuntary: unemployment makes workers unhappy.” ([Blanchflower & Bryson, 2020](#))

The question of nonwork is timely because of current public debate over the role of employment in means-tested assistance programs. *Wounding Warriors*, a recent book on the Veteran Administration’s handling of helping injured and disabled veterans, is a case in point. The authors argue that the financial incentives of disability payments are not only inviting fraud and abuse of the system, but they are also undermining incentives of getting veterans back to work ([Gade & Huang, 2021](#)). A study on the Agent Orange decision of Vietnam veterans backs up the authors’ contention. It was found that the decision, which expanded disability benefits, was associated with reduced labor force participation by about 18% ([Autor et al, 2016](#)). The Agent Orange is not the only case. Disability insurance can account for at least 25% in the decline of prime-working-age males not participating in the labor force ([Krueger, 2017](#)).

The push to eliminate work requirements from means-tested assistance programs has also raised concern among some welfare policy experts, such as Scott Winship at the American Enterprise Institute. He has argued that removing work incentives would reverse historic progress made

with welfare reform ([Winship, 2021](#)). At the center of the concern is that a lack of work incentives will reduce employment. Decreased employment was associated among families headed by single women who received food stamps during the 1960s and 1970s ([Hoynes & Schanzenbach, 2012](#)). Decreased labor force participation coincides with growth in the safety net programs ([Eberstadt, 2016](#)).

In addition to the negative impact of nonwork, this review also uncovered positive employment benefits in rehabilitative care. Likewise, studies were uncovered speaking specifically to the benefits of work. These studies are relatively new and emerging. A more thorough investigation is merited.

Bibliography with Annotations¹

Abraham *et al*, 2016 & 2019

Katharine G. Abraham, John Haltiwanger, Kristin Sandusky, and James R. Spletzer. "The consequences of long-term unemployment: evidence from linked survey and administrative data." *Industrial and Labor Relations Review* 72(2), March 2019, pp. 266-299. Also, NBER Working Paper No. 22665, September 2016:

https://www.nber.org/system/files/working_papers/w22665/w22665.pdf.

Annotation: Using Current Population Survey data on the aftermath of the Great Recession and linked to unemployment wage records, the authors found that the longer the duration of unemployment, the lesser the likelihood of subsequent employment.

Alimujiang *et al*, 2019

Aliya Alimujiang, Ashley Wiensch, Jonathan Boss, Nancy L. Fleischer, Alison M. Mondul, Karen McLean, Bhramar Mukherjee, and Celeste Leigh Pearce. "Association Between Life Purpose and Mortality Among US Adults Older Than 50 Years," *JAMA (Journal of American Medical Association) Network Open* 2(5), May 24, 2019, e194270:

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2734064>.

Annotation: The authors used the Health and Retirement Study to evaluate 6,985 individuals older than 50 years of age. Consistent with a growing body of literature, the study suggests that having a strong sense of purpose in life leads to improvements in both physical and mental health and enhances overall quality of life. This study's results indicate that stronger purpose in life is associated with decreased mortality.

The Australasian Faculty of Occupational & Environmental Medicine, 2015

The Australasian Faculty of Occupational & Environmental Medicine, The Royal Australasian College of Physicians. *Realising the health benefits of work – An evidence update*. November 2015.

Annotation: The Australasian Faculty of Occupational and Environmental Medicine updated evidence-based research on the health benefits of work. The review argues that work is good for optimizing people's health and well-being; and work absence due to illness or injury is not. This update not only reinforced this concept; it also documented emerging evidence demonstrating the growing effect that a lack of 'good' work has on mental health. It highlights the need for an emphasis on promoting recovery at work practices, which require better integration between health services and employers.

Autor *et al*, 2016

David H. Autor, Mark Duggan, Kyle Greenberg, and David S. Lyle. "The Impact of Disability Benefits on Labor Supply: Evidence from the VA's Disability Compensation Program." *American*

¹ Annotations may include direct quotes from abstracts or the articles themselves, or summaries by the author.

Economic Journal: Applied Economics 8 (3), July 2016, pp. 31-68. July 2016: doi 10.1257/app.20150158; <https://www.aeaweb.org/articles?id=10.1257/app.20150158>.

Annotation: The authors studied the 2001 Agent Orange decision of Vietnam veterans that expanded disability benefits. The authors estimated that the benefits reduced labor force participation by 18%.

Barnette & Michaud, 2011

Justin Barnette and Amanda Michaud. *Wage Scars from Job Loss*. Working paper. Akron, OH: University of Akron. February 16, 2011: <http://www.uakron.edu/dotAsset/2264615.pdf>.

Annotation: Using the Panel Study of Income Dynamics survey, the authors estimated that displaced workers on average lost 11.6% in predicted hourly wages. Laid off workers lost an average of 14.4%, while displaced workers from company closings lost 5.7%.

Bartley et al, 2005

Mel Bartley, A. Sacker, Ingrid Schoon, Michael P. Kelly and Chris Carmona. *Work, Non-work, Job satisfaction and Psychological Health: Evidence Review*. British Health Development Agency, 1st edition, March 2005: <https://www.ucl.ac.uk/capabilityandresilience/worknonwork.pdf>.

Annotation: Recognizing ample literature on the negative impacts from the absence of work, such as unemployment impacts on psychological well-being, the authors wrote that at the time of the writing (i.e., 2005) there was little research and statistical analysis on the relationship among job satisfaction, aspirations, mental health, and worklessness. The authors proposed three mechanisms on the benefits of work. When work allows for job satisfaction, discretion, and control over their lives, there seems to be health benefits, especially in terms of mortality. For jobs that do not allow for self-direction or control, there are fewer health benefits and higher mortality and morbidity. They concluded that the absence from work has considerable negative impact.

Besharov & Laumann, 1997

Douglas J. Besharov and Lisa A. Laumann. "Don't call it child abuse if it's really poverty." *Journal of Children and Poverty* 3:1, 1997, pp. 5-36: doi 10.1080/10796129708412203: <https://www.tandfonline.com/doi/abs/10.1080/10796129708412203>; http://www.welfareacademy.org/pubs/childwelfare/dont_call_it_97.pdf.

Annotation: Child protective services are designed to remedy social/psychological disorders that harm children, but there is overlap in maltreatment and poverty. For situations due to poverty, the authors argued it is best to handle the situation outside the protective system. Definitions of maltreatment had also expanded to capture more incidents that are "moderate," but it would be better if they were not captured. Poor families make up a majority of cases reported to authorities, and the cases are more prevalent among single-parent households, teen mothers, and by race. Note: the race factor was likely nonconsequential because some racial groups are predominantly

poorer. However, it needs to be recognized that there are also differences in accepted practices among racial and ethnic groups that need to be considered so not to impose standards outside those norms.

