ASSESSING RISK AND PROTECTIVE FACTORS ASSOCIATED WITH
PSYCHOLOGICAL WELLBEING IN THE WORKPLACE AMONG
EMPLOYEES OF SMALL RETAIL BUSINESSES

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We recommend acceptance of this thesis in partial fulfillment of the candidate's requirements for the degree of Master of Public Health in Community Health Education.

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ABSTRACT


Workplaces vary in terms of their culture of health. Small employers especially may have a difficult time prioritizing aspects of health that traditionally are undervalued, such as mental wellness. Employees at these businesses are less likely to have access to workplace resources that promote wellbeing, which may contribute to inequities and health disparities. The purpose of this cross-sectional descriptive study was to assess factors associated with psychological wellbeing in the workplace among employees of small retail businesses in La Crosse County, Wisconsin. Also, this study was undertaken to investigate whether differences in these factors varied based on demographics. A previously established, validated and reliable survey was issued to 20 retail businesses with 100 or less full and part-time employees. In total, 49 employees provided complete records to be included in final analyses. The most commonly reported risk factor was emotional exhaustion. Preliminary results within sample examination revealed that factors associated with psychological wellbeing in the workplace differed based on employee demographics. Future studies should emphasize a more rigorous sampling approach to promote generalizability, and research should attempt to further validate the online survey used in this study by looking for associations between factors and other well established psychological wellbeing measures.
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CHAPTER I
INTRODUCTION

Background

Employer-provided health insurance is the most common source of coverage in the United States (Henry J. Kaiser Family Foundation, 2018). Businesses have a vested interest in providing employee health and wellbeing measures aimed at controlling the amount they spend on healthcare. The Centers for Disease Control and Prevention (CDC, 2016) states that while employers already have an obligation to keep the workplace safe and free of potential hazards, they also have the unique opportunity to promote the health of their workforce by fostering a culture of wellness within their organization.

Fostering this culture of wellness can reduce direct costs such as insurance premiums and workers’ compensation claims, and have a positive effect on indirect costs, such as absenteeism and presenteeism. Businesses can do this by adopting a coordinated set of strategies to meet the needs of their employees. Examples of these strategies include: health education courses, onsite fitness facilities or access to a nearby fitness facility, healthful workplace policies, employee health insurance that covers preventive screenings, and increased access to healthy meals or food options. Many programs with these components have been shown to reduce health risks for disease, improve current health status of employees, and decrease health-related costs (CDC, 2016; Michaels & Greene, 2013; Partners for Prevention, 2010; Wein, 2015). Furthermore, it has been
demonstrated that improving health outcomes on an individual level creates change on an organizational level as well, where a plethora of people reap the benefits (CDC, 2016).

*Healthy People 2020 (HP 2020)* is a document that includes a set of 10-year objectives created to help improve the health of the nation. The overall goals of *HP 2020* are to increase both the quality and years of healthy life for each person and to eliminate health disparities. Ten leading health indicators were prioritized in *HP 2020*, including mental health and access to health care. These indicators were chosen to help encourage action in public health initiatives (Office of Disease Prevention and Health Promotion, 2018). A by-product of *Healthy People 2020*’s predecessor, *Healthy People 2010*, was *Healthy Workforce: 2010 and Beyond*. This was a sourcebook designed for employers to promote a culture of health in their businesses. One of the first points made in this sourcebook was why employers should be concerned with the figures included in the sourcebook. It explains that, long-term, it is more cost-effective to invest in preventive care, such as behavioral healthcare, health education, and screenings, compared to paying for treatments for illnesses and/or injuries. By working to establish prevention programming in the workplace, health education and public health professionals can address these causes before they become costly, ongoing issues. Employers can do this by investing in the health of their employees by providing resources and opportunities to reduce individual health care cost expenditures over time (Department of Health and Human Services [HHS], 2000; Partners for Prevention, 2010).

There are various local organizations and community efforts focused on enhancing mental wellness throughout La Crosse County in Wisconsin, such as the local branch of the Campaign to Change Direction, the Mental Health Coalition, the local
National Alliance on Mental Illness (NAMI) chapter, and the addition of mental health staff to youth organizations, such as the YMCA Teen Center. It has been conveyed through reports such as the *Burden of Mental Illness in La Crosse* (Long, 2011), *Healthy Workforce: 2010 and Beyond* (Partners for Prevention, 2009), and the *La Crosse County Health Department Community Health Assessment* (La Crosse County Health Department, 2016), that psychological wellbeing in the workplace is a pressing concern that needs to be addressed in the area. However, to date, a study that is specifically focused on determining risk and protective factors associated with psychological wellbeing in the workplace has not been conducted in this county.

Well County La Crosse, or the La Crosse County Well Workplace Initiative (LCWWI) is a collaboration of more than 20 businesses and organizations in the area with the purpose of "[guiding] worksites to develop and sustain results orientated worksite wellness programs to enhance the health, safety, and wellbeing of your workforce" (Well County La Crosse, 2017, para. 2). Each participating business or organization that officially joins the initiative agrees to create a plan and use evidence-based methods to implement worksite wellness programming at their location. The goal of this initiative is to make wellness a consistent aspect of work in La Crosse County. However, this initiative is not focused specifically on psychological wellbeing. Programming may consist of psychological wellbeing initiatives, but may also include physical activity, nutrition, stress management, and smoking cessation (Well County La Crosse, 2017).
Statement of the Problem

In her 2011 report on mental health, De Long "provide[s] a framework for considering the burden of illness attributed to mental illness in [La Crosse County]" (p. 3). Section One of the report includes data on workplace mental health. Gundersen Health System, a prominent health system and employer in the community, provided information regarding their workplace Employee Assistance Program (EAP). They reported that "emotional difficulties, depression, and stress made up a combined 26% of visits for all EAP appointments in 2010, second only to relationship issues" (p. 8). Additionally, individuals with serious psychological distress reported that for 30% of the last 30 days they experienced disruptions with work or other activities due to mental health concerns. This psychological distress can lead to further concerns in other areas of a person’s life. According to a report from the Wisconsin Department of Health Services (2009), adult Wisconsin residents with serious psychological distress (SPD) are more likely to be dissatisfied with life, have little social support, and have fair to poor health.

Compass Now 2015 is part of a joint effort facilitated by Great Rivers United Way to "assess community needs, identify community resources, and encourage action to improve the quality of life for everyone in the community" (p. 2). With the help of various healthcare organizations, foundations, and health departments, Compass Now 2015 was established as a widely encompassing resource that can be accessed and utilized by anyone in the community. Data were collected using a household survey conducted by both random and convenience sampling in different areas. The process aimed to improve the understanding of the needs of the community and perceived challenges facing the region. Qualitative data were collected by facilitating focus groups.
made up of community members. Local experts in education, health, finance, and community issues were recruited to review information and generate results.

Compass Now 2015 presented some important data that indicated a variety of concerns in the community as well as outlined population demographics. In La Crosse County in 2015, the total population consisted of 114,638 people, 14% of which lived at or below the poverty line. Compass Now 2015 listed mental health as one of the top identified areas of need. It clarified that "in 2012, 17.3% of the Great Rivers Region's Medicare fee-for-service program users lived with depression" (p. 12). About 18.7% of adults ages 18-64 in the county were uninsured. Additionally, in 2015, the local mental health provider-to-patient ratio was 1,728:1. This was greatly disproportionate to the Wisconsin and Minnesota ratios of 529:1 and 623:1, respectively (Great Rivers United Way, 2015).

In additional efforts to further identify the health needs of the local community, a community health assessment was conducted by the La Crosse County Health Department in 2016. It utilized key informant interviews with 10 community representatives and community forums consisting of over 60 county residents. Ten major concerns were identified, including mental health, substance abuse, and access to health services. The link between mental and physical health was noted, as well as the link between mental health and chronic disease. It was also stated that there is limited mental health data available for this community, which identifies a need for exploration in this capacity (La Crosse County Health Department, 2016).
Significance of the Problem

Approximately 18% of adults in the U.S. struggle with a mental health issue annually, which equates to about 44 million people. One in 25 adults, or 9.8 million people, experiences a mental illness that extensively affects or limits one or more major life activities. Approximately 4% of Americans struggle with thoughts of suicide, which equates to approximately 9.4 million people. Nationally, about 17% of adults with mental illness lack health insurance, which, in turn, limits their access to mental health care (NAMI, 2017; Mental Health America, 2017a).

In 2015, only 41% of adults with a mental health condition in the United States received services or care for their condition in the past year. Individuals without adequate care faced an increased risk of developing chronic medical conditions over time (NAMI, 2017). A study conducted by Colton and Manderscheid (2006) found that mental health clients had a higher relative risk of death in comparison to the general population. They also reported that people with mental health needs died at significantly younger ages. Most of these clients died due to natural causes, such as heart disease, cancer, and respiratory and lung diseases. The World Health Organization [WHO] (2000) reported that chronic medical problems are experienced at higher rates among those with chronic mental illness.

Serious mental illnesses cost the United States approximately $193.2 billion per year in lost earnings. Additionally, mood disorders, such as major depression and bipolar disorder, are the third most common reason for hospitalization among people ages 18-44 (NAMI, 2017). Furthermore, depression is projected to be the top cause of work
disability by 2020. Researchers predicted that by 2030, depression will be one of the top three leading causes of illness in the U.S. (Mathers & Loncar, 2006).

**Purpose of the Study**

Studies have suggested that improved care for employees with mental health concerns has a positive impact on job retention, reducing employee burnout, alleviating symptoms of mental health conditions, and improving overall job satisfaction (Haslam, Atkinson, Brown, & Haslam, 2005; Tan et al., 2014; Wang et al., 2007). The La Crosse Medical Health Science Consortium (LMHSC), founded in 1993, is a nonprofit corporation and a collaboration of two regional medical systems and three higher education institutions, including: Mayo Clinic Health System – Franciscan Healthcare, Gundersen Health System, University of Wisconsin-La Crosse (UWL), Viterbo University, and Western Technical College. In 2009, the LMHSC added two more partners: the local school district and County Health Department. The mission of LMHSC is “fostering collaboration for healthier communities” (LMHSC, 2017).

In July of 2017, the LHMSC began the second year of their eight-year grant titled, *Better Together*. *Better Together* is a behavioral health grant funded by the Medical College of Wisconsin’s Changemaker Program. The first year was specifically designated for problem identification and planning a course of action, years two through six are designated for implementation, and years seven and eight will be dedicated to sustainability (Executive Director of LMHSC, personal communication, May 26th, 2017). The purpose of the grant is for the community to identify local behavioral health concerns in order to develop, implement, evaluate, and sustain programs to amend the culture of mental health stigma and awareness.
The first step in being able to address mental health for employees at work is conducting a worksite health assessment. A successful assessment targets the specific employee population to identify their goals and needs. A comprehensive assessment would aim to identify many factors that influence the overall health of the population, including lifestyle factors, work environment, policies, and practices (CDC, 2016). This study assessed risk and protective factors associated with psychological wellbeing in the workplace among employees of small retail businesses in La Crosse County Wisconsin. The purpose of this study was to find which factors associated with psychological wellbeing in the workplace are most prevalent among this demographic, and to see if the prevalence of these factors differed based on demographics. Conducting a survey, such as the one used in this study, can act as a stepping stone towards integration of more socially and fiscally-responsible worksite wellness programming.

This study aligned with the goals of the LMHSC, potentially contributing to better integration of mental health services in the community and improved behavioral health in the county long-term. The La Crosse Medical Health Science Consortium’s Evaluation Model (see Appendix A) will be measuring the extent to which the grant’s purpose is addressed. The fourth page of the Evaluation Model addresses the strategy to “increase knowledge and improve attitudes about mental wellness, mental health, and mental illness among the general community in the county." A goal for output regarding this strategy is “improved knowledge about protective factors that promote mental health and mental wellness among the adult population." One goal for this study was to assist with improving attitudes regarding mental wellness among a particular demographic, employees of small retail businesses, in the general community. This was done by
creating a conversation about psychological wellbeing in the workplace through distribution of the survey.

Research Questions

1. What factors associated with psychological wellbeing in the workplace are most prevalent among small retail business employees in La Crosse County, Wisconsin?

2. Does the prevalence of factors associated with psychological wellbeing in the workplace among small retail business employees in La Crosse County, Wisconsin, differ based on demographics?

Delimitations

- This study only assessed factors associated with psychological wellbeing in the workplace as operationalized in an existing survey tool.

- This study only accessed small employers included in the La Crosse Chamber of Commerce business directory listed under the category “Retail.”

- Business owners and managers were utilized to distribute information regarding the online survey tool to eligible participants.

- Surveys were only distributed via an online tool; no hard-copy surveys were offered.

- Surveys were distributed and collected in a three-month time frame.

Limitations

- Employers may not have distributed survey information to employees.

- Employees may have hesitated to take the survey or chose not to take it due to fear of it affecting their job status.
• The stigma associated with mental health may have deterred employees from participating in the survey.

Assumptions

• Information regarding availability of the survey was passed on by business owners or managers to all eligible employees at their businesses.

• Each study participant completed only one survey.

• Study participants answered each question honestly.

• Only eligible study participants completed the survey.

• Study participants understood the survey tool.

Definition of Terms

• Psychological wellbeing - “A state of wellbeing in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (WHO, 2014a, para. 1).

• Small business – The U.S. Small Business Administration (2017) has established the largest size that a business can be to still be classified as a small business with variances depending on the industry. In retail, variances in size to acquire the name “small business” is related to the type of product sold and is not standard throughout the retail industry. For the purpose of this study, a small business will be defined as a business that employs 100 or less full and part-time employees.
CHAPTER II
LITERATURE REVIEW

Mental Health in the United States

The term "mental health" was first popularized in the early 1900's by physicians, reformers, and former patients who were looking to reduce the stigma associated with mental illness. They claimed that using the words "illness" or "madness" reinforced prejudices against the mentally unwell in addition to patients who had previously resided in asylums. Throughout the early to mid-1900's, institutions became places for dangerous patient testing, and performing procedures such as electroconvulsive therapy and lobotomies. In the latter part of the 1990's, new techniques were introduced. Magnetic resonance imaging (MRI) was used for brain scans and medicines such as selective serotonin reuptake inhibitors (SSRI's) became treatment methods for major depressive disorder and anxiety disorders (Science Museum, 2017).

