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**Labor Union Affiliation and its Influence on Psychological Well-Being and Depression**

Waleed Sami

Virginia Commonwealth University

Labor Union Affiliation and its Influence on Psychological Well-Being and Depression

A dissertation submitted in partial requirements for the degree of Doctor of Philosophy in Education with a concentration in Counselor Education and Supervision at Virginia Commonwealth University.

By

W. Younas Sami

Bachelor of Science, Psychology, Virginia Commonwealth University, 2012  
Masters of Arts, Clinical Mental Health Counseling, Wake Forest University, 2016

Director: Naomi Wheeler  
Assistant Professor, Department of Counseling and Special Education

Virginia Commonwealth University  
Richmond, Virginia

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#### DEDICATION

This dissertation is dedicated to all the hard-working men and women who make up this country and all over the world. From every background, race, creed, and ethnic origin. Who have

labored since time immemorial, before there was written history, to create and maintain everything we use and take for granted, and have rarely been given their just due. As someone who has labored and worked till his hands bled, I promise to never forget my roots. I dedicate this dissertation to the UCW-VA and to your continued success. Solidarity!

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## Abstract

### LABOR UNION AFFILIATION AND ITS IMPACT ON PSYCHOLOGICAL WELL-BEING AND DEPRESSION

By: Waleed Sami, MA, LPC-R

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Counselor Education and Supervision at Virginia Commonwealth University

Virginia Commonwealth University, 2022

Major Director: Dr. Naomi Wheeler, Associate Professor, Department of Counseling and Special Education

The purpose of this quantitative study was to examine the influence labor union affiliation has on psychological well-being and depression. Poverty and income-inequality are large challenges within contemporary American society. Labor unions have historically mitigated income-inequality, promoted solidarity, and decent working conditions. There is growing research on their role as a social determinant of health and mental health. This present study sought to expand this nascent literature base and examine if labor union affiliation influenced psychological well-being (made up of six subscales) and a depression scale through a secondary cross-sectional data analysis, derived from the Wisconsin Longitudinal Study (WLS). A novel, interdisciplinary theoretical approach was constructed, using economics, political science, counseling education, sociology, and public health to investigate pathways between structural determinants and their individual outcomes. The dissertation study used a MANCOVA, with two levels (unionized versus non-unionized) and controlled for several covariates. Results indicated small but significant, multivariate group significance Pillais' Trace = .005,  $F(7, 3323) = 2.334, p$

= 0.02. Follow up pairwise comparisons noted that only the subscale, personal growth, was statistically significant, with small yet significant results ( $p = .006$ ,  $\eta_p^2 = .002$ ), with the rest of the psychological well-being subscales and depression as non-significant. Mean score examination between both groups noted that the non-labor union affiliated group, scored slightly higher in the personal growth subscale:  $\mu = 12.13$  than the labor union affiliated group:  $\mu = 11.81$ . These interesting results are interpreted, along with limitations and future recommendations for further research are suggested within the dissertation.

## CHAPTER I. INTRODUCTION

### Introduction

Poverty and inequality are a dynamic within the mental health of Americans (Marmot, 2015), yet social determinants (WHO, 2014) can mitigate or augment these effects. United States poverty rates reached a high from 2010 to 2015, increasing from 12.5% of the population in 2007 (Bitler & Hoynes, 2016) to around 15% (U.S. Census Bureau, 2020). The increase in poverty markers from 2007 to 2015 likely resulted from the after-shocks of the Great Recession, which peaked around 2009 (Shierholz, 2009). The economic impact of the Great Recession exerted enormous costs, as all classes of individuals reported real income loss and particularly impacted the wealth of racial minorities and marginalized individuals (Shierholz, 2009). Childhood poverty in the United States accounts for over 10 million children and teenagers, some of the highest rates of child poverty in the industrialized world (Organization for Economic Co-operation and Development, 2021). Markers of poverty and insecurity also increased during the contemporary COVID-19 pandemic. For example, exponential growth occurred throughout the pandemic for rent and food hardship, with one in four Americans reporting difficulty covering necessary expenses during the ongoing pandemic (Center on Budget and Policy Priorities, 2021). Rates of child poverty also rose, along with a disproportionate impact on racial minorities (CBPP, 2021). While economists note stabilization of some employment and income markers, the long-term effects of the COVID-19 pandemic have yet to be assessed, and will probably mirror or exceed the losses suffered during the Great Recession (NPR et al., 2021). Indeed, Americans will continue to experience the long-term health and economic effects of the COVID-19 pandemic.

Individuals with low-income and families that live in poverty or poverty-stricken areas within the United States (U.S.) face several challenges to their well-being and mental health (U.S. Census Bureau, 2020). Income is a significant predictor of several mental health issues (Patel et al. 2018); yet, the relationship between income and a person's well-being also occurs within other social and systemic contextual factors. Systemic challenges often associated with poverty include poor housing, high-crime neighborhoods, and difficulty in accessing healthy food, water, and quality healthcare (U.S. Census Bureau, 2020). Social factors associated with income inequality include the loss of unions to globalization and subjective status evaluations within one's referent group (Eriksen, 2014; Wetherall et al., 2019).

Poverty remains one of the most challenging issues within the United States and the focus of multidisciplinary research and intervention. Counselors may play an important role in addressing the connections between systemic policy and practice that contribute to social inequity and individual mental health issues, both within the counseling room and while engaged in broader social justice and advocacy efforts (Ratts et al., 2016). The proposed study therefore aims to provide empirical insight into the relationship between systemic and social factors in the economy and the impact they have on mental health outcomes and subjective control over one's life. Specifically, I will look at how labor union affiliation within one U.S. state is related to depression and psychological well-being, compared to those who are not affiliated with a labor union. I will discuss my theoretical foundations, review the pertinent literature, formulate an empirical analysis, analyze the data, and report on the data's results and the implications within this dissertation study.

### **Theoretical Foundation**

This dissertation study is interdisciplinary and draws on a variety of different theories within counseling education, economics, sociology, public health, and vocational psychology to examine social determinants of mental health (SDOMH). SDMOH (like social determinants of health) refers to determinants in our social context in which we live (e.g., working environment, living conditions). These social contexts also influence our mental health outcomes, just as they do with physical health outcomes (WHO, 2014). The causal pathways between deleterious mental health outcomes and their social determinants can be organized in three different dimensions as articulated by (Allen et al., 2014): a), the life-course approach, b), community-level contexts, c), national-level contexts. The life-course approach refers to the accumulated advantages and disadvantages experienced by an individual over the course of their life (Allen et al., 2014). Community-level contexts refers to the community, neighborhood, and city level social contexts that influence a person's health and well-being (Allen et al., 2014). Last, national level-contexts refer to the political and economic policies and conflicts within a nation that influence health and well-being (Allen et a., 2014). Our theoretical framework will target all three levels. Thus, an interdisciplinary approach allows us to infer different casual mental health outcomes across the life-span of an individual.

I will also examine concepts of class and classism, along with connecting economic pressures to mental health outcomes (e.g., depression) using theories within psychology and counseling education (Cook et al., 2018; Liu et al., 2007). Using sociology and economics, I discuss the idea of how income-inequality and our political economy, specifically neoliberalism, shape our economic culture and create distributional challenges that help us infer how poverty and inequality impact mental health (Marmot, 2015; Stiglitz, 2012). Researchers from both sociology and economics detail the role of labor unions in income-distribution (Leigh &

Chakalov, 2021; Malinowski et al., 2015 ). Labor unions, as a social determinant of mental health, are a focus of this study. I will detail how the psychology of working, specifically what entails good and decent living, impact our mental health outcomes (Blustein, 2006). Labor unions traditionally advocate for decent working conditions at their firms. The psychology of working's theoretical understanding may provide us with practical understandings of how to interpret differences in labor relationships and their clinical outcomes (e.g., psychological well-being). Income is necessary to access social determinants of health (e.g., housing, healthcare, food) and most individuals within the U.S. derive their income from employment. Thus, income-inequality is deeply intertwined with work, and the psychology of working examines how structural challenges of income impact downstream, internalized ideas of class, and working conditions within individuals and families (Liu et al., 2007). The dissertation study will be a quasi-experimental quantitative study in nature and utilize a secondary data-set to generate causal inferences on large populations. My theoretical approach will examine how SDOMH, specifically labor unions, influences the mental health of individuals, through concepts such as neoliberalism, capitalism, social class worldviews, and the psychology of working.

### **Purpose of Study**

Counselors report lower comfort and awareness around concepts of class and income-inequality within clinical work (Liu et al., 2007; Tucker et al., 2017). For instance, counseling students demonstrated more comfort within therapy with personal growth and identity development issues (e.g., trauma, gender identity), then with economic and social class challenges (Tucker et al., 2021). Counselor discomfort or unfamiliarity with issues of class naturally affect the counseling practice and therapeutic relationship, as inevitable social and wealth gaps exist between clinician and client (Sax, 2015). Notably, the classism (a byproduct of

inequality) prevents students and young adults from seeking counseling and help from professionals because of perceived and experienced stigma (Choi & Miller, 2018). Liu et al. (2007) note that classism exists within the counseling and psychotherapy disciplines due to middle-class attitudinal dispositions, which inevitably impact practice and teaching. Therefore, empirical studies and theoretical progress in understanding how class, inequality, and political economy influence mental health are needed within the discipline.

Latent biases against what is within the realm of counseling (e.g., identity issues) versus what is not (e.g., inequality, class) reflect biases inherent within the counseling disciplines (Liu et al., 2007). Biases about class within the counseling profession may contribute to structural policies that augment income-inequality within a society. For instance, poverty that is attributed to personal characteristics, commonly known as personal attributional bias, predicts attitudes towards governmental distributional policies within a nation (Schneider & Castillo, 2015). Simply put, the more individuals attribute poverty to personal characteristics versus structural challenges, the more likely they also are to oppose social policies that mitigate income-inequality (Lindqvist et al., 2017; Schneider & Castillo, 2015). Bolitho et al. (2007) noted that public perception of how poverty manifests play a crucial role in the policies they desire to see enacted by their government. Indeed, societies with higher income-inequality assign more positive merit to their wealthier earners than their poorer members (Heiserman & Simpson, 2017). Within the context of the cultural understandings in the United States of meritocracy, there is evidence that those who believe strongly in the American Dream have more attributional biases towards those in poverty (Hoyt et al., 2021). Indeed, inequality creates profound interpersonal feelings of frustration and stress, termed *restlessness* by Wang et al. (2022) as individuals strive to compete with their referent groups. Therefore, poverty and income-inequality generate dynamic biases

within the United States which influence political and social policies. Inevitably, counselors may carry these biases within their clinical and teaching roles.

Class and inequality are structural challenges that impact counseling relationships and social justice concerns for the discipline at large. However, social class and inequality are rarely mentioned within the counseling discipline. Clark et al. (2018) conducted a content analysis of major counseling, academic journals from 2000 to 2016 and noted: “the startling lack of literature and unclear social class construct operationalization are the primary findings in the 37 articles analyzed. Social class is an important component of diversity (Pope-Davis & Coleman, 2001), yet little research exists to support this assertion,” (p.10). This lack of attention to a fundamental component of an individual’s life leaves potential for clinical challenges on the horizon.

As will be discussed further in chapter two, labor unions mitigate income-inequality and traditionally advocate for working-class and poorer members in society. Therefore, they are a vital component to understand income-inequality and social class dynamics. Understanding the role labor unions play in relationship to mental health serves a vital interest to society as our contemporary mental health challenges increase within the United States (NPR et al., 2021).

### **Research Question and Hypotheses**

My research questions and hypotheses add empirical insight into the growing, but still nascent, literature on the relationships labor unions have with health and mental health. Specifically, I examined if the benefits that labor unions provide (e.g., higher wages, stronger work protections, psychological solidarity) influence the psychological well-being (PWB) and rates of depression differently within workers who are affiliated with a union or not. My research questions are:



RQ1: Does union affiliation influence psychological well-being and depression compared to non-union workers?

H10: Psychological well-being and depression is not influenced by union affiliation

H1a: Psychological well-being and depression is positively influenced by union affiliation

I conducted a secondary data analysis from the Wisconsin Longitudinal Study, which will be cross-sectional. In order to ascertain adequate power for my sample size, I conducted a priori power analysis using G\*Power version 3.1.9.7 (Faul et al., 2007) to determine the minimum sample size required to test the study hypothesis. Results indicated the required sample size to achieve 80% power for detecting a medium effect, at a significance criterion of  $\alpha = .05$ , was  $N = 157$  for a multivariate analysis of covariance (MANCOVA) Thus, the obtained sample size of  $N = 157$  is adequate to test the study hypothesis. A MANCOVA is a multivariate test that allows us to compare different groups across multiple dependent variables (Tabachnick & Fidell, 2018). MANCOVAs allow for the additional ability to statistically control for covariates, or variables that might be closely related to our dependent variable of focus (Tabachnick & Fidell, 2018). Further details on my methodology, instrument selection, and plan for analysis are provided in chapter three.

### **Significance of the Study**

As noted by Allen et al. (2014), society must implement many social, political, and systemic solutions to help individuals and families concentrated in lower social gradients and chronic precarity. Some of these major systemic interventions recommended include reducing unemployment, allowing more subjective control of work, improving wages, and improving primary health care delivery with school quality (Allen et al., 2014). Compton and Shin (2015)

argue for reducing income-inequality and promoting more security in the social environment through local and national policies to improve economic stability, to reduce poverty and inequality, which improve mental health. It is with growing consensus that researchers across several disciplines related to health and mental health, conclude that national policies (which improve income distributional outcomes) are the best way to intervene and stabilize the precarity experienced by those on lower requires social gradients (e.g., Burns, 2015; Doran & Kinchin, 2020; Patel, 2018). The study of how income, resources, and social determinants are distributed requires a larger, more systemic understanding of the economy. Within the helping professions (particularly counseling), most theories, research, and attitudinal dispositions reflect dominant American, white, and middle-class relational patterns (Liu & Ali, 2007). With the aforementioned rise in poverty and inequality, interrogating conceptual understandings of social class and classism is an important, interpersonal way of connecting systemic concepts of political economy to individual and family systems. Thus, Sami and Jeter (2021) theorized that researchers and colleagues within counseling interested in improving mental health outcomes for individuals concentrated in lower social gradients, should develop an analysis of the political economy, to understand how resources are distributed, to advocate for social justice. Labor unions are a concrete, evidence-based way to reduce income-inequality and are a historically important in the development of capitalism. Labor unions intervene structurally in the employer/employee relationship and re-distribute productivity (e.g., wages, security) back towards the workforce, reducing inequality in a firm. Labor unions historically improved material and psychosocial outcomes for the poor and working-class and are an important vehicle for social class mobility (Jacob & Meyers, 2014).

Counselor educators and counselors can contribute to interdisciplinary conversations and efforts to address inequality, labor, and poverty around the nation, positioning ourselves as experts on this global dilemma. To highlight the importance and severity of income-inequality and its determinants, former President Barack Obama noted that income-inequality is the “defining issue of our time” (Newell, 2013, p.1). Therefore, counselor educators benefit enormously by contributing to and understanding income-inequality, its determinants, and its influence on mental health.

This study added to a variety of policy conversations around income-inequality and will help center the issue within the counseling discipline. For instance, counselors may be better prepared to interact with a variety of community agencies and labor advocacy boards to connect their clients with additional resources and help with social integration. Counselors may work more closely with professional, labor union organizations to bring psychoeducation to wider populations. Helping clients and families through economic challenges (and their mental health) by providing them with relationships in larger, labor movements can help bring stability in contexts of chronic precarious employment. Counselors may also join the labor movement, organizing their workplaces for better pay and benefits, improving their security at their job and reducing potential burn-out and better promoting better client outcomes.

The importance of decent work and its relationship with well-being (mental and physical) involves the work of counselors. On a political level, counselors have expressed interest in shifting their discipline to address social justice and multicultural issues (Ratts et al., 2016). As Sami and Jeter (2021) note, precarity, poverty, and income inequality impact racial minorities disproportionality. This dynamic weaponizes racism and prejudice, intersecting it with classism, which naturally influences subjective perceptions of one’s standing in society (Clay,

2018). Social justice concerns, along with their attendant policy and political ramifications, will help the counseling discipline set their agenda in service of marginalized populations. Of particular concern to counselors is the role that capitalism plays in their systemic analysis of marginalization

## **Capitalism**

This dissertation will add to the important literature surrounding the influence of capitalism on mental health (Jacob & Meyers, 2014; Muntaner et al., 2015; Prins et al., 2018). Capitalism is a system of organizing private capital and promoting free markets in pursuit of profits (Jahan & Mahmud, 2015). Capitalism is the dominant political economy of almost every nation in our contemporary world, though not every nation implements capitalism in the same way (Jahan & Mahmud, 2015). In chapter two, I will detail how neoliberalism, a version of capitalism, influences the relationship between labor, inequality, and mental health. Capitalism's capacity to unleash productivity, investment, and growth is unparalleled in human history. However, capitalism has been consistently been critiqued as fostering inequality, wealth accumulation and environmental damage (Jahan & Mahmud, 2015; Shaikh, 2018). Capitalism seeks to encourage competition and investment through minimizing the government's role in regulating markets, noting that the pursuit of self-interest by a variety of actors in the market naturally brings prosperity to everyone (Jahan & Mahmud, 2015). Capitalism encourages the flexibility of workers to sell their labor to the highest bidder instead of a system of slavery or serfdom, where labor is owned by a master (Lonergran & Blyth, 2020). During the Great Depression in the 1930s, capitalism experienced a major setback, as the global system of capital collapsed, requiring government intervention through the form of the New Deal, championed by President Franklin D. Roosevelt within the United States (Shaikh, 2018). Government intervened

more forcibly into markets and wage distributions, encouraging the growth of labor unions and strongly regulating the ability of capital to pursue profit above all other goals (Jahan & Mahmud, 2015). This intervention has receded under the growth of neoliberalism as organized labor's power has declined.

Capitalism's role as a social good is a deeply polarizing and divisive issue. One of the frequent critiques of capitalism is that, left unchecked by strong governmental policies, it radically accelerates inequality (Jahan & Mahmud, 2015). Piketty & Goldhammer (2017), famously articulated that the rate of return by capitalist investment far outstrips growth of wages and social goods. To put it simply, the rich gain more from capitalism overtime than the ordinary or the poor. I will discuss the influence of inequality on subjective appraisals by individuals and social class worldviews in chapter two. Despite the importance of capitalism in how societies function, there has been little attention paid to it within the counseling discipline. For instance, only two articles that mention the word capitalism have been published, in the last five years in the *Journal of Counseling and Development*, the flagship journal of the counseling discipline. Capitalism's systemic contribution to inequality naturally influences the social structures and their relationship to health and mental health. One of the primary issues within capitalism is the control wielded by those in managerial and ownership power at their firm over those who have no power at their job (Muntaner et al., 2015). This control is commonly expressed as exploitation and organizes individuals into various social classes, reflected by their structural position in their work-lives (Muntaner et al., 2015). Labor unions intervene on the side of workers who have little control in their work lives, helping redistribute wages and increasing democratic control throughout the firm. Therefore, the discipline of counseling benefits from developing a critical and systemic look at the contributions of capitalism towards the structures of its own profession

and its impact on the wider society. The locus of this dissertation will focus on how labor unions influence mental health, as the distribution of income that labor has access to is a contentious but important political issue (Lonergran & Blyth, 2020; Shaikh, 2018).