Blanchflower, 2019

David G. Blanchflower. *Not Working: Where Have All the Good Jobs Gone?* Princeton University Press: Princeton, 2019.

Annotation: “unemployment .. increases susceptibility to malnutrition, illness, mental stress, and loss of self-esteem, leading to depression.” “Being unemployed can reduce the life expectancy of workers. Increases in the unemployment rate tend to be associated with increases in the suicide rate. Unemployment increases the probability of poor physical health outcomes such as heart attacks in later life. Many of the unemployed delay life decisions such as marriage and having children. There is evidence of increases in smoking after unemployment. There is a great deal of evidence to suggest that unemployment is involuntary: unemployment makes workers unhappy.” Quotes summarizing book are extracted from David G. Blanchflower and Alex Bryson, “Unemployment Disrupts Sleep,” National Bureau for Economic Research Working Paper 27814, September 2020.

Blanchflower & Bryson, 2020

David G. Blanchflower and Alex Bryson. *Unemployment Disrupts Sleep*. National Bureau for Economic Research Working Paper 27814, September 2020:

https://www.nber.org/system/files/working_papers/w27814/w27814.pdf.

Annotation: Short-term unemployed suffer more short and long sleep than the employed, and are more likely to suffer from disturbed sleep. The problems are greater for long-term unemployed. Disrupted sleep is related to poor mental and physical health.

Bono *et al*, 2008

Emilia Del Bono, Andrea Weber, and Rudolf Winter-Ebmer. “Clash of Career and Family: Fertility Decisions after Job Displacement.” *Journal of the European Economic Association* 10(4), January 2008, pp. 659–83: <https://www.iza.org/publications/dp/3272/clash-of-career-and-family-fertility-decisions-after-job-displacement>.

Annotation: This Austrian study found that job displacement reduced average fertility by 5% to 10% within three to 6 years, and explained largely by the response of white collar women. Further, they concluded that the loss in fertility was not due to loss of income but rather a career interruption in light of a model that “human capital accumulation slows down after the birth of a child and all specific human capital is destroyed upon job loss “

Borie-Holtz *et al*, 2010

Debbie Borie-Holtz, Carl Van Horn, and Cliff Zukin. *No End in Sight: The Agony of Prolonged Unemployment*. Work Trends Reports, New Brunswick, NJ: John J. Heldrich Center for Workforce Development, Rutgers University, May 2010: [https://heldrich.rutgers.edu/sites/default/files/2020-10/Work Trends May 2010 0.pdf](https://heldrich.rutgers.edu/sites/default/files/2020-10/Work_Trends_May_2010_0.pdf).

Annotation: This article gives the survey results of unemployed persons in March 2010 during the long recovery from the Great Recession, finding among a number of the unemployed pessimism and emotional challenges.

Browning & Hienese, 2012

Martin Browning and Esquil Heinesen. "Effect of job loss due to plant closure on mortality and hospitalization." *Journal of Health Economics*, Volume 31, Issue 4, ISSN 0167-6296, accepted March 2012, pp. 599-616:
<https://www.sciencedirect.com/science/article/pii/S0167629612000276>;
<https://doi.org/10.1016/j.jhealeco.2012.03.001>.

Annotation: Study of male workers in Denmark from 1980 to 2006 found an increased risk from plant closure job loss for overall mortality and circulatory disease mortality, suicide and attempted suicide, and death & hospitalization due to traffic accidents, alcohol-related disease, and mental illness. The increased risk for alcohol-related disease suggested more widespread use of alcohol.

Burgard *et al*, 2007

Sarah A. Burgard, Jennie E. Brand, and James S. House. "Toward a Better Estimation of the Effect of Job Loss on Health." *Journal of Health and Social Behavior* 48(4), December 2007, pp. 369–84: <http://www.jstor.org/stable/10.2307/27638722>.

Annotation: "Using two large, population-based longitudinal samples of U.S. workers from the Americans' Changing Lives Study and the Wisconsin Longitudinal Study," the results suggest "job loss is associated with significantly poorer overall self-rated health and more depressive symptoms. More nuanced analyses reveal that among involuntary job losers, those who lose their jobs for health-related reasons have, not surprisingly, the most precipitous declines in health. Job losses for other reasons have substantive and statistically significant effects on depressive symptoms, while effects on self-rated poor health are relatively small."

Charles & Stephens, 2004

Kerwin Kofi Charles and Melvin Stephens, Jr. "Disability, Job Displacement and Divorce." *Journal of Labor Economics* 22(2), April 2004, pp. 489–522.

Annotation: The study indicates that divorce hazards increase after a spouse is laid off, but not for plant closings or after a disability, suggesting that it is not strictly related to loss of income.

Clark & Oswald, 1994

Andrew E. Clark and Andrew J. Oswald. "Unhappiness and Unemployment." *The Economic Journal*, Oxford University Press, 104(424), May 1994, pp. 648–59.

Annotation: Using the British Household Panel Study, the authors determined that the unemployed in Great Britain had less mental well-being than the employed. Furthermore, the lost "utility" units were worse than for divorce or marital separation. Distress was less among the young and workers in high employment areas, and less for long-term unemployed than short-run unemployed.

Classen & Dunn, 2012

Timothy J. Classen and Richard A. Dunn. "The effect of job loss and unemployment duration on suicide risk in the United States: a new look using mass-layoffs and unemployment duration." *Health Economics* 21(3), March 2012, pp. 338-50: doi 10.1002/hec.1719.

Annotation: Using a U.S. panel study from 1996 to 2005, the authors found recent job-loss from mass layoffs was positively associated with suicide risk for both males and females, which was stronger in unemployment weeks 15 to 26 than between weeks 5 to 14. No increased risk for suicide was found for those with less than 5 weeks of unemployment.

Coile & Duggan, 2019

Courtney C. Coile, and Mark G. Duggan. "When Labor's Lost: Health, Family Life, Incarceration, and Education in a Time of Declining Economic Opportunity for Low-Skilled Men." *Journal of Economic Perspectives*, 33 (2), Spring 2019: pp. 191-210: DOI: 10.1257/jep.33.2.191; <https://doi.org/10.1257/jep.33.2.191>; <https://www.aeaweb.org/articles?id=10.1257/jep.33.2.191>

Annotation: The researchers explored changes over time for prime-working-age men and women in education, mortality, morbidity, disability program receipt, family structure, and incarceration rates.

Council of Economic Advisors, 2016

Council of Economic Advisers, Executive Office of the President. *The Long-Term Decline in Prime-Age Male Labor Force Participation*. June 2016: https://oba0mawhitehouse.archives.gov/sites/default/files/page/files/20160620_cea_primeage_male_lfp.pdf.