Up until the mid-1900’s, worksite wellness was not something that businesses considered. However, in the early 1940’s, businesses began implementing Employee Assistant Programs (EAPs), which were primarily focused on helping employees with alcohol addiction. It was not until the 1970’s that EAPs were made available to employees with mental health or family concerns in addition to addiction. This occurred due to a perceived transfer of monetary responsibility from the government to employers. Employers wanted to manage costs and ensure occupational safety. In 1991, the National Institute of Mental Health (NIMH) created a program called Managing Depression in the
Workplace to help prevent and aid in the treatment of depression in the workplace. Around the same time, the government released Healthy People 2000, part of which recommended that health promotion services, including mental health services, be offered in the workplace. Today, many EAPs include access to these benefits, in addition to others, such as child and elder care, stress management, and financial services (Masi, 2011; Reardon, 1998; Rucker, 2016).

In 2015, only 41% of adults with a mental health condition in the United States had received services or care for their condition in the past year. Individuals without adequate care faced an increased risk of developing chronic medical conditions over time (NAMI, 2017). A study conducted by Colton and Manderscheid (2006) found that mental health clients had a higher relative risk of death in comparison to the general population. They also reported that people with mental health needs died at significantly younger ages. Most of these clients died due to natural causes, such as heart disease, cancer, and respiratory and lung diseases. The WHO (2000) has also reported that chronic medical problems are experienced at higher rates among those with chronic mental illness.

Serious mental illnesses cost the United States approximately $193.2 billion in lost earnings in 2015 alone. Additionally, mood disorders, such as major depression and bipolar disorder, are the third most common reason for hospitalization among people ages 18-44 (NAMI, 2017). Furthermore, depression is projected to be the top cause of work disability by 2020. Researchers have also predicted that by 2030, depression will be one of the top three leading causes of illness in the U.S. (Mathers & Loncar, 2006).

In recent years, many employers have realized that merely supplying healthcare resources, such as access to an EAP, to their employee base has a low return on
investment. In order to avoid unnecessary health and safety risks that may be expensive to the employer in healthcare costs, employee health efforts should be focused on primary prevention. A significant amount of deaths in the U.S. are due to chronic illnesses that often develop from modifiable, lifestyle-related behaviors. In fact, more than a third of total mortality can be attributed to tobacco use, poor diet/low physical activity, and alcohol consumption. These three factors are also highly prevalent among people with mental health conditions (Crocq, 2000; NAMI, 2017; Partners for Prevention, 2010)

Attributes that Contribute to Mental Health

Many studies have hypothesized specific reasons why mental health concerns, such as depression, affect certain populations (Hughes, Werthmann, Costello, Steinruck, Cercas, & Kastler, 2017; Janssens et al., 2015; Kessler, 2012; Martin, Karanika-Murray, Biron, & Sanderson, 2014; Luthar & Becker, 2002). This next section of this literature review will provide an overview of some of these studies.

Gender and Biological Sex

Before addressing different types of genders and sexes in relation to psychological wellbeing, it is important to discuss the difference between gender and sex will be briefly addressed. "Sex" refers specifically to biological differences in terms of "chromosomes, hormonal profiles [and] internal and external sex organs (Nobelius, 2004, para. 1). "Gender" is a psychosocial factor that "describes the characteristics that a society or culture delineates as masculine or feminine" (Nobelius, 2004, para. 2). Some may identify as a different gender than would normally be associated with their biological sex. For example, while one may have been born biologically female, with female reproductive organs, they may identify as male, agender, gender fluid,
transgender, or a plethora of other identities. This brings a new framework to the idea of "male" and "female" (Planned Parenthood, 2018).

Overall rates of mental illness are almost the same among men and women; however, there are clear differences in the types of mental health concerns that affect each gender. Gender differences are particularly apparent in the rates of the most common mental disorders, depression, anxiety, and somatic complaints, which are most prevalent among women. Men, however, are more than twice as likely to develop alcohol dependence, and more than three times as likely to have antisocial personality disorder (World Health Organization, 2018).

Women experience depression at about twice the rate that men do, regardless of economic status or racial or ethnic background (Depression and Bipolar Support Alliance, 2016; World Health Organization, 2016). However, one study found that gender differences in symptoms of depression disappeared when participants reported additional symptoms that are more common among men (e.g., anger, distraction, etc.). This means that depression may be a relatively equal offender among men and women alike, but it takes on different socialized symptoms based on gender (Martin, Neighbors, & Griffith, 2013). While both women and men experience many types of depression, there are particular kinds of depression that are exclusive to women, such as premenstrual dysphoric disorder (PDD), perinatal depression, and perimenopausal depression (National Institute of Mental Health, 2017). Rosch (2014) stated various reasons why women are more likely to experience depression, including: hormonal differences and fluctuations in hormone levels, stronger genetic predisposition, and disruptions to personal relationships. Also, since women who are experiencing symptoms of depression are more likely to
consult a physician than men with the same symptoms, they are also more likely to be diagnosed with the condition.

While women outnumber men in more internalized problems that can manifest themselves in self-destructive behaviors, like physical self-harm, men easily exceed women in externalized problems that can be destructive to others, such as anti-social behaviors. Traditional masculine role socialization is a powerful contributor to the production of harmful interpersonal patterns and behaviors that males commonly demonstrate. "Traditional" men exhibit greater health risks than "nontraditional" men in regards to risky behavior (such as inflicting a firearm-related injury or death, drowning, and hospitalization for non-fatal head and spinal cord injuries) and self-care behaviors (such as having a less healthy diet or getting less sleep). Additional patterns and behaviors associated with traditional masculine role socialization include, but are not limited to: violence, sexual assault, and issues with fathering. While these issues are not specifically mental illnesses, they may be risk factors that contribute to one's overall psychological wellbeing (Rosenfield, 2012; Murray-Law, 2011; Brooks, 2001).

For those who experience gender dysphoria, or an unease and/or dissatisfaction with their biological sex, social predicaments can play an influential role in psychological wellbeing. People with gender dysphoria may identify as transgender (gender identity does not correspond with biological sex), nonbinary/gender fluid (gender identity falls outside of the gender binary and not exclusively masculine or feminine), agender (does not identify with a particular gender identity), queer (gender identity is not heterosexual and/or cisgender), or a multitude of other gender identities. These identities are personal to the individual and may change over time. Individuals with gender dysphoria may
become socially isolated, by choice or through being ostracized, which is a risk factor associated with poor mental health. While many people experiencing gender dysphoria find happiness and contentment in their own lives, the potential lack of support from friends and family and/or a hostile work or living environment may be harmful to their psychological wellbeing (“Gender dysphoria”, 2017; Kaplan, 2014).

Race

In 2015, the Substance Abuse and Mental Health Services Administration (SAMSHA) released a report titled, *Racial/Ethnic Differences in Mental Health Service Use among Adults*. The report used 2008 to 2012 data from the National Survey on Drug Use and Health (NSDUH) to present estimates of mental health service utilization among different racial/ethnic groups in the U.S., as well as overall prevalence of mental illness for different populations.

Figure 1 below, which is a chart from the SAMSHA report, represents the estimated prevalence of any mental illness (AMI) in the past year among adults, sorted by race/ethnicity.
According to Figure 1, adults with the highest percentage of AMI identified with two or more races. American Indian or Alaska Native was the second highest group, followed by White, Black or African American, Hispanic, Asian, respectively. The difference between the highest group, two or more races, and the lowest group, Asian, was almost twice as high. Figure 2, which is also a chart from the SAMSHA report, represents mental health service use among adults, sorted by both race/ethnicity and service type.
SAMSHA reported that, among the six racial/ethnic categories that were assessed, those who were the most likely to use mental health services, prescription medications, and outpatient services were people of two or more races, followed by Whites and American Indians or Alaska Natives, respectively. Asians were the least likely to utilize these treatment modalities or services, followed by Hispanics, and Blacks or African Americans, respectively. Among all racial ethnic groups, cost of insurance (such as no coverage or coverage limitation) was reported as the most common reason for not
addressing unmet needs for mental health services. The least common reason for not using mental health services among all groups was the belief that the services would not help (SAMSHA, 2015).

Age

The American workforce is aging and people are staying in the workforce longer than ever before. It is projected that by 2020, one out of every four workers will be over the age of 55. Moreover, the prevalence of a disability increases with age, with the incidence of disability doubling between ages 40 and 55. There will continue to be more people in the workforce who are living and working with a disability (Tamburo, 2017).

In 2008, approximately one in five people ages 55 or older experienced a mental health concern. The most common concerns included anxiety, severe cognitive impairment (such as dementia), and mood disorders (such as bipolar disorder or depression). Of all the age groups, men ages 85 or older had the highest suicide rate, which was about four times the national average (Centers for Disease Control and Prevention, 2008).

Mental health concerns may also be linked to earlier retirement. Vo and colleagues (2015) examined the relationships between retirement, reasons for retirement, and psychological distress among men and women ages 45-79. They surveyed 202,584 Australians using the Kessler psychological distress scale. It was found that for both men and women ages 45-64, and for men ages 65-74, being fully retired or otherwise unemployed was associated with high levels of psychological distress in comparison to having paid work. Between the ages of 75-79, there was no difference in distress among various work statuses. The authors speculated that while retirement in different forms
(early, involuntary, or due to illness/injury) is linked to poor mental health, poor mental health may influence the decision to retire earlier. Other reasons for retirement that also exist as risk factors for mental health include redundancy at work, experiencing ill health, or needing to leave to care for a friend or family member.

**Relationship Status**

One's relationship status, whether single, married, cohabitating, divorced, or widowed, may affect psychological wellbeing. Busch and Kapusta (2017) found that, in comparison to women involved in a romantic relationship, single women suffered from more depressive symptoms. Lindstrom and Rosvall (2012) found similar results in their study. They concluded that the odds of experiencing poor mental health outcomes were higher among unmarried, divorced, and widowed men and women, in comparison to married and cohabitating couples. The authors also considered economic stress but found that this factor only had a small effect among specific populations, particularly divorced men and women. They stated that being divorced was associated with greater economic stress than widowhood, mostly due to differing social and economic circumstances.

Being unmarried has been found to be associated with a higher suicide rate in comparison to couples who are married or cohabitating (Masocco, 2008). This is particularly true among men, with married men less likely to complete suicide than unmarried men. Married women were also less likely to complete suicide than unmarried women, but marriage was not as much of a protective factor for women as it was for men (Balint, Osvath, Rihmer, & Dome, 2016; Ishii et al., 2013; Masocco, 2008)
Education

Educational level can play a role in one's lifelong psychological wellbeing. Having a high level of education has been shown to be associated with decreased suicidality among both men and women (Abel & Kruger, 2005; Balint et al., 2016). Bjelland and colleagues (2008) examined the relationship between educational level and anxiety and depression. They found a significant correlation between low educational levels, anxiety, and depression that decreased with increasing age. Put simply, someone with a lower level of education was at a higher risk of experiencing anxiety and/or depression, but risk was lowered as they get older.

A study by Chazelle and colleagues (2011) presented similar conclusions, but also included explanatory factors, which were material, psychosocial, behavioral factors, and chronic disease. They found that material factors, particularly health insurance, access to a vehicle, housing tenure, insufficient food budget, and unemployment, made the greatest contribution in explaining the relationship between educational level and mental illness, particularly among men. Bauldry (2014) supported these explanatory factors for overall health, finding that completion of higher education led to greater health-related benefits for people from advantaged backgrounds compared to people from disadvantaged backgrounds.

Mental health concerns are also a prevalent issue in higher education. Zivin and colleagues (2009) conducted a study to assess the persistence of mental health problems and needs among students at a large public university. The study consisted of an initial assessment to determine the number of students who were experiencing a mental health problem, and a two-year follow-up assessment to determine the number of students who
were still experiencing the same issues. The researchers found that two years after their first assessment, 60% of participants who initially had a mental health problem still did, and fewer than half of them had sought help in that timeframe.

**Income**

While wealth in relation to psychological wellbeing is an area that requires further research, some studies suggest that a potential contributor is affluence early in life. A study by Luthar and Becker (2002) found that affluent families tended to have children with increased rates of substance abuse, anxiety, and depression. The authors reported that young students from such families experienced excessive achievement pressures, often relying on their accomplishments to provide feelings of self-worth. Children also had their own maladaptive perfectionistic strivings, which included overconcern with perceived mistakes and unrealistically high personal standards. In addition to achievement pressures, a factor that played a part in adjustment disturbance was isolation from adults, particularly perceived closeness with mothers. The results of the study did not indicate greater perceived closeness to mothers as opposed to fathers, but suggested that the children’s perception of closeness with their mother may have more pronounced consequences for their maladjustment. The effects on children eventually carry over into adulthood and, therefore, into the workplace (Koplewicz, Gurian, & Williams, 2009; Luthar & Becker, 2002).

In addition to affluence potentially contributing to psychological wellbeing in a negative matter, there have been various studies claiming that low income can contribute to depression. According to an article titled, *The Cost of Depression*, “personal earnings and household income of people with Major Depressive Disorder are substantially lower
than those of people without depression” (Kessler, 2012, p. 3). Low income could often be paired with lower economic status as well. In fact, a study of 4,660 participants conducted in a disadvantaged area of Uganda measured the effect that ecological factors, such as individual socioeconomic status, adverse life effects, and sociodemographics (such as age, gender, and marital status) have on depression. The study found that poor socioeconomic factors and sociodemographics were the strongest independent causes of depression. The researchers also found that women were twice as likely as men to be at risk (Kinyanda et al., 2009).