### **Counseling and Counselor Education**

Counselors and counselor educators use a variety of important tools to practice and teach. In relation to pedagogy, counselor educators can integrate concepts of social class, economic instability and inequality, along with poverty and social status concepts into a variety of different teaching contexts (e.g., addictions, career, school). Professional counselors may extract meaningful methods and frameworks to work with and advocate for the poor and working-class clients they will inevitably serve. Finally, advocacy and social justice are pillars within the counseling professional identity. Social class and inequality provide material insights that improve social justice advocacy, along with novel solutions to career and workplace economic challenges that the counseling profession can advocate for and implement.

### ***CACREP Standards***

The Council for the Accreditation of Counseling and Related Educational Programs (CACREP) is a nationally recognized body that accredits, audits, and helps maintain a standard for teaching and training future counselors. CACREP advocates for the counseling profession through state policy and helps maintain quality control over the discipline and its level of training. To maintain the standard of professional quality, CACREP has created standards for counseling programs, to guide teaching and training programs.

A knowledge base in political economy, income-inequity, and social determinants of poverty equips counselors and counselor educators with a material understanding of social justice issues. As noted within CACREP standards (CACREP, 2016), counselor education

programs are required to address a host of teaching and training standards. The CACREP standards equip novice counselors with a strong professional identity, geared towards understanding and removing barriers to access, multiculturalism and social justice, along with helping advocate for their profession within the public sphere (CACREP, 2016). Understanding the various social and economic determinants of income inequality, along with developing empirical research detailing causes of inequality and potential interventions, falls within the CACREP standards. For example, within the counseling curriculum, CACREP highlights under professional counseling orientation and ethical practice's standard: "advocacy processes needed to address institutional and social barriers that impede access, equity, and success for clients," (CACREP, 2016, p. 10). Counselors equipped with a sufficient understanding of social determinants of mental health (SDOMH), along with distributional conflicts within the political economy, are better positioned to advocate for their equity access for their clients. As noted in the aforementioned literature, individuals concentrated on the lower end of the social gradient, disproportionately bear health and mental health burdens (Marmot, 2015). Individuals and families who struggle disproportionately with health/mental health outcomes live in the intersection of poor social determinants (e.g., housing, food, income precarity). Thus, counselors and counselor educators will improve their ability to advocate socially and politically within the systemic structures of the political economy that create these inequities in our social determinants. Some of these political interventions include the following suggestions provided by Patel et al. (2018): to advocate for universal access to mental health care on a national level, to improve social and community bonds in neighborhoods through local policies and interdisciplinary partnerships.

### ***Social Justice***

Income-inequality and poverty play large roles in mental health outcomes through a variety of pathways. It is likely that counselors will interact with clients from lower social gradients or struggling with precarity. Capitalism looms large as a polarizing way of organizing our political economy. Therefore, concrete interventions to reduce income-inequality and poverty are well within the purview of counselors and counseling education. Unions represent a concrete, evidence-based way to reduce income-inequality and improve health/mental health outcomes through different pathways (Malinowski et al., 2016). If my hypothesis is correct, with union affiliation predicting greater psychological well-being and lower depression, then the counseling disciplines, social justice goals will intersect with those of professional labor. To put it simply, clients in labor unions may have better mental health than those who don't. Therefore, advocating for more unionization across the mental health field and wider society will be an important plank for counseling's social justice agenda.

Counselors interested in reducing income-inequality can, using the evidence, advocate for unions. This would lead to stronger worker control of productivity, improving wages and security for counselors and allied mental health professionals. More secure staff in mental health institutions means greater attention and care given to clients, which will inevitably improve their mental health outcomes. Indeed, the literature on burn-out within the counseling profession locates burgeoning case-loads, oppressive work environments, and budgetary constraints as significant contributors to counselor self-efficacy and locus of control (Lee et al., 2010). Labor unions intervene in this relationship, and would help counselors advocate more forcefully for better labor practices within their own field, leading to less burn-out and better client outcomes. Counselors and counselor educators have increasingly adopted an anti-racist framework to combat systemic racial inequalities within the United States (Sharma & Hipolito-Delgado, 2021).



Racial minorities, immigrants, and women are disproportionately concentrated within lower social gradients, making their economic cultures precarious (Sami & Jeter, 2021). Therefore, anti-racist work within the counseling professions cannot be complete without a material analysis, and subsequently, material interventions. For instance, Tsao et al. (2016) noted an increase of the minimum wage to \$15 an hour would cut premature deaths amongst mostly women of color within New York City. Thus, anti-racist frameworks follow naturally from an analysis of the political economy, and are congruent with counseling education's CACREP standards for social justice.

CACREP (2015)'s discussion on social and cultural diversity standards also include: "the effects of power and privilege for counselors and clients' and 'strategies for identifying and eliminating barriers, prejudices, and processes of intentional and unintentional oppression and discrimination," (p. 11). Indeed, class privilege and classism (Liu et al., 2004; Liu et al., 2007) are significant threats to counselor training and effective clinical practice. To protect against potential attributional biases by counselors and counselor educators, systemic structures of how class and SDOMH are created by the political economy could improve attributional issues within counseling. As noted by Lui (2011), classism by a client, because of referents in their economic culture or self-attributed bias (i.e., I'm failing as a breadwinner), exerts a strong mental health cost on individuals and families. Counselors and mental health professionals, being middle or upper-class, pose significant classism threats when working with underprivileged and marginalized clients (Liu et al., 2007). Therefore, comprehensive discussions of class, poverty, and income-inequality within training programs prepare counselors and counselor educators to understand barriers and prejudices, along with attending to various forms of class oppression in

the political economy.

### ***Curriculum***

Counseling education's classes on career counseling, addictions, along with specialty concentrations in rehabilitation counseling could benefit from developing empirical and conceptual integrations with the aforementioned concepts. For example, CACREP (2016) notes in its career counseling class's standard: "approaches for assessing the conditions of the work environment on client's life experiences" (p. 12). Conditions of work, labor practices, and the benefits/drawbacks associated with various professions and labor practices are fundamental concerns of the social determinants of health (SDOH) framework (WHO, 2010). Indeed, Marmot (2015) has long noted that, based on his influential Whitehall studies on British Civil Servants, individuals concentrated in more precarious work conditions struggle with a subjective sense of control, and thus are more likely to have deleterious health and mental health outcomes. Therefore, wage labor, especially within the United States, noted for its incredibly low share of labor productivity compared to other peer nations (Elsby et al., 2013), inevitably heightens negative mental health outcomes. CACREP (2016), highlights for career counseling specialization, a contextual dimension by noting the: "impact of globalization on careers and the workplace," (p.22). Globalization is associated with neoliberalism, which forms the dominant understanding of our political economy. Therefore, the determinants of globalization and its impact on labor and technology, increases counselor education's contextual teaching standards when questions of political economy are discussed within education.

### ***Clinical Recommendations***

Counselor competence in social class, along with low wage labor serving as a proxy for understanding inter-related, unequal SDOH in a client/family's life, creates an opportunity to

decrease attributional bias and improve therapeutic relationships in community mental health settings. Clinically, our results could help inform counselors to conceptualize ways to help their clients find solidarity, meaning, and action at their workplaces by looking at potential labor struggles to find meaning and solidarity. This would be congruent with our measure of psychological well-being. Integration of more theoretically rigorous literature on social class, income-inequality, and SDOMH, provides counselors working with career-related theories, a clearer picture of class-mobility and the determinants that impact labor markets and education. With a labor union's ability to influence health determinants, the inter-relatedness of work performance, work demands, and health as articulated by (Tang et al., 2021), becomes a viable intervention for career counselors to advocate for and help place clients within labor relationships.

Addiction's coursework and professional specialization within addictions therapy is a salient part of counseling professional identity (CACREP, 2016). SDOMH, political economy, and the decline of unions offer contextual insights into addictions' clinical work and education. For instance, Case and Deaton (2017) noted that working class Americans within de-industrialized areas were dying at an alarming rate from diseases of despair (e.g., addictions, suicide), directly connecting precarious labor market conditions and unequal SDOMH to the increase of mortality. This data was further replicated and reinforced by Ikeler's (2020) study, noting labor union decline as a significant predictor of overdose deaths. Empirical evidence is slowly accruing, showing that unions are protective against mortality, specifically diseases of despair (Eisenberg-Guyot et al., 2020; Eisenberg-Guyot et al., 2021). Therefore, integrating information about labor unions and theoretical insights into why they declined (e.g., neoliberalism) increases a counselor's clinical ability to help diagnose social determinants and

their ecological impact on addiction and substance abuse within their clientele. Counselor educators can better prepare counselors for work in community mental health settings or with marginalized populations by discussing issues such as de-unionization, political economy, and various SDOMH and their pathways towards diseases of despair. This theoretical training potentially creates an environment where counselors can advocate for better working conditions and feel empowered.

Rehabilitation counseling is an important specialty of the counseling fields. CACREP (2016) contextual standards related to rehabilitation specialty, rehabilitation counselors note the importance of: “education and employment trends, labor market information, and resources about careers and the world of work, as they apply to individuals with disabilities,”(p. 25). Within the practice standards, CACREP (2016) highlights how: “career- and work-related assessments, including job analysis, work site modification, transferable skills analysis, job readiness, and work hardening,”(p. 27) is an important component of rehabilitation counseling. Within this domain, labor unions play an intersecting role in developing rehabilitation counseling’s advocacy, competence, and practice in collaboration with unions. For instance, the American Federation of Labor and Congress of Industrial Organizations (AFL–CIO), the nation’s largest union, released a convention resolution in 2009, detailing the important role labor unions play in protecting disability status in the work-place through collective bargaining (Department for Professional Employees, AFL-CIO, 2009). The International Labour Organization (ILO) compiled research and recommendations on the positive intersections labor unions have on disability rights, along with improvements and potential next steps (Fremlin, 2017). The ILO notes in their report how labor unions advance the cause of disability justice in the workplace through four mechanisms: a) making sure legislation and labour standards are

adequate, b) awareness raising and advocacy, c) formation of the union and representation of workers, d) ensuring conditions for decent work, e) recruitment, career development and retention, f) services or products in the worker's organization or the workplace, (Fremlin, 2017, p. 6). Labor unions play an important role in advocating for work-place safety and accommodation standards that are essential for individuals with disabilities (Fremlin, 2017).

Unions accomplish their aims through strategies such as collective bargaining and worker solidarity throughout the firm. Labor unions raise wages, disproportionately helping individuals with disabilities who face prejudicial classism and intersectional challenges within unequal SDOMH because of their social class (Diniz et al., 2019). Therefore, connecting concepts within the political economy (e.g., labor unions) provides tools and frameworks for rehabilitation counselors to develop and provide for their clients and society at large. Individuals with disabilities are more likely to struggle with deleterious mental health outcomes (Diniz et al., 2019). Therefore, if the hypothesis is confirmed, then individuals with disabilities would disproportionately benefit from being represented by a labor union at their places of employment.

The interconnections between diverse, systemic concepts such as SDOMH, social class and classism, along with labor unions and their relationship to the political economy, provide the counseling education discipline with important theoretical and practical tools to help inform education and practice. Within the proposed study, I will cross-sectionally examine union affiliation and its impact on mental health and psychological well-being. I compare workers who are not union affiliated with those who are, to see if there are differences related to their mental health. This empirical analysis will further add to the developing, interdisciplinary literature

examining the role of health, mental health, and associations with labor unions and income-inequality.

### **Chapter One Summary**

Within chapter one, I discussed the importance of examining the role that labor unions and the political economy play with the intersection of various SDOMH and their outcomes. Interdisciplinary knowledge of these topics exists, and I highlighted how they would aid counselors and counselor educators in fulfilling their CACREP standards. I introduced a preliminary study, with further detail in chapter three. Chapter two involves a literature review, which expands the depth of these topics mentioned.

## **CHAPTER II: REVIEW OF THE LITERATURE**

In chapter two, I summarize interdisciplinary perspectives related to political economy, including income inequality, as well as the effects of these factors as structural and social determinants of mental health and mental health disparities. The major social determinant of mental health I focus on are labor unions. I touch on the history of labor unions, especially in the state of Wisconsin, and their influence on mental health.

Following the structural discussion, I will discuss how these challenges manifest in potential mental health problems through social rank, social class, psychology of working, and subjective status comparisons. Therefore, chapter two includes a review of several major areas of theory and research flowing from the ecological to the individual, culminating in the proposed study's question.

### **Social Determinants of Mental Health**

Within the context of my study, the labor union's function is a critical determinant of health and mental health. Social determinants of health (SDOH) refer to the contextual factors that influence health and are reflected in the places individuals and families live, breath, worship, play, and work (WHO, 2010). More technically, SDOH are various social institutions and factors in a society that determine one's health outcomes beyond direct medical care access. These social determinants include (but are not limited to) housing, pollution, transportation, neighborhood quality, economic stability and income, food, and violence/lack of safety (WHO, 2010). Various factors in society influence the health outcomes of individuals, aside from access to quality healthcare (Braveman & Gottlieb, 2014). Such factors are nested in the social and political environments in which families and individuals live. Environments that are unequal and

impoverished show profound influences on health, and increasingly on mental health outcomes as well.

Similarly related are the social determinants of *mental* health (SDOMH). Growing evidence supports that the social context in which we live in (e.g., working environment, living conditions), also impacts our mental health outcomes, just as they do with physical health outcomes (WHO, 2014). Indeed, the distribution of social and environmental problems disproportionately impacts those of lower social classes, which then influences their likelihood of having chronic mental illness (WHO, 2014). Some factors that are implicated as determinants of mental health include (but not limited to): female gender, no social support, low-income, unemployment, and perceived social discrimination (Silva et al., 2016). Social factors that contribute to mental illness increasingly concentrate individuals into chronic precarity. Indeed, chronic precarity lowers one's sense of subjective social status compared to those of a higher status concentrated on the less precarious end of the social gradient (Marmot & Bell, 2016). Lower status and social gradient position are strong proxies for poor health and mental health outcomes across the life span (Marmot, 2015; Marmot & Bell, 2016; Operario et al. 2004; Russell & Odgers, 2019; Scott et al. 2014). Financial debt and economic determinants play an outsized role within the social gradient and influence mental health disorders (Jenkins et al., 2008). Marmot (2015) notes that workers at the bottom of the social and financial hierarchy lacked sufficient perception of interpersonal control and stability over their work environments and lives, which increased their stress and generated poorer mental health outcomes than their higher status peers (Marmot, 2015). Thus, social determinants are considered the “cause of causes,” and play a large role in determining our mental health outcomes (Marmot, 2015).



The causal pathways between deleterious mental health outcomes and their social determinants can be organized in three different dimensions as articulated by (Allen et al., 2014): a), the life-course approach, b), community-level contexts, c), national-level contexts.

### **Life-Course Approach**

The life-course approach situates social determinants as impacting different developmental stages in the life-span, such as pre-natal and working ages (Allen et al., 2014). Adverse events, traumas, and stressors play a dynamic role, influencing epigenetic and social processes that create the conditions of relative advantages and disadvantages that impact one's mental health (Allen et al., 2014). For instance, maternal depression, along with risk-taking behaviors (e.g., smoking, addiction) impact a newborn's health and well-being, including their weights at birth (Surkan et al., 2011). Within the larger family structure, postpartum depression follows a social class and social gradient pattern, with lower social gradients reporting more maternal depression than higher ones in England (Marmot Review Team, 2010). In an individual's working-age, unemployment, income-inequality, and shifts in the political economy (e.g., recession) increase the potential for poor mental health outcomes. Job security and control are important factors in maintaining positive mental health outcomes (Bambra, 2010). Within the elder ages, accumulation of advantages or disadvantages impact one's mental health. Social provisions, such as pension and retirement support, are a larger factor in mental health outcomes (Allen et al., 2014). Loneliness is a major determinant of depression and suicidal ideations amongst the elderly (Crewdson, 2016). Thus, the life-course provides a dynamic and ever-shifting context in how advantages and disadvantages can accrue that impact one's mental health.

### **Community Level Contexts**

Community level determinants involve tangible properties (e.g., polluted environments, housing) and intangible properties (e.g., perception of neighborhood safety) (Allen et al., 2014). For example, improving fuel access for homes to stay heated during the winter improves stress and anxiety amongst families in England (Critchley et al., 2007). Adolescents in various Asian countries were found to have increased psychological distress from bullying in school environments and feeling a lack of integration within their schools and local community (Lee et al., 2019). Community environments that have access to nature show improved well-being as well. Physical activity is noted to improve mental well-being when practiced outdoors in natural environments, and forms an important community level determinant for mental health outcomes (Thompson Coon et al., 2011). Primary health care is an important community level determinant as well for positive mental health outcomes. Compton and Shin (2015) note the importance of accessible, low-cost or free at point of service, primary care to help screen for potential mental health challenges. Clinics and primary care facilities are on the vanguard for positive health and mental health interventions and education. Their local knowledge of their communities and trust within local populations make them an important determinant of care. Labor union density is a community level context I am investigating in the study.

### **Country-level Contexts**

Structural challenges that impact the nation's economic and political structures play a large, systemic role in determining mental health outcomes. As a result, systemic economic interventions on a provincial, regional, and nation-wide level are viewed as essential for creating positive change that improves mental health outcomes (Allen et al., 2014). Within poorer and middle-income nations, evidence suggests that cash transfers to families and adolescents in

poverty deeply improve mental health in the aggregate, promoting systemic and positive change in the environment (Bauer et al., 2021). Large, global shocks, such as the financial crisis of 2008, created dysfunction in the health and mental health of numerous nations. The nations that proved to be more resilient and showed better mental health outcomes amongst their populations had less inequality, and more structural support in the political economy (e.g., universal health-care, labor union density) (de Vogli, 2014). Taken together, life-courses, community, and national determinants all make a diverse and dynamic impact on influencing accumulated advantages and disadvantages in mental health, experienced by a population.

SDOMH are dynamic and fluctuates extraordinarily between different populations. They create social hierarchies through accumulated advantages and disadvantages experienced by populations within a nation. Different social classes and individuals derive their self-esteem and self-worth through comparison to others within the social hierarchy, along with accumulated advantages/disadvantages. Thus, SDOMH in the political economy creates opportunities for social hierarchies and ranks to emerge, which impact families and individual's mental health. Labor unions, thus, influence mental health outcomes through a community-based social context.

### **Labor Unions**

Within the political economy, we classify most individuals as workers, working on the behalf of employers. Workers generate profit or material outcomes for their employers, who hire them to complete tasks required for them to make the firm productive. Therefore, workers make up most of the population in society. The traditional way workers can organize to advocate for their well-being within a work-place is through the institution of labor unions (Hagedorn et al., 2016). Labor unions originated over a century ago to help the vast majority of people (employees) bargain with their employers for better work conditions and wages (Hagedorn et al.

2016; *Trade Union Census*, 2006). Employers, or those who own firms by the labor relationship, have a vested interest in keeping their labor costs down to maximize their material outcomes and profit. Workers have a natural, vested interest in opposing this outcome, since they derive their benefits from a larger share of the productivity gains from their firm (Chu et al. 2018). Thus, the conflict between workers and employers is one of the most traditional insights into the *heterogeneity of interests* in political economy. The distribution of income in a society is affected by labor's ability to bargain for wages and reduce income-inequality and poverty. Individuals at the lower end of the income-spectrum and social precarity face a disproportionate degree of poor physical and mental health outcomes, and struggle to access necessary resources (e.g., food, healthcare). The different groupings of individuals organized on this distributional income spectrum are social classes, which form a relationship with income that is on a spectrum. Thus, different social classes will vary in their ability to access necessary resources for daily living. With the decreasing ability to distribute gains towards workers in the neoliberal period, income-inequality has grown (Lonergran & Blyth, 2020).