Annotation: The President's Council of Economic Advisors under President Barack Obama released a study on prime-working-age males not in the labor force: who are they, the potential economic factors contributing to the non-participation; and prescription for policy changes.

Couser *et al*, 2021

Greg P. Couser, David Evan Morrison III, Andrew O. Brown, and Gaurava Agarwal. "Is Separation from the Workplace a Psychiatric Emergency? The Role of the Clinician and the Consultant." *Psychiatric Annals* Vol. 51, No. 2, January 2021: doi: <https://doi.org/10.3928/00485713-20210105-02>.

Annotation: The authors argued that psychiatrists are less trained regarding how to address problems that are at high risk for occurring whenever a patient leaves work. Psychiatrists best serve patients and their employers by sustaining employment and helping their patients navigate workplace challenges and improve their work, which also likely to improve their self-efficacy

Deb *et al*, 2009

Partha Deb, William T. Gallo, Padmaja Ayyagari, Jason M. Fletcher, and Jody L. Sindelar. *Job Loss: Eat, drink and try to be merry?* National Bureau for Economic Research Working Paper 15112, July 2009: doi 10.3386/w15122; https://www.nber.org/system/files/working_papers/w15122/w15122.pdf.

Annotation: This study found that job loss due to business closings accentuated alcohol consumption and increased unhealthy behaviors related to body mass index (BMI) among those already at risk.

Ditton, 2012

Mary Ditton. "Employment and Mental Illness," chapter 15, pp 293 to 240, in Luciano Labate (Ed.), *Mental Illnesses – Understanding, Prediction and Control*, ISBN: 978-953-307-662-1, 2012: <http://www.intechopen.com/books/mental-illnesses-understanding-prediction-and-control/employment-andmental-illness>.

Annotation: This chapter explores employment and mental illness as defined by a) the health of individuals who perform work for a living, (b) the average forty year period of the life span in which employees are in the work environment, (c) the traditional concerns of work related injury along with other concerns, and (d) the health promotion aims of quality of life or state of optimum health and striving to reach one's potential. The key points made are that employment must be considered in the genesis and treatment strategies of mental illness, and that dialogue about mental illness will need to play a greater part in the employer-employee master narrative.

Dreyer & Dickson, 2018

Rachel P. Dreyer and Victoria Vaughan Dickson. "Return to Work After Acute Myocardial Infarction: The Importance of Patients' Preferences." *Circulation: Cardiovascular Quality and Outcomes*, American Heart Association, Volume 11, Issue 6, June 2018: <https://doi.org/10.1161/CIRCOUTCOMES.118.004806>; <https://www.ahajournals.org/doi/epub/10.1161/CIRCOUTCOMES.118.004806>.

Annotation: The authors argued that return to work needs to be part of a patient-centered outcome. Return to work represents a critical indicator of recovery from illness—and return to a degree of normality after an acute event, such as an acute myocardial infarction. Employment is reflective of superior health and well-being,

Eberstadt, 2016

Nicholas Eberstadt. *Men without Work: America's Invisible Crisis*. West Conshohocken, Pennsylvania: Templeton Press, 2016.

Annotation: The author reviewed the plight of prime-working-age males not participating in the labor force, giving statistical description and potential causes, including marital status, welfare dependence, substance abuse, and criminal backgrounds.

Edin & Gustavsson, 2008

Per-Anders Edin and Magnus Gustavsson. "Time out of Work and Skill Depreciation." *Industrial and Labor Relations Review* 61, no. 2, January 2008, pp. 163–80:

<http://www.jstor.org/stable/25249132>.

Annotation: Using Swedish data for two waves (1994 and 1998), the authors found a strong association between work disruptions and a decline in general skills.

Eliason & Storrie, 2009

Marcus Eliason and Donald Storrie. "Job loss is bad for your health – Swedish evidence on cause-specific hospitalization following involuntary job loss." *Social Science & Medicine*, ISSN 0277-9536, Volume 68, Issue 8, April 2009, pp. 1396-1406:

<https://doi.org/10.1016/j.socscimed.2009.01.021>;

<https://www.sciencedirect.com/science/article/pii/S0277953609000380>

Annotation: This study followed non-fatal health events for a twelve-year period due to closures of establishments with at least ten employees from all establishments in Sweden occurring in 1987 or 1988. The researchers found an unquestionable association with establishment closure job losses with increased risk for alcohol-related hospitalizations for both men and women. Men were found to have higher associated risk for traffic accidents and self-harm, and women were found with higher levels of depression and anxiety although rarely requiring hospitalizations. No associations were found for myocardial infarction or stroke.

Ellwood, 1982

David T. Ellwood, "Teenage unemployment, permanent scars or temporary blemishes?" in *The Youth Labor Market Problem: Its Nature, Causes and Consequences*, ed. Richard .B. Freeman and David A. Wise, University of Chicago Press and NBER, Chicago, 1982:

<https://www.nber.org/system/files/chapters/c7878/c7878.pdf> .

Annotation: A study on young men found early work experience seemed to have a sizable impact on future wages by 10% to 20%. The study did not find any long-term effects of teenage unemployment on future employability. All the strong effects found were related to the impact on wages, which was attributed to the loss of lost work experience.

Fitzpatrick & Moore, 2018

Maria D. Fitzpatrick and Timothy J. Moore. "The mortality effects of retirement: Evidence from Social Security eligibility at age 62." *Journal of Public Economics*, Volume 157, January 2018, pp. 121-137: ISSN 0047-2727": <https://doi.org/10.1016/j.jpubeco.2017.12.001>; <https://www.sciencedirect.com/science/article/pii/S0047272717302037>.)

Annotation: Using a regression discontinuity design, the researchers concluded that social security retirement at age 62 was linked with a robust and statistically significant 1.5% discontinuity increase in mortality for males. However, they did not find a similar discontinuity for females. They concluded that "the results suggest decreased labor force participation upon turning 62 as a key reason for a discontinuous increase in male mortality, although other factors may also play a role."

Gade & Huang, 2021

Daniel M. Gade and Daniel Huang, *Wounding Warriors: How Bad Policy Makes Veterans Sicker and Poorer*, Washington, D.C.: Ballast Books, ISBN 978-1-955026-99-4, October 2021.

Annotation: An investigation into the disability system of the Veterans Administration by retired Army Colonel Daniel Gade and Wall Street Reporter Daniel Huang. The authors argued that the disability system for veterans encourages veterans to maximize disability payments by increasing their disability scores. The system is often abused, even fraudulently, and discourages veterans from reintegrating themselves into the labor force.