**Work/Organizational Climate**

Various studies have suggested that enhanced care for employees with mental health concerns, particularly depression, have a positive impact on job retention. This is good for an organization’s cost-saving measures. Since the expenses of both hiring and training new employees are typically high, an employee’s longevity within a company can be a financial savings for the business (Haslam et al., 2005; Wang et al., 2007).

Employees form beliefs about how much their organization values them in terms of their contribution to the company as well as their personal wellbeing. This is referred to as perceived organizational support, or POS. POS directly affects the employees affective commitment (AC) to the organization. Employees with AC are generally seen as having a sense of personal belonging in their organization, an identity that increases their organizational involvement, and a desire to stay at the organization. By providing services such as mental health resources or by creating a healthier environment for workers to thrive, an organization is projecting high POS onto their employees. It is a method in which employers can communicate that they value the psychological
wellbeing of their employees and want to secure a healthy future for them (Lam, Liu, & Loi, 2016; Rhoades, Eisenberger, & Armeli, 2001).

Organizational climate, which is defined as how an employee views the conditions within their organization, can not only affect the way an employee perceives his or her surroundings within the workplace, but also the way that employee behaves. Organizational climate is multidimensional. Essentially, any aspect of an employee’s environment can be interpreted differently through the eyes of another employee. Organizational climate can be used to help better understand the connection between working conditions and psychological wellbeing, specifically in relation to working relationships (Martin, Karanika-Murray, Biron, & Sanderson, 2014; Spell & Arnold, 2007).

Employees of an organization use information they receive from their social environment to interpret their own reality of that organization. Martin and colleagues (2014) explained that a range of circumstances contribute to reinforcing an employee’s perception of their organizational climate. These included, but were not limited to: organizational structure/hierarchy, social interaction within the workplace, and customary socialization practices. This demonstrates that an employee’s perceived organizational climate can be shaped by the people they interact with, the way they speak about their work, how they view their colleagues experiences, and how employees learn from one another.

Promoting Employee Psychological Wellbeing in the Workplace

It can be more cost-effective, long-term, to invest in preventive care, such as behavioral healthcare, health education, and screenings, compared to paying for
treatments for illnesses and/or injuries. By working to establish prevention programming in the workplace, health education and public health professionals can address these causes before they become costly, ongoing issues. Employers can do this by investing in the health of their employee population by providing resources and opportunities to reduce individual health care cost expenditures over time (Department of Health and Human Services [HHS], 2000; Partners for Prevention, 2010).

The Centers for Disease Control and Prevention (CDC, 2016) states that while employers already have an obligation to keep the workplace safe and free of potential hazards, they also have the unique opportunity to promote the health of their workforce by fostering a culture of wellness within their organization. A culture of wellness can reduce direct costs such as insurance premiums and workers’ compensation claims, and have a positive effect on indirect costs, such as absenteeism and presenteeism. Businesses can achieve this by implementing a coordinated set of strategies to meet the needs of their employees. Examples of these strategies include: health education courses, onsite fitness facilities or access to a nearby fitness facility, healthful company policies, employee health insurance that covers preventive screenings, and increased access to healthy meals. Many programs with these components have been shown to reduce health risks for disease, improve current health status of employees, and decrease health-related costs (CDC, 2016; Michaels & Greene, 2013; Partners for Prevention, 2010; Wein, 2015). Furthermore, it has been demonstrated that improving health outcomes on an individual level creates change on an organizational level as well, where a plethora of people reap the benefits (CDC, 2016).
On average, mental health issues cause more accumulated time away from work and impairment at work than other chronic health conditions such as heart disease and diabetes. Time away from work and impaired time at work are referred to as absenteeism and presenteeism, respectively. Absenteeism is the act of regularly staying away from work without sound reason. According to an article published in the *Journal of Occupational and Environmental Medicine*, absenteeism “is calculated as the number of hours expected to be worked minus number of actual hours worked, divided by the number of expected hours, and represented as a percent” (Hilton et al., 2009, p. 998). A 2004 study by Rost and colleagues defined absenteeism as “the total number of work hours lost due to illness or doctor visits” (p. 1204). In this study, physicians and care managers were given training in enhanced depression care specifically to work with people who had major depressive disorder. These physicians and care managers implemented a 2-year intervention with the objective of improving depression management in order to increase productivity at work and reduce absenteeism. The study found that improved depression management in the workplace significantly reduced absenteeism. Under their methods, absenteeism dropped by 22.8% for all depressed workers and by 28.4% for depressed workers who were consistently employed. The study concluded that the improvements in absenteeism were largely due to their interventions.

Presenteeism is the act of employees being at work despite illness or injury, but underperforming, therefore causing productivity loss. According to the same article that provided a calculation for absenteeism, presenteeism can be computed “by the ratio of an employee’s self-reported perceptions of their own productivity in relation to that of other workers in similar jobs”. Presenteeism tends to be more detrimental to the employer than
absenteeism (Hilton et al., 2009 p. 998). In a study that focused on the psychosocial characteristics of work and presenteeism among Belgian middle-aged workers, the prevalence of presenteeism was 50.6%. The study consisted of 137 men and 1611 women, 72% of whom worked full-time. Psychosocial characteristics that were assessed included work demands, work control, social support, efforts, rewards, harassment/bullying, home-to-work conflict, and work-to-home conflict (such as conflict starting in the home, but affecting a personal mentally at work, and vice versa). The results showed a significant association between presenteeism and all factors besides job control. The study revealed that low support and low rewards were most significantly related to presenteeism among the eight psychosocial factors (Janssens et al., 2015). Low support can be characterized by a perceived lack of understanding, like previously a study conducted by Haslam and colleagues (2005), and low rewards can be characterized by low financial reward, self-efficacy, career opportunities, and job security (Janssens et al., 2015).

Health-related lost productivity due to absenteeism and presenteeism is a cost that employers cannot afford to overlook. As an example, one study from the *Journal of Environmental and Occupational Medicine* found that due to behavioral health issues, the productivity of employees significantly decreased. Results showed that, on average, “for every one dollar of medical and pharmacy costs there are 2.3 dollars of health-related productivity costs in lost work time from absenteeism and presenteeism” (Loeppke et al., 2009, p. 424-425). Employers cannot just focus on providing more effective support to employees who are currently in treatment for mental health concerns; those with untreated chronic conditions also experience absenteeism and presenteeism as
a result. Therefore, employers should consider in-house screening, interventions, and/or implementation of protective factors for psychological wellbeing to support their employees (Loeppke et al., 2009).

**Theoretical Considerations of Worksite Wellness**

**Effort-Reward Imbalance Theory**

Work environment within an organization can present challenges that may conflict with the mental wellbeing of employees. Factors such as pressures to perform, poor conflict management skills, and time constraints can all lead to increased stress and lower self-efficacy among employees. Furthermore, exposure to what can be referred to as “psychosocial hazards” at work can increase the detrimental effects of existing mental illnesses as well as the risk of developing a mental illness. (Hughes et al., 2017.; Janssens et al., 2015; Martin et al., 2014). This is often demonstrated with the effort-reward imbalance theory (See Figure 3).

The effort-reward imbalance theory states that high effort, such as a hefty workload, with low reward, such as low payment or lack of self-efficacy, can lead to poor health outcomes. In a study conducted in 2013 that assessed high rates of depression and anxiety among clergy members using effort-reward imbalance theory, rates of depression among clergy, who have considerably high job demands, were significantly higher than among the U.S. population. Both the extrinsic and intrinsic demands of job stress paired with low rewards such low salary and social isolation were associated with higher odds of
being depressed. In addition, the longer each clergy member was part of the ministry, the more likely they were to be depressed (Proschold-Bell; et al. 2013).

![Diagram of the effort-reward imbalance model]

Figure 3. The effort-reward imbalance model according to Siegrist. Adapted from ResearchGate, by M. Söderberg, 2014, Retrieved from https://www.researchgate.net/figure/The-effort-reward-imbalance-model-according-to-Siegrist_fig2_275016457.

There are many ways that psychological wellbeing is linked to work performance. It is connected to various work-related behaviors, such as absenteeism and presenteeism, as well as possible reasons for unemployment, such as chronic disease and impaired abilities due to illness or injury. Moreover, psychological skills, such as coping capabilities, resilience, and emotional management, are significant contributors to career success, more so than occupational skills (Bandura, 1994).

**Theory of Preventive Stress Management**

Organizational interventions can be a very effective method in addressing employee psychological wellbeing. The theory of preventive stress management (TPSM) provides a foundation for employers to implement primary, secondary, and tertiary levels of intervention. Primary interventions focus on eliminating or reducing common workplace stressors; secondary interventions promote improved employee responses to stressors; and tertiary interventions focus on rehabilitating employees who are already
suffering from stressors (Martin et al., 2014). See Figure 4 for an outline of these interventions.


Hargrove et al., (2011) defines stressors as “the physical and psychological demands that initiate response within individuals” (p. 183). Stressors manifest in different forms within an organization. A common stressor is change, which may relate to a technological adoption or innovation or a new person in a shared office space. Stress may be experienced due to factors associated with one’s job role, such as confusing or conflicting expectations of one’s job and/or an overall feeling of ambiguity. A more direct stressor may relate to the quality and quantity of work that needs to be performed. Feedback, appraisals, and criticism are also associated with job factors. Interpersonal stressors are present at work in the form of relationships demands from coworkers, customers, vendors, subordinates, and superiors. Employees may also experience physical stressors, such as prolonged sitting or standing and lengthy exposure to lights, sounds, smells, and/or extreme temperatures (Hargrove et al., 2011).
Stressors on their own do not generate individual outcomes. Stimuli are mediated by the individual’s response to that stimuli, which is characterized as a stress response. Stress responses can be positive (eustress) or negative (distress). Eustress transpires when one is experiencing a moderate amount of stress and his or her body reacts in a typical way to improve their ability to react to stimuli. Eustress is of short-duration and results in an adaptive physical and mental response. Distress is a deviation from health functioning due to a negative stress response. This occurs when one is experiencing both low and high stress conditions. Individuals who are less affected by stressors to the point of not taking action to address stressors do not have a healthy response to stress and may demonstrate poor physical, psychological, and/or cognitive performance. Conversely, distress from overstimulation occurs because the stress response was too intense, frequent, or prolonged. This is called strain, and is associated with symptoms of negative behavioral, psychological, and physical performance (Hargrove et al., 2011).

Assessing Factors Associated with Psychological Wellbeing in the Workplace

Mental health concerns, such as depression and anxiety, have been shown to have significant negative effects an individual’s life, such as decreased learning comprehension, poor social and personal relationships, reduced personal earnings, and declined work performance (Janssens et al., 2015; Jensen, Dumas, & Edlund, 2015; Kaminer, 2016). A study published in 2005, comprised of 74 individuals aged 18-60 from a variety of occupations, examined the effects of anxiety and depression in the workplace. The authors found that employees were hesitant to reveal details of their mental distress to colleagues because of the stigma surrounding mental illness. Many of the respondents said that they felt stigmatized because they believed that their managers
and peers could not empathize with anxiety and depression. Over 75% of respondents also identified management methods and unmanageable workloads as factors that contributed to feelings of anxiety and depression (Haslam et al., 2005).

Those experiencing mental health concerns may not be receiving proper accommodations in the workplace due to stigma. Employees suffering from mental distress are less likely than physically ill employees to ask for help or accommodations at work. One reason for this is that these employees might not realize that they are mentally ill, potentially due to being in a manic or psychotic state. Another reason for not asking for accommodations is the fear is discrimination. There are many negative stereotypes associated with mental illness, including the beliefs that mental illness is a personality flaw or that the mentally ill are violent or incompetent (Kaminer, 2016).

Psychological wellbeing, which will be addressed in this study, and mental health are not the exact same thing. Psychological wellbeing is made up of a variety of factors, all of which act as risk or protective factors that may positively or negatively impact one’s mental health. Beachy and Donnelly (2016) designed an assessment of factors associated with psychological wellbeing in the workplace, the Workplace Wellbeing Questionnaire, and distributed it to staff at a community behavioral health center in Ohio to determine employee psychological wellbeing, turnover intention, and job satisfaction. One of the primary focuses of the project was to “[identify] the most important factors that affect employee psychological wellbeing” (p. 1). The assessment explored 11 indicators of psychological wellbeing in the workplace, which were identified through an extensive literature review. Emotional exhaustion (burnout), supervisor/manager support, colleague support, distributive justice, and job control/autonomy were listed as the most
prominent indicators of psychological well-being in the workplace. Additional indicators included work demands, interpersonal relationships, job role, organizational change, and procedural justice.

Beachy and Donnelly (2016) described burnout as the extent of emotional exhaustion and disengagement. Emotional exhaustion is characterized by “feelings of being worn-out, overstretched, and drained” (p. 49). Maslach, Schaufelo, and Leiter (2001) refer to the relationship between burnout and inefficacy, which is a feeling of reduced personal accomplishment. Inefficacy occurs when someone feels as if their work situation has chronic and overwhelming demands that contribute to their exhaustion. These feelings make it more difficult for the person to feel as if their work is effective or important.

Manager and colleague support was described as the “extent to which colleagues and managers support and encourage employees” (Beachy & Donnelly, 2016, p. 53). The authors found that social support within the workplace, such as manager and colleague support, had the greatest impact on job satisfaction. A study by Milton and colleagues (2015) assessed the clinical profile and level of job satisfaction of employees with mental health concerns who worked at social firms in the United Kingdom. For reference, a social firm was described as a business specifically made to employ people with disabilities or who are disadvantaged in the labor market. The overarching theme that employees reported, qualitatively, was that they experienced high amounts of job satisfaction due to the protective and supportive environment they were in at work. According to Treiber and Davis (2012), supervisor/managerial support and colleague support are both considered coping resources in the workplace, but can have unique
impacts on employees depending on the work environment. Due to colleague support being more equal than supervisor support, it is of more critical and immediate influence. Supervisor support has been found to have a greater impact on employees’ job attitude, job satisfaction, organizational commitment, and turnover intention (Ng & Sorensen, 2008).