### **Labor Movement History**

The United States has a long and active labor history. Indeed, many of the first colonial settlers that reached America served various British merchant companies that required income and production for passage to the new world (Morris, 2020). The importation of African slaves and various indentured servants from all over Europe and Latin America, along with aggression against Native American tribes, created conflictual tensions over wealth and income (Morris, 2020). Indeed, many slave and indentured revolts revolved around oppressive working conditions and are considered the genesis of American labor militancy before the official founding of the nation (Morris, 2020). Starting in the Civil War period (1850s-1860s) and

progressing till the early 20<sup>th</sup> century, American industrialization catapulted wealth and capital into uncharted territories, bringing millions of immigrants from Europe and Asia into large, developing cities such as New York, Boston, and Chicago (Montgomery, 2020). With growing industrialization and the solidification of American industrial capitalism, wage inequality, unsafe working conditions, and exploitation of labor took on a new turn. This period marked the beginning of mass labor unionism, strikes along immigrant and ethnic lines, and harsh countermeasures enacted by the government and capital to keep workers disciplined (Montgomery, 2020). This period was marked by several depressions (e.g., 1873), followed by boom cycles of growth (Montgomery, 2020). Unemployment was chronic and much of the work was seasonal, and workers lacked the ability to plan for the future and make investments into putting down roots, establishing families, and accumulating wealth. The activism by the militant unionists led to what is termed the Progressive Era in American society. Many conservation efforts protected nature along with advocating for the government to provide basic services such as fire-fighting, health clinics, trash-pickups, and proper sanitation/water facilities (Montgomery, 2020).

At the dawn of the 20<sup>th</sup> century, American labor activism was reaching its greatest peak. Indeed, formal labor unions began to be established as workers were socialized and utilized politics to increase their power in society. The Democratic Party shifted and began to reflect more working-class voices in their coalition of interests (Taft, 2020). Political parties, including socialist and communist parties, also agitated on the edges for greater worker participation in the process of power. When the Great Depression struck in 1929, millions of Americans were unemployed, with many of them losing their life's savings. However, the powerful labor movements backed President Franklin D. Roosevelt, who promised a *New Deal* between the government and its citizens (Taft, 2020). With so numerous workers unemployed and the market

unable to employ them, the labor union movement demanded more protections and advocated for the government to intervene. This pressure resulted in the largest expansion of government services in American history, including employment protections (Taft, 2020). By the conclusion of WW2, into the 1950s and early 1960s, American workers enjoyed low income-inequality and the highest standard of living in the world, with the highest levels of private sector unionization (Taft, 2020). However, the genesis of labor union decline was sown with the Taft-Hartley act of 1947, along with implementing “right to work” laws (Leigh & Chakov, 2021). Taft-Hartley allowed workers to opt out of paying union dues (while still receiving union benefits), damaging labor’s ability to fundraise and organize compared to management’s vast capital resources (Taft, 2020). The dawn of neoliberalism and globalization, along with anti-worker politics within the United States and the United Kingdom, typified by Ronald Regan and Margaret Thatcher, contributed to the decline of organized labor starting in the 1970s (Lonergran & Blyth, 2020).

### **Discrimination in Labor**

Despite labor’s ability to reduce income-inequality and improve material outcomes for workers, labor unions within America practiced racism and discrimination against racial minorities, specifically African-Americans (Cassedy, 2017). Both Black and white workers expressed interest in labor unionism to improve their wages and security. However, white workers traditionally excluded black workers from labor unions (Cassedy, 2017). This didn’t prevent Black workers from organizing their own strikes and exercising agency over their working lives. For instance, Black workers led a caulking strike in 1835 within a Navy Ship Yard (Cassedy, 2017). In the late 19<sup>th</sup> century, Black workers organized a parallel labor congress to the white National Labor Convention, called the Colored National Labor Union, and petitioned the United States Congress to recognize their demands for equality (Cassedy, 2017).

Racial discrimination remained rife in the labor movement, as employers often pitted the threat of lower paid Black (and various immigrant workers) against higher paid white workers.

The Civil Rights movement in the 1950s and 1960s saw the rise of militant Black labor unionism re-emerge as a part of demands for equality and integration. One of the most famous Civil Rights leaders, A. Phillip Randolph, famously demanded President terminate racial discrimination in hiring within labor unions and segregation in the armed forces. Roosevelt complied by signing Executive Order 8802 (Cassedy, 2017). While continuously discriminated against by many white unionists, Black workers demanded equal opportunity to protection through labor unions and saw them as integral to equality. While many white unionists discriminated against Black workers, labor unions and strikes have also been famous avenues for interracial solidarity, as racial differences are over-come to triumph against management (Bruegmann & Boswell, 1998). Currently, African-Americans are slightly more likely to be represented in a labor union than whites, Hispanics, and Asians (Bureau of Labor Statistics, 2020). While Black Americans were discriminated against through much of the labor union history, they also fought for membership and equality, and pushed for wider participation in the labor union movements.

### **Labor Union history in Wisconsin**

The sample in our study occurs in Wisconsin and examines unionized workers and their mental health outcomes. Wisconsin is an especially strong labor union state with a militant union history. For instance, Wisconsin was the first state to allow public sector workers to unionize in the 1950s (Leigh & Chakov, 2021). Wisconsin's labor history is diverse and full of important events that shaped the politics of the state and the nation at large (Wisconsin Labor History Society, 2021). In the late 19<sup>th</sup> century, over a thousand workers were striking and marching in

Bay View, Milwaukee for an eight-hour work day. The local militia opened fire and killed seven of them, which is still honored by the Wisconsin Labor movement till this day (Holter, 1999). Though their initial strike was unsuccessful, their activism helped created the conditions of the eight-hour work day. Wisconsin famously was the site of the longest labor strike in American history, the Kohler strikes which last from 1954 to 1960, along with two more years of bargaining and negotiation (Holter, 1999). Wisconsin has also been the site for the famous farmer worker strikes and labor organizing in the 1960s (led primarily by Latino immigrants) and massive push-back in 2011 from public sector workers when they were stripped of their collective bargaining rights (Wisconsin Labor History Society, 2021). Wisconsin's important labor union activism would likely be felt by our sample, who are coming to age and working during these generational movements within the state. Our sample provides us with a unique opportunity to understand the dynamics of labor unions as a social determinant, and its influence on mental health outcomes.

### **Labor Unions and Health**

Labor unions took their contemporary shape with modernity in the West, along with the explosion of innovation and growth created by the Industrial Revolution. Within the United States, labor agitation and organization were a feature of the 19<sup>th</sup> century, carrying over into the 20<sup>th</sup> century with the creation of the National Labor Relations act in 1935 (Schwartz & Thorkelson, 2006). The National Labor Relations act gave workers the legal right to self-organize and bargain for better work-place conditions with legal protection. As a result, unions continued to grow until around the 1960s before they declined. Currently, only 10.8% of workers are unionized within the United States—a historic low (U. S Bureau of Labor Statistics, 2021). The peak of labor unionization in the 1940s-1950s stood at approximately 33%, significantly



narrowing income-inequality within the nation (Callaway & Collins, 2017). Reduction in labor union participation influences health outcomes amongst workers.

The most direct influence from labor unions to health is their role in bargaining for higher income and utilization of contracts to secure stability of health access (Hagedorn et al., 2016; Malinowski et al., 2015). Health and medical benefits make up a foundational component of labor relations, despite being often overlooked as a contributor to social determinants of health (Malinowski et al., 2015). Unions have also historically promoted public health (Malinowski et al., 2015; Reynolds & Brady, 2012) including support for campaigns around tobacco control, hypertension awareness, and asthma. Conversely, union decline predicts larger income-inequality, which generates downstream impacts on health and self-rated health (Reynolds & Brady, 2012). Thus, labor unionization exerts a systemic influence on factors often associated with positive physical and mental health.

Labor unions contribute to health outcomes through a variety of structural and interpersonal pathways. Collective bargaining and union agitation often focus on work-place benefits, safer work conditions, and sharing within the productivity of the firm or organization the workers are a part of. Thus, a strong consensus exists around pathways that link unions to public health through wages, income-equality, decreasing hazardous work environments, and promoting social cohesion and solidarity at work (Leigh & Chakalov, 2021). Unions intervene at numerous levels (e.g., economic, social) to help promote positive health outcomes. Indeed, Leigh & Chakalov (2021) review the literature around social determinants of health and mental health and develop five different domains and pathways between labor unions and outcomes. The first domain: economic stability, offers pathways through wages, reduction of income-inequality, job security, and protection against management retaliation/discrimination (Leigh & Chakalov,

2021). The second domain, education, leads to pathways to job and general education, along with promoting stability to pursue higher credentials, increasing social mobility (Leigh & Chakalov, 2021). The third pathway: health care's pathways lead to health insurance, family sick-leave, paternity leave and general health promotion (Leigh & Chakalov, 2021). The fourth domain, workplace safety's pathways lead to workplace compensation, government regulation over workplace safety, shift and graveyard shift incentives, dangerous work places and the gig economy (Leigh & Chakalov, 2021). A reduction of unions may lead to deleterious workplace conditions. Last, the fifth domain relates to psychosocial pathways, which include job stress and strain, satisfaction, social support, well-being, solidarity, respect, dignity, and stigma (Leigh & Chakalov, 2021). My study will examine the fifth domain of pathways, specifically the relationship between labor unions, psychological well-being, and depression.

### **Labor Unions and Mental Health**

While there is growing empirical literature on the associations between unionization and physical health (e.g., Leigh and Chakalov 2021; Malinowski et al., 2015), the literature on unions and mental health is in its nascent stage. One of the first studies for the associations between unions and mental health noted the correlations in the European Social Survey between country-level union density and depressive symptoms (Reynolds & Buffel, 2020). The study concluded that depressive symptoms were lower in nations with higher union density. Yet, the study was cross-sectional, correlational, and one of the first to examine empirical connections between unions and general mental health. Researchers also recently examined the relationship between union density and more specific mental health outcomes. Case and Deaton (2021) studied how the United States working-class population's life-span had been decreasing (a first in the developed world), through drug over-doses, alcohol abuse, and suicide. The researchers noted

that precarious employment, deindustrialization, losing unions, along with globalization, was exerting a massive social and mental health cost on American workers without college degrees.

Similarly, states that experienced a more rapid decline of unions (because of deindustrialization) and low self-employment had significantly more overdose deaths than not (DeFina & Hannon, 2018; Ikeler, 2020). Thus, de-industrialization and the decline of unions are significant factors in predicting overdose deaths within the United States. The impact is not direct and causal between a structural, social determinant and its influence on an individual's mental health. In both of the aforementioned studies, several covariates were controlled for (e.g., marriage, manufacturing, income, social welfare wages), and the studies are correlational.

However, a complex relationship exists between social institutions in the political economy (e.g., unions) and their impacts on an individual's mental health. For example, Eisenberg-Guyot et al. (2020) found that union status did not reflect higher self-rated health or reduction in mental illness. However, individuals with marginalized identities (e.g., racial minorities and female-identifying) demonstrated significant effects. The decline of unions within the last few generations decreased the researcher's ability to assess if unions could make marginal improvements for their members (Eisenberg-Guyot et al., 2020). Further examination is warranted to augment our understanding of the influence of unions as a social determinant that influences health and mental health. However, enough evidence exists through Malinowski et al. (2015)'s assertion that labor unions are an important social determinant of health. SDOMH and labor unions, specifically, are influenced by conflicts in the political economy, which exacerbate income-inequality.

### **Political Economy**

Political economy is the study of how politics, or power, intersect with scarce economic resources in a society, and the battles over how to distribute those resources (Drazen, 2002; Ravenhill, 2020). Inevitably, resources are distributed unequally through a variety of institutions. Political economy as a discipline, and as a theoretical tool, allows one to describe the features of income distribution in a society and the resulting outcomes. Political economy is an important influence on economic stability, a vital component of SDOMH. Political economy concerns itself with how different factions (e.g., political parties, institutions, donor networks, voting bases) may use politics to tilt the distribution of resources towards their perceived beneficial outcomes. For example, cutting deficits in the government helps prevent hyperinflation and improves returns for investors, but it also reduces government social investment. Municipal zoning conflicts over affordable housing with higher density housing units benefit economically precarious families, but contribute to lower property values for middle-class homeowners. Therefore, different groups in society will conflict over these policies, since they provide varying degrees of material benefits to power groups and social classes. These conflictual interests are sometimes described as the *heterogeneity of interests* (Drazen, 2002; Ravenhill, 2020). Thus, income distribution reflects power and political interests, as different social classes extract varying degrees of material outcomes. The purpose of utilizing political economy as a theoretical tool allows us to understand how larger, structural forces impact the downstream health and mental health outcomes of individuals and families in various social classes (Burns, 2015; Sami & Jeter, 2021). This conflict is referred to as power-resource theory by Korpi (1985). Power-resource theory offers theoretical insights into how the distribution of power between different social classes leads to different policies being adopted in society.

The current study aims to examine the effects of conflicts within our political economy, specifically labor de-unionization, on individual mental health outcomes. To understand the influence of labor unions on health in greater depth, we must first explore the role of social trends related to political economy within the U.S. including concepts of neoliberalism, globalization, unionization, and income inequality.

### **Neoliberalism**

Neoliberalism is a term that has been used to describe the dominant understanding of political economy in the United States for the last few generations (Stiglitz, 2012). Neoliberalism has alternatively been called the Washington Consensus, due in part to the alignment of economic policy in the Anglo-American world, typified by Ronald Reagan of the United States and Margaret Thatcher of the United Kingdom (Stiglitz, 2012; Wade, 2020). It is a challenging term to define, conceptualize, and apply theoretically (Thorsen, 2010). Neoliberalism is best understood as a return to classic economic liberalism, which entails loosening government intervention into the markets of society and defending private property (Thorsen, 2010). Neoliberalism proposes that capital should have as little restriction as possible from the government or any regulating force that tries to redistribute it. This is based on the belief that markets are efficient and self-regulating and that they will naturally lead to the prosperity of society if no external forces tamper with them (Stiglitz, 2012). It is important to understand that neoliberalism is a theoretical perspective on political economy, defined by an uncompromising belief in the market's ability to efficiently allocate resources and a deep skepticism of any form of government intervention to redistribute them (Thorsen, 2010).

Neoliberalism deepens inequality within society (Stiglitz, 2012). The birth of the neoliberal period functions as one determinant for the decreased union strength in American

society, which proponents argue is key to maintaining high wage inequality in society (Jacobs & Myers, 2014; Western & Rosenfeld, 2011). Decreasing labor union activity to free capital is a trademark of neoliberal theory (Thorsen, 2010). Indeed, wage inequality sky-rocketed in the United States since the late 1960s and early 1970s, corresponding to the shift toward neoliberal economic politics (Jacobs & Myers, 2014). Wage inequality during the neoliberal period is observed in countries as diverse as Australia (Watson, 2016), India (Alvaredo et al., 2018), and China (Han et al., 2012), demonstrating the global impact of neoliberal policies. Relatedly, this large income inequality in all developed nations is rooted in globalization, trade, technology, and the slow erosion of labor unions under neoliberalism (Roser & Cuaresma, 2014). In summary, the neoliberal economic period widened global inequality through a variety of structural mechanisms enacted through political power, to include the de-unionization of many Western nations through globalization.

### **Globalization**

Globalization is a nebulous term that is variously applied to describe diverse intellectual, cultural, and economic trends in our contemporary times (Eriksen, 2014). With its relationship to the international political economy, globalization refers to the inter-related concepts of free-trade between nations and the ability to globalize labor production (Eriksen, 2014). To put it simply, globalization of labor refers to using workers in other nations to produce needed goods and services and to import those goods/services back into a home nation at a reasonable cost to consumers. For example, iPhones are developed and created in China, and shipped to the United States for consumers to buy them in their local stores. For our purposes, we link the globalization of labor to the decline of labor unions in various Western nations and then to the increase in income-inequality in the industrialized world (Doan & Wan, 2017). Internationalizing the labor-

pool under-cuts a labor union's ability to collectively bargain within their nation, as the firm's owners can threaten to move jobs and production overseas. This dynamic reflects the *heterogeneity of interests* towards the firm's owners, who can cut down on their labor costs and accumulate more capital to then influence the political structures of their nation through the power-resource theory. However, this leaves the workers who are losing their position to bargain or have their jobs taken away in a precarious situation. Case and Deaton (2017) highlight how deaths of despair have rapidly pushed the working class's life-spans downwards, partly because of the cost of deindustrialization and de-unionization (with globalization being one determinant). Indeed, there is growing political push-back in the United States and other developed nations in the last generation within the political sphere against this dynamic (Kwon & Pontusson, 2010). This political push-back has led to various forms of political populism, dubbed "Angrynomics" which has deleterious effects on social politics, mental health, and physical health outcomes of a society (Lonergan & Blyth, 2020). Thus, conflicts in the international political economy have resulted in the de-unionization and de-industrialization of numerous parts of the United States, leading to poor mental health outcomes, as a side-effect of increasing globalization. An understanding of the international political economy and its impact on de-unionization with the United States provides us with an important, theoretical insight into the loss of unions and the increase of income-inequality with all of its impacts on mental health.

### **Income-inequality**

Income-inequality is differentiated from poverty because of the relative nature of deprivation, rather than actual deprivation itself. Income-inequality situates an individual on an income spectrum and compares them to higher earners of wealth and income (Wade, 2020). The importance of income can't be overstated, as it provides a ceiling on how much necessary

resources of daily living (e.g., housing, food) is accessed through the market. Thus, poverty is related to income-inequality through low-income earners' proximity to absolute deprivation, compared to individuals with higher incomes on the spectrum. There is growing evidence that income-inequality is a predictor of poor mental health outcomes to the same degree as poverty (Burns, 2015; Patel, 2018). For example, Marmot (2015) noted that, past a certain global dollar threshold, income-inequality became predictive of health outcomes more than absolute income/wealth. The connection between income inequality and health appears strongest in richer, more developed nations, where income-inequality is a larger phenomenon than absolute poverty (Marmot, 2015). This relationship magnifies the connection between income-inequality and specific mental illnesses, such as depression (Ettman et al. 2020; Patel, 2018). However, in a meta-analysis on the relationship between income-inequality and subjective well-being (SWB), researchers noted weak, heterogenous effects between both variables, with much variation existing in a country's level of economic development (Ngamaba et al., 2017). The evidence is inconclusive on the causal pathways between income-inequality and mental health outcomes. Thus, it is important to examine the theoretical understandings of how income is distributed in a society and the role they play in how an individual can access important resources for daily living. Various groups of people will differ in the ability to access these resources on the income inequality spectrum, and form the basis of how to understand social classes, relative deprivation, and its impact on mental health (Alegría et al., 2018; Compton & Shin, 2015; Wolff & Zacharias, 2007). These social classes intersect with social determinants of health and social determinants of mental health (Sami & Jeter, 2021), which are the systemic and contextual factors that impact mental health outcomes.



With income-inequality and poverty playing a large role in mental health outcomes, it is important to examine the role that labor unions play in reducing this gap for intervention within the mental health disciplines. Evidence-based reasons for the increase of income-inequality in the last 50 years across the world include the reduction of unions, increasing globalization and educational standards, and better technology (along with government support towards employers) (Doan & Wan, 2017; Jacobs & Meyers, 2014; Liu & Grusky, 2013). Researchers implicate the reduction in labor unions as another reason for the increase in income-inequality around the world (Guerriero, 2019). Thus, labor unions and their impact on income form a foundational understanding of political economy, and play an important role in how an individual can access various social determinants of health and mental health. Income-inequality creates hierarchies in the social realm and influences individuals' perceptions of themselves and others.