Gallo *et al*, 2000

William T. Gallo, Elizabeth H. Bradley, Michele Siegel, and Stanislav V. Kasl. "Health Effects of Involuntary Job Loss Among Older Workers: Findings from the Health and Retirement Survey." *The Journals of Gerontology: Series B* Volume 55, Issue 3, 1 May 2000: pp. S131-S140: <https://doi.org/10.1093/geronb/55.3.S131>; <https://watermark.silverchair.com/S131.pdf>; <https://academic.oup.com/psychsocgerontology/article/55/3/S131/607082>.

Annotation: Using longitudinal data from the 1992 and 1994 waves of the Health and Retirement Survey, the authors showed that "the effects of late-life involuntary job loss [average age of 55 for study] on both follow-up physical functioning and mental health were negative and statistically significant ($p < .05$), even after controlling for baseline health status and sociodemographic factors. Among displaced workers, reemployment was positively associated with better physical and mental health, whereas the duration of joblessness was not significantly associated with either outcome."

Garcy & Vågerö, 2012

Anthony M. Garcy and Denny Vågerö. "The length of unemployment predicts mortality, differently in men and women, and by cause of death: A six year mortality follow-up of the Swedish 1992–1996 recession." *Social Science & Medicine* Volume 74, Issue 12, , ISSN 0277-9536, June 2012, pp. 1911-1920:

<https://www.sciencedirect.com/science/article/pii/S0277953612001657>;

<https://doi.org/10.1016/j.socscimed.2012.01.034>.

Annotation: A Sweden study from 1992-96 recession suggests long-term employment is related to elevated all-cause mortality for men and women. The effects on women were small with an increased risk for alcohol-related disease mortality and other external causes. For men, mortality peaked at mid-levels of unemployment related to cancer, circulatory, and alcohol related diseases and declines with longer periods

Giovannoni and Billingsley, 1970.

Jeanne M. Giovannoni and Andrew Billingsley. "Child neglect among the poor: A study of parental adequacy in families of three ethnic groups." *Child Welfare* 49(4), April 1970, pp. 196-204.

Annotation: The study concluded that neglectful mothers are much more likely to experience additional stresses, including being without a husband, marital disruption, poorer, and to be more isolated from extended family. Although not directly related to joblessness, the study showed how higher stress levels are associated with greater social isolation and neglective behavior to children.

Halpern-Meekin, 2019

Sarah Halpern-Meekin. *Social Poverty: Low-Income Parents and the Struggle for Family and Community Ties*. NYU Press, 2019. <http://www.jstor.org/stable/j.ctv12fw6dg> .

Annotation: The author argued that poverty is not just a financial experience but a social experience where they suffer from social poverty and isolation from community resources and institutions, such as extended family. Their lives are essentially unstable.

Hipple, 2015

Steven F. Hipple. "People Who Are Not in the Labor Force: Why Aren't They Working?" *Beyond the Numbers, Employment and Unemployment*, Vol. 4, No.15, Bureau of Labor Statistics, U.S. Department of Commerce, December 2015: <https://www.bls.gov/opub/btn/volume-4/pdf/people-who-are-not-in-the-labor-force-why-arent-they-working.pdf>

Annotation: Statistic description of prime-working-age persons not in the labor force.

Hollenbeck, 1990

Kevin Hollenbeck. *Dislocated Worker Human Capital Depreciation and Recovery*. Working Paper 90-04. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, May 1, 1990: doi 10.17848/wp90-04; http://research.upjohn.org/up_workingpapers/4.

Annotation: Using data from a sample of workers in Ohio who received Job Training Partnership Act services, the author showed wages for reemployed workers who had been displaced were less when compared to the time when they were dislocated, and the amount of the decrease was associated with the duration of employment separation. However, contrary to prior studies, the model did not show a rapid recovery in wage rates.

Hoynes & Schanzenbach, 2012

Hilary Williamson Hoynes and Diane Whitmore Schanzenbach. "Work incentives and the Food Stamp Program." *Journal of Public Economics* Volume 96, Issues 1–2, ISSN 0047-2727, February 2012, pp. 151-162: <https://doi.org/10.1016/j.jpubeco.2011.08.006>; <https://www.sciencedirect.com/science/article/pii/S0047272711001472>.

Annotation: The authors studied the introduction of the food stamp program in the 1960s and 1970s. They found that the introduction of the program reduced employment and hours worked, especially among families headed by single women.

Huber *et al*, 2011

Machteld Huber, J André Knottnerus, Lawrence Green, Henriëtte van der Horst, Alejandro R Jadad, Daan Kromhout, Brian Leonard, Kate Lorig, Maria Isabel Loureiro, Jos W M van der Meer, Paul Schnabel, Richard Smith, Chris van Weel, and Henk Smid. "How Should we define health?" *BMJ: British Medical Journal*, ISN 0959-8138, Volume 343, Issue 7817, 2011, pp. d4163-237: <https://www.bmj.com/content/343/bmj.d4163>; <http://www.jstor.org/stable/23051314>:

Annotation: The authors argued that the World Health Organization definition of health is no longer adequate given what researchers now understand about how individuals can best manage chronic disease. The new definition needs to emphasize an individual's ability to adapt and self-manage conditions in the face of social, physical, and emotional challenges.

Krueger, 2017

Alan Krueger, "Where Have All the Workers Gone? An Inquiry into the Decline of the U.S. Labor Force Participation Rate," *Brookings Papers on Economic Activity*, CPEA Conference Drafts, September 7–8, 2017: https://oba0mawhitehouse.archives.gov/sites/default/files/page/files/20160620_cea_primeage_male_lfp.pdf.

Annotation: This study provides a description of prime-working age males not in the labor force, including prevalence of reliance on pain medication, health issues, disabilities, and subjective measures of well-being and meaning in their lives. The study indicates that employed males are more satisfied with their lives than either the unemployed or prime-working-age males not in the labor force. Although the study showed that those not in the labor force scored higher on the Cantril ladder of life

satisfaction, other indicators showed their emotional experience throughout the day were “less happy, more sad, and more stressed than unemployed men.”

Jahoda *et al*, 1971

Marie Jahoda, Paul F. Lazarsfeld, Hans Zeisel, and Christian Fleck. *Marienthal: The Sociography of an Unemployed Community* (1st ed.). Routledge, 1971:

<https://doi.org/10.4324/9780203786338>;

<https://www.taylorfrancis.com/books/mono/10.4324/9780203786338/marienthal-marie-jahoda-paul-lazarsfeld-hans-zeisel-christian-fleck>.