Beachy and Donnelly (2016) defined distributive justice as "the extent of perceived fairness related to what employees receive by way of pay, praise, etc." (p. 61). Distributive justice is commonly associated with high employee job performance (Zhou & Li, 2015). Janssen and colleagues (2010) described distributive justice as a component of organizational justice "that refers to the extent to which employees are treated justly by the organization and its authorities" (p. 790). Interestingly, the authors found that when employees perceived high levels of distributive justice in their organization, then a negative relationship also existed between emotional exhaustion and job performance.

Job control and autonomy were defined as "the extent of independence on how to do the job" (Beachy & Donnelly, 2016). Some of the identified factors measured in the Workplace Wellbeing Questionnaire can be considered to be intertwined; for example, lack of control and autonomy has been shown to be correlated with causing emotional exhaustion, also known as burnout (Awa, Plaumann, & Walter, 2010). Control and autonomy in the workplace are important in promoting further development of an employee's internal locus of control, or the belief that they have control over their own lives. Individuals with high internal locus of control experience better psychological wellbeing, as well as improved physical health and favorable work experiences (Wu, Griffin, & Parker, 2015).
Beachy and Donnelly (2016) characterized work demands as the "extent of work demands on staff concerning hours, deadlines, quantity of work, taking breaks, and time pressures" (p. 55). The researchers referenced the Health and Safety Executive (HSE), which is an organization in Great Britain in charge of the encouragement, regulation, and enforcement of workplace health, safety, and welfare. According to the HSE (2018), work demands are one of the key areas of stress in the workplace. High work demands, especially in the form of frequent work contact, have also been associated with increased feelings of guilt and distress, particularly among women (Glavin, Schieman, & Reid, 2011).

Interpersonal relationships were defined as the "nature of workplace relationships, such as friction, harassment, and bullying" (Beachy & Donnelly, 2016, p. 56). High-quality relationships in the workplace have been associated with increased compassion between coworkers, which enhances job performance and mental health for both people (Chu, 2017). Receivers of compassion in the workplace are also more likely to experience positive emotions while at their job, express commitment to their organization, and view their relationships at work more positively (Lilius et al., 2008).

Job role was characterized as "understanding duties and responsibilities and fitting into the bigger organizational framework" (Beachy & Donnelly, 2016, p. 57). Job role can also be described as person-organization fit (P-O fit). A relationship has been suggested between P-O fit and supervisor/managerial support. Sökmen, Bitmis, and Üner (2015) found that the presence of supportive leadership predicted greater P-O fit, which in turn influenced greater job satisfaction. Merecz (2012) assessed P-O fit in relation to employee health status and asserted that not only can high P-O fit benefit the business on
an organizational level, but can also benefit the employee on a personal level in terms of his or her mental health outcomes.

Beachy and Donnelly (2016) described organizational change as the "extent of worker involvement with organizational change" (p. 59). It can also be thought of in terms of how changes are communicated from employer to employee(s). In their study focused on attitudes regarding organizational change, Brown and Cregan (2008) addressed organizational change cynicism (OCC), which can be defined as a negative or cynical attitude towards ones employing organization. OCC has been associated with negative emotions about one’s workplace, such as distress, disgust, and/or shame (Dean, Brandes, & Dharwadkar, 1998). These negative emotions can lead to poor personal mental health outcomes, such as emotional exhaustion and burnout (Johnson & O’Leary-Kelly, 2003). Brown and Cregan (2008) compared two approaches to employee involvement: information sharing and involvement in decision making. The researchers found that high levels of both contributed towards lower levels of OCC.
CHAPTER III

METHOD AND PROCEDURES

Introduction

This was a cross-sectional, descriptive study. Due to the lack of data regarding psychological wellbeing in the workplace, a descriptive approach was needed in order to generate preliminary findings. As best practices for descriptive studies in behavioral health suggest, research questions were developed in lieu of hypotheses. This chapter will describe the study participants, data collection tool and methodology, and statistical analyses.

Employers have an opportunity to promote the health of their workforce by fostering a culture of wellness within their organization. Doing so may reduce costs such as insurance premiums and worker’s compensation claims as well as improve worker productivity and job performance (CDC, 2016). It is more cost effective for employers to invest in prevention as opposed secondary care or tertiary care (Partners for Prevention, 2010). By understanding what specific issues employees experience, employers can implement appropriate health interventions to support them. However, the extent to which certain risk and protective factors are present among an organization's employees must be examined in order to choose and establish useful and relevant programming.

The purpose of this study was to assess the extent factors associated with psychological wellbeing in the workplace are present among small retail business employees in La Crosse County, how such factors compared in terms of prevalence, and
whether factors differed based on employee demographics. By assessing the extent that particular risk and protective factors are present among small retail business employees, this study identified what areas workplaces can focus on to improve mental health outcomes and, long-term, overall workplace performance.

**Instrumentation**

Beachy and Donnelly's (2016) Workplace Wellbeing Questionnaire (Appendix C) was identified as an appropriate data collection tool for this study. In the initial search for appropriate existing survey tools, Mental Health America was contacted to retrieve information regarding their Work Health Survey (WHS), which is accessible for free online (Mental Health American, 2017b). Theresa Nyugen, the Vice President of Policy and Programs of Mental Health America, was contacted as part of assessing the psychometric properties of this questionnaire. She stated that the WHS was not a validated research tool, but was created by staff at her organization as their own initiative for further exploration of mental health in the workplace. However, Mrs. Nyugen said that she knew of a survey that may be a better fit for this study. Mrs. Nyugen provided contact information to the principal investigator (PI) for Kenton J. Beachy, co-creator of the Workplace Wellbeing Questionnaire, which is the tool that was chosen for use in this study. The PI contacted Kenton via email and asked for permission to utilize his survey. Permission was given based on agreement to two stipulations. First, the survey tool needed to be used to measure the comprehensive dimensions of employee psychological wellbeing that their research has previously established. The original survey had 78 questions, but was shortened to 58 questions as a result of researchers finding no connection between procedural justice (perceived fairness within the workplace) and
psychological wellbeing. As a result, procedural justice was removed in the updated survey. Secondly, it was requested that a report of the findings of this study be given to the authors of the survey to assist with identifying further applicability and validity of their model.

The survey used in this study, the Workplace Wellbeing Questionnaire, was made up of a variety of previously established surveys that had been tested for validity and reliability. The questions that were chosen maintained their psychometric properties by using the same wording and measurement scales. The Workplace Wellbeing Questionnaire contained 58 questions that were designed to measure employees’ perceptions of 10 different risk and protective factors associated with psychological wellbeing in the workplace, including: emotional exhaustion, work engagement, colleague support, supervisor/managerial support, work demands, job control/autonomy, interpersonal relationships, job role, organizational change, and distributive justice. The questions were measured on a 7-point Likert scale, consisting of “1” for "never,” “2” for "almost never,” “3” for "rarely,” “4” for "sometimes,” “5” for "often,” “6” for "very often,” and “7” for "always.” There were between four and eight questions per factor, therefore leaving inconsistencies in potential minimum and maximum subscale scores. The number of questions per factor were as follows: emotional exhaustion (five questions), work engagement (eight questions), colleague support (four questions), supervisor/managerial support (seven questions), work demands (eight questions), job control (six questions), interpersonal relationships (four questions), job role (five questions), organizational change (seven questions), and distributive justice (four questions).
For this study, eight demographic questions were added to the survey to collect information regarding age, hours worked per week, gender identity, race/ethnicity, relationship status, degrees completed, and annual household income. Potentially identifiable information such as name, address, email, or phone number were not collected. All data generated for this study were anonymous. In order to keep data anonymous, specific place of work and information specific to the workplace (such as available wellness resources and number of employees) were not requested.

**Subject Selection**

A list of businesses to contact was put together by using the local Chamber of Commerce business directory. The drafted business list was comprised of all businesses classified as "Retail," which totaled 123 businesses. The principal investigator eliminated businesses that were known as large corporate entities, such as: Wal-Mart, Sam's Club, Walgreens, Goodwill, Olive Garden, Perkins, Outback Steakhouse, McDonald's, Little Caesars Pizza, Starbucks, Famous Dave's of America, and Subway. Other businesses were also removed as a result of having more than 100 employees. These businesses included Culver's and Farm & Fleet. Some of the businesses were eliminated multiple times due to having several locations on the "Retail" list. This process resulted in 96 remaining businesses.

Emails were needed to contact these locations to request study participation. To collect this information, the principal investigator first gathered publicly listed email addresses on company websites and business listings. If an email address was not publicly available, the investigator contacted the business via a "Contact" form on the business website and Facebook message on the company Facebook page, if these options
were available. Reachable businesses with less than 100 full and part-time employees were asked to share the survey with their employees. Employees were eligible to take the survey if they were 18 years of age or older and worked either full or part-time at the business. Business managers were able take the survey as long as they are not the owner(s). Business owners could not take the survey.

**Data Collection**

The protocol for this study was submitted to the University of Wisconsin – La Crosse Institutional Review Board (IRB) on October 17, 2017. It included the application attachment, the requested eight narrative items, the informed consent document for the survey, outlines of emails that would be used to request participation in the survey, the survey itself, correspondence with one of the original authors that granted permission to use the survey, marketing materials, and copies of the IRB Certificate of Completion for both the principal investigator and her thesis chair. The IRB was approved on October 25, 2017 (Appendix B). Data were collected between November 14, 2017 and February 9, 2018.

By the first deadline for email distribution, November 14, 2017, the principal investigator had acquired emails for 65 businesses. In an effort to improve willingness of businesses to participate in this study, the Executive Director at the La Crosse Medical Health Science Consortium (LMHSC), and Chamber of Commerce member, contacted the 65 business owners and/or managers via the acquired emails to request participation in this study and provide access to the survey (Appendix D). The primary investigator conducted this study in tandem with her preceptorship at the LMHSC, so the Executive Director was willing to assist with the data collection process in this capacity. Businesses
were emailed the link to the survey and were asked not to participate if they had more than 100 employees. The business could indicate that it had more than 100 employees and therefore could not participate by emailing back an “N/A” response. The business owner was asked to email back “yes” if he or she chose to participate and “no” if he or she chose not to participate. The Executive Director of the LMHSC created a rule in her e-mail to route these responses to the PI’s email. The Executive Director did not have access to survey responses. If the business owner and/or manager chose to have their business involved in the research, the email included a message to forward to employees requesting that they complete the survey. The PI also supplied hard copy cards and flyers with the link that could be distributed to employees. If business owners did not respond to the initial request for participation, the Executive Director attempted to contact them a second time via email to maximize survey response rate.

Out of the 65 emails that were sent for the first round of contacts, four were returned as "undeliverable" due to invalid email addresses, two businesses agreed to participate by responding "yes," and one business replied with "N/A.” This left 58 businesses that did not respond initially and were still considered reachable via email. The second contact email was sent on December 7, 2017. Two emails returned as "undeliverable”. Both returned emails were for individual managers. It was speculated that perhaps these two managers no longer worked for their respective businesses. During this second round of emails, one business owner replied "no”, stating that they were not interested in participating, and three replied "N/A”. Overall, six emails were returned as "undeliverable,” two businesses responded with "yes,” one business responded with "no,”
and four responded with "NA." This left 52 businesses that did not yet respond and were still considered reachable via email.

It was found that, due to a low response rate from businesses, changes in methodology were needed. The PI submitted an IRB addendum to propose in-person on-site visits to businesses to request participation in this study (Appendix E). The PI began visiting businesses on-site to request participation in the survey. In some situations, when the owners or manager were not present on site, the PI requested contact information for the owner or manager and emailed them according to the protocol as if previous emails had not be received. Overall, 58 businesses were visited. These businesses included the 52 businesses that did not yet respond and were still considered reachable via email, and the 6 total businesses that were not reachable via email due to emails returned as "undeliverable". This left 59 total businesses that were contacted to participate in the survey. At the end of on-site business visits, 20 total business owners and/or managers agreed to share information about the survey with their employees. Though it is impossible to address response rate to the actual survey, since employer and number of employees per site were not data collected in this study, 20 out of 59 businesses sharing the survey with employees represented an agreement rate of just above 33 percent.

**Statistical Analyses**

Nominal and ordinal survey items were used to collect data to perform descriptive statistical analyses generating indicators of central tendencies (such as frequency, mean, and standard deviation). Data were collected on Qualtrics and analyzed using SPSS software. Scores for items under each of the 10 factors were summed to determine total subscale scores and consider the extent to which factors associated with psychological
wellbeing in the workplace were present among small retail business employees in La Crosse County, Wisconsin. The total scale score ranged from 58-406. Since number of items differed between subscales, means and standard deviations could not be directly compared to consider the extent in which one factor was of greater concern than another. To be able to compare psychological wellbeing factors, mean percentages were calculated for each subscale by dividing the mean with the max score for a scale and multiplying that number by one hundred. Finally, demographic indicators were used to investigate whether psychological wellbeing factors differed between different subgroup of study participants.
CHAPTER IV

RESULTS

Introduction

On average, mental health issues cause more accumulated time away from work and impairment at work than other chronic health conditions such as heart disease and diabetes. Psychological wellbeing in the workplace is connected to various work-related behaviors, such as absenteeism and presenteeism, as well as possible reasons for unemployment, such as chronic disease and inability to handle work-related responsibilities. Psychological skills, such as coping capabilities, resilience, and emotional management, are significant contributors to career success, perhaps even more so than occupational skills. Furthermore, the higher the employee’s self-efficacy in their psychological skills, the higher the workplace performance. By providing conditions where an employee can experience psychological development and build their self-efficacy, employers can create more productive, happier employees (Hilton et al., 2009; National Alliance on Mental Illness, 2017).