### **Social Hierarchies and their Worldviews**

Social Rank Theory (SRT) is the mechanism for how individuals make comparisons amongst each other within their social hierarchy (Stevens & Price, 2015). SRT may explain different mental health outcomes between unionized workers versus non-unionized. Unionized workers are more likely to have higher wages and better access to healthcare. SRT is an individuated process and results from downstream structural impacts on mental health through SDOMH and the political economy. SRT and Subjective Social Status (SSS), while measured through different scales, are similar conceptual constructs that emphasize the importance of *relative* social comparisons and their attendant health/mental health outcomes (Wetherall et al., 2019). Through a systemic literature review, Wetherall et al. (2019) found that with every unit of decrease in perceived social rank, there was an increase in depression, suicidal ideation, and self-

harm. Indeed, social rank has long been associated with poor health outcomes, though no consensus has emerged on the specific causal mechanisms (Sapolsky, 2005). Rather, social rank conceptualizations (which includes SSS), purports that human (and other, observed animal species), engage in resource competition, mating strategies, and other dominance hierarchies that influence our health, and mental health outcomes (Stevens & Price, 2015; Sapolsky, 2005). Therefore, deleterious mental health outcomes (e.g., depression, substance abuse) are reactions to psychosocial stressors and arrangements that produce inequity in social outcomes, namely (but not only) material resources (Sapolsky, 2005). Thus, relative and subjective perceptions of one's social rank compared to one's peers is the psychosocial mechanism that illuminates causal pathways between income-inequality and deleterious mental health outcomes (Price et al., 2007). Objectively, income inhibits the ability to access the social determinants of mental health. However, the internal psychological processes that accompany this inability to access positive outcomes in the political economy are explained through the theoretical lenses of SRT. This would help explain why relative income relationships appear to be better at predicting suicide outcomes than absolute income differences (Wetherall et al., 2015). Indeed, personal relative deprivation is associated with stronger predictions of health and mental health outcomes compared to SSS (Callan et al., 2015). Personal relative deprivation measures cognitive appraisal and emotional resentment because of subjective social rank (Callan et al., 2015). This more precise measure of the affective states caused by unequal social ranks/comparison might explain why there are deleterious mental health outcomes associated with social rank theory, SSS, and personal, relative deprivation because of inequity in our political economy (Stevens & Price, 2015).

The emotional resentment and the affective outcomes caused by social rank comparison through how our larger culture understands class and uses classism to enforce ranks within our economic hierarchies (Diemer & Rasheed Ali, 2009). Indeed, classism and subjective social class understandings play an important role in the development of mental health outcomes (Wetherall et al., 2019). We relate these understandings to the referent appraisals individuals make within our social hierarchy. Individuals at the top of the social hierarchy accumulate more advantages than disadvantages through various determinants of mental health. As we move through systemic understandings of how inequality is produced (e.g., SDOMH, political economy), we arrive at more interpersonal, subjective, and intrapsychic understandings of social class and classism (Diemer & Rasheed Ali, 2009; Liu et al. 2004). The worldviews around class and classism enforce the social hierarchies developed from systemic processes.

### **Social Class Worldviews and Classism**

Social class and classism are deeply interrelated, as social class is one's relationship to the economic hierarchy and classism is the social-prejudicial enforcement of these hierarchies (Liu et al. 2004). Social class and economic precarity are deeply intersected with other identities, such as race and gender, concentrating marginalization disproportionately upon certain groups of people, subjecting them to various forms of prejudice (Liu et al. 2004; Sami & Jeter, 2021). For instance, evidence exists to suggest that men struggle with internalized classism because of the importance of being a bread-winner, along with being a racial minority, when both identities are intersected (Liu et al., 2004; Sánchez et al., 2011). The heterogeneity of interests in the political economy, along with objective indicators of income and education, are observable features of class dynamics. However, subjective perceptions of class are important to interpersonal clinical

work and allow mental health professionals to use class in their interpersonal work (Cook & Lawson, 2016; Liu et al., 2004).

### **Social Class Worldview Model**

There are different theoretical insights into how classism (the prejudicial component that enforces economic inequality) are formed in our society (Liu, 2012). Classism refers not only to the cognitions one has about their economic status in relationship to others, but the affective components (e.g., shame, guilt, loss of social status) that one experiences when in a subordinate economic position. (Liu, 2002). To rectify or combat feelings of classism, an individual can engage in behaviors that form the motivational underpinnings of the Capital Accumulation Paradigm. The Capital Accumulation Paradigm (CAP) refers to an individual's motivations to accumulate status symbols, whether material, social, or cultural, to fit into their community's economic culture (Liu et al., 2004). This economic culture is a reference to the larger macro and micro social determinants (e.g., schools, neighborhoods, state) and aforementioned conceptions of political economy (Liu et al., 2004). Liu et al., (2004) developed a Social Class Worldview Model (SCWM) to create a theoretical basis for how classism and subjective social class operates within an individual's schema. The SCWM posits that one's social class worldview is made-up of several components: a) consciousness, attitudes, and salience, b) referent group of origin and aspiration, c) property relationships, and d) behaviors. The SCWM helps encapsulate the individual and subjective interactions with class status, along with unifying the aforementioned literature on political economy and its distribution of resources in a society. SCWM is a concrete, theoretical basis to explore why relative deprivation and relative income comparisons appear to predict deleterious mental health outcomes. Being embedded in economic cultures that emphasize certain status symbols within the Capital Accumulation Paradigm, for

instance, enforces a value system that creates winners and losers (Liu, et al., 2004). Thus, poor mental health and health outcomes are likely to rise in combination with comparison to one's relative referents, along with objective difficulties in accessing equitable SDOMH.

The social class worldview model's application in the empirical literature reinforces its theoretical underpinnings. For instance, (Trott & Reeves, 2018) documented how counselors cause inadvertent harm if there are large class differences between counselor and client, and the counselor does not broach it in sessions. Broaching and discussing class-related challenges of the client was noted to improve counseling outcomes with the client (Trott & Reeves, 2018).

Amongst low-income, white students in college, Martin (2015) noted how the students interviewed discussed challenges of working to maintain pace with their higher socio-economic status (SES) peers in college, while missing out on traditional, social networking and mentoring opportunities of college life. The need to accumulate capital to stay afloat in school, while missing out on normative experiences that their higher SES students enjoyed, impacted their self-esteem and their ability to graduate (Martin, 2015). Social class worldviews are complex and nuanced and often intersected with other identities. For instance, Black students in a Primarily White Institution (PWI) reported a wide variety of social class worldviews that intersected with their Black identity (Keeles, 2020). Some of these worldviews provided buffering effects while others reinforced negative affect, such as shame and guilt (Keeles, 2020). Social class worldviews are implicated in counseling treatment outcomes, as perceived financial security along with objective levels of education and health insurance predicted positive counseling outcomes, compared to clients who didn't have access to higher education and health insurance (Hawley et al., 2014). The SCWM has been demonstrated in the empirical literature in a variety of different contexts.

Economic inequality and poverty are unequally distributed in our society. This distribution has downstream impacts on an individual's cognitive, affective, and intrapsychic understandings of themselves and how to acquire status in their economic culture. For instance, homeless men face internalized classism over their inability to provide for their families, but developed alternative ways to show leadership in their families (Rice et al., 2017). On the other spectrum, Twenge and Cooper (2020), noted that class divide in happiness levels increased dramatically for those of a higher and lower SES between 1976-2016 (the neoliberal period). Essentially, individuals with higher SES saw their happiness increase dramatically over the course of the previous generation. They contrasted this with happiness decreasing dramatically in the same time period for White adults of a lower SES, with Black adults of a lower SES retaining stable levels of happiness. Affective traits like happiness were noted to be distributed unequally. Therefore, the SCWM helps provide a clinical application for how to encapsulate systemic inequalities and social hierarchies, along with the social gradient, noted in Marmot's foundational studies on social determinants of health. Applying the SCWM to client conceptualizations, especially working-class and poorer clients, allows the educator and clinician to discuss challenges related to classism and the negative intrapsychic, affective effects of social hierarchies, and subjective status.

### **Social Class and Classism Consciousness**

However, not all individuals within the United States are aware of the deeper dynamics of social class and economic inequality. To process this concept theoretically, Liu (2011) updated the SCWM and included a Social Class and Classism Consciousness (SCC) theory of development. Liu (2011) noted that assumptions of subjective class experience (i.e., SCWM) required a certain level of insight into one's class experiences. As noted by Cook and Lawson

(2016), even educated, practicing mental health professionals inconsistently conceptualize class outside of income. Health professionals and other academics struggle to conceptualize and apply social class to a meaningful construct for their clients and patients as well (Oakes & Rossi, 2003). This might be because of the lack of theoretical rigor within the social sciences with class-based discussions, and thus resort to merely descriptive features of SES (Liu, 2011). This finding is further reinforced by (Cooke et al., 2021)'s data on how middle-and upper-class counselors use less descriptive factors to describe class, compared to working class counselors who provide richer descriptions. Indeed, wealthy social workers who provided psychotherapy were noted by Sax (2015) as encountering challenges related to transference and countertransference with their less-wealthy clients, around fee structures and openly displaying their wealth in their professional settings. Thus, the need to see one's self as inhabiting an economic culture and as "classed" to acquire insight into one's mental health, necessitated the need to view this process on a subjective, developmental level, especially for middle-and upper-class counselors (Liu, 2011). Thus, a lack of social class consciousness and education influences therapeutic relationships and mental health outcomes.

The SCCC posits that realizing social class, economic inequality, and prejudicial features of classism requires consciousness as a classed person to have developed within an individual (Liu, 2011). It is not necessary that an individual at the bottom of the social gradient, or struggling with lower, subjective social status compared to their peers, will understand economic inequality, class, and political economy. Indeed, they may be likely to attribute their status to their own personal characteristics. Therefore, one's consciousness has to be developed through an environment that encourages the exploration of these themes and discussions of inequality. The SCCC posits three developmental stages of growth in social class awareness: a) no social

class conscious, b) social class self-consciousness, and c) social class consciousness (Liu, 2011). Thus, individuals must grow over time in their consciousness and learn to describe their specific economic challenges and cultures through the systemic structures, rather than attributing poverty or income-inequality to personal characteristics. Attributional errors of poverty and inequality continue to persist, and are potent forces in shaping psychological and interpersonal attitudes towards class and poverty (Bolitho et al., 2007; Lindqvist et al., 2017). One's consciousness is influenced by the education embedded in their environment and how they make meaning of their experiences.

### **Psychology of Working**

While there is no empirical evidence linking these concepts together, it is theoretically possible to posit that labor unions intervene on the SCCC of their participants and lower potential attributional biases. As noted in the labor union section, unions have a radical history of agitating and fighting for higher pay and benefits, while intervening structurally in their respective firms and work environments (Malinowski et al., 2015). It is likely that the attendant socialization effects (of a labor union) impact subjective, psychological states that may prime a labor union participant to make less attributional errors, and to have higher SCCC, because of having awareness and knowledge of structural problems in their workplace. Consciousness is not a guarantee of better health or mental health outcomes, however. Critical consciousness was noted as being the first step to reducing classism, but it needed to be followed through with critical action (Diemer & Rapa, 2016). Critical action, which leads to concrete steps taken to empower oneself and those around you, was found to be an important buffer for classism and systemic challenges in vocational opportunities (Kim & Allan, 2021). Labor unions represent the critical action stage. Workers acquire a base-line level of consciousness about systemic



inequalities in their work-places, which might influence their social class worldviews. These worldviews theoretically shift from individual attributions to systemic attributions. Then, they join and organize, shifting from critical consciousness to critical action, generating more well-being than those workers who don't (Blanchflower & Bryson, 2020). It is possible that labor union organizing provides for the essential features of Blustein (2006)'s underlying features in the psychology of working, namely volition and privilege.

The psychology of working theory (PWT), as articulated by Blustein (2006), discusses the features of what makes work and working conditions decent. Securing decent work leads to important life outcomes, such as well-being and needs satisfaction (Blustein, 2006). Within the PWT, Duffy et al. (2016) notes that working fulfills three necessary human needs: survival and power, social connection, and self-determination. However, not everyone can fulfill these prerequisite conditions for meaningful and decent work. Duffy et al. (2016) details how there are several predictors that go into making work meaningful for an individual. These include economic constraints, work volition, marginalization, and career adaptability. Crucially, within the theoretical model, critical consciousness, social support, and economic conditions moderate the relationship between economic constraints/marginalization and work violation. Simply put, consciousness and solidarity at work are important predictors for creating decent working conditions (Blustein, 2006; Duffy et al, 2016). Labor unions develop this critical consciousness and create the environment for critical action to occur, leading to decent working conditions. Therefore, it is reasonable to posit that labor unions intervene on an individual's psychological well-being by elevating critical consciousness to move those at the bottom of the social rank hierarchy towards critical action. This critical action is done in solidarity with one's co-workers, improving feelings of well-being by reducing one's alienation from others. This critical action

fulfills the steps towards creating decent work conditions, which allows individuals to exercise volition, find work meaningful, and to meet their survival needs.

Counselors gain tremendously from understanding theoretical ways to speak to their clients concentrated at the bottom of social gradients in ways that liberate them from internalized classism and improve their SCCC (Liu, 2011). With a higher consciousness, clients and counselors can turn to critical action and social justice, as opposed to attributing poverty and income-inequality to their own personal characteristics (Bolitho et al., 2007). The PWT notes the importance of helping individuals who face marginalization and economic constraints conceptualize their critical consciousness to lead them to critical action. Therefore, it is necessary to investigate social class worldviews and consciousness within a dyadic relationship. These internalized understandings of social class lead to differences in how one understands their subjective social status and rank when comparing themselves to others around them. Social class worldviews and consciousness are inter-related to subjective understandings of social status, which is derived from social rank theory.

### **Subjective Social Status**

Subjective Social Status (SSS) scales offer an empirical way to find out a person's social status in relationship to others and the health/mental health outcomes associated with it. Individuals at the bottom of class and social hierarchies are more likely to have poor health and mental health outcomes—otherwise known as social gradient or social rank (Marmot, 2015). SSS is correlated with SES (e.g., income, education), along with depression, neighborhood quality, and self-rated health (Shaked et al., 2016). SSS is closely correlated and related to self-rated health, which itself is a subjective indicator of health status (Wuorela et al., 2020). Furthermore, SSS correlates with significant health outcomes (e.g., BMI), and mental health outcomes (e.g.,

control of life, negative affect, chronic stress) (Adler et al., 2000). Cundiff et al. (2011) noted that psychosocial vulnerability (e.g., depressive symptoms, marital risk) mediated the pathways between SSS and self-rated health. Therefore, the inter-relationships between subjective status and health/mental health outcomes are related through diverse physical and psychological pathways.

SSS helps predict a wide range of health/mental issues and outcomes beyond traditional measures of socioeconomic status (SES) (Singh-Manoux et al., 2005). Low SSS is predictive of poor health outcomes (Euteneuer, 2014; Operario et al., 2004). A meta-analysis of the associations between SSS and physical health noted an overlap existed between SSS and SES indicators to significantly predict physical health (Cundiff & Matthews, 2017). However, while the overlap exists, SSS predicts physical health outcomes with a stronger predictability than traditional SES. SSS is predictive of mental health outcomes and provides important context in that individuals at the lower end of the social gradient have poorer health/mental health outcomes than those on top (Cundiff & Matthews, 2017). Popularized in the Whitehall studies conducted by Marmot and colleagues in the 1970s (Singh-Manoux et al., 2005), SSS scales instruct individuals to rate their status in a hierarchy compared to others, usually on a ladder (Jackman & Jackman, 1973).

However, as Shaked et al. (2016) noted, psychosocial outcomes and subjective status are nuanced through different demographic groups (e.g., women, racial minorities) who might rank themselves differently on status and social comparisons. Therefore, it is important to consider demographic differences in noting the predictive effects of SSS on health outcomes. For instance, Cundiff et al. (2011) noted that SSS is more predictive of psychosocial outcomes for men, compared to only community comparisons as predictive of psychosocial outcomes for

women. Thus, gender influences subjective social status comparisons and their contextual validity. The relative strength of SSS over SES to predict health was stronger amongst White Americans than Black Americans, potentially implicating race as an important covariate within SSS assessments, along with gender (Cundiff & Matthews, 2017). SSS demonstrated an increase in depressive symptoms within South Africa, especially so for women (Mutymbizi et al., 2019). SSS was associated with more deleterious metabolic syndrome outcomes with African-Americans, especially for women in a longitudinal sample, further providing evidence of its cross-cultural, causal, and gendered pathways (Cardel et al., 2020). SSS demonstrates strong predictive power and is an important construct in understanding the influence of inequality.

SSS and its relationship to self-rated health and mental health outcomes have also been demonstrated in a variety of multi-ethnic, cultural, and international contexts. For instance, Amir et al. (2019) assessed the relationship between SSS and self-rated health in four different adolescent populations around the world - United States, Argentina, India, and two Ecuadorian Indigenous samples differentiated by mainstream social integration. Thus, SSS has international and multicultural validity and reliability with individuals who are integrated into the mainstream economic and political structures of their nations.

Besides physical health, SSS also predicts mental health outcomes. For instance, SSS was implicated in depressive symptoms and relational hostility amongst white and Black children of late elementary to early middle-school age (Castro et al., 2020). The authors noted the race-based differences between depressive and hostility symptoms, signifying demographic differences in reactions to perceived low social mobility, which contributed to differences in SSS between racial groups. SSS impacts individuals with persistent and chronic mental illness, lowering their subjective sense of status compared to their healthier peers (de Vries et al., 2019). Those with

chronic and serious mental illness were found to have lower SSS increasing their likelihood to engage in substance abuse when compared to healthier peers (Langlois et al., 2020). Indeed, a world-wide, cross-sectional study covering many continents and regions, noted that SSS predicted Diagnostic and Statistical Manual of Mental Disorders (DSM IV) symptomology, adding evidence to SSS's predictive qualities with mental health (Scott et al., 2014). In one of the few longitudinal examinations of SSS and mental health, the authors noted that, with every subjective increase in rank on the subjective ladder, an adolescent's potential for substance abuse decreased (Russell & Odgers, 2019). This effect has been noted internationally as well, with SSS predicting mental health outcomes in Korea (Hong & Yi, 2017) and Chinese elderly (Kwong et al., 2020), adding evidence of its international and cross-cultural validity. Additionally, SSS has been noted to predict mental health in relationship to schooling outcomes. A cross-sectional study noted that graduate students who ranked themselves lower on SSS had increased depressive symptoms (Vidal et al., 2018). Researchers have also noted that students who are admitted into more selective schools have increased SSS, compared to those who are not admitted, and have differentiated mental health outcomes as a result (Uecker & Wilkinson, 2019). While the evidence for SSS and mental health is newer in the literature and more cross-sectional than longitudinal, it still offers compelling evidence SSS plays a role in predicting mental health outcomes more accurately and beyond traditional measures of SES. It is likely that social class worldviews and social rank theories explain the negative effects on psychological health of those on the lower end of the gradient, while systemic features of SDOMH and political economy exert an objective cost on health and mental health. Thus, systemic inequalities in our political economy create social hierarchies with worse health and mental health outcomes from

those at the bottom of the status hierarchy. Crucially, one's perceptions form the foundation of subjective status and its influence on mental health.