Annotation: A sociographic study of the deleterious effects of joblessness from a plant closure during the Austrian 1929 Depression in the village Marienthal outside of Vienna. The study followed the impact on 478 families and the community with detailed descriptions on family budgets, individual interviews, social interactions, and impact on the community. It documents the mental challenges, the psychological impact, and the impact on nutrition and standard of living.

Jefferis *et al*, 2011

Barbara J. Jefferis, Irwin Nazareth, Louise Marston, Berta Moreno-Kustner, Juan Ángel Bellón, Igor Svab, Danica Rotar, Mirjam I. Geerlings, Miguel Xavier, Manuel Goncalves-Pereira, Benjamin Vicente, Sandra Saldivia, Anu Aluoja, Ruth Kalda, and Michael King. “Associations between unemployment and major depressive disorder: Evidence from an international, prospective study (the predict cohort).” *Social Science & Medicine* Volume 73, Issue 11, ISSN 0277-9536, October 2011, pp. 1627-1634:

<https://www.sciencedirect.com/science/article/pii/S0277953611006010>;

<https://doi.org/10.1016/j.socscimed.2011.09.029>.

Annotation: The authors studied the impact of unemployment for workers in Chile and six European counties, and they found becoming unemployed raised the risk of clinical depression 12 months after separation by 1.58.

Laditka & Laditka, 2018

James N. Laditka and Sarah B. Laditka. “Lifetime Disadvantages after Childhood Adversity: Health Problems Limiting Work and Shorter Life.” *The Annals of the American Academy of Political and Social Science* 680(1), November 2018, pp. 259–277:

<https://go.exlibris.link/bXqt68LT>.

Annotation: Using 1999-2015 data from the Panel Study of Income Dynamics, the authors showed individuals who experienced high adversity childhoods (individuals with four or more of six adversity indicators) had significantly more work disability and shorter lives than those who experienced no adversity. These findings provide evidence that childhood adversity is associated with substantial disability, and a reduction in life expectancy of at least a decade.

Lansford et al, 2021

Jennifer E. Lansford, Jennifer Godwin, Robert J. McMahon, Max Crowley, Gregory S. Pettit, John E. Bates, John D. Coie, and Kenneth A. Dodge. "Early Physical Abuse and Adult Outcomes." *American Academy of Pediatrics* 147(1), January 2021, e20200873:

<https://pediatrics.aappublications.org/content/early/2020/12/10/peds.2020-0873>; doi [10.1542/peds.2020-0873](https://doi.org/10.1542/peds.2020-0873).

Annotation: "Researchers in two multisite studies recruited children at kindergarten entry and followed them into adulthood. Parents completed interviews about responses to the child's problem behaviors during the kindergarten interview. Interviewers rated the probability that the child was physically abused in the first 5 years of life. Adult outcomes were measured by using 23 indicators of education and economic stability, physical health, mental health, substance use, and criminal convictions reported by participants and their peers and in school and court records." Unreported physical abuse in community samples can have long-term detrimental effects into adulthood. Pediatricians should talk with parents about using only nonviolent discipline and support early interventions to prevent child abuse

Lindo, 2011

Jason M. Lindo. "Parental Job Loss and Infant Health." *Journal of Health Economics* 30(5), September 2011, pp. 869–79.

Annotation: Using the Panel Study of Income Dynamics, this study showed a positive association with a husband's job loss and a negative impact on an infants' health, including lower birth weights.

Lindsay et al, 2018

Sally Lindsay, Elaine Cagliostro, Mikhaela Albarico, Neda Mortaji, and Leora Karon. "A Systematic Review of the Benefits of Hiring People with Disabilities." *Journal of Occupational Rehabilitation* 28, February 2018, pp.634–655: <https://doi.org/10.1007/s10926-018-9756-z>.

Annotation: A review of 6,176 articles identified 39 peer-reviewed empirical studies on the benefits of hiring disabled persons and showed the benefits of hiring people with disabilities that included "improvements in profitability (e.g., profits and cost-effectiveness, turnover and retention, reliability and punctuality, employee loyalty, company image), competitive advantage (e.g., diverse customers, customer loyalty and satisfaction, innovation, productivity, work ethic, safety), inclusive work culture, and ability awareness. Secondary benefits for people with disabilities included improved quality of life and income, enhanced self-confidence, expanded social network, and a sense of community."

Linn *et al*, 1985

Margaret W. Linn, Richard Sandifer, and Shayna Stein. "Effects of Unemployment on Mental and Physical Health." *American Journal of Public Health*, 0090-0036/85, Vol 75 no 5, May 1985, pp 502 – 506.

Annotation: From a prospective study of the impact of stress on health in 300 men assessed every six months, the study found that after unemployment, symptoms of somatization, depression, and anxiety were significantly greater in the unemployed than the employed. Large standard deviations on self-esteem scores in the unemployed group suggested that some men coped better than others with job loss stress. Further analysis showed those with higher esteem had more support from family and friends than did those with low self-esteem. Furthermore, unemployed men made significantly more visits to their physicians, took more medications, and spent more days in bed sick than did employed individuals even though the number of diagnoses in the two groups were similar.

McLoyd *et al*, 1994

Vonnie C. McLoyd,, Toby Epstein Jayaratne, Rosario Ceballo, and Julio Borquez. "Unemployment and Work Interruption among African American Single Mothers: Effects on Parenting and Adolescent Socio-Emotional Functioning." *Child Development* 65, April 1994, pp. 562–89: <http://www.jstor.org/stable/1131402>.

Annotation: Based on interviews of a sample of 241 single African-American mothers with seventh and eighth grade children, the study revealed maternal unemployment and work interruption indirectly affected socioemotional functioning, and directly impacted the mothers' psychological functioning, parenting behavior, and mother-child relationships. In addition, the adolescents tended to show cognitive distress, depressive symptoms, general anxiety, diminished self-esteem, and negative view of mother-child relationships.

Merrick *et al*, 2019

Melissa T. Merrick, Derek C. Ford, Katie A. Ports, Angie S. Guinn, Jieru Chen, Joanne Klevens, Marilyn Metzler, Christopher M. Jones, Thomas R. Simon, Valerie M. Daniel, Phyllis Ottley, and James A. Mercy. "Vital Signs: Estimated Proportion of Adult Health Problems Attributable to Adverse Childhood Experiences and Implications for Prevention — 25 States, 2015–2017." *Morbidity and Mortality Weekly Report*, Centers for Disease Control and Prevention, Early Release/Vol. 68, November 5, 2019.

Annotation: Using Behavioral Risk Factor Surveillance System data from 25 states for 2015–2017, the authors found adverse childhood experiences, such as violence victimization, substance misuse in the household, or witnessing intimate partner violence, have been linked to leading causes of adult morbidity and mortality. Therefore, the authors concluded that reducing adverse childhood experiences is critical to avoiding multiple negative health and socioeconomic outcomes in adulthood.