Employers have an opportunity to promote the health of their workforce by fostering a culture of wellness within their organization. Examples of this include implementing worksite wellness programs, employee-assistance programs (EAPs), and creating a physical and social environment that is conducive to employee health. Doing so may reduce costs such as insurance premiums and worker’s compensation claims as well as improve worker productivity and job performance (CDC, 2016). It is more cost
effective for employers to invest in prevention as opposed secondary care or tertiary care (Partners for Prevention, 2010). By understanding what specific issues a certain type of workplace often experiences, employers can implement appropriate health interventions to support their employees. However, the extent to which certain risk and protective factors are present among an organization's employees must be examined in order to choose and establish useful and relevant programming.

The purpose of this study was to assess what extent factors associated with psychological wellbeing in the workplace were present among employees of small retail businesses in La Crosse County, how such factors compared in terms of prevalence, and whether factors differed based on employee demographics. Ten factors were examined via an online survey tool, including: emotional exhaustion, supervisor/managerial support, colleague support, distributive justice, control and autonomy, work demands, interpersonal relationships, job role, work engagement, and organizational change. Demographic information was also collected, including: age range, average hours worked per week, gender identity, race/ethnicity, relationship status, highest academic degree earned, and approximate yearly household income. In addition to describing the characteristics of the participants in this study, these demographics were used to compare the presence of risk and protective factors associated with psychological wellbeing within the among differing population characteristics.

This study was conducted with the use of an already validated and reliable survey tool. Employees at participating retail businesses were asked to complete a 66-item online questionnaire. The survey contained eight demographic questions and 58 questions measuring 10 risk and protective factors identified as contributors to psychological
wellbeing in the workplace. The questions that examined risk and protective factors were measured on a 7-point Likert scale.

**Agreement to Participate**

The local Chamber of Commerce business directory was used to put together a list of businesses to contact. Fifty-nine business owners and/or managers were contacted via email and in-person visits to request that they share information regarding the survey with their employees. Out of those 59 business owners and managers, 20 agreed to participate by sharing both an email link to the survey with their employees as well as distribute hard-copy informational materials. Many types of retail businesses agreed to participate, including, but not limited to: clothing stores, restaurants, a pet store, a jeweler, a screen-printing business, and an auto dealer. Since the survey did not ask about specific place of employment or number of employees to protect the identity of participants, it was not possible to consider the sampling frame in the form of accessible employees at these businesses and calculate a response rate. Overall, 64 responses to the survey were collected. Of the 64 respondents, three said that their workplace existed outside of La Crosse County, WI, which resulted in exclusion from final analyses. Out of the 61 remaining responses, 12 were incomplete, in that the participant stopped taking the survey partway through, and were subsequently removed from the data set. Therefore, the final sample for this study consisted of 49 respondents.

**Demographics of Survey Respondents**

The greater part of the employees who completed the survey identified as cisgender female (57.14%) (Table 1). Almost half the employees were married (48.98%), with another quarter of the sample reporting their relationship status as single (24.49%).

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Most participants fell in the 26-35 age group (34.69%), almost all the employees were white (95.92%), and a variety of educational levels were exhibited, with the most common highest academic degree earned by employees being a bachelor’s degree (24.49%). Approximate yearly household income was relatively evenly distributed across the 12 possible answer options that ranged from “$15,000 or less” to “$150,001 or over.” Among the 43 employees who included their average hours worked per week, the average number of hours was 38.9. Table 1 excludes answer options for demographic questions that were not selected by study participants. To see the full survey tool and all answer options, please refer to Appendix B.

Table 1. Demographic and Background Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
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<tr>
<td>18-25</td>
<td>11</td>
<td>22.45</td>
</tr>
<tr>
<td>26-35</td>
<td>17</td>
<td>34.69</td>
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<td>36-45</td>
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</tr>
<tr>
<td>46-55</td>
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<td>16.33</td>
</tr>
<tr>
<td>56-65</td>
<td>5</td>
<td>9.38</td>
</tr>
<tr>
<td><strong>Gender Identity</strong></td>
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<td></td>
</tr>
<tr>
<td>Female (Cisgender)</td>
<td>28</td>
<td>57.14</td>
</tr>
<tr>
<td>Male (Cisgender)</td>
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<td>38.76</td>
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<tr>
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<td>Asian American or Pacific Islander</td>
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<td>4.08</td>
</tr>
<tr>
<td>White</td>
<td>47</td>
<td>95.92</td>
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<tr>
<td><strong>Relationship Status</strong></td>
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<tr>
<td>Single</td>
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<td>24.49</td>
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<tr>
<td>Domestic partnership (live together but are not married)</td>
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</tr>
<tr>
<td>In a relationship but do not live together</td>
<td>8</td>
<td>16.33</td>
</tr>
<tr>
<td>Married</td>
<td>24</td>
<td>48.98</td>
</tr>
<tr>
<td>Widowed</td>
<td>4</td>
<td>8.16</td>
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</table>
### Highest Academic Degree Earned

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some high school, no diploma</td>
<td>1</td>
<td>2.04</td>
</tr>
<tr>
<td>High school graduate, diploma or the equivalent</td>
<td>4</td>
<td>8.16</td>
</tr>
<tr>
<td>Some college credit, no degree</td>
<td>9</td>
<td>18.37</td>
</tr>
<tr>
<td>Trade/technical/vocational training</td>
<td>8</td>
<td>16.32</td>
</tr>
<tr>
<td>Associate degree</td>
<td>10</td>
<td>20.40</td>
</tr>
<tr>
<td>Bachelors degree</td>
<td>12</td>
<td>24.49</td>
</tr>
<tr>
<td>Masters degree</td>
<td>4</td>
<td>8.16</td>
</tr>
<tr>
<td>Professional degree</td>
<td>1</td>
<td>2.04</td>
</tr>
</tbody>
</table>

### Approximate Yearly Household Income

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>$15,000 or less</td>
<td>5</td>
<td>10.20</td>
</tr>
<tr>
<td>$15,001 to $25,000</td>
<td>5</td>
<td>10.20</td>
</tr>
<tr>
<td>$25,001 to $35,000</td>
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<td>6.12</td>
</tr>
<tr>
<td>$35,001 to $45,000</td>
<td>3</td>
<td>6.12</td>
</tr>
<tr>
<td>$45,001 to $55,000</td>
<td>4</td>
<td>8.16</td>
</tr>
<tr>
<td>$55,001 to $65,000</td>
<td>3</td>
<td>6.12</td>
</tr>
<tr>
<td>$65,001 to $75,000</td>
<td>5</td>
<td>10.20</td>
</tr>
<tr>
<td>$75,001 to $85,000</td>
<td>4</td>
<td>8.16</td>
</tr>
<tr>
<td>$85,001 to $100,000</td>
<td>4</td>
<td>8.16</td>
</tr>
<tr>
<td>$100,001 to $150,000</td>
<td>4</td>
<td>8.16</td>
</tr>
<tr>
<td>$150,001 or over</td>
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<td>6.12</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>6</td>
<td>12.24</td>
</tr>
</tbody>
</table>

Note: Percent refers to valid percents. Missing values excluded.  
N=49

### Results

An assumption of this study was that every employee at each of the participating 20 retail businesses was given the opportunity to participate in the online survey, and that no person outside of this demographic participated in the survey. The survey was 66 questions in length, eight of which were demographic questions. The remaining 58 questions measured the 10 risk and protective factors that were identified as contributors to psychological wellbeing in the workplace, including emotional exhaustion, supervisor/managerial support, colleague support, distributive justice, control and autonomy, work demands, interpersonal relationships, job role, work engagement, and organizational change. The questions were measured on a 7-point Likert scale (1 = SD, 7 = SA), consisting of “1” for "never", “2” for "almost never", “3” for "rarely", “4” for "sometimes", “5” for "often", “6” for "very often", and “7” for "always". Scores for each
factor were summed to determine a total subscale score. The total scale score ranged from 58-406 (\( M = 291.12, SD = 9.323 \)) (Table 2).

There were not an equal number of questions per factor for each of the 10 factors assessed by the survey tool used for this study. There was also a mix of positively and negatively phrased items. For ease of interpretation of results, all negatively phrased items were recoded to ensure that greater subscale scores reflected a higher level of employee psychological wellbeing. To add to the ability to consider the quality of this tool across populations and settings, Cronbach’s alpha analyses were performed for each subscale to determine internal consistency reliability. All subscale scores were above the recommended 0.7 limit to indicate a reliable scale (Nunnally, 1978). See Table 2 for more detailed information regarding Cronbach’s alpha for all subscales.

Table 2. Cronbach’s Alpha for Risk and Protective Factors Subscales

<table>
<thead>
<tr>
<th>Factors</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Exhaustion</td>
<td>5</td>
<td>21.67</td>
<td>4.65</td>
<td>.811</td>
</tr>
<tr>
<td>Work Engagement</td>
<td>8</td>
<td>35.29</td>
<td>8.64</td>
<td>.891</td>
</tr>
<tr>
<td>Colleague Support</td>
<td>4</td>
<td>21.90</td>
<td>5.26</td>
<td>.906</td>
</tr>
<tr>
<td>Supervisor/Managerial Support</td>
<td>7</td>
<td>36.59</td>
<td>10.54</td>
<td>.952</td>
</tr>
<tr>
<td>Work Demands</td>
<td>8</td>
<td>37.73</td>
<td>8.96</td>
<td>.865</td>
</tr>
<tr>
<td>Job Control</td>
<td>6</td>
<td>29.92</td>
<td>5.32</td>
<td>.744</td>
</tr>
<tr>
<td>Interpersonal Relationships</td>
<td>4</td>
<td>22.61</td>
<td>5.39</td>
<td>.908</td>
</tr>
<tr>
<td>Job Role</td>
<td>5</td>
<td>30.77</td>
<td>4.50</td>
<td>.874</td>
</tr>
<tr>
<td>Organizational Change</td>
<td>7</td>
<td>33.76</td>
<td>10.05</td>
<td>.955</td>
</tr>
<tr>
<td>Distributive Justice</td>
<td>4</td>
<td>20.88</td>
<td>5.58</td>
<td>.890</td>
</tr>
</tbody>
</table>

N, number of items; Std Dev, standard deviation; \( \alpha \), Cronbach alpha

To be able to compare psychological wellbeing factors, mean percentages were calculated for each subscale by dividing the mean with the max score for a scale and multiplying that number by one hundred. Of the 10 factors, emotional exhaustion had the
lowest psychological wellbeing score in terms of mean percentage ($M = 21.67, SD = 4.652, M\% = 61.91$) and work engagement ranked second to last ($M = 35.29, SD = 8.643, M\% = 63.02$). Job role had by far the highest psychological wellbeing score in terms of mean percentage ($M = 30.77, SD = 4.049, M\% = 87.91$), and interpersonal relationships ranked second out of the 10 factors that were assessed ($M = 29.92, SD = 5.388, M\% = 80.75$). This means that, overall, employees who participated in the survey were least satisfied with their level of emotional exhaustion at work, and most satisfied with their job role. See Table 3 for more detailed information for all subscales, which will be displayed in order of lowest to highest mean percentage score.

Table 3. Psychological Wellbeing Risk and Protective Factors Score

<table>
<thead>
<tr>
<th>Factors</th>
<th>Range</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Mean %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Exhaustion</td>
<td>5-35</td>
<td>21.67</td>
<td>4.65</td>
<td>61.91</td>
</tr>
<tr>
<td>Work Engagement</td>
<td>8-56</td>
<td>35.29</td>
<td>8.64</td>
<td>63.02</td>
</tr>
<tr>
<td>Work Demands</td>
<td>8-56</td>
<td>37.73</td>
<td>8.96</td>
<td>67.38</td>
</tr>
<tr>
<td>Organizational Change</td>
<td>7-49</td>
<td>33.76</td>
<td>10.05</td>
<td>68.90</td>
</tr>
<tr>
<td>Job Control</td>
<td>6-42</td>
<td>29.92</td>
<td>5.32</td>
<td>71.24</td>
</tr>
<tr>
<td>Distributive Justice</td>
<td>4-28</td>
<td>20.88</td>
<td>5.58</td>
<td>74.57</td>
</tr>
<tr>
<td>Supervisor/Managerial Support</td>
<td>7-49</td>
<td>36.59</td>
<td>10.54</td>
<td>74.67</td>
</tr>
<tr>
<td>Colleague Support</td>
<td>4-28</td>
<td>21.90</td>
<td>5.26</td>
<td>78.21</td>
</tr>
<tr>
<td>Interpersonal Relationships</td>
<td>4-28</td>
<td>22.61</td>
<td>5.39</td>
<td>80.75</td>
</tr>
<tr>
<td>Job Role</td>
<td>5-35</td>
<td>30.77</td>
<td>4.05</td>
<td>87.91</td>
</tr>
</tbody>
</table>

Note: Percent refers to valid percents. Missing values excluded.
N=49

Subsequent group comparisons of factors associated with psychological wellbeing were performed based on preliminary results of population characteristics. For demographic indicators where participants could be reorganized into two groups while keeping the number of subjects in each group relatively even, psychological wellbeing subscale scores were investigated for each group. Due to the relatively small sample in
this study, even when the distribution of participants was even across several demographic answer options, splitting subjects into more than two group based on a certain characteristic would make sub-groups too small for any practical considerations to be considered based on descriptive statistics. Because of the possible unique stressors for gender identity and psychological wellbeing at the workplace, an exception was made in this case and data were reorganized into three groups. Within sample comparisons were performed based on age range, gender identity, relationship status, education level, and approximate household income. Subgroups for race/ethnicity were not investigated further due to lack of sample diversity (47 of the 49 participants were white). Only notably different means between subgroups are referenced in this thesis. Beyond reviewing tables that reported indicators of central tendencies, graphs depicting individual subscale scores were also visually inspected for differences.