### **Poverty and Mental Health**

Income inequality and poverty play a profound role in the mental health outcomes of individuals and societies (Murali & Oyebode, 2004). For instance, poverty restricts one's ability to access necessary resources to manage and meet the demands of daily living (e.g., housing, healthcare, food) (Wade, 2020). Poverty also increases one's chances of interacting with the legal and police systems in society, further exacting lifelong financial and emotional costs (Pare & Felson, 2014). Poverty experienced early in childhood appears to enhance sensitivity to stress and cumulative stress throughout the life-span (Evans & Cassel, 2014). The researchers note that this enhanced sensitivity to cumulative stress leaves individuals disproportionately more likely to accumulate deleterious health, mental health, and occupational outcomes throughout their life-span. The psychological stress caused by living below subsistence is well documented (Evans & Cassel, 2014; Haw et al. 2015). Individuals and families that live in poverty have a higher likelihood of experiencing mental illness, reduced wellness, and struggling with its ill-effects over the course of a life-time (Long et al., 2019). Some of these mental illnesses include (but are not limited to), depression, anxiety, schizophrenia, ADHD, and postpartum depression. There is debate within the formal literature on the causality of poverty and mental health conceptualized as social cause versus the social drift hypothesis (Mossakowski, 2014). On one side, poverty causes subsequent mental health challenges (as articulated above). On the other side, the stressors of mental illness may be more likely to cause one to "drift" into poverty. For instance, an individual struggling with chronic, clinical depression may find it more challenging to meet the daily responsibilities of working and living, and thus accumulate negative impacts on their

life to the point of potential poverty. More than likely, these two phenomena are inter-related and bi-directional, and poverty and mental health are deeply intertwined (Jin et al., 2020). As noted within the labor union section, labor unions redistribute wages and resources back to their workers through collective bargaining, lowering income-inequality and poverty. Therefore, labor unions are an important moderating influence on the structural relationship between poverty and individual mental health outcomes.

### **Chapter Two Summary**

Within chapter two, I provided background literature on various structural and interpersonal dynamics that influence mental health outcomes. I provided evidence for the importance of examining labor unions as a social determinant of mental health. Within this chapter, I noted the importance of linking ecological and generational conflicts within the economy to subjective processes and social class worldviews of individuals. These individual processes and their impact on mental health result from the systemic conflicts outlined above. However, an overall construct of psychological well-being, comprising many factors related to existential fulfillment, has not been studied in relation to labor unions. As outlined above, inequality and poverty generate objective and subjective consequences for individuals and societies. Labor unions theoretically intervene structurally on both accounts. Studying the influence of labor unions on psychological well-being and depression allows us to add to the literature in innovative ways.

Thus, chapter two sought to unify disparate theories from a variety of different disciplines to provide insight into these complex processes. Chapter three will detail my plan on investigating my research question and the methodology I choose to pursue.

### **CHAPTER III: METHODOLOGY**

Chapter three details the various steps of implementing my analysis. It includes background information on the Wisconsin Longitudinal Study (WLS) and the participants surveyed. I will then detail various assumptions, limitations, and the steps in conducting my cross-sectional analysis to examine differences in mental health and subjective well-being between union and non-union affiliated workers in Wisconsin. Potential limitations and challenges to my methodology will be discussed along with solutions. I will also provide background information on my instruments, including reliability and validity statistics. An overview of the variables under consideration is also provided within the chapter.

#### **Research Design**

I accessed the Wisconsin Longitudinal Study as a publicly available dataset. The Institutional Review Board (IRB) reviewed and approved the original study and as a publicly available, de-identified dataset, the proposed study is exempt from further review. I will use a subset of data from the larger study from time points when the constructs of interest for the current investigation (i.e., mental health) were collected. Because of the participants being derived from a de-identified, secondary data-set long in circulation, there are no ethical considerations to note of. However, personal information such as genetic data and other identifiers are not publicly available for download and have to be specifically requested, along with obtaining an official IRB review. The variables that I used in this study are available for public download and are described as level one data by the WLS. Subsequently, more sensitive variables must be requested and are not needed for this study. The researchers who manage the



WLS request all publications and dissertations that use the data to forward the results and studies after completion.

### **Wisconsin Longitudinal Study**

I derived the participants from a secondary data analysis, called the WLS from a cohort of adults born around 1939 and who finished their high school years in 1957. The WLS is one of the oldest longitudinal studies developed in the 20<sup>th</sup> century, to capture the growth, aging, and development of the baby boomer generation as it left high school (Herd et al., 2014). It is a random sample of 10,317 men and women from the state of Wisconsin, and generally represents a white, baby-boomer generation that completed at least a high-school degree (Herd et al., 2014). The original researchers collected survey data in the years of 1957, 1964, 1975, 1992, 2004, and 2011 from the participants (Herd et al., 2014). Researchers asked parents and siblings of participants' survey questions and their data was collected and documented at different time points. The WLS is not representative of the increasing racial diversity within the United States (Herd et al., 2014). Racial minorities only make up a handful of respondents. The population surveyed mostly completed high school, and they considered 19% to be of farm origin (Herd et al., 2014). Overall, the WLS is one of the oldest, continuous longitudinal studies within the United States and it offers researchers key insights into the changing dynamics of the baby boomer generation.

The WLS is also one of the first longitudinal studies to capture emerging, post-World War Two (WWII) adolescents within the United States, and serves as a venerable data set to help inform the public about the baby boomer generation's health, well-being, and social attitudes. The longitudinal data points track over different time periods and generations, and provide a window into the shifting political economy, neoliberalism, globalization, and de-unionization. In

the late 1970s, the United States encountered several macroeconomic shocks, such as an oil embargo, which led to a decade of stagflation, a combination of low growth and high inflation (Larsky & Kilian, 2000). As a response, the United States Federal Reserve raised interest rates, which created a recession and large amounts of unemployment for numerous years. The traditional, macroeconomic consensus of strong labor, high wages, and full employment of the post WWII era was replaced with the dawn of neoliberalism (Campbell & Pedersen, 2001; Larsky & Kilian, 2000; Loneragan & Blyth, 2020). Neoliberalism necessitated weakening traditional labor protections, promoting free-trade, and increasingly allowing market involvement in the essentials of daily living (e.g., housing, healthcare) (Loneragan & Blyth, 2020). The WLS charts the longitudinal shifts in the political economy of the United States over several generations, providing insight into the changing lives of the baby-boomer generation. The WLS provides us a window into these shifting labor dynamics and allows researchers to make inferences and causal claims on labor and income dynamics impact on well-being and mental health.

### **Sampling Procedures**

I will derive the proposed study sample from the first data collection time point, noted as wave four within the WLS (Herd et al., 2014): 1992-1993. Researchers first collected the variables and constructs of interest to the proposed investigation during wave four. For instance, starting with the wave of 1992, researchers expanded the WLS data to include questions related to psychological well-being. The 1975 wave, which serves as the first follow up time-point since the boomer generation left high school, does not ask mental health related questions to the degree that the subsequent waves do. The time period for wave four also accords with theoretical understandings of how the political economy shifted under neoliberalism. Deindustrialization

and de-unionization were well underway by forces such as the North Atlantic Free Trade Association (NAFTA) (Dandaneau, 1996) by the time data collection started in 1992. Our analysis will investigate how union affiliation influences the psychological well-being and depression of workers within the year noted. Developmentally, workers during wave four are approaching their mid-life earning potentials and maturing into middle-age responsibilities of career and family. The early 1990s in the United States and North America were the genesis of NAFTA, a free-trade agreement that liberalized capital and investment, while weakening labor rights and control. Ross Perot, a presidential candidate in the 1992 American presidential election, campaigned on how the consequences that NAFTA was inflicting on labor and the resultant income-inequality noted in several Midwestern, union-heavy states such as Wisconsin. Thus, the political and social context of the United States provides an ideal historical moment to examine the mental health differences between workers that could keep their union affiliation benefits in a declining labor environment, compared to those who were not unionized.

Each wave of data includes documentation on who was contacted, the overall number of respondents per wave, and their gender break-down. Respondents answered phone interviews, mail-in questionnaires, or a combination of both methods. Researchers conducted additional interviews with siblings, spouses, and parents of the primary respondents; however, in the proposed analysis, I aim to examine individual-level data and relationships between our variables in the initial study to strengthen claims of causality. The 1992 wave includes 10,143 individuals (Herd et al., 2014). The WLS's retention rate for their respondents that completed both phone and mail interviews at least three times (besides completing the initial 1975/77 survey) stands at 39.18%, with retention rate percentage increasing for fewer responses provided in the surveys (Herd et al., 2014).

In order to ascertain adequate power for my sample size I conducted a priori power analysis using G\*Power version 3.1.9.7 (Faul et al., 2007) to determine the minimum sample size required to test the study hypothesis. Results indicated the required sample size to achieve 80% power for detecting a medium effect, at a significance criterion of  $\alpha = .05$ , was  $N = 157$ . All the respondents that show union affiliation within the 1992-1993 wave ( $n = 1,049$ ) will be compared to respondents who indicated “no” union affiliation ( $n = 4,924$ ); therefore, our study should be adequately powered for the proposed investigation. The other options provided to identify union affiliation included: “don’t know” ( $n = 1$ ), “inappropriate (no job spell)” ( $n = 357$ ), and “refused to answer/self-employed” ( $n = 2,162$ ). Within the 1992-1993 wave, the WLS researchers could not get responses from some respondents, which they labeled as “system missing” ( $n = 1824$ ). For the study, those who answered “don’t know”, “inappropriate”, and “refused to answer/self-employed” met the exclusion criteria and were removed with list wise deletion, since I am interested in examining differences in union affiliation versus non-affiliation for employed persons.

### **Instrumentation**

Participants in the WLS completed several assessments at each of the waves of data collection. Below I will outline data collected and instruments pertinent to the proposed research question. Variables of interest to the proposed study include covariates (gender, income, marital status, self-rated health, and education), the independent variable (union, non-union affiliation), and the dependent variables. Dependent variables will include depression (as measured by the Center for Epidemiologic Studies Depression Scale [CES-D; Radloff, 1977]) and psychological well-being (as measured by subscale totals for autonomy, environmental mastery, personal

growth, positive relationships with others, purpose in life, self-acceptance from the Survey of Psychological Well-Being [SPWB] (Ryff, 1989).

### **Demographic Information**

WLS participants provided basic demographic information at each wave of data collection. Within the demographic data, participants self-reported information such as gender, education, marital status, and income. The analytic strategy includes controlling for several covariates that impact the associations between labor unions, depression, and psychological well-being. Detailed results of demographic breakdown are provided in chapter four. Below, I provide more detail for each of the aforementioned individual characteristics.

#### ***Gender***

The survey coding for gender included either male or female. As noted within Chapter 2, depression and well-being are influenced by gender, as female identifying individuals have higher rates of depression (Pinquart & Sorensen, 2001; Silva et al., 2016). Unions historically found ground in sectors of the economy (e.g., manufacturing) that were composed mostly of men (Schneider & Reich, 2014). The benefits that unions provide are likely to be salient towards male-identifying participants. Female-identifying individuals may hold different views towards trade unionism (Sinclair, 1996). I will use gender as a covariate in the proposed analysis.

#### ***Education***

The WLS divided education respondents into several categories post-high school graduation. These levels include: *never attended college, associate's degree, bachelor's degree, master's degree, doctorate/professional degree*. Education is protective of well-being and poor mental health outcomes (Bauldry, 2015), and is an important determinant of mental health.

Distributing education levels post-high school through the afore-mentioned sensitivity categories is common in the literature, as it provides insight into different well-being, health, and mental health outcomes (Herd et al., 2007). Traditional unionized sectors of the economy, like manufacturing, typically don't include white-collar professionals (outside of teachers' unions), implying that union affiliation decreases with college education and professional schooling (Schneider & Reich, 2014). However, there is growth in higher educated, more white-collar professional unions in the 21<sup>st</sup> century, though their impact on issues of redistribution and political organizing are mixed (Arndt, 2018). Initial examination of the education variable showed  $n = 3974$  for those who attended college and  $n = 4519$  for those who did not. For the proposed investigation, I recoded the education variable into a binary option for post-high school education or not. I will use education as a covariate in the proposed analysis.

### ***Marital Status***

Marital status is an important covariate for depression and psychological well-being outcomes (Reneflot & Mamelund, 2011). Marriage is a buffer to isolation and improving mental health outcomes and well-being. There is evidence that notes how men are more likely to be married if they are a part of a union, due to increased employment stability and income (Schneider & Reich, 2014). Defina and Hannon (2018) controlled for marital status when documenting the relationship between union density and drug overdose, and noted that union density was still predictive of lower overdose deaths after controlling for the positive effects of marriage and social support. The WLS used five different levels of marital status that included: *married, separated, divorced, widowed, never married*. However, when I examined that data, a preponderance of participants (81%) indicated being currently married. Given the unequal representation of the other marital status options and to simplify variables to be included in the

analysis, I recoded marital status to be a binary variable (i.e., married or not). I will use marital status as a covariate in the proposed analysis.

### ***Income***

Income plays a large role in mental health and well-being outcomes. As covered in chapter two, labor unions intervene to increase the income and other material benefits of their workers through collective bargaining. Thus, we divided total personal income into five different levels provided by the WLS starting with the 1992-1993 wave: 33 - 13300, 13500 - 25000, 25200 - 38000, 38002 - 56000, 57000 - 9,999,999. I assessed income through total personal income derived from wages over the last 12 months, not household income, to draw causality inferences about an individual and their mental health outcome. Income being divided into several levels to assess a union's influence on an individual outcome (e.g., self-rated health, depression), is evidenced in the literature (Reynolds & Brady, 2012; Reynolds & Buffel, 2020). I utilized income as a covariate in the analysis.

### ***Self-Rated Health***

Reynolds and Brady (2012) found that union status improved self-rated health when adding labor market controls. Self-rated health is interrelated with subjective social status and predicts similar health and mental health outcomes (Euteneuer, 2014; Haught et al., 2015; Reynolds & Brady, 2012). Health plays an important role in psychological well-being and depression outcomes. Furthermore, "How would you rate your health compared with other people your age and sex" allows one to infer subjective social status, as the respondent is asked to make a referent abstraction that can guide us in understanding how the respondent makes comparisons to others in their community (Haught et al., 2015). Controlling for self-rated health,

while important, allows us to strengthen causal inferences on the relationship between union affiliation, depression, and psychological well-being. Initial correlations should demonstrate relationships between self-rated health, depression, and psychological well-being.

The WLS survey included two questions for health that included: “How would you rate your health at this time,” and “How would you rate your health compared with other people your age and sex.” Self-rated health items were measured on a Likert Scale, ranging from 1 *Poor Self-rated health* to 5 *Excellent self-rated health* for both questions. Therefore, higher values reflect greater perceived self-rated health. For the study, I utilized self-rated health as an additional covariate.

## **Depression**

Depression, the first dependent variable for the proposed study, was measured with the Center for Epidemiologic Studies Depression Scale (CES-D). CES-D is used in epidemiological studies in the general and clinical population and is the primary measure for assessing depression within the WLS. The CES-D is a 20 item, self-rating scale with four identified factors: depressed affect, positive affect, somatic and retarded activity, and interpersonal (Radloff, 1977). The CES-D asks the respondent: “*On how many days of this past week did you...*” and the respondent fills out the instrument based on the subsequent prompts related to experience of affect, activity, or interaction. A total score is summed by adding the items together. Example questions include: “*feel happy*”, “*feel fearful*”, “*enjoy life*” “*think your life had been a failure.*” Items were coded 0 to 7, with 0 zero signifying zero days, and 7 signifying 7 days of the feeling noted. Traditionally, within the CES-D, an overall score of 16 days and above signifies a significant depressive score. Within the WLS, the scoring was handled differently. The standard method collapses days into < 1, 1-2, 3-4 and 5-7 and codes



those 0 - 3, respectively; then sums those codes resulting in scores from 0 to 60 days. The WLS coding starts from 0 days = 0 score to 7, which equals 7 days (of experiencing a symptom). There are 20 items resulting in a max score of 140 days of experiencing depressive symptoms. While 16 days is the traditional threshold, the WLS's scoring would make 16 days sub-threshold. The descriptive statistics will be provided in chapter four.

The CES-D is free to use, and is a popular and widely used scale that is used within various social groups (e.g., young, mixed race) and international populations (Cosco et al., 2017). The CES-D has indicated appropriate reliability since its inception. Initial reliability tests of the CES-D reported a coefficient alpha in the general population of 0.85 and 0.90 in the clinical, in-patient population (Radloff, 1977). In terms of validity, the CES-D demonstrates discriminate validity between clinical, in-patient groups, and the general population. Radloff (1977) noted initially that 70% of the clinical population scored above 16, with only 21% of the general population scoring above the sub-threshold cut-off range for depression. To update the reliability and validity estimates, Cosco et al. (2017) used the instrument to screen for depression with a middle-aged population. The researchers documented the Cronbach alpha for the CES-D was 0.90 in the population surveyed, which lends validity to the WLS sample (Herd et al., 2014). For this study, I utilized a total score from the CES-D scale.

### **Psychological Well-Being**

Our second dependent variable relates to psychological well-being. The scale of psychological well-being (SPWB)'s original measure was developed by Ryff (1989), to address more nuanced positions on well-being related to self-actualization and its relationship to social status. The global measure of SPWB helps capture an individual's perception of existential achievement in life, along with perceptions of control and self-actualization (Ryff, 1989). This

multi-dimensional scale measures six subscales: a) autonomy (e.g., “*I have confidence in my opinions even if they are contrary to the general consensus.*”), b) environmental mastery (e.g., “*I often feel overwhelmed by my responsibilities.*”), c) personal growth (e.g., “*I have the sense that I have developed a lot as a person over time*”), d) positive relationship with others (e.g., “*I often feel lonely because I have few close friends with whom to share my concerns.*”), e) purpose in life (e.g., “*I don’t have a good sense of what it is I’m trying to accomplish in life*”), and f) self-acceptance (e.g., “*When I compare myself to friends and acquaintances, it makes me feel good about who I am.*”) (Ryff, 1989). Coding for each subscale goes from 2 (which is the lowest score) to 14 (the highest). The highest total score would result in 84, after combining all six subscales. Certain items in each subscale are reverse coded, to make an overall score easier to interpret.

Testing for reliability, Ryff (1989) reported internal consistency reliability coefficients as: 0.86 for autonomy, 0.87 for personal growth, 0.90 for environmental mastery, 0.91 for self-acceptance, 0.90 for purpose in life, and 0.91 for positive relationships with others (Ryff & Keyes, 1995). The SPWB’s inclusion in the WLS in the 1992-1993 wave captures the multidimensional nature of *eudaimonic* well-being, or the ability to self-actualize one’s life through meaning, purpose, and control (Ryff et al., 2003). In our study, the SPWB will be divided into the original six subscales to see if union affiliation impacts any of SPWB outcomes after co-variate controls for the 1992-1993 wave. I used total scores of each individual subscale of the SPWB in order to capture nuances between our independent variable and dependent variables.

### **Union Affiliation**

In order to find out union-status, respondents were asked in several waves if they

belonged to a labor union. Labor union affiliation was asked with several other questions related to job status and history, such as if an employer offers a pension plan, different job spells, start/end dates of the job spell, and several other questions of that nature within the 1992-1993 survey wave. Specifically, the union affiliation question in the 1992-1993 wave was: “*Did respondent belong to a labor union in the current/last employer job spell?*”

### **Research Questions**

The dissertation research study will seek to answer the guiding research question related to the independent and dependent variables, measured in the 1992-1993 wave. The study will be cross-sectional in design and seek to develop an inference based on the following question:

What differences exist in psychological well-being (including self-acceptance, purpose, positive relationships, personal growth, environmental mastery, autonomy) and depression between individuals who report union or non-union affiliation?

RQ1: Does union affiliation influence psychological well-being and depression compared to non-union workers?

H10: Psychological well-being and depression is not influenced by union affiliation

H1a: Psychological well-being and depression is positively influenced by union affiliation

I will detail my steps to test this hypothesis below.