Milner *et al*, 2013

Allison Milner, Andrew Page, and Anthony D. Montagne. "Long-Term Unemployment and Suicide: A Systematic Review and Meta-Analysis." *PLoS ONE*, Published by Public Library of Science, vol. 8, no. 1, January 16, 2013, p. e51333+.

Annotation: A systemic review and meta-analysis of 16 studies, out of 10,356 articles scanned, selected based on population-based cohort or case-control or similar methods found that long-term unemployment is associated with greater incidence of suicide and attempted suicide, with the greatest risk occurring within five years of employment separation.

Mincer & Ofek, 1982

Jacob Mincer and Haim Ofek. "Interrupted Work Careers: Depreciation and Restoration of Human Capital." *Journal of Human Resources* 7(1), Winter 1982, pp. 3-24.

Annotation: Using National Longitudinal Survey panel data on the wages of married women, this study demonstrated the existence of human capital depreciation from leaving the workforce. Wages when returning to the labor force are often lower than when withdrawing from the labor force. And the longer the interruption, the greater the disparity. However, wages can grow rapidly after the return to work.

Morris *et al*, 1994

Joan K. Morris, Derek G. Cook, and A Gerald Shaper. "Loss of Employment and Mortality." *British Medical Journal (BMJ)*, volume 308, April 30, 1994, pp. 1135-9.

Annotation: From 1978 to 1980, men aged 40 to 59 were randomly selected from 24 towns in England, Wales, and Scotland to study the impact of job loss and early retirement on mortality. After adjusting for town and social class, health-related behaviors, and health indicators, those men who remained employed had a lower risk for mortality than either those men who lost employment or voluntarily retired early even among those who appeared to be healthy.

Murphy & Athanasou, 1999

Gregory C. Murphy and James A. Athanasou. "The Effect of Unemployment on Mental Health." *Journal of Occupational & Organizational Psychology*, The British Psychological Society, Volume 72, No. 1, March 1999: pp. 83–99. doi:10.1348/096317999166518.

Annotation: The authors examined sixteen longitudinal studies from America, Australia, Britain, Denmark, Finland, Germany, the Netherlands, and Norway on the impact of employment status on mental health. The meta-analysis concluded a weighted-average effect of 0.54 for improving mental well-being from gaining employment and a negative but smaller weighted-average effect of 0.36 from employment loss on mental health.

Nichols *et al*, 2013

Austin Nichols, Josh Mitchell, and Stephan Lindner. *Consequences of long-term unemployment*. Urban Institute, prepared for the Rockefeller Foundation under grant 2013 SRC 105, July 2013:

<https://www.urban.org/sites/default/files/publication/23921/412887-Consequences-of-Long-Term-Unemployment.PDF>.

Annotation: A literature review on the consequences of long-term unemployment showed that while the outcomes are clear, the research gives little light on the causal reasons. “Loss of a job can lead to losses of income in the short run, permanently lower wages, and result in worse mental and physical health and higher mortality rates. Further, parental job loss hampers children’s educational progress and lowers their future earnings.”

Noordt et al, 2014

Maaïke van der Noordt, Helma IJzelenberg, Mariël Droomers, and Karin I Proper. “Health effects of employment: a systematic review of prospective studies.” *Occupational & Environmental Medicine* 71, accepted February 2014, pp. 730–736:

<http://dx.doi.org/10.1136/oemed-2014-102143>.

Annotation: A systematic review of 33 prospective studies by Dutch researchers found that employment is beneficial for health, particularly for depression and general mental health. The study concluded that more research is needed for determining the benefits to physical health.

Oreopoulos et al, 2008

Philip Oreopoulos, Marianne Page, and Ann Huff Stevens. “The Intergenerational Effects of Worker Displacement.” *Journal of Labor Economics* 26 (3), July 2008, pp. 455–83: doi 10.1086/588493.

Annotation: Using Canadian panel from 39,000 father-son pairs from 1978 to 1999, sons whose fathers experienced unemployment made about 9% less than those fathers who did not experience unemployment, especially among children from families at the bottom of the income distribution.

Paul & Moser, 2009

Karsten I. Paul and Klaus Moser. “Unemployment impairs mental health: Meta-analyses.” *Journal of Vocational Behavior*, Volume 74, Issue 3, ISSN 0001-8791, June 2009, pp. 264-282:

<https://www.sciencedirect.com/science/article/pii/S0001879109000037>;

<https://doi.org/10.1016/j.jvb.2009.01.001>.

Annotation: Meta-analyses across 237 cross-sectional and 87 longitudinal studies found a solid medium effect ($d=0.51$; note 0.40 to 0.59 is considered medium) from unemployment on mental health indicators consisting of mixed symptoms of distress, depression, anxiety, anxiety, psychosomatic symptoms, subjective well-being, and self-esteem when compared to employed persons (35% versus 16%). The effect is worse for blue collar workers and those in countries with weak levels of economic development, unequal income distribution, and poor work unemployment protection. However,

intervention programs for the unemployed were found to be only moderately effective, or a small effect ($d=-0.35$).

Pink, 2011

Daniel H. Pink, *Drive: The Surprising Truth About What Motivates Us*, New York: Riverhead Books, Penguin Group, ISBN: 9781101524381, Kindle ebook edition, 2011.

Annotation: The author delved into what factors motivates people, especially viewed from the perspective of business and employment. The conclusion was that pay and compensation, i.e., positive extrinsic factors or punishment and rewards, are important up to a threshold where needs are covered for a comfortable lifestyle, however that is defined, but afterwards intrinsic factors, such as natural curiosity or the feeling of completing a job well-done or helping another person in need, are more important. The author further concluded that people naturally gravitate to intrinsically-based motivation, but extrinsic factors can crowd it out. Intrinsic motivation is especially important when creativity on the job is required.

Polanski *et al*, 1981

Norman A. Polansky, Mary Ann Chalmers, Elizabeth Werthan Bittenwieser, and David P. Williams. *Damaged parents: An Anatomy of child neglect*. Chicago: University of Chicago Press, 1981: <https://press.uchicago.edu/ucp/books/book/chicago/D/bo3635357.html>.

Annotation: Detailed description of a study describing and determining factors that lead to child neglect based on work in Appalachia and Philadelphia. Using a Childhood Level of Living Scale and a Maternal Characteristics Scale, the characteristics of mothers were compared among neglectful and control group mothers. The authors concluded that neglect is not caused by poverty, although the two are associated with each other. Neglectful behavior has enduring impact on children well into adulthood both psychologically and physically. Nor was child neglect due to mothers not knowing what was socially accepted as good child care used in the traditional sense and not meaning day care. Maternal character is key to understanding the quality of child care.