Age range was analyzed by dividing participants into two subgroups: ages 18-35 ($N = 28$) and ages 36 to 65 ($N = 21$). Those who were in the age 18-35 subgroup expressed that they felt more involved in organizational change ($M = 36.71, SD = 9.04$) than their age 35-65 counterparts ($M = 29.81, SD = 10.18$). The age 18-35 subgroup also felt more positive supervisor support ($M = 39.61, SD = 9.22$) than the age 35-65 subgroup ($M = 32.57, SD = 11.06$).

As previously mentioned, gender identity was analyzed by dividing participants into three subgroups, which consisted of cisgender female ($N = 28$), cisgender male ($N = 18$) and non-binary/genderfluid/genderqueer (NB/GF/GQ) ($N = 2$). It should be noted that there are limited practical implications of comparing the NB/GF/GQ group due to small sample size. However, while acknowledging the practical aspect of this decision,
excluding the group would have been a decision difficult to align with professional ethical guidelines. Some subscale scores for those who identified as NB/GF/GQ will be stated, but discussion of group comparisons based on gender will be for cisgender females and cisgender males only. Females expressed greater work engagement ($M = 37.04, SD = 8.57$) in comparison to males ($M = 33.94, SD = 7.76$) and those who identified as NB/GF/GQ ($M = 31.00, SD = 9.00$). Females also felt greater supervisor support ($M = 38.32, SD = 9.40$) in comparison to males ($M = 34.83, SD = 11.88$) and those who identified as NB/GF/GQ ($M = 33.00, SD = 16.97$).

Relationship status was divided into unmarried ($N = 25$) and married ($N = 24$) subgroups. Unmarried, in this case, included those who identified as single, in a domestic partnership (live together but are not married), in a relationship but do not live together, divorced/separated, and widowed. Unmarried individuals felt that they were more involved with organizational change ($M = 36.00, SD = 10.50$) than married individuals ($M = 31.42, SD = 9.21$). Unmarried individuals also expressed that they felt greater supervisor support at work ($M = 38.20, SD = 11.46$) compared to married individuals ($M = 34.92, SD = 9.43$). However, married individuals felt more work engagement ($M = 36.88, SD = 7.84$) than their unmarried counterparts ($M = 33.76, SD = 9.25$).

Highest level of education was also divided into two groups: a combined subgroup of associate’s degree or lower, which included trade/technical/vocational training, some college credit with no degree, a high school graduate or equivalent, and some high school without graduating ($N = 32$), and a combined subgroup of a bachelor’s degree or higher, which included a master’s degree and professional degree ($N = 17$). While 32 participants in the associate’s degree or lower group is far from equal to the 17
participants in the bachelor’s degree or higher group, education level was divided this way because studies suggest that those with a bachelor’s degree or higher are likely to have more job opportunities, have a lower unemployment rate, and earn more money than people with less education (Torpey, 2013). No participants who completed the survey had a doctorate degree. The most noticeable difference in the data were among perceived work demands. Those with an associate’s degree or lower were less satisfied with their work demands ($M = 35.34, SD = 10.99$) than those with a bachelor’s degree or greater ($M = 42.24, SD = 7.69$).

Finally, approximate household income was divided into two subgroups: families or individuals who made $65,000 or less ($N = 23$), and families or individuals who made $65,001 or more ($N = 20$). Six of the 49 respondents marked that they would “prefer not to say” their approximately household income. Those who had an approximately household income of $65,000 or less felt greater supervisor support ($M = 39.26, SD = 10.67$) than those who made $65,000 or more ($M = 34.60, SD = 11.04$). Interestingly, those whose household income was $65,000 or less were also more satisfied with their work demands ($M = 39.52, SD = 8.36$) than those whose household income was $65,001 or more ($M = 35.65, SD = 10.27$).

**Summary**

The final sample for this study consisted of 49 respondents. Most of the employees who completed the survey identified as cisgender female (57.14%), almost half the employees were married (48.98%), the most common participants were 26-35 years of age (34.69%), and almost all the employees were white (95.92%). Of the 10 workplace psychological wellness factors assessed in this study, emotional exhaustion
had the lowest psychological wellbeing score in terms of mean percentage ($M = 21.67, SD = 4.652, M\% = 61.91$). Job role had the highest psychological wellbeing score in terms of mean percentage ($M = 30.77, SD = 4.05, M\% = 87.91$). Subsequent group comparisons based on demographics were performed based on preliminary results of population characteristics. The 18-35 age subgroup expressed that they felt more involved in organizational change ($M = 36.71, SD = 9.04$) than their age 35-65 counterparts ($M = 29.81, SD = 10.18$). Unmarried individuals felt that they were more involved with organizational change ($M = 36.00, SD = 10.50$) than married individuals ($M = 31.42, SD = 9.21$). Finally, those with an associate’s degree or lower were less satisfied with their work demands ($M = 35.34, SD = 10.99$) than those with a bachelor’s degree or greater ($M = 42.24, SD = 7.69$).
CHAPTER V
DISCUSSION AND RECOMMENDATIONS

Introduction

On average, mental health issues cause more accumulated time away from work and impairment at work than other chronic health conditions such as heart disease and diabetes. Psychological wellbeing in the workplace is connected to various work-related behaviors, such as absenteeism and presenteeism, as well as possible reasons for unemployment, such as chronic disease and inability to handle work-related responsibilities. Psychological skills, such as coping capabilities, resilience, and emotional management, are significant contributors to career success, perhaps even more so than occupational skills. Furthermore, the higher the employee’s self-efficacy in their psychological skills, the higher the workplace performance. By providing conditions where an employee can experience psychological development and build their self-efficacy, employers can create more productive, happier employees (Hilton et al., 2009; National Alliance on Mental Illness, 2017).

Employers have an opportunity to promote the health of their workforce by fostering a culture of wellness within their organization. Examples of this include implementing worksite wellness programs, employee-assistance programs (EAPs), and creating a physical and social environment that is conducive to employee health. Doing so may reduce costs such as insurance premiums and worker’s compensation claims as well as improve worker productivity and job performance (CDC, 2016). It is more cost
effective for employers to invest in prevention as opposed secondary care or tertiary care (Partners for Prevention, 2010). By understanding what specific issues a certain type of workplace often experiences, employers can implement appropriate health interventions to support their employees. However, the extent to which certain risk and protective factors are present among an organization's employees must be examined in order to choose and establish useful and relevant programming.

The purpose of this study was to assess risk and protective factors that contribute to psychological wellbeing in the workplace among employees of small retail businesses in La Crosse County, Wisconsin. Ten factors were examined via an online survey tool, including: emotional exhaustion, supervisor/managerial support, colleague support, distributive justice, job control/autonomy, work demands, interpersonal relationships, job role, work engagement, and organizational change. Demographic information was also collected, including: age range, average hours worked per week, gender identity, race/ethnicity, relationship status, highest academic degree earned, and approximate yearly household income. In addition to describing the characteristics of the participants in this study, these demographics were used to compare the presence of risk and protective factors associated with psychological wellbeing within the sample.

**Conclusions and Discussion**

Of the 10 factors associated with psychological wellbeing in the workplace, emotional exhaustion had the lowest score in terms of mean percentage, and job role had the highest score. This means that, overall from the factors assessed via survey for this study, employees who participated in the survey were least satisfied with emotional exhaustion (also known as burnout) at work, and most satisfied with their job role.
Emotional exhaustion was measured in this study was characterized by “feelings of being worn-out, overstretched, and drained” (Beachy & Donnelly, 2016, p. 49). Maslach, Schaufelo, and Leiter (2001) claimed that there was a relationship between emotional exhaustion, or burnout, and inefficacy, which is a feeling of reduced personal accomplishment. Inefficacy occurs when someone feels as if their work situation has chronic and overwhelming demands that contribute to their exhaustion. These feelings make it difficult for that person to feel as if their work is effective or important.

It is not surprising that retail workers reported experiencing high levels of emotional exhaustion. The retail industry has above average turnover rates. Employees in the retail industry have to do a considerable amount of emotional labor at work, which is defined as the requirement to manage feelings and expressions in the workplace in order to perform a job. This is a form of expressive suppression, where an employee is expected to regulate their emotions with co-workers, managers, and customers in order to satisfy those around them. For example, regardless of how an employee in the retail industry is feeling, they are generally expected to greet customers with a positive attitude. This emotional suppression compounds over time, making employees more prone to emotional exhaustion (Cho, Rutherford, & Park, 2013). Emotional suppression, in tandem with lower than average wages, inconsistent hours, and physically taxing work requirements (such as standing for long periods of time), can cause burnout.

In terms of most satisfied to least satisfied, as measured by mean percentage, results of this study ranked factors associated with psychological wellbeing in the following order: job role, interpersonal relationships, colleague support, supervisor support, distributive justice, job control, organizational change, work demands, work
engagement, and emotional exhaustion. In addition to the order, groupings of these factors present interesting findings. First, interpersonal relationships, colleague support, and supervisor support were ranked second, third, and fourth, respectively, in terms of factors affecting psychological wellbeing; meaning, these factors were all found to be promising protective factors among the surveyed population. According to previous research, these are also three factors that are greatly related. Both colleague support and supervisor support are factors that promote positive interpersonal relationships in the workplace (Chu, 2017; Milton et al., 2015; Lilius et al., 2008). It could be claimed that without the presence of colleague support and supervisor support, an employee would have a more difficult time cultivating high quality interpersonal relationships in the workplace.

A second interesting finding as far as grouping factors is that work demands, work engagement, and emotional support were all ranked eighth, ninth, and tenth in terms of satisfaction. This means that these factors associated with psychological wellbeing in the workplace, in the context of the full range of concepts assessed, were found to be lacking among the surveyed population. These are also three factors that are related. Overwhelming work demands impair health, exhausting employees’ resources and energy. Over time, this causes employees to experience burnout. Work demands can also cause psychological strain, which reduces the ability of an employee to be thoroughly engaged in their work (Li, Wang, Li, & Zhou, 2017).

Following an investigation of the factors for the full group of study participants, selected demographics were used to look for within sample differences. Age range was used to divide participants into two subgroups: ages 18 to 35 and ages 36 to 65. Those
who were in the age 18-35 subgroup expressed that they felt more involved in organizational change and greater supervisor support than the age 35-65 subgroup. The fact that the younger age group expressed feeling more supervisor support was not unexpected, considering the predicted inverse relationship between amount of work experience and level of supervisor involvement. However, it was surprising to find that the younger age group felt more involved in organizational change. One potential explanation for feelings of lesser involvement in organizational change among the 35-65 age group may be the willingness to adapt to change. Change in the workplace over time is inevitable, but if an employee who has been at their job for a longer period of time does not support changes, he or she may feel less involved in overall organizational structure and/or decision-making. This is not to say that all older employees have been at the same job for an extended period of time; however, it may be assumed that they have had the opportunity to remain in their workplace longer, especially in comparison younger employees with limited time in the workforce (Kanfer & Ackerman, 2004).

Kanfer and Ackerman (2004) suggested that a person’s age affects their adaptation to organizational change. In their research, they claimed that age-related declines in fluid intellectual abilities made overcoming higher demands for new skill learning more difficult for older workers, and these situations usually occurred during organizational changes. It was mentioned that younger workers may be more open to change, which would better allow them to adapt to shifting job demands. Furthermore, some research has suggested that older employees may be discriminated against in the workplace. Posthuma and Campion (2009) identified, analyzed, and summarized 117 sources that dealt with age stereotypes in the workplace. Some age-related stereotypes
that led to discrimination in the workplace included the idea that older workers provided a lower return on investment due to their limited time remaining in the workforce, that they had a limited capacity for learning new skills, that they were resistant to change, that they had declining job performance, and that they were costlier due to higher wages and use of benefits.

This study found that females expressed greater work engagement and more supervisor support in comparison to males. Considering the professional literature consistently reports that females tend to be more socially involved in the workplace and emotionally connected to people they work with, it is not surprising that females felt more supervisor support. Some researchers have suggested that women place a greater value on positive social relationships and rapport in the workplace, while men prefer personal control, exercising their work-related skills, and having a higher income (Souza-Poza & Souza Poza, 2000; Warr, 2009). Supervisor support is considered a positive coping mechanism in the workplace and helps to reduce the impact of job-related stress (Karasek, Triantis, & Chaudhry, 1982). Feelings of high supervisor support also influences work engagement. For example, behaviors such as being helpful and friendly to others at work are positively associated with job satisfaction and job performance (Warr, 2009).

Relationship status was divided into unmarried and married subgroups. Unmarried, in this case, included those who identified as single, in a domestic partnership (live together but are not married), in a relationship but do not live together, divorced/separated, and widowed. Unmarried individuals felt that they were more involved with organizational change and had greater supervisor support than married
individuals. However, married individuals felt more work engagement than their unmarried counterparts. While the professional literature on associations between marriage-status and work outcomes is limited, more research exists that pertains to the idea of “family-supportive organizations” and “work-family relationships”.

Work-family conflict (WFC), such as a worker feeling conflicted between balancing job demands and time with their family, can lead to negative consequences for employees and their respective organizations (Allen, Herst, Bruck, & Sutton, 2000). Mills and colleagues (2014) suggested that managers’ family-supportive behavior plays a critical role in their employees’ level of WFC. They claimed that the manager’s actions influence the employee’s perceptions of the organization’s work-family policies, therefore influencing the employee’s attitudes about work and, eventually, their work performance. Though having a family is not dependent on marriage, it may be suggested that unmarried individuals felt greater supervisor support because the potential barrier of WTC wasn’t as much of a concern. As for organizational change, unmarried individuals may feel more involved in decision-making regarding organizational change on average because, due to not having to invest as much time and energy into family affairs, they may invest more in work. However, over-investment in work can lead to burnout, and possibly decrease levels of work engagement. Perhaps married individuals felt greater work engagement because they are more practiced at balancing their commitments, such as they would between work and family. This is merely speculation; currently, limited research regarding the relationship between marital status and work engagement exists.