### **Data Analysis Plan**

Data analysis included preliminary analysis and multivariate analysis of covariance (MANCOVA). Preliminary analysis included: data cleaning, testing assumptions, and checking reliability of dependent variable instruments. I checked for baseline equivalency between the two

groups (union affiliated, non-union affiliated) for the covariates using biserial correlations and chi-square tests. I used MANCOVA to examine differences in the dependent variables of mental health by union affiliation status.

### **Preliminary Analysis**

The plan for analysis involves first running descriptive statistics and demographic data amongst our variables. Our preliminary analysis will begin with running descriptive statistics on all of the independent, dependent, and covariate variables described above. Preliminary descriptive statistics include measures of frequency, dispersion, and central tendency (Kaur et al., 2018). Descriptive analysis allows us to picture the data and understand tendencies of the sample we are extracting from the population. It is a prerequisite before we can move on to inferential statistics (Kaur et al., 2018). The WLS collection and retention strategy notes missing values amongst respondents and classifies them as “system missing” and “inappropriate”. Therefore, I will examine patterns and percentages of missing values. Second, we will conduct a correlation analysis and estimate the correlation coefficient between all independent, dependent, and covariate variables in our study. Our sample correlation coefficients quantity strength and direction in our linear relationships (Taylor, 1990) which allows us to understand the relationships between diverse variables and suggests potential causality between our independent and dependent variables. A p-value of 0.05 will be set to decide a statistically significant correlation between demographic information variables, and Pearson’s  $r$  values greater than .60 were determined as strong correlations (McMillion, 2015). Correlational statistics, demographic and descriptive statistics, along with assumption results are detailed in chapter four for the reader.

### ***Assumption Testing***

MANCOVAs rest on several assumptions that include: multivariate normality, independence of observations from the population, homogeneity of covariance between each group (homoscedasticity), multicollinearity, linearity, and no extreme outliers (Tabachnick & Fidell, 2018). Before the analysis, I tested assumptions within the statistical package of SPSS and correct for any violations before conducting the analysis. Results are detailed in chapter four and I will briefly address each assumption.

Multivariate normality assumption testing involves testing to see if the residuals are normally distributed before analysis. This influences the confidence intervals that are generated and makes creating inferences off of model coefficients difficult. Normality function will be assessed through the Henze-Zirkler (HZ) test (Henze & Zirkler, 1990), the Shapiro-Wilkes test, or through utilization of a probability-probability (p-p) plot through SPSS's graph functions. Typically, normality for distributed errors can be represented through SPSS's quantile function as well. Multivariate normality violations are typically resilient through the calculation of various F statistics, such as Pillai's trace, Wilks' lambda, Hotelling's trace (Garson, 2015). If normality is violated, I will reassess my outlier strategy, as non-normality is common, and typically a result of extreme outliers (Garson, 2015). In this case, a log transformation of the variables can also be implemented; however (Garson, (2015) recommends assessing normality through various visual plots and prioritizing other assumption violations during the course of the analysis.

The second assumption involves independence of observations, which are tested through random assignment and the structure of the study (McMillan, 2015). As mentioned in the sampling strategy section, I will create a simple random sample from the non-union affiliation group in the 1992-1993 sample to create an equivalence between union-affiliation and non-union

affiliation. This sampling strategy will ensure the independence of observations. Our study is a cross-sectional examination of one wave within a longitudinal study. Therefore, observations are independent within the cross-sectional context.

Outlier assumption testing is important for MANOVA and MANCOVAs, due to how an outlier observation's sensitivity impacts group means and normality (McMillan, 2015). Mahalanobis distances will check this assumption through SPSS's software. Mahalanobis's distance is calculated through critical chi square's value and its relationship to the degrees of freedom, and the number of variables being examined (Leys et al., 2018). The critical value generated will be the cut-off score for detecting an outlier score and removing it from data analysis.

Another assumption for MANCOVA is multicollinearity or inter-relatedness amongst independent variables (Tabachnick & Fidell, 2018). Multicollinearity will be checked for initially through correlational statistics, with 0.80 correlation or above representing a potential threat of multicollinearity. Since I am only examining one predictor variable, split into two groups (union affiliation), violating this assumption is a low probability. Multicollinearity will be checked through SPSS's variance inflation factor (VIF) command during assumption checking. A VIF of five or higher, indicates high multicollinearity and the independent variables will have to be reassessed for model fit.

Linearity is another assumption that must be met in MANCOVA. A linear relationship with the independent and dependent variables and will be checked through SPSS's scatter-plot function (Tabachnick & Fidell, 2018). Typically, linearity is assessed through utilizing SPSS's command and visually assessing if the data is grouped in a diagonal positive or negative slope. A non-diagonal straight line for instance, would indicate a violation of linearity.

Another assumption of MANCOVA is the importance of the homogeneity of variances and covariances (Tabachnick & Fidell, 2018). MANCOVA includes assumptions that the population covariances are equal between both groups of comparison. Traditionally, a Box M's test is run to check for this assumption, with a significance level of 0.001 showing a significant test to meet this assumption (Finch & French, 2013). Significant non-normality and unequal group sizes may lead to the violation of variance and covariance matrices. Here, Pillai's Trace, which is a more robust multivariate test statistic than Wilks' Lambda, can be used (Tabachnick & Fidell, 2018).

### **Multivariate Analysis of Variance**

Once the data cleaning is completed, a MANCOVA will be conducted, examining the multivariate tests for significance while controlling for our covariates. Typical multivariate tests for significance include various F tests such as Pillai's trace, Wilks' lambda, Hotelling's trace (Garson, 2015), each with their strengths. Partial eta-squared is the main effect size and represents the portion of the variance explained by a variable, after accounting for the variables within the model (Garson, 2015). Typically, 0.14 or greater indicates a larger effect size for partial eta squared, which ranges from 0.0 to 1.0 (Garson, 2015). From there, follow up ANOVA analysis are conducted on the univariate, dependent variables, along with post-hoc testing. Typically, univariate ANOVAs/ANCOVAs are conducted independently for each dependent variable, if the multivariate F statistics prove significant upon the initial analysis. Univariate ANCOVAs will be my post-hoc strategy, as MANCOVAs typically do not feature the ability to conduct typical ANOVA post hoc tests (e.g., Tukey's). The results are reported in chapter four, along with any analytic changes that took place during assumption testing.

A multivariate analysis of variables (MANOVA) analysis tests for differences in group means, with multiple dependent variables (DVs; Steyn & Ellis, 2009; Tabachnick & Fidell, 2018) and one independent variable (IV) with two or more levels (Tabachnick & Fidell, 2018) that are categorical. For this study, the IV will be union affiliation, split into two levels, indicating union affiliation and a non-union affiliation group. MANOVA is a further, iterative development of the univariate analysis of variance (ANOVA) which traditionally tests for group differences amongst one dependent variable (Tabachnick & Fidell, 2018). MANOVAs, with their ability to structurally test multiple dependent variables, help guard against Type 1 Error inflations that might appear in simpler, univariate ANOVA tests (Finch & French, 2013). MANOVAs also provide empirical insight into intercorrelations between dependent variables. This is important to my study, as our dependent variables (SPWB and depression) should be theoretically, negatively correlated with each other. A multivariate analysis of covariance (MANCOVA) is the same conceptual test as a MANOVA, with controls for covariates implemented before analysis, to control for similarities between covariate variables and dependent variables (McMillan, 2015). While not controls from an experimental point of view, they allow for statistical adjustment in conducting inferences between the groups of comparison by creating equivalence between groups (Tabachnick & Fidell, 2018). Within my study, I controlled for several covariates, which include marital status, education, income-levels, gender, and self-rated health.

### **Limitations**

The proposed study will provide important information regarding differences in mental health by union status. However, the proposed study is not without limitations. Perhaps the most salient limitation of MANCOVA involves the challenge of selecting covariates. Covariates from



previous literature, theory, and a researcher's deductive reasoning are important considerations to make throughout the analysis. Increasing the number of covariates leads to needing a larger sample size and power, which increases the ability of the researcher to find significant results that may be spurious in interpretation (Morgan & Winship, 2014). Therefore, covariate selection potentially impacts treatment effects causality inferences. Typically, a small number of covariates should be chosen that offer correlations with the dependent variable, while not being correlated with each other (multicollinearity) (Garson, 2015). Any covariates that correlate too strongly with each other will be removed from the final analysis and will be discussed in chapter four.

Other limitations of the proposed study include potential threats to internal and external validity inherent in the research design. For instance, we will examine variables using a cross-sectional approach which limits our ability to make causal inferences. Because of the homogenous nature of the sample (e.g., respondents indicated a predominant racial identity of White and being from Wisconsin), it may be difficult to generalize the results to more diverse populations. The unique history of Wisconsin, a more heavily industrialized and unionized state, the results may be more difficult to generalize onto other states that do not have the same unionization and industrialization.

### **Chapter Three Conclusion**

Within chapter three, the researcher discussed population characteristics, the nature of the data, and the analytic strategy to be implemented. Instrument selection and discussion were included as well. The analytic strategy details: assumption testing, correlations and descriptive analysis, research question and hypotheses, and the steps to running a MANCOVA. I included limitations and covariate strategies in the strategy. I expect that the nature of this strategy might

change due to initial data cleaning. Results, including any change to analytic strategy and its impact on the results, are reported in chapter four.

## **Chapter IV: Results**

The purpose of my study was to investigate the differences in mental health outcomes between workers who were affiliated in a union versus non-affiliated. Specifically, my hypothesis examined if psychological well-being (overall score and its four subscales) was stronger for union-affiliated respondents and if depression scores were lower for union-affiliated respondents. My null hypothesis postulated no differences between union and non-union affiliated respondents for psychological well-being and depression. I examined this question using a multivariate analysis of covariance (MANCOVA). In chapter four I reported the results, including the various steps I took to generate those results, along with any changes in analytic strategy encountered.

### **Preliminary Analysis and Data Cleaning**

#### **Missing Data Analysis**

My first step was to conduct a missing data analysis within SPSS for all of my independent, dependent, and covariate variables. The goal of completing a missing data analysis is to identify if patterns exist to explain missing data and if no patterns exist, then validate that the data is missing completely at random (MCAR) (Li, 2013). Assumptions associated with being MCAR lie in noting that data that is missing from the surveys involves independence of both observed and unobserved data (Li, 2013). If data is not missing at random, then it is systematic missingness, and needs to be accounted for through other means, like imputation (Li, 2013). One way to test for this hypothesis is to use Little (1988)'s MCAR test, which organizes missingness into a global, test statistic that's interpreted through  $p$  value of significance.

I conducted a MCAR test using SPSS's missing value analysis on the subscales of psychological well-being, depression, self-rated health, wages income, sex, education, and labor

union status. Initial missingness data demonstrated over 20% missing data in the variables related to depression and self-rated health, along with 10% reported in the wages income variables. Several methods of data collection were used in the initial study and missingness may in part be because of the discrepancy between the initial computer and phone assisted surveys and the subsequent mail surveys sent to the respondents. More data was missing from the mail-survey portion of data collection and the current proposed study uses constructs measured through the mailed surveys. Garson (2015) noted that subject non-response, especially in large data sets, can be removed from the final analysis for complete case analysis instead of imputing values. I used listwise deletion of participants with unit non-response (i.e., missing entire assessments) for our study dependent variables to obtain a sample for complete case analysis. The sample size still exceeded minimums required to get the desired power. Based on Little (1988)'s MCAR recommendation, if the *p value* is significant, then data cannot be assumed to be missing completely at random, and there is a systematic bias to the missing data. After running Little's MCAR test, the *p value* returned was not significant, satisfying the Little's test. Therefore, we could assume any remaining missing variables in our data were MCAR.

## **Correlations**

I re-coded my three covariate variables (education, marital status, and sex) into dummy variables to run correlations and my MANCOVA. My new re-coded dummy variables are education status (1 = attended college, 2 = did not attend college), marital status (1 = married, 0 = not married), and sex (1 = male, and 0 = female). I then transitioned to conducting a point-biserial correlation between my categorical, dichotomous covariates (education, marital status, and sex) with my dependent, continuous variables (PWB subscales, total score, and depression). Point-biserial correlations allow for associations to be inferred between dichotomous, categorical

variables and continuous variables, with traditional Pearson coefficients more effective for two, continuous correlations.

Starting with marital status, results show a weak, positive point-biserial correlation with the sub-scales of PWB: self-acceptance:  $r_{pb} = .07, p < 0.01$ , purpose in life:  $r_{pb} = .04, p < 0.01$ , positive relationships:  $r_{pb} = .10, p < 0.01$ . Marital status had a non-significant association with personal growth, autonomy, and environmental mastery sub-scales. The total score of PWB was found to also be weakly, positively associated with marital status  $r_{pb} = .10, p < 0.01$ . Marital status had a weak, negative correlation with our other dependent variable, depression:  $r_{pb} = -.10, p < 0.01$ .

For college attendance, results indicated a weak, negative point-biserial correlation with the subscale: purpose in life:  $r_{pb} = -.09, p < 0.01$  and personal growth:  $r_{pb} = -.15, p < 0.01$ , environmental mastery  $r_{pb} = -.09, p < 0.01$ , and self-acceptance:  $r_{pb} = -.07, p < 0.01$ . I found the subscales of positive relationships and autonomy to not be significant. The total score of PWB was weakly, negatively associated with college attendance:  $r_{pb} = -.12, p < 0.01$  Depression had a weak, positive point-biserial correlation with college attendance:  $r_{pb} = .09, p < 0.01$ .

For sex, a weak and negative point biserial correlation was noted for positive relationships:  $r_{pb} = -.18, p < 0.01$ , personal growth:  $r_{pb} = -.07, p < 0.01$ , and autonomy:  $r_{pb} = -.07, p < 0.01$ . A weak, positive association was noted for purpose in life:  $r_{pb} = .08, p < 0.01$  and environmental mastery:  $r_{pb} = .07, p < 0.01$ . I found no significant association for self-acceptance. A weak, negative association was found for the overall score of PWB:  $r_{pb} = -.06, p < 0.01$ . Sex was weakly and negatively correlated with our other dependent variable, depression:  $r_{pb} = -.06, p < 0.01$

I then conducted preliminary correlation coefficients between my continuous dependent variables (PWB's subscales, total, and depression), along with continuous covariates (self-rated health and wages income). Self-acceptance had a strong, negative correlation  $r = -.39, p < 0.01$  with depression; a moderate, positive correlation with self-rated health  $r = .20, p < 0.01$ ; and a weak, positive relationship with income,  $r = .10, p < 0.01$ . The purpose in life subscale showed a weak, negative correlation with depression  $r = -.16, p < 0.01$ ; a moderate, positive correlation with self-rated health  $r = .20, p < 0.01$ ; and a weak, negative correlation with wages  $r = .10, p < 0.01$ . The positive relationships subscale demonstrated a moderate, negative correlation with depression  $r = -.27, p < 0.01$ ; a weak, positive correlation with self-rated health  $r = .09, p < 0.01$ ; and wages had a weak, negative correlation with positive relationships  $r = .04, p < 0.01$ . The subscale with personal demonstrated a moderate, negative correlation with depression  $r = -.20, p < 0.01$ , a weak, positive correlation with self-rated health,  $r = .15, p < 0.01$ , and a weak, positive relationship with wages  $r = .10, p < 0.01$ . The subscale for autonomy showed a weak, negative correlation with depression  $r = -.14, p < 0.01$ , a weak, negative relationship with wages,  $r = .02, p < 0.05$ . Self-rated health was insignificant. The scale of environmental mastery was found to be strongly, negatively correlated with depression  $r = -.43, p < 0.01$ , moderately, positively correlated with self-rated health  $r = .18, p < 0.01$ , and weakly, positively correlated with wages:  $r = .09, p < 0.01$ . PWB's total score was found to be strongly, negatively correlated with depression  $r = .47, p < 0.01$ , weakly and positively correlated with wages  $r = .11, p < 0.01$ , and moderately, positively correlated with self-rated health  $r = .22, p < 0.01$ .

Correlations do not indicate causality; however, they indicate some sort of relationship. My preliminary analysis demonstrates weak and moderate correlations that are reinforced by my prior understanding of the literature. For example, PWB and depression are moderately,

negatively correlated with each other as our dependent variables. Similarly, marital status (in our case, coded as being married or not) had a weak, positive correlation with PWB. This confirms our previous assumption in the literature, over marital status being protective of mental health. Multicollinearity between our dependent variables, PWB and depression is avoided, as they have a moderate relationship with each other, an assumption of MANCOVA. However, our two self-rated health covariates are correlated strongly with each other  $r = .84, p < .01$ , showing a potential violation of multicollinearity within our final analysis. While self-rated health and self-rated health compared to others offers us a different approach to judging the influence of subjective social status and its relationship to mental health, our data analysis would become more inefficient and redundant if both questions are included. Therefore, I removed self-rated health compared to others in my final analysis, as I believe self-rated health has a stronger literature base and would allow us to make a similar inference related to subjective social status on our sample.

### **Reliability**

I ran Cronbach's alpha loading on the two dependent variable scales PWB and depression. Starting with PWB, the scale consisted of 12 items and the value for Cronbach's Alpha for the scale was  $\alpha = .96$ , indicating excellent reliability. My depression scale comprised 23 items, with Cronbach's Alpha for the scale was  $\alpha = .83$ , showing good reliability. The internal reliability of my dependent variables was judged adequate enough to continue with the rest of the analysis.

### **Descriptive Statistics**

#### **Table 1**

*Descriptive Statistics: Dependent Variables*

	M	SD	Min, Max
Self-Acceptance	12.04	2.09	3, 14
Purpose in Life	11.36	2.87	2, 14
Positive Relationships	11.62	2.96	2, 14
Personal Growth	12.08	2.25	3, 14
Environmental Mastery	11.60	2.49	2, 14
Autonomy	11.20	2.66	2, 14
Depression	15.87	13.98	0, 84

*Note.* The first six variables are apart of the PWB construct.

**Normality and Outliers**

I examined skewness, kurtosis, and a Shapiro-Wilkes test to demonstrate normality and outliers. Through visualization of the histogram and interpretation of the Shapiro-Wilkes test, I found my dependent variables to violate the normality assumption. These variables included the total score of PWB, along with its sub-scales, and depression. The Shapiro-Wilkes test for each dependent variable was significant. The skewness of PWB's total score was found to be -.90, showing that the distribution is left skewed. I found kurtosis to be 1.21 and platykurtic. The skewness of self-acceptance was found to be -1.70, indicating left skewness. Kurtosis was found to be 2.96, approaching normal distribution and slightly platykurtic. Purpose in life's skewness



was found to be -1.05, with the distribution being left-skewed. Kurtosis was found to be .29 and platykurtic. The positive relationships subscale was found to have -1.34 skewness, indicating left skewness and the kurtosis was found to be .91 and platykurtic. Personal growth's subscale was -1.36 left skewed, with kurtosis being 1.27 and platykurtic. Environmental mastery's subscale indicated -1.20 and was left skewed, along with a platykurtic kurtosis .96. Autonomy's subscale was left skewed as well, -.96 and kurtosis was platykurtic at .24. The last dependent variable, depression's was right skewed: 2.09 and kurtosis was 5.79, which indicates leptokurtic kurtosis. Most our dependent variables indicated platykurtic and left-skewness. Our respondents indicated higher levels of PWB and low levels of depression with few outliers and the results do not indicate a normal distribution. I infer that most our respondents rate higher levels of well-being and lower amounts of depression.

As noted with chapter three, Garson (2015) argues that multivariate normality violations are common and that  $F$  statistics are robust against this violation. Garson (2015) recommends prioritizing other assumption violations during data cleaning.