Pool *et al*, 2018

Lindsay R. Pool, Sarah A. Burgard, Belinda L. Needham, Michael R. Elliott, Kenneth M. Langa, and Carlos F. Mendes de Leon. "Association of a Negative Wealth Shock with All-Cause Mortality in Middle-aged and Older Adults in the United States." *JAMA: Journal of the American Medical Association* 319(13), April 2018, pp.1341-1350: doi 10.1001/jama.2018.2055 .

Annotation: Using Health and Retirement Study data for 8,174 adults aged 50 years or older, the study showed that a loss of wealth over 2 years was associated with an increased risk of all-cause mortality.

Pransky *et al*, 2016

Glenn S. Pransky, Jean-Baptiste Fassier, Elyssa Besen, Peter Blanck, Kerstin Ekberg, Michael Feuerstein, Fehmidah Munir, The Hopkinton Conference Working Group on Workplace

Disability Prevention. "Sustaining Work Participation Across the Life Course." *Journal of Occupational Rehabilitation* 26 , October 4, 2016, pp. 465–479: doi 10.1007/s10926-016-9670-1.

Annotation: A review of the scientific and industry literature and group discussions on cancer and mental illness as examples of chronic or recurring conditions showed preliminary support for improving workplace self-management strategies, collaborative problem-solving, and providing checklists and other tools for job accommodation. The reviewed literature further directed employers to help individuals address challenges of fatigue, emotional exhaustion, poor supervisor and co-worker support, stigma, discrimination, and difficulties finding appropriate accommodations.

Rege *et al*, 2011

Mari Rege, Kjetil Telle, and Mark Votruba. "Parental Job Loss and Children's School Performance." *Review of Economic Studies* 78(4), October 2011, pp. 1462–89: <https://www.jstor.org/stable/41407068>.

Annotation: Using Norwegian data, paternal job loss was associated with a negative impact on children's school performance. The negative impact "appears largely unrelated to the father's income, employment status, a shift in maternal time towards employment, marital dissolution and residential relocation. This finding is consistent with other empirical studies showing mental distress."

Roelfs *et al*, 2011

David J. Roelfs, Eran Shor, Karina W. Davidson, and Joseph E. Schwartz. "Losing Life and Livelihood: A Systematic Review and Meta-Analysis of Unemployment and All-Cause Mortality." *Social Science & Medicine* 72(6), March 2011, pp. 840–854: doi 10.1016/j.socscimed.2011.01.005.

Annotation: Random-effects meta-analysis and meta-regression of 42 studies showed unemployment was associated with an increased mortality risk for those in their early and middle careers, but less for those in their late-career. The risk of death was highest during the first 10 years of follow up, but decreased subsequently thereafter.

Ruedo *et al*, 2012

Sergio Rueda, Lori Chambers, Mike Wilson, Cameron Mustard, Sean B. Rourke, Ahmed Bayoumi, Janet Raboud, and John Lavis. "Association of Returning to Work with Better Health in Working-Aged Adults: A Systematic Review." *American Journal of Public Health*, Vol 102, No. 3, March 2012, pp 541-556.

Annotation: A systematic review of eighteen studies showed beneficial health effects of returning to work in a variety of populations, times, and settings. Return-to-work programs may improve not only financial situations but also health.

Ruhm, 1991

Christopher J. Ruhm, "Are Workers Permanently Scarred by Job Displacements?" *The American Economic Review* 81, no. 1, March 1991, pp. 319–24: <http://www.istor.org/stable/2006805>.

Annotation: The study showed that involuntary job displacements are associated with in a significant loss of long-term earnings potential. After four years, the research indicated displaced workers earned 10% to 13% less than those who were not displaced.

Ruhm, 2004

Christopher J. Ruhm. "Healthy living in hard times." *Journal of Health Economics* 24(2), accepted September 2004, pp. 341-363:

<https://www.sciencedirect.com/science/article/abs/pii/S0167629604001250>.

Annotation: Using microdata from 1987 to 2000 of the Behavioral Risk Factor Surveillance System, the study showed that smoking and excess weight declined during temporary economic downturns, while leisure time physical activities rose.

Schröder, 2013

Mathis Schröder. "Jobless now, sick later? Investigating the long-term consequences of involuntary job loss on health." *Advances in Life Course Research* Volume 18, Issue 1, ISSN 1569-4909, accepted August 2013, pp. 5-15:

<https://www.sciencedirect.com/science/article/pii/S1040260812000500>;

<https://doi.org/10.1016/j.alcr.2012.08.001> and

Annotation: The study compared long-term effects on involuntary job loss by comparing groups subjected to plant closures, other layoffs, and those who never experienced job loss. The study used eleven measures of health to assess the impact after 25 years of the event. The findings suggest men were significantly more likely to be depressed and women reported poorer general healthy, more chronic conditions, tended to be more obese, and have more limitations. The effects were less for those suffering from non-closure layoffs.

Smalligan & Boyens, 2019

Jack Smalligan and Chantel Boyens. *Supporting Employment for Newly Ill and Injured Workers: Evidence on Early Intervention*. Income and Benefits Policy Center, Urban Institute, January 2019.

Annotation: This brief reviewed evidence supporting early intervention for new ill and injured workers, increasing their chances of returning to their jobs.

Stevens, 1997

Ann Huff Stevens. "Persistent Effects of Job Displacement: The Importance of Multiple Job Losses." *Journal of Labor Economics* 15(1), January 1997, pp. 165–88.

Annotation: Using Panel Study of Income Dynamics data, the study showed that the effects of multiple displacement languish, and that earnings were about 9 % below what

they would be expected to be after six years from the initial displacement. Those who suffered only one displacement had wage losses of 1% to 4%.

Stevens & Schaller, 2010

Ann Stevens and Jesamyn Schaller. "Short-Run Effects of Parental Job Loss on Children's Academic Achievement." *Economics of Education Review* 30(2), accepted October 2010, pp. 289–99.

Annotation: Using Survey of Income and Program Participation data for 1996, 2001, and 2004, "a parental job loss is associated with significant increases [by 15%] in a child's probability of repeating a school grade."

Tüzemen, 2018

Didem Tüzemen. "Why Are Prime-Age Men Vanishing from the Labor Force?" *Economic Review*, Federal Reserve Bank of Kansas City, First Quarter, 2018:

<https://kansascityfed.org/~//media/files/publicat/econrev/econrevarchive/2018/1q18tuzemen.pdf>.

Annotation: Economic analysis on why prime-working-age males are not participating in the labor force.