Highest level of education was also used to divide the study participants into two groups: one consisting of people with an associate’s degree or lower, which included
trade/technical/vocational training, some college credit with no degree, a high school
graduate or equivalent, and some high school without graduating, and a second group
consisting of people with a bachelor’s degree or higher, which included a master’s degree
and professional degree. No participants who completed the survey had a doctorate
degree. The most noticeable difference in the data based on academic degree earned
could be found for perceived work demands. Those with an associate’s degree or lower
were less satisfied with their work demands than those with a bachelor’s degree or
greater. People often attend college in order to specialize in an area of interest. It may be
assumed that participants with a higher level of education also hold positions that are
more closely related to their ideal career. Therefore, participants with a bachelor’s degree
or greater may be more satisfied with their work demands because they are in their job of
choice. Those with a higher level of education also tend to reap higher rewards in terms
of salary, job security, and positive reinforcement from supervisors and colleagues. These
higher rewards are linked to decrease levels of stress at work, therefore lowering
perceived level of work demands (Lunau, Siegrist, Dragano, & Wahrendorf, 2015).

Finally, approximate household income was used to divide study participants into
two subgroups: those with an annual household income of $65,000 or less, and those who
made $65,001 or more a year. Six of the 49 respondents marked that they would “prefer
not to say” their approximate household income. Those who had an approximate
household income of $65,000 or less felt greater supervisor support and were more
satisfied with their work demands. Because family-related questions were not asked in
the demographics, such as number of dependents within the household, it is difficult to
speculate on the association between income and factors associated with psychological
wellbeing in the workplace. Recommendations for this issue will be made in the
following sections.

**Recommendations to Improve this Research**

There are several ways this study could have been improved. One
recommendation would be to expand the number of retail businesses that would be
contacted to request participation in the survey, in lieu of contacting only reachable retail
businesses that are members of the La Crosse County Chamber of Commerce. Additional
businesses could be identified in a variety of ways, such as going door-to-door to eligible
workplaces in different areas around the county or finding other usable listings to
reference. The amount of businesses that were contacted in this study was greatly
delimited and, therefore, generated a smaller sample of employee participants than what
would have been preferred. A larger sample size would allow for more complex
descriptives to be presented, due to the likelihood of participation by people with more
diverse demographics. For a more thorough investigation among a larger sample, it is
also recommended that different multivariate statistical analyses be considered to
investigate unique contribution of predictors, as well as correlation between factors that
may indicate an opportunity to condense or refine measurements. Finally, in addition to a
larger sample, employing a random sampling approach may result in an ability to
generalize findings to a determined sampling frame. That type or methodology would be
most helpful from the perspective of making practical recommendations for businesses.

The methodology of this study required that employees be reached through their
employers. The use of "gatekeepers" (i.e., employers) meant that it could not be
guaranteed that, even for the sites that agreed to participate, employees were thoroughly
offered the opportunity to take part in this study. In addition, while it was initially believed that having the employer assist with distribution of the survey via email would help reach employees to request participation, contacting employers and convincing them to take part in this study was a long and laborious process. The majority of businesses were unresponsive to the request for participation. In the future, it is recommended that employees be contacted directly via other means, either in addition to or in lieu of emailing employers. Employee participation could be requested via volunteer sampling (e.g. social media) or snowball sampling. These methods, however, would inevitably come with other limitations.

It is recommended that data collection take place over a different time of year. Due to data collection taking place over the holiday season (i.e., November – January), and the fact that retail business employees were the participants, the employees may have felt additional strain at their jobs and/or may have been less likely to participate in the survey. It is also recommended for future research that the researchers inquire about family status, such as the number of dependents living in the survey participant’s household. This type of item should be added to the survey to be able to better discuss implications of work-family conflict and psychological wellbeing at work. Participants should also be asked to provide approximate individual income, either in addition to or instead of household income, in order to better speculate the implications of financial resources on individual psychological wellbeing in the workplace.

Due to low response rate from gender identities other than cisgender females and cisgender males, conclusions for connections between different gender identity categories and factors associated with psychological wellbeing in the workplace could not be
discussed. However, future research should plan to be able to utilize additional gender identity categories in their conclusions. More extensive research on diverse gender identities and psychological wellbeing in the workplace should be conducted to further investigate currently underrepresented groups.

According to various participants who provided anonymous feedback, the survey tool was considerably long. In order to not disrupt instrument validity, shortening the survey would not be recommended. However, a more thorough discussion with business owners when requesting participation in the survey may minimize this barrier. If it could be negotiated that the business owner let his or her employees take the survey while at work, length of the survey may not be as much of an issue. There could also be an incentive to take the survey, such as entrance into a drawing to win a prize, which may entice potential participants to dedicate the time needed to complete the questionnaire. It is expected that by combining multiple recommendations for improvement of data collection (e.g. contacting more businesses, having more thorough discussion with business owners, distributing the survey during a different time of year), the survey would yield a greater response number as well as rate.

The survey contained between four and eight questions per factor being assessed, therefore leaving inconsistencies in potential minimum and maximum subscale scores and standard deviations. In the analysis for this study, notably different means between subgroups were referenced, based on reviewing tables that reported indicators of central tendencies and visually inspecting graphs that depicted individual subscale scores. One way to make this analysis more professionally objective would be to analyze standard deviations in terms of deviations from the mean, which could be used to show how far
away from the average of the full sample such groups fall. Researchers should also consider the possible effect of outliers on mean percentage and should, at a minimum, visually inspect the data to ensure that this descriptive effort to compare groups is not unduly influenced by extreme cases.

The context in which this survey tool was utilized should also be questioned. While the goal of this study was to assess factors associated with psychological wellbeing in the workplace among employees of small retail businesses, various questions from this survey may not be particularly well suited for small employers. First of all, some questions in the survey imply that the survey participant has many coworkers. For example, one Likert scale statement under the section for work demands states, “Different groups at work demand things from me that are hard to combine”. This question would not be relevant to a worker who does not interact with different groups in the workplace due to their workplace having a small pool of employees. Secondly, the section devoted to assessing colleague support assumes that the worker has colleagues to interact with. This would not be true if the employee works alone on a shift-schedule, or if he or she is the sole employee. It would be recommended that, if this study is replicated or if the survey tool was to be used in a similar manner, that the businesses that are involved have a minimum number of employees in order to be eligible for participation.

**Recommendations for Future Research**

This study can inform future research in several ways. The addition of qualitative methodology to supplement this study or studies like this one should be considered. Although the 10 factors that were assessed offer a well-rounded view of psychological wellbeing in the workplace, psychological wellbeing is a complex, multidimensional topic
that encompasses a plethora of traits. While survey research is an appropriate approach to a study like this one, using quantitative measures alone runs the risk of missing additional elements that influence psychological wellbeing and, therefore, may disrupt a comprehensive understanding of the phenomenon of interest. Additionally, allowing participants to voice their opinions in focus groups, interviews, or qualitative surveys can help conjure up versatile solutions to potentially otherwise unidentified areas of need.

In order to identify potential opportunities for improvement in the workplace, it is recommended that the survey tool also inquire about current or past worksite wellness initiatives and interventions. This could be phrased as a qualitative, fill in the blank question where the participants indicate what types of programming they have participated in. In addition to identifying direct opportunities for programming, data could then be coded to best fit study hypotheses and analyzed to identify associations or differences. For example, researchers could investigate whether level of satisfaction with job role is in fact positively associated with employers having implemented programming intended to support job role self-efficacy. Collecting other types of quantitative information could also be meaningful, such as asking the employee to define his or her role at work, inquiring about the type of retail business he or she works in (e.g. clothing store, restaurant, auto body shop), and asking for the total number of jobs the employee works. It cannot be assumed that employees of a small clothing boutique have similar experiences in retail to employees of an auto body shop, just as number of jobs and hours worked may impact psychological wellbeing. This would improve the ability to consider independent variables that directly influence risk and protective factors. However, just as anonymity was
an important aspect of this study, future research should be careful to not collect more information than necessary, as the combination of several demographic items may indirectly point to a select group of study participants.

It was found that employees of small retail businesses in La Crosse County, Wisconsin, were least satisfied with their level of emotional exhaustion in the workplace. Due partly to the exploratory nature of this study, inferential analyses were not conducted and, therefore, causes of emotional exhaustion in the workplaces being studied were not identified. It would be recommended that future research attempt to establish unique contribution of independent variables on emotional exhaustion. By doing so, the researcher would also be able to make recommendations for more specific, evidence-based worksite wellness interventions that more closely target the identified areas of need. Additionally, random sampling and inferential statistical analyses would allow the researchers to generalize findings and recommendations beyond just the sample utilized for this study.

Future studies should also consider using a multivariate approach to determine relationships between factors and demographics. This would allow the researchers to simultaneously study multiple demographic traits per factor, such as the prevalence of emotional exhaustion among females with an associate’s degree, instead of analyzing emotional exhaustion among females and emotional exhaustion among people with an associate’s degree separately. Some of the identified factors could be considered to be intertwined; for example, studies have linked lack of control and autonomy with causing emotional exhaustion (Awa, Plaumann, & Walter, 2010). Therefore, multiple factors and their relationships to demographics could also be studied, such as interpersonal relationships, colleague support, and supervisor support felt among male employees.
Practical Recommendations

Results of this study were disseminated to all small retail employers in La Crosse County that were asked to participate. A brief, detailed letter was sent providing an overview of methodology, results, and implications for practice. More detailed descriptive results were also given to the La Crosse Medical Health Science Consortium (LMHSC) for reference throughout the implementation and evaluation of their grant, Better Together. The LMHSC was also given permission to disseminate de-identified, aggregate data at their discretion. Additionally, results were shared with Kenton Beachy, one of the creators of the survey used for this study, who is continuing to use this valuable tool in his business practice.

As was stated earlier, employers have a unique opportunity to promote the health of their employees by fostering a culture of wellness within their organization. Physically and mentally healthy employees reduce direct costs such as insurance premiums and worker's compensation claims, as well as have a positive effect on indirect costs, such as presenteeism and absenteeism. In terms of how these efforts should be focused, it is more cost-effective for employers in the long-term to invest in preventive care, such as behavioral healthcare, health education, and screenings, compared to paying for treatments for illnesses and/or injuries. By working to address the real causes of health concerns, health education and public health professionals can address the roots of problems before they become costly, ongoing issues.

Unless employers understand what factors may disrupt or negatively affect employees and exactly how, then it is not likely that randomly-chosen worksite wellness initiatives will be effective in improving the health and wellbeing of their employees.
Conversely, if an employer understands underlying causes of negative workplace outcomes, they can implement programming that is specific to their employees’ needs. Conducting a survey, such as the one used in this study, can act as a stepping stone towards integration of more socially and fiscally-responsible worksite wellness programming. For example, this survey found that, out of the ten factors associated with psychological wellbeing that were assessed, employees of small retail businesses in La Crosse County reported feeling the most affected by emotional exhaustion (also known as burnout). Therefore, it would be recommended that employers implement programming that has been proven to reduce the causes and symptoms of burnout. This does not mean, however, that programs that are meant to help employees in other ways are not important. It means that, according to the assessment, emotional exhaustion is a prevalent need that should be addressed. As such, devoting specific, evidence-based programming focused on this factor may be helpful to the greatest number of employees in terms of their psychological wellbeing, which employers should want to do to improve their employee’s overall quality of life. Moreover, helping the greatest number of employees with one worksite wellness program may also be the most cost-effective method to boost overall performance and morale.

Furthermore, as was discussed in Chapter Two of this thesis, employees of an organization use information they receive from their social environment to interpret their own reality of that organization. Conducting a survey that evaluates feelings and perceptions that employees have of their organization demonstrates that the organization values their input. Employees form beliefs about how much their organization values them by recognition of their contribution to the company as well as interest in their
personal wellbeing. This is referred to as perceived organizational support, or POS. POS directly affects the employee’s affective commitment (AC) to the organization. Employees with high levels of AC are generally seen as having a personal sense of belonging in their organization, an identity that increases their organizational involvement, and a desire to stay with the organization. By providing services such as appropriate evidence-based programming that reflects the needs and desires of their employees, an organization is projecting high POS onto their employees. It is a method in which employers can communicate that they value the psychological wellbeing of their employees and want to secure a healthy future for them (Lam, Liu, & Loi, 2016; Rhoades, Eisenberger, & Armeli, 2001).

The effort-reward imbalance theory, which was discussed in Chapter Two, states that high effort, such as a hefty work load, with low reward, such as low payment or lack of self-efficacy, can lead to poor health outcomes. In an ideal workplace, employees would always be giving “100 percent” (Proschold-Bell et al., 2013). However, the high effort it takes to deliver quality outcomes in the workplace needs to be reciprocated from the organization. Some would even argue that in order for an employee to contribute his or her highest efforts, their organization would need to create the appropriate space and culture for him or her to do so. One way that employers can do that is by communicating that they value the needs, desires, and wellbeing of their employees. However, in order to communicate this, they need to identify and understand what those needs are. This warrants a workplace health needs assessment similar to what was done in this study.

The theory of preventive stress management (TPSM), which was also discussed in Chapter Two, provides a foundation for employers to implement primary, secondary, and
tertiary levels of intervention. Primary interventions focus on eliminating or reducing common workplace stressors; secondary interventions promote improved employee responses to stressors; and tertiary interventions focus on rehabilitating employees who are already suffering from stressors (Martin et al., 2014). Hargrove and colleagues (2011) defined stressors as “the physical and psychological demands that initiate response within individuals” (p. 183). Individuals who are less affected by stressors to the point of not taking action to address stressors do not have a healthy response to stress and may demonstrate poor physical, psychological, and/or cognitive performance. Conversely, distress from overstimulation occurs because the stress response was too intense, frequent, or prolonged. This is called strain, and is associated with symptoms of negative behavioral, psychological, and physical performance (Hargrove et al., 2011)

To avoid the long-term impact of stressors and strain, business owners and managers can use the preventive stress management model, which is outlined in the TPSM, to implement appropriate workplace interventions to promote and improve employee psychological wellbeing. However, similarly to the effort-reward imbalance theory, the needs of their employees need to be identified in order to adequately address them. A workplace health needs assessment, such as the Workplace Wellbeing Questionnaire that was used in this study, should be done. Following the needs assessment, business owners and managers can then fully utilize this theory to create or find intervention methodology that is conducive to their workplace culture and environment.