### **Outlier Strategy**

As discussed in Chapter 3, I used Mahalanobis Distance to ascertain my dependent variable outliers and implement a strategy before final analysis. My degrees of freedom were set at eight (six subscales of PWB, PWB's total score, and depression) and the output returned 60 cases classified as outliers. The critical value was set at 26.13. I created two different data sets, one with outliers and one without them, and ran the rest of my assumptions with outliers excluded.

### **Linearity**

I tested linearity through point-biserial correlations and the scatterplot function between my independent variable (labor union affiliation) and dependent variables, PWB and depression. Results initially demonstrated non-linear relationships between the union affiliation and both dependent variables. As Fields (2015) indicates, homogeneity of variance, normality, and linearity are common assumption violations within large sample sizes. As our sample size is well over 3,000 respondents, it is well within reason to have some of our basic assumptions violated.

### **Homogeneity of Variance**

I conducted several univariate ANOVAs between our independent variable: union affiliation (two levels), PWB, subscales, and depression. My goal was to obtain a Levene's test statistic to interpret significance. For the summary score for PWB (total score), the variances were equal for union and non-union affiliated respondents,  $F(1, 3334) = .891, p = .33$ . For the self-acceptance scale, the variances were equal for union and non-union respondents  $F(1, 3334) = .894, p = .876$ . Purpose in life's subscale was found to be the variances were equal for union and non-union respondents  $F(1, 3334) = .847, p = .564$ . Positive relationships subscale was found to be significantly different in variance between union and non-union respondents  $F(1, 3334) = .03, p = .01$ . Additionally, personal growth was found to be significantly different in variance between union and non-union respondents  $F(1, 3334) = .01, p = .000$ . Environmental mastery was found to be significantly different in variance between union and non-union respondents  $F(1, 3334) = .00, p = .02$ . Autonomy's variances were equal for union and non-union affiliated respondents  $F(1, 3334) = .39, p = .814$ . Lastly, depression's variances were equal for union and non-union affiliated respondents  $F(1, 3334) = .84, p = .437$ . However, according to Fields (2009), large samples can create a significant Levene's test even when group variances are not different. A variance ratio

helps provide additional clarity if the variances are homogenous and can be an addition to the traditional Levene's test (Fields, 2009).

In order to further test the homogeneity of variances, I utilized Hartley's  $F_{\max}$  variance ratio, which involves dividing the larger ratio variance of one group from the smaller ratio (Fields, 2009). Here, I take the square root of each group's standard deviation (union versus non-union affiliation). If this ratio is close to one, then homogeneity of variance can be assumed. I utilized the ratio for all of my significant Levene tests mentioned above. For positive relationships, my  $F_{\max}$  ratio was 1.12. As this was closer to 1, I assumed the homogeneity of variance was met. For the personal growth subscale, the  $F_{\max}$  ratio was found to be 1.21, and I assumed the homogeneity of variance. Lastly, I tested environmental mastery's  $F_{\max}$  ratio, which was exactly 1, and I assumed the homogeneity of variance. Utilizing the  $F_{\max}$  ratio in addition to the Levene's test, my homogeneity of variance assumption was sufficiently met before analysis.

### **Primary Analysis**

I conducted the analysis using the various subscales and the overall score of depression. The final sample size for both levels of our groups were: yes (labor union affiliation)  $n = 561$  and no (labor union affiliation)  $n = 2775$ . The Box's  $M$  of 42.94 indicated that the homogeneity of covariance matrices across groups is not assumed ( $F(28, 3546611.021) = 1.5, p = .037$ ). With our larger sample size and the inherent conservatism of Box's  $M$  test, Garson (2015) notes that Pillai's trace is an effective, alternative multivariate statistic for significance, beyond Wilk's Lambda.

I conducted a one-way multivariate analysis of covariance (MANCOVA) to test the hypothesis that there would be one or more mean differences between labor union levels (yes and no affiliation) and PWB subscales (e.g., self-acceptance, purpose in life, positive

relationships, personal growth, autonomy, environmental mastery) and depression scores after controlling for self-rated health, sex, education, income, marriage. A statistically significant MANCOVA effect was obtained, Pillais' Trace = .005,  $F(7, 3323) = 2.334$ ,  $p = 0.02$ . The multivariate effect size was estimated at .005, which implies that 0.05% of the variance in the dependent variables was accounted for by labor union affiliation. This shows a very weak effect size. However, my overall hypothesis was confirmed, that psychological well-being and depression are influenced by union affiliation.

After finding multivariate significance, I examined the pairwise comparison outputs, generated by SPSS. I wanted to see which dependent variable was significant and contributed to the significant multivariate difference. Traditionally, MANCOVAs do not have formal, ad-hoc procedures such as the Tukey's test, which would be used in an ANOVA (Garson, 2015). Therefore, univariate, pairwise comparisons are the traditional, next step to examine which factor levels are significant in relationship to our dependent variables. Within my pairwise comparisons, the only subscale that was significant in relationship to the labor union affiliation group was personal growth, after controlling for sex, income, education, self-rated health, and marriage ( $p = .006$ ,  $\eta_p^2 = .002$ ). Interestingly enough, the not affiliated labor union group reported slightly higher over-all mean scores from our descriptive statistics:  $\mu = 12.13$  for personal growth than labor union affiliated:  $\mu = 11.81$ . The five other subscales and depression score were not found to be statistically significant. Therefore, the multivariate significance between both groups is likely being driven by the small but significant effect size in the personal growth subscale, which demonstrates a slightly higher score for those not affiliated with a labor union.

### **Covariate Between-Subject Tests**

I examined the relationships between our covariates and the dependent variables as individual modifiers. I used the between-subject output within SPSS to examine any significant variables and effect sizes when a covariate was examined as an independent variable (while controlling for each of the other covariates). I reported these results considering how our main independent variable (labor union affiliation) was found to not have a statistically significant relationship with most of the subscales and depression score, outside of personal-growth.

Univariate between-subjects tests indicated that self-rated health, controlling for sex, education, income, and marriage, was significantly and weakly related to self-acceptance ( $p = .0001$ ;  $\eta_p^2 = .031$ ), purpose in life ( $p = .000$ ;  $\eta_p^2 = .007$ ), positive relationships ( $p = .000$ ;  $\eta_p^2 = .005$ ), personal growth ( $p = .000$ ;  $\eta_p^2 = .013$ ), environmental mastery ( $p = .000$ ;  $\eta_p^2 = .023$ ), and depression ( $p = .000$ ;  $\eta_p^2 = .07$ ). Self-rated health was not significantly related to autonomy ( $p = .320$ ).

Univariate between-subjects tests showed that personal income, controlling for sex, education, self-rated health, and marriage were significantly and weakly related to self-acceptance ( $p = .000$ ;  $\eta_p^2 = .006$ ), purpose in life ( $p = .000$ ;  $\eta_p^2 = .02$ ), and personal growth ( $p = .000$ ;  $\eta_p^2 = .009$ ), and autonomy ( $p = .019$ ;  $\eta_p^2 = .002$ ). Income was not significantly related to positive relationships ( $p = .936$ ) or depression ( $p = .261$ ).

Univariate between-subjects test showed that education, controlling for sex, income, self-rated health, and marriage were significantly and weakly related to self-acceptance ( $p = .05$ ;  $\eta_p^2 = .001$ ), purpose in life ( $p = .05$ ;  $\eta_p^2 = .001$ ), personal growth ( $p = .000$ ;  $\eta_p^2 = .013$ ), environmental mastery ( $p = .007$ ;  $\eta_p^2 = .002$ ), and depression ( $p = .003$ ;  $\eta_p^2 = .003$ ). Education was not significantly related to positive relationships ( $p = .09$ ) and autonomy ( $p = .219$ ).

Univariate between-subjects test demonstrated that marriage, controlling for sex, income, self-rated health, and education were significantly and weakly related to self-acceptance ( $p = .000$ ;  $\eta_p^2 = .023$ ), purpose in life ( $p = .000$ ;  $\eta_p^2 = .004$ ), positive relationships ( $p = .000$ ;  $\eta_p^2 = .011$ ), and depression ( $p = .000$ ;  $\eta_p^2 = .008$ ). Education was not significantly related to personal growth ( $p = .50$ ), environmental mastery ( $p = .66$ ), and autonomy ( $p = .66$ ).

Univariate between-subjects test demonstrated that sex, controlling for marriage, income, self-rated health, and education were significantly and weakly related to self-acceptance ( $p = .000$ ;  $\eta_p^2 = .005$ ), positive relationships ( $p = .000$ ,  $\eta_p^2 = .031$ ), personal growth ( $p = .000$ ;  $\eta_p^2 = .014$ ), and environmental mastery ( $p = .013$ ,  $\eta_p^2 = .002$ ). Sex was not significantly related to purpose in life ( $p = .95$ ), and depression ( $p = .11$ ).

### **Research Question Results**

In the current study, I utilized data from the Wisconsin Longitudinal Study to examine if union affiliation influenced psychological well-being and depression compared to non-union workers. I hypothesized that union affiliation would positively influence psychological well-being and depression. My results showed a significant difference in psychological well-being and depression by union status with small effect size. Contrary to my initial hypothesis, differences existed with a tiny difference in personal growth in our sample, with those who are not union affiliated reporting a slightly higher personal growth score than those who are. For all other of our five subscales of PWB (autonomy, environmental mastery, self-acceptance, positive relationships, purpose in life), along with depression, were not found to be significantly different by union affiliation. Our covariate interpretation showed a variety of influences that the covariates (e.g., gender, educational attainment, marital status, income, health) play on our dependent variables, but the effect sizes were small. Additionally, our descriptive statistics,

biserial and Pearson correlations demonstrated small but significant statistical relationships between our various variables. These results will be interpreted in chapter five, in light of previous literature and the researcher's understanding of the context of these results.

## Chapter V: Discussion

In the current study, I examined the differences in psychological well-being (PWB) and depression between workers who were unionized versus non-union affiliated. My hypothesis was that controlling for the effect of self-rated health, income, marital status, education, and sex, workers that indicated they had a union affiliation, would report higher levels of PWB (measured on several subscales) and lower depression scores, than those who weren't. Results confirmed the primary hypothesis for a statistically significant difference between both groups; however, the practical effect size was small and differences were in unexpected directions that suggested greater personal growth among non-union affiliated workers. Using prior research, theory, and our study's limitations, I provide an interpretation of my findings and suggest opportunities for future research that may provide more definitive evidence.

### Study Findings

Overall, I found a statistically significant difference in PWB and depression by labor union affiliation, where unionized employees reported slightly less personal growth in the PWB construct ( $\mu = 11.81$ ) than non-unionized employees ( $\mu = 12.13$ ). There was no statistically significant difference in depression between both groups of employed respondents. There were no other PWB sub-scales that were found to be statistically significant, despite there being slight differences in mean scores between both groups. Our biserial and Pearson correlations returned associations and relationships that were significant and aligned with previously understood literature. However, the relationships were not large. Our sample was biased towards a few days of depressive symptoms based on the unique rating of the WLS:  $\mu = 15.97$ , out of the highest possible score of 140 days. Our PWB subscales also averaged between 11-12 scores out of possible 14, with higher scores indicating a positive relationship within the subscale. Our sample



skewed towards relatively low days of depressive symptoms and higher scores of PWB on our individual sub-scales. It is important to note that several assumptions were under violation, specifically linearity, normality, and covariance. While I implemented strategies around the homogeneity of covariance (namely, Hartley's corrections) and previous literature confirms that multivariate  $F$  tests are resilient against normality violations, our linearity assumption failed. While Fields (2009) mentions that linearity assumptions often fail in large sample sizes, my results should be understood with caution.

Our covariate demonstrated some interesting results. For instance, self-rated health was found to be statistically significant in relationship to self-acceptance, purpose in life, positive relationships, personal growth, environmental mastery, and depression. Consistent with prior research (e.g., Euteneuer, 2014; Haught et al., 2015; Reynolds & Brady, 2012) we found a significant association between subjective reports of health and psychological wellness. Yet, Reynolds and Brady (2012) reported positive influences from union affiliation not observed in the current study; however, they controlled for labor market stratification, which was not available in the data used for the current analysis. Self-rated health is also a congruent construct with subjective social status, and we found associations between self-rated health and PWB in our covariate analysis. Those who have a greater perception of their status will have a higher perception of their psychological well-being. Yet, this relationship within our study was tenuous and needs to be examined further.

I found income to be statistically significant in relationship to a self-acceptance but not depression. This is contrary to prior examinations of income and depression, where significant associations were found (Reynolds & Brady, 2012; Reynolds & Buffel, 2020). The relationship between income and depression is inconsistent in the literature. For instance, income-inequality

and subjective well-being (SWB), were noted to have weak, heterogenous effects between both variables, with much variation existing in a country's level of economic development (Ngamaba et al., 2017). Yet, Patel et al. (2018) observes a connection between multiple nations, their income-inequality, and its exacerbation of depression. As Marmot (2015) noted, the subjective relationship between poverty and that of inequality is not the same, indeed they have subtle differences. Poverty, being absolute deprivation, imposes stressors that inequality navigates differently, mostly through subjective appraisals. Therefore, sophisticated instruments and rigorous methodology in future studies can continue to add empirical insight into these associations.

I found education to be significantly related to personal growth and environmental mastery, but not autonomy and depression. Education is protective of well-being and poor mental health outcomes (Bauldry, 2015). It is no surprise that college education protects against mental health by raising one's social status and improving their SES. The fundamental cause theory reinforces this, as education is a crucial component of the rise in status among generations. Those who are more educated are more likely to feel rewarded in their life choices and more in control of their work environments which improves their well-being. Labor unions are historically intervening amongst the less educated, working-class populations to bring them some measure of stability that may be similar to what college education provides white-collar professionals. Further research studies are needed to explore these links and pathways. Complete results can be found in chapter four. Despite the heterogenous nature of covariate results, they appear to be more consistent predictors of our dependent variable outcomes than labor union affiliation. However, we know from theory and our literature review that union affiliation predicts higher self-rated health and income (Reynolds & Brady, 2012). Yet, the relationship was

not clear in an overall linear way. Indeed, there was a small but significant effect size between unionized and non-unionized workers, with personal growth being slightly higher amongst non-unionized workers.

The multivariate effect size accounted for 0.05% of the difference between both groups, a small but significant difference. From a practical standpoint, the small effect size should lead to some caution in interpretation of study results, at least for the population and our methodological analysis. Additional studies are recommended to further explore if labor union affiliation differentiates mental health outcomes between those who are a part of a union and those who are not. Within my analysis, I controlled for several covariates that were found in the literature, examining the relationships between unions and health/mental health outcomes. It is notable that within the study's analysis, these covariates, while significant, had marginal effect sizes on the outcomes of our variables. This is contradicted by our initial, Pearson correlations, which returned moderate associations on self-rated health and its influence on PWB and depression, for instance. The Biserial correlations returned statistical significance, but were minimally associated, confirming our MANCOVA results. Our multivariate analysis indicated a small effect size in the aggregate, despite statistical significance.

Of particular interest is that our personal growth subscale was the only one of that was statistically significant, while controlling for our covariates. There was a slightly higher personal growth score for the non-unionized growth. This contradicts my initial assumptions of there being higher PWB amongst our unionized workers. Yet, there may be some reasons for this. For instance, during the 1992-1993, neo-liberalization and NAFTA were in full force as political cultures within our nation (Gerstle, 2022). The primary locus of governmental and private intervention was in organized labor, in a move to liberalize labor markets to help capital pursue

the highest rate of return. Organized labor and those within the movement were frequently cast as the primary inhibitors of our economy. Instead of the stable, consistent, and secure work of a union, the new economy focused on higher education, technology, and entrepreneurship as the optimal path to economic rewards (Gerstle, 2022). It is possible that this discourse may have impacted our respondents slightly, but there is no evidence to prove this conjecture within this secondary data analysis. If my conjecture is accurate, this political discourse might have inhibited feelings of subjective growth during this period. There is evidence in the literature to suggest that unionized workers are more likely to be a part of a union, because they are disgruntled, since they see it as an option to improve their well-being (Laroche, 2017). There is a paradox to labor unionism. It involves unions drawing attention to what is wrong in the workplace to help their employees change it (Laroche, 2017). Discontent for a while may lead to longer structural changes within the firm that are reflected in lower income-inequality and feelings of solidarity in the long term.

### **Theoretical Insights**

My interpretation of these mixed results stems from understanding the complex relationship of causality between social determinants and individual outcomes. Poverty and inequality are salient issues of social justice for counselors and counselor educators. Income-inequality is large in the United States, which ranks as one of the more unequal nations amongst the industrialized nations, despite generating the greatest wealth and Gross Domestic Product (GDP) (OECD, 2014). Poverty and inequality have grown because of the historic disruptions of the COVID-19 pandemic, with the social and economic effects likely to linger for quite some time. Poverty traps individuals within generational stagnation and absolute deprivation, while

income-inequality prevents social mobility and rests on relative deprivation compared to others (Marmot, 2015). Within the United States, racialized minorities, single mothers, and recent refugees and immigrants are disproportionately more likely to be in poverty and struggle with effects of income-inequality (Marmot, 2015). This dissertation used a novel, interdisciplinary framework that incorporated literature from diverse disciplines (e.g., political science, public health) and integrated it with dyadic, counseling frameworks. Within this framework, the dissertation sought to examine the influence that labor unions, which reduce income-inequality, play in influencing mental health outcomes. Labor unions historically play a profound role in working-class and poor individual's lives. Therefore, poverty, income-inequality, and class hierarchy are important concerns for our discipline.

In chapter one, I examined some of the evidence in the counseling literature related to the discomfort around issues of class and inequality that counselors report feeling within the professional work (Liu et al., 2007; Tucker et al., 2017; Tucker et al., 2021). Class is under-researched and poorly conceptualized within our research literature (Clark et al., 2018). The literature has observed this lack of recognition of class as an important component of clinical practice to result in bias while building a therapeutic relationship (Choi & Miller, 2018; Sax, 2015). Latent biases may be a reason that we have not investigated labor unions before in our literature as potential, structural intervention to improve the mental health of our clients, or for our own subsequent unionization to reduce counselor burn-out. The middle-class dispositional background of the psychotherapy disciplines may explain these biases, as observed by Liu et al. (2007).

### **Implications for Counselors**

Counselors will derive a strong set of practical insights from the dissertation and its findings. Despite significant results with small effect sizes, the importance of examining structural interventions in the political economy and their influence on clinical work remains an important goal for the discipline in the 21<sup>st</sup> century. Counselors working in rehabilitation, disability, career services, and re-offending legal services benefit from tapping into resources that provide stability to their clients and protections. Formal labor unions and their job benefits (e.g., retirement, health care) are important community services that counselors can refer to, collaborate with, and help provide internships/opportunities to their clients. In the psychology of working theory, good decent work is noted to fulfill many of the psychological and physical needs of individuals that directly influence their mental health. Our sample itself was employed and educated, biasing it towards higher rates of PWB and lower rates of depression. This reaffirms the importance of counselors partnering with structural services (i.e., labor unions and job placement agencies) to help clients move towards greater well-being.

Labor unions are a politically contentious issue and are deeply disliked by many segments of American society. Labor union affiliation has been declining steadily and is at its lowest levels in recent history. Therefore, it may be difficult for a counselor to help a client gain access to formal labor support in their city/region. Therefore, counselors should engage in centering economic and labor justice as important, social justice goals that are equal to the values of gender justice and multiculturalism within our discipline's future. Engaging with professional labor to help improve counselors' own working conditions to prevent burnout is an important social justice goal within our discipline. Simionato and Simpson (2018) conducted a meta-analysis over 30 years of literature documenting burn-out and noted over half of the counselors/psycho-therapists were experiencing moderate-to-severe levels of burn-out in their

jobs. Maslach (2003) discusses how exhaustion and cynicism are primary drivers of burn-out in human serving professions. Therefore, counselors should note that the psychology of working, which places decent and dignified work as a foundational goal for well-being, applies to their clinical and professional abilities as well.