Waddell & Burton, 2006

Gordon Waddell and A. Kim Burton. *Is Work Good for Your Health and Well-being?* London: TSO, 2006

Annotation: Commissioned by the United Kingdom Department for Work and Pensions, this report reviewed academic literature on the question of whether work is good for health and well-being. The review categorized and analyzed the literature based on health effects of work on health and well-being broken down by health effects of work and unemployment, reemployment, work for sick and disabled people, mental health, musculoskeletal conditions, cardio-respiratory conditions, and moving off of (British) social security into work. Although involuntary separation from employment was not the focus of the study, it found significant evidence of negative associations with mental health and physical health. However, the evidence that nonwork is not good does not necessarily mean that it good. The literature review supports the idea that the answer depends. In general, for most jobs and circumstances, work is associated with better mental health, physical health, less substance abuse, and less mortality. However, the quality of the job and specific circumstances can come into play. For example, the review examines the literature on how persons with several mental cope and perform with employment.

Whooley *et al*, 2002

Mary A. Whooley, Catarina I. Kiefe, Margaret A. Chesney, Jerome H. Markovitz, Karen Matthews, and Stephen B. Hulley. *Depressive Symptoms, Unemployment, and Loss of Income:*

The CARDIA Study. *Archives of Intern Medicine* 162(22), December 2002, pp. 2614–2620: doi 10.1001/archinte.162.22.2614.

Annotation: A cohort study of 5,115 adults aged 18 to 30 years of age showed “[d]epressive symptoms are associated with subsequent unemployment and loss of family income among working young adults”

Wightman, 2012

Patrick Wightman. *Parental Job Loss, Parental Ability and Children’s Educational Attainment*. Research Report 12-761, Ann Arbor: Population Studies Center, University of Michigan. June 2012: <http://www.psc.isr.umich.edu/pubs/pdf/rr12-761.pdf>.

Annotation: “Using the Panel Study of Income Dynamics (PSID) [the author finds] .. that experiencing a parental job loss during childhood reduces the probability that an offspring will obtain any post-secondary education (by age 21) by at least 10% and perhaps as high as 50%. Furthermore, household resources, including family income and wealth, do not explain this effect.”

Wilson, 1997, *When Work Disappears*

William Julius Wilson. *When Work Disappears: The World of the New Urban Poor*. New York: Alfred A. Knopf, Inc., 1997.

Annotation: The author argued that the nature of poverty in American urban neighborhoods changed. In the 1950s, work was common in poor neighborhoods. However, work had largely disappeared in those neighborhoods. Jobless poverty is far worse than poverty because of many factors, including loss of social organizations and institutions. Although racial discrimination was a contributing factor to many poor blacks stuck in these neighborhoods, race relations can scarcely explain the problem. Economic factors, such as the loss of unskilled work and the relocation of industry and commercial districts in the suburbs, can better explain the reasons.

Wilson, 1999, “When Work Disappears” article.

William Julius Wilson. 1999. “When Work Disappears: New Implications for Race and Urban Poverty in the Global Economy.” *Ethnic & Racial Studies* 22 (3), May 1999, pp. 479–99: doi 10.1080/014198799329396.

Annotation: A short recap of salient points made in the author’s book *When Work Disappears*, q.v. the immediately preceding annotation, with an emphasis on the implications.

Winkelmann & Winkelmann, 1998

Liliana Winkelmann and Rainer Winkelmann. “Why Are the Unemployed So Unhappy? Evidence from Panel Data.” *Economica* 65(257), January 1997 (received), February 1998, pp. 1–15.

Annotation: Using data on working-age men in Germany from 1984 to 1989, the study found unemployment had a substantial impact on life satisfaction. “The non-pecuniary

costs of unemployment by far exceed the pecuniary costs associated with loss of income while unemployed.”

Winship, 2017

Scott Winship. “What’s behind Declining Male Labor Force Participation: Fewer Good Jobs or Fewer Men Seeking Them?” Mercatus Center, George Mason University, September 2017: https://www.mercatus.org/system/files/winship_malelaborparticipation_mr_v2.pdf.

Annotation: Statistical review on the declining participation of prime-working- age males not in the labor force.

Winship, 2021

Scott Winship. *The conservative case against child allowances*. American Enterprise Institute, March 5, 2021: <https://www.aei.org/research-products/report/the-conservative-case-against-child-allowances>; <https://www.aei.org/wp-content/uploads/2021/03/The-conservative-case-against-child-allowances.pdf> .

Annotation: The author assessed the risk of proposed policies for child allowances without a work requirement, arguing that it would reduce work among single parent families and further encourage the growth of single-parent families, citing numerous evidence from studies and using analysis. The author claims that when not grounded in work, the proposed child allowance will reverse gains made from reforming welfare that introduced the work requirement.

Zill *et al*, 1991

Nicholas Zill, Kristin A. Moore, Christine Winquest Nord, and Thomas Stief. *Welfare Mothers as Potential Employees: A Statistical Profile Based on National Survey Data*. Child Trends Inc., February 25, 1991: <https://www.childtrends.org/wp-content/uploads/2014/09/1991-01WelfareMothersasPotentialEmployees.pdf>.

Annotation: The study provided a statistical profile of welfare mothers. It showed that the majority started with a teen birth outside of marriage. One third were dependent because of the breakup of their parents’ marriage. Many were young but few were still teenagers. The majority were black or Hispanic. Most families were small. Education levels were higher than generally believed but still low, but most were below average with verbal and math skills. Most with preschool children were in the labor force. Most had little work experience. One third had negative views of mothers working outside the home. When they do work, they tended to be employed in service industry jobs. Almost half were long-term welfare recipients. Nearly one fifth receiving benefits from the Aid to Families with Dependent Children (AFDC) program had a health limitation. One in four reported alcohol-related problems, and mothers who receive AFDC were prone to depression.

Zill *et al*, 1995

Nichols Zill, Kristin A. Moore, Ellen Wolpov Smith, Thomas Stief, and Mary Jo Coiro. "The life circumstances and development of children in welfare families." Chapter 2 in P. Lindsay Chase-Lansdale and Jeanne Books-Gunn, *Escape from Poverty: What Makes a Difference for Children?* Cambridge University Press, 1995, 325 pages. Chapter:

<https://books.google.com/books?id=ofSogvPrIGAC&pg=PP1&pg=PP1#v=onepage&q&f=false>.

Annotation: This chapter describes the circumstances of children in families that received Aid to Families with Dependent Children in comparison to other families.

Interviews

Douglas J. Besharov, Ph.D., August 24, 2021

Jennifer Christian, M.D., September 2, 2021

Nicholas Zill, Ph.D., September 8, 2021