There are different resources available to employers who are looking to improve psychological outcomes among workers. In a report from the World Health Organization
(2000) titled, *Mental health and work: Impact, issues, and good practices*, practical suggestions are made for small businesses that are looking to implement psychological wellbeing at work, but may not have the same resources that larger businesses have. The report recommends that if an employee is on medical or disability leave, an appointed employee, such as a Human Resources Director, should visit them to demonstrate concern. It is recommended that when an employee returns, they should resume their prior job, even if a necessary accommodation needs to be made. Community resources, such as rehabilitation or support groups, should be utilized. Finally, the disabled employee’s physician or mental health professional should.

It is also recommended that business owners hire an onsite health educator, if they can afford to do so. Certified health education specialists (CHES) are qualified individuals who have the skills to build a culture of wellness within an organization. These specialists are trained in the Areas of Responsibility and Competencies for Health Education Specialists, which include assessing the needs of a population, creating an appropriate plan of action, implementing interventions, evaluating processes, administering and managing health programs, serving as a valuable health education resource person, and communicating, promoting, and advocating for health, health education and promotion, and the profession. The Areas of Responsibility and Competencies and Sub-competencies are outlined by the National Commission for Health Education Credentialing, Inc. (2015), also known as NCHEC. A health educator in the workplace can employ necessary prevention-focused programming that can help improve and enhance the health of employees, their families, and the community. Doing so may help avoid unnecessary health and
safety risks that cause undue financial burdens in the form of healthcare costs to the employer and employee, generate high perceived organizational support among employees, and decrease the risk of employees experiencing absenteeism, presenteeism, or dissatisfaction with their job.

For businesses owners that cannot afford to hire a health educator, it may be more cost-effective to contract with a business to assess health in the workplace and identify areas of concern. For example, the Workplace Wellbeing Questionnaire, the survey used in this study, is available through a company called Occumetrics. For a fee, a representative from Occumetrics will assess the 10 factors from this study in the workplace, engage with employees through focus groups, and help to create change within the workplace culture. As noted on the website, one participating business in Occumetrics reported a 12% reduction in staff turnover during the year following their assessment (Beachy, 2018).
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APPENDIX A

LA CROSSE MEDICAL HEALTH SCIENCE CONSORTIUM EVALUATION MODEL
# La Crosse County Behavioral Health Project

## Evaluation Model

### RESULTS

**Improved behavioral health**

To reverse the trend of youth at risk of depression in La Crosse county, we will reduce the percentage of students at risk for depression from the 2015 level of 31% to the 2010 level of 23% (Youth Risk Behavior Survey). This represents an overall relative decrease of 26% or approximately 800 fewer students at-risk.

### POPULATION

The entire youth population (ages 11-18/Grades 6-12) who attend public schools in La Crosse County (approximately 8200).

### Strategy

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Factors</th>
<th>Output/Outcome Statement</th>
<th>Method/Measure</th>
<th>Current Benchmark</th>
<th>Target Benchmark</th>
<th>Timeframe</th>
<th>Level of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Build resilience skills and positive social connections among the youth population in La Crosse county public schools grades 6-12</td>
<td><em>Having the skills to form positive social relationships promotes connectedness and reduces isolation</em></td>
<td><em>Identify the intended outcome(s) that will achieve the strategy. How much, how well, what difference?</em></td>
<td><em>How you will regularly measure progress</em></td>
<td><em>The current level or state in the conditions that influence the strategies</em></td>
<td><em>The desired level or state in the conditions that influence the strategies</em></td>
<td><em>Indication of when the target benchmark will be achieved within the five year period</em></td>
<td>Individual, Relationship, Community/Organization, and Society</td>
</tr>
<tr>
<td></td>
<td><em>Supportive and stable caregiving and positive adult role models promote self-efficacy, self-esteem and self-regulation skills</em></td>
<td><em>Increased knowledge and practice in healthy coping and social skills among youth</em></td>
<td><em>Increase number of youth in grades 6-12 who report feeling a sense of belonging at their school</em></td>
<td><em>Increased percentage of youth who report having an adult to turn to for support</em></td>
<td><em>YRBS (2015): 64% of youth feel they belong at school; 63% of youth believe teachers care and give encouragement; 75% can name a trusted adult at school</em></td>
<td><em>By 2023, 75% of youth feel they belong at school; 63% of youth believe teachers care and give encouragement; 75% can name a trusted adult at school</em></td>
<td>Year 1 Baseline Year 3 Midline Year 5 Endline</td>
</tr>
</tbody>
</table>

*YRBS (2015): 64% of youth feel they belong at school; 63% of youth believe teachers care and give encouragement; 75% can name a trusted adult at school.*

*By 2023, 75% of youth feel they belong at school; 63% of youth believe teachers care and give encouragement; 75% can name a trusted adult at school.*

*Year 1 Baseline Year 3 Midline Year 5 Endline*
### La Crosse County Behavioral Health Project

#### Evaluation Model

<table>
<thead>
<tr>
<th>RESULT:</th>
<th>Improved behavioral health</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDICATOR:</td>
<td>To reverse the trend of youth at risk of depression in La Crosse county. We will reduce the percentage of students at risk for depression from the 2015 level of 31% to the 2010 level of 23% (Youth Risk Behavior Survey). This represents an overall relative decrease of 26% or approximately 800 fewer students at-risk.</td>
</tr>
<tr>
<td>POPULATION:</td>
<td>The entire youth population (ages 11-18/Grades 6-12) who attend public schools in La Crosse County (approximately 8300).</td>
</tr>
</tbody>
</table>

8. Facilitate key communication improvements among youth serving agencies, institutions, and organizations

* Connectivity among and knowledge of community resources related to mental health and wellness improves individual outcomes
* Youth serving institutions/organizations tend to function independently of each other

* Optimal communication pathways among youth serving agencies are identified
* Youth services flow charts are created, tested and disseminated
* Improved communication between systems

* Track # and attendance in collaborative meetings to improve communication and referrals
* Conduct focus groups to identify priority pathways/flow charts needed to be developed; Gather feedback from users of flow charts for improvements

1st draft flow chart is functional by Q4 V1; 3 additional issues based on flow charts are created by Q2 V2

Completed by Q2 V2

Community/Organization
### La Crosse County Behavioral Health Project

**RESULT:** Improved Behavioral Health

**INDICATOR:** To reverse the trend of youth at risk of depression in La Crosse County. We will reduce the percentage of students at risk for depression from the 2015 level of 31% to the 2010 level of 23% (Youth Risk Behavior Survey). This represents an overall relative decrease of 26% or approximately 800 fewer students at risk.

**POPULATION:** The entire youth population (ages 11-18/Grades 6-12) who attend public schools in La Crosse County (approximately 8,200).

<table>
<thead>
<tr>
<th>Process</th>
<th>Indicators</th>
<th>Outcome</th>
<th>Yearly beginning</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build the capacity of internal supports such as the faith community, school staff, non-profit staff/volunteers, and employers to assist and respond to potential mental health challenges among youth and their families</td>
<td>Adults and caregivers can be overwhelmed and lack the skills and knowledge to identify potential mental health challenges among youth and access services effectively</td>
<td>Increased awareness of the effects of trauma on the overall mental health of young people with mental health challenges in adolescence</td>
<td>Yearly beginning in Year 1</td>
<td>Relationship</td>
</tr>
<tr>
<td>Establish a system for mental health</td>
<td>Adults who typically support youth will have the following outcomes:</td>
<td>Increased knowledge of youth development, increased knowledge of mental health challenges that can manifest during adolescence, and increased awareness on the effects of trauma can have a young person's mental health.</td>
<td>150 Mental Health First Aiders per year; 150 informal supports will receive training in trauma-informed care, 50 adults trained in youth mentoring principles per year</td>
<td>Relationship</td>
</tr>
<tr>
<td>Process: # of mental health counselors placed at schools and other institutions serving youth</td>
<td>Process: # of mental health counseling interns placed at schools and other institutions serving youth</td>
<td>Does not currently exist</td>
<td>Does not currently exist</td>
<td>Relationship</td>
</tr>
</tbody>
</table>

Established Year 1

Target by year 5

Individually, relationally
### Evaluation Model

#### Result: Improved Behavioral Health

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Outcome</th>
<th>Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of signs, symptoms, and risk factors of mental disorders</td>
<td>*Cross-platform messaging campaign on mental wellness developed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Increased knowledge of mental wellness, mental health, and mental illness among the adult population</td>
<td></td>
</tr>
<tr>
<td>Knowledge and Attitude about Mental Wellbeing</td>
<td>*Baseline established in Year 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*100% increase of knowledge,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Baseline in Year 1, not in year 0, ending in Year 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Community/Organization, Society</td>
<td></td>
</tr>
<tr>
<td>Awareness and Attitude about Mental Illness</td>
<td>*Baseline established in Year 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*All media outlets on-board with campaign</td>
<td></td>
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<tr>
<td></td>
<td>*Yearly</td>
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</tr>
<tr>
<td></td>
<td>*Community/Organization, Society</td>
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<tr>
<td>Awareness and Attitude about Mental Illness</td>
<td>*Baseline established in Year 1</td>
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<td>*Yearly</td>
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<td></td>
<td>*All media outlets on-board with campaign</td>
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<td>*Yearly</td>
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<td></td>
<td>*Community/Organization, Society</td>
<td></td>
</tr>
<tr>
<td>Information Exchanges per year</td>
<td>*Yearly sterling in Year 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Community/Organization, Society</td>
<td></td>
</tr>
</tbody>
</table>

#### Population:
The entire youth population (ages 11-18/Grades 6-12) who attend public schools in La Crosse County (approximately 8200).
APPENDIX B

WORKPLACE WELLBEING QUESTIONNAIRE
Start of Block: Informed Consent

Please review the informed consent text below. Following this text, you will be asked a number of questions regarding psychological wellbeing in the workplace. Completion of these questions and submission of this questionnaire indicate your consent to participate in this study.

Protocol Title: Psychological wellbeing in the workplace among employees of small businesses in La Crosse County, Wisconsin.

Principal Investigator:
Dana Ingemann
920-579-2604
ingemann.dana@uwlax.edu

Emergency Contact:
Anders Cedergren
608-785-6790
acedergren@uwlax.edu

Purpose and Procedure
- The purpose of this study is to assess the extent to which 10 risk and protective factors associated with psychological wellbeing in the workplace are present in employees of small businesses in La Crosse County, Wisconsin.
- Participation in this study will involve taking an electronic survey that will take 15-20 minutes to complete.
- Instructions on how to access the survey will be shared by business owners electronically via email or provided on hard copy cards or flyers.

Potential Risks
- No more than minimal risks are anticipated in this study.

Rights and Confidentiality
- A person must be over the age of 18 to participate in this study.
- There are no alternatives procedures that will be offered to those who decide not to complete the survey.
- Participation is voluntary. Participants can withdraw or refuse to answer any question without consequences at any time.
- The results of this study may be published in scientific literature or presented at professional meetings using aggregate data only.
- Participation in this study will generate anonymous data; at no point will individual information be identifiable.
- There are no costs or compensation associated with this study.

Possible Benefits
- Findings from this study may be used by small retail business owners and managers in La Crosse
County when strategizing to improve employee engagement, performance, and morale. This study may also inform mental health professionals and academics as they continue to develop best practices in comprehensive workplace health and wellness initiatives.

Questions regarding study procedures may be directed to Dana Ingemann (920-579-2604 or ingemann.dana@uwlax.edu), the principal investigator, or the study advisor Dr. Anders Cedergren (608-785-6790 or acedergren@uwlax.edu). Questions regarding the protection of human subjects may be addressed to the UW-La Crosse Institutional Review Board for the Protection of Human Subjects, (608-785-8124 or irb@uwlax.edu).

End of Block: Informed Consent

Start of Block: Demographics

Q1 What is your age range?

- Under 18 (1)
- 18-25 (2)
- 26-35 (3)
- 36-45 (4)
- 46-55 (5)
- 56-65 (6)
- 66 or over (7)

*Skip To: End of Survey If Q1 = Under 18 (1)*

Q2 Is your place of work located in La Crosse County, Wisconsin?

- Yes (1)
- No (2)

*Skip To: End of Survey If Q2 = No (2)*

Q3 On average, how many hours a week do you work at the job in which you found out about this survey? (answer using numbers only)

- [open space for text entry]

Q4 What is your gender identity?

- Female (Cisgender - your gender identity matches the sex that you were assigned at birth) (1)
- Male (Cisgender - your gender identity matches the sex that you were assigned at birth) (2)
- Agender (3)
- Transgender (4)
- Nonbinary/gender fluid/genderqueer (5)
• Queer (6)
• Questioning (7)
• Other (please specify) (8)

• Prefer not to say (9)

Q5 What is your race/ethnicity? (please choose all that apply)

• Multiracial (1)
• African American/Black (2)
• Asian American or Pacific Islander (3)
• Latino or Hispanic (4)
• Native American (5)
• White (6)
• Other (please specify) (7)

• Prefer not to say (8)

Q6 What is your current relationship status?

• Single (1)
• Domestic partnership (live together but are not married) (2)
• In a relationship but do not live together (3)
• Married (4)
• Divorced/Separated (5)
• Widowed (6)
• Other (please specify) (7)

• Prefer not to say (8)

Q7 What is your highest academic degree completed?

• Some high school, no diploma (1)
• High school graduate, diploma or the equivalent (for example: GED) (2)
• Some college credit, no degree (3)
• Trade/technical/vocational