Counselors can reflect on the psychology of working, namely how the predictors of decent work (i.e., economic constraints, marginalization, career adaptability, work volition, and career adaptability) influence a broad array of well-being outcomes (i.e., survival needs, social connections) (Blustein, 2006). These well-being outcomes are a focus of our clinical work. Case-conceptualizing and developing insights into how clients, especially those coming from economically marginalized backgrounds, may struggle in consistent therapeutic work is of vital importance to positive psychotherapy outcomes.

Counselors need to engage politically in the structures that help influence decent working conditions for their clients, similar to how teachers and nurses engage politically with the structures that influence teaching and health outcomes. Counselors should work to organize their own work places along with advocating to the media and local politicians the importance of connecting mental health outcomes to decent working conditions for working-class clients. Counselors must reflect on their own class biases and their own consciousness, as articulated by Liu (2011). Many of our clients internalize classism to their own outcomes, and counselors may inadvertently promote that narrative by staying within the beginning stages of consciousness. Instead, counselors can increase the social class consciousness from interpersonal attributions to structural determinants through studying the political economy, and use that to guide clients from internalized classism to motivation and action in solidarity with others. As noted within the literature review sections, states that have deindustrialized are more likely to see drug over-dose

effects (Ickler, 2020) making the connection between decent work, losing stability in decent work, and mental health outcomes, even more urgent.

### **Implications for Counselor Educators**

Counselor educators may derive important pedagogical and research insights from these dissertation results. It is important to note that issues of class, social class worldviews, subjective status, and other hierarchal frameworks are not consistently researched within our discipline. Indeed, as noted in chapter one, this results in bias within the therapeutic relationship (Choi & Miller, 2018), as the lack of research focus inevitably influences pedagogy, which then, influences counselor training and preparation, leading to middle-class biases that threaten therapeutic relationships with poor or working-class clients. Indeed, these dynamics align with the CACREP standards of promoting social justice within our counseling discipline, as class bias shapes how we approach counseling and what we choose to focus on as an intervention in the field. Racial minorities and immigrants are more likely to be concentrated on lower social gradients and in poverty, increasing the need for counseling to actualize its anti-racist frameworks and pedagogy with structural interventions (Sharma & Hipolito-Delgado, 2021; Sami & Jeter, 2021). Simply put, there is no progress in anti-racist approaches without integrating a critique of the political economy into our discipline's priorities.

The importance of locating labor unions as a structural intervention that reduces inequality provides the discipline with the potential to serve a broader and more economically diverse population through our research and pedagogy. Novice counselors may be largely originating from a middle-class background (Liu, et al., 2007), therefore, foundational work on class, income, and social gradients would enable a greater sophistication in case-conceptualization and prepare our counselors to work with clients who need government services



(e.g., Medicaid). The careers course requirement within the CACREP curriculum is perhaps the most well-situated course to include questions of class, income, social gradients, and the psychology of working theories to help students learn these concepts. Within this course, the importance of labor unionism will stand out as an important intervention in our client's lives who originate from lower social gradients. Counselor educators may look to develop new curriculum engagement with counseling students through the careers class. Noting how deeply linked career, labor, and mental health are in our society, educators can update their curriculum to include discussions of classism, SDOMH, and the role of unionization. Indeed, some simple and novel studies can easily be done, assessing counseling students understanding of class and social class consciousness at the beginning of the term, exposing them to these concepts during the semester, and measuring their feelings of social class consciousness, internalized classism, and other constructs at the end of the semester. This would be a helpful intervention in our pedagogy and allow for us to integrate new ideas without creating new classes.

These issues can further be exploring in supervision within our classes and practicum/internship sites. It is likely that many of our students will get internships and start their residency processes within community mental health, where they will encounter a broad spectrum of clients. Improving class consciousness through understandings of political economy and SDOMH can help our counselors move their clients from internalized classism to attributions to systemic challenges in their environment. This may help them practice agency and help them feel more interconnected with others struggling in the same way. These challenges become in more apparent in the sub-specialties of careers and disability within our discipline. For instance, we know the importance that labor unionism has for advocating to improve accommodations at a work place. Rehabilitation counselors can help their clients connect with

these resources within their work place, or help their clients attain more agency by engaging in solidarity and struggle with their able-bodied co-workers. Helping our counselors learn to conceptualize about decent work and stressors related to it may open up insightful conversations that can facilitate growth and change across a variety of specialties.

Counselor educators that can link the concepts of political economy with SDOMH also provide a valuable, theoretical framework that can help inform our novice counselor's pedagogy for careers, addiction, mental health, and disability work. To develop an interdisciplinary perspective on these issues, counselor educators should partner with other researchers from a variety of fields. Counselor educators can bring expertise to how structural and sociological mechanisms influence individuals and families within their subjective environments, creating a vital link within an interdisciplinary perspective. Further conceptualization between how self-rated health and our other covariates influence PWB and depression are important areas for us to build an empirical basis research basis on. For instance, subjective appraisals of status and social class world views, along with dignified work, are valuable forms of information that emerge from counseling relationships that intersect with sex, education, and income. There is a rich field of qualitative and quantitative data that be created by examining these experiences in our clients, which can further influence and help other disciplines (e.g., economics, political science) develop insight into structural shifts in our societies and political economy.

The results showed a small but significant difference in personal growth in those who were not unionized versus those who were not. It is important for counselor educators to interpret these findings with caution and to help develop a broader literature base to investigate the complex relationship labor unions have with mental health with greater empirical clarity.

### **Social Determinants of Mental Health**

Judged to be the “cause of causes” (WHO, 2010), social determinants of mental health (SDOMH) reflect the structural inequities and influences on our own personal well-being. The counseling discipline emphasizes the importance of integrating structural and social factors into our understanding of how mental health influences our clients’ lives (Ratts et al., 2016). As reflected in chapter one, income-inequality, poverty, and classism are salient concerns for counselors, because of their influence on our own professional understandings of mental health and the impact they have on clients and communities. A variety of disciplines (e.g., political science, sociology) have large literature bases investigating (e.g., Hagedorn et al. 2016; Leigh & Chakalov, 2021; Piketty & Goldhammer 2017) income-inequality and the impact of social factors on our well-being. Following this literature, one can see the influence that labor unions have on reducing inequality in a society and how their loss, because of globalization, is one determinant of our inequality within the United States (Hagedorn et al. 2016; Lonergran & Blyth, 2020). Labor unions have a robust and militant history within the United States, and have played an integral role in the development of safer working conditions, benefits, and overtime pay gradually over the past century (Taft, 2020). Labor unions also provide their members with feelings of solidarity and safety, which may improve their well-being. Through this structural intervention in the workplace, labor unions can bargain for better wages and lead to income-inequality reduction within their firms. Therefore, the dissertation sought to add to the nascent literature base examining the influence a labor union may have on mental health.

The dissertation study was innovative in a few different ways and departed from previous empirical examinations of this topic. First, our study sought to examine a construct called PWB, made up of six different subscales, all representing different aspects of a purposeful life. While there has been a study examining the influence of labor unions on general well-being across

different countries (Flavin et al., 2010), this was the first use of the PWB variable to the author's knowledge, in relationship with labor unions. Our second variable, depression, has been examined before in relationship to labor unions before (Reynolds & Buffel, 2020). My interest in including it in our study through a multivariate design is that theoretically, higher scores of PWB should divulge significantly from higher scores of depression.

While the relationship between labor unions and their mental health outcomes is nascent, empirical studies in the literature sought to examine these relationships through identifying labor unions, the independent variable through labor union density. The density of a certain region/country's labor union affiliation and then correlating that density (while controlling for covariates) to mental health outcomes (Ikeler 2020; Eisenberg-Guyot et al., 2020; Eisenberg-Guyot et al., 2021; Reynolds & Buffel, 2020). Our independent variable did not examine labor union density in Wisconsin. Rather, it sought to examine a predictive, linear relationship between two groups of workers, those affiliated with unions and those who were not, within a specific cohort of individuals through a longitudinal, secondary data analysis. While innovative, determining causality through social determinants in linear, quantitative relationships proved to be a limitation in this study. This may be because of the challenge of determining causality between social determinants and individual outcomes.

A helpful analogy within the literature of SDOMH, specifically housing, helps illustrate this challenge. It is not controversial within the literature to associate housing access with better health outcomes (Irwin, 2010; Rolfe et al., 2020). Yet, as Rolfe et al. (2020) notes, these causal pathways are not well understood, and it is difficult to develop empirical data on the pathways between social determinants and their downstream, individual outcomes. Part of this difficulty lies in the challenge of how causality works and is understood in the social sciences. Rolfe et al.

(2020) for instance, propose a realist framework of causality, where they argue for the importance of understanding causality from a realist framework in the social sciences. This framework discusses causality through generativity as opposed to successive steps, or more simply put, causality arises in latent powers/liabilities within different contexts, as opposed to nullifying context through a random-control-trial (RCT) (Rolfe et al., 2020). Contexts are dynamic, and they need to be considered when introducing causality. Second, causality may be a stratified reality, hidden and difficult to detect (Rolfe et al., 2020). These two latent factors, combined with many theoretical pathways that exist between social determinants and health/mental health outcomes (e.g., material factors, life-course events), suggests difficulty in capturing causality between social determinants and their individual outcomes. Leigh & Chakov (2021) identified several causal pathways between how labor unions influence health outcomes, with our specific focus being psychosocial influences. Irwin (2010) notes the theoretical challenges between identifying psychosocial, individual influences (i.e., mental health) with structural determinants, which are often the “cause of causes” and are one layer of abstraction beyond the interpersonal. This may be the reason that our results, while significant, did not prove to have large effect sizes. Despite the difficulty in proving linear causality, the relationships between labor unions and individual mental health outcomes are an important contribution to the literature. There may be several innovative ways to move the literature forward with new empirical data that would help flesh out the relationship.

### **Wisconsin and Positive Contagion**

The sample was mostly non-unionized workers, but several hundred were found to be affiliated with a union. Of particular note is that our sample, because of its mostly platykurtic and left-skewed results for the various PWB subscales, and right-skewed results of depression,

resulted in bias. Our sample appeared to score high on the various sub-scales of PWB and low on the scale of depression, with few extreme outliers that needed to be removed from our analysis. Examining our prior literature and covariates, our sample appears to have at least completed high school and includes a majority of individuals who identified as married and employed. All three factors play a role in positive mental health and may bias our sample towards better mental health outcomes than a sample that may not have these characteristics in play. Reverse causality might be in play as well, as those affiliated with a labor union are more likely to marry, especially as men, and have a high school degree. While our sample is firmly established in their middle age with higher incomes than younger years, research shows that happiness and subjective well-being are lowest in our middle ages, gradually increasing after age 48 (Blanchflower, 2020). Therefore, our sample's relatively higher rates of PWB and depression are interesting to note.

One possibility may lie in the unique structural determinants of Wisconsin. As noted in chapter two, Wisconsin, at one point, was one of the most union-friendly states in the United States. It has also been the site of militant labor actions, including the longest strike in U. S labor history. Regardless of de-industrialization and the slow loss of unions during NAFTA and neo-liberalization during the 90s, Wisconsin's union density was traditionally high. For instance, around 1993 (when our data is sampled), approximately 20% of Wisconsin's workforce was unionized, compared to under 10% in 2021 (U. S Bureau of Labor Statistics, 2022). Higher amounts of union-density lead to what Flavin et al., (2010) termed positive social contagion from union members interacting with non-union members. Unionized workers have better health and well-being and Flavin et al., (2010) discussed how more satisfied, happier individuals will interact and spread their positive contagion onto non-union members. Therefore, higher rates of

union density led to spill-over effects of positive well-being for the entire society. 20% of unionized workers in 1993 (approaching close to a fifth of workers in the state of Wisconsin), lead to positive social contagion effects across the state. Nowhere is this link clearer than in the various Nordic countries, where labor union participation and density is high, and well-being, health, and happiness routinely rank as the highest in the world (Torp & Reiersen, 2020). Therefore, our sample during this time period may be biased towards lower levels of depression and higher levels of PWB, because of this positive social contagion and various psychosocial factors (e.g., marriage) that positively influence mental health. These factors may explain the small effect size that was noted in our results; however, additional research is needed to examine causal factors, as social contagion was not directly examined in the current study.

### **Limitations**

There are several limitations to note within our study. The first was that several of our assumptions (linearity, normality, and homogeneity of covariance) were in violation during our initial stage of assumption testing. I made adjustments and controls for the assumption violations, as detailed in chapter four. Our sample sizes were unequal, though large enough to provide adequate power based on a prior power analysis. This large sample size may be a limiting factor in our results, as large sample sizes find significance in their results, even if the connections might be spurious. (Fields, 2009). A second limitation is the nature of secondary data sets within social sciences. Secondary data sets are not custom built, like primary source data, to answer a research question specifically. The WLS asks a remarkable number of questions that cover everything from the type of house and mortgage an individual has to their health, well-being, perceptions of religion, and social structures. This wide range provides a host of variables that researchers can craft research questions on, but it may lack the specific rigor

needed to hone down a specific phenomenon to examine. There may be respondent fatigue based on the larger number of questions asked with every wave. There was an additional loss of over one-thousand respondents in the WLS's 1993 wave when the second half of the paper-based surveys were sent to the respondents' homes.

In our study, the only questions related to our independent variable (labor union affiliation) were coded as a simple "yes" or "no". A more rigorous set of questions that examined labor union involvement, including years of work in a union, types of work covered, etc., would have increased the rigor of our independent variables and improved our inferences. While practically not a limitation in our respondent's real lives, for our research questions our sample reported high levels of PWB and low levels of depression. Our sample could not meet a normal distribution of effects/residuals; therefore, it may be difficult to detect significant differences between our groups for predictor variables that may change the relationships between both groups.

Our study also had a homogenous sample. They were middle-aged, white adults from the baby-boomer generation, who were mostly married and had completed high school. Therefore, it may be more difficult to generalize results to diverse demographics that may disproportionately benefit from labor union affiliation. For instance, Eisenberg-Guyot et al., (2021) notes that union status may be more protective for men, and men of color, compared to less-educated women (for self-rated health and mental-illness). Labor union affiliations and their relationships to health and mental health of individuals with a historically minoritized racial identity are a sizable gap in the literature and even more pertinent for researchers and social justice activists to understand. Eisenburg-Guyot et al., (2021) also note that union status is mis-represented in the field, with several respondents erroneously marking that they are a part of a union or are not. There may be



confusion over how respondents understand union status, as certain labor unions (e.g., business unions) cannot bargain for contracts. Professional, white-collar unions rarely do contract bargaining for their associations. Therefore, there may be some confusion and mis-classification of a union and its relationship to the respondent within my study. My dissertation study also did not stratify respondent's occupation (e.g., teacher, park-ranger, construction). Certain occupations are more likely to be unionized and it would add to the study's rigor to test differences in health/mental health between workers who are unionized/non-unionized in a similar occupation.

Last, the state of Wisconsin, with its unique labor history and historically higher levels of labor union participation, may make the results difficult to generalize to states that have different levels of union participation. In particular, we may control the positive social contagion theory associated with labor union affiliation in a right-to-work state with low labor union participation. Theoretically, the differences of health and mental health for unionized workers/non-unionized would be more significant in a right-to-work state, as social contagion would not be a factor.

### **Recommendations for Future Research**

As outlined in chapter two, few studies directly examine the relationships between labor unions and mental health. There are a few more that examine health and labor unions, but overall the empirical literature is nascent. Mental health is a complex and latent construct, and varies deeply based on an individual's culture, background, and perception of their experiences. The importance of examining rich narratives based on participant's lived experiences in labor unions and asking if there are differences in their mental health would be most directly accomplished through various qualitative methods. Our constructs in chapter two, specifically, subjective social status, social class worldviews, and the psychology of working, may be further explored in these

individual's lives. We could note if there are substantial differences in their experiences between unionized/non-unionized jobs, and if they relate those experiences to the aforementioned constructs. For instance, I could examine the lived experiences between unionized workers with racial minority identities and ask them to compare and contrast their experiences at their union job versus a non-union job. Qualitative methodologies could allow for further empirical work to be done examining these differences and would aid the development of more rigorous quantitative constructs as well.

Our variable, PWB is a latent construct made up of several subscales. While in my dissertation study, I controlled for several covariates that have been demonstrated to affect one's mental health, it may be more useful to examine if these covariates differently. For instance, a SEM's path analysis would allow us to see the pathways between labor union affiliation and if the covariates we examined (e.g., self-rated health, income) lead to differences in our latent construct of PWB. I could note if there were differences in those pathways between workers that were unionized versus those that were not, while reducing error and improving homogeneity of covariance assumptions through model fitting. This method may allow us to make a more rigorous inference of the differences between unionized versus non-unionized workers in this sample.

Related to the counseling discipline, it is important to see if more control of work environments (through unionization) may lead to decreased burn-out amongst mental health workers and counselors. Counseling, being a white-collar discipline that is traditionally focused on outpatient and individual dyadic work, makes it difficult to find groups of master's level clinicians that would be unionized. Advocating for unionization in certain larger facilities (e.g., hospitals, residential) would allow us to empirically examine if there is less burn-out in our

colleagues. Once an empirical basis is demonstrated, this would allow us to advocate and champion for improving labor practices in our discipline and allow for counselors to join formal labor movements. Following the example of successful teachers' unionization drives, counselors should show that more resources and more security at work lead to better outcomes for the individuals they serve, in our case, clients. Developing an empirical literature base on this issue would allow us to advocate and implement structural changes in our communities.

Finally, future research in our discipline should look to integrate valuable theoretical insights from the various disciplines of political economy, sociology, and economics, as we seek to examine structural forces that are affecting the mental health in our communities, especially for marginalized individuals. For instance, using neo-liberalization of government services as a theoretical insight, counselors can examine if the mental health of citizens is changing, longitudinally over-time within specific states, regions, or even nations. As covered in chapter two, the reduction of labor unions within certain states has been associated with increased drug overdoses, after controlling for other covariates. Counselors can build on this existing framework and examine if various mental illnesses are more pronounced in areas that are highly unequal, and develop empirical inferences into these various mechanisms. Developing these insights would allow us to teach the importance of SDOMH, political economy, and inequality to the next generation of counselors and counselor educators.

### **Conclusion**

Within this dissertation study, I used a novel, inter-disciplinary approach to examine a structural influence on income-inequality and its relationship to mental health. Income-inequality and poverty exert a profound health and mental health cost on the citizens of the United States. As counselors and counselor-educators, we are positioned to encounter families and individuals

who are mired in precarity and its discontents. Therefore, a structural intervention against income-inequality (i.e., labor unions) serve as a vital environment for the discipline to develop an empirical analysis on. My aim was to examine these relationships within a cohort of individuals who had a relationship with a union within a time of intense economic and political changes in the United States. Ultimately, my results did not reflect my initial hypothesis about there being a positive relationship between labor unions and mental health. However, I believe it is innovative in the literature. The results (especially the covariates) reflect some of the consensus in the literature, while demonstrating results that are inconsistent with it. Indeed, the results only add to the importance of developing rigorous, empirical insight into the complex phenomena of social determinants of mental health and their relationship with individual self-described outcomes within survey data. Every empirical study has limitations. however, I believe this study establishes a clear research agenda on the relationship between labor unions and mental health for future researchers and myself.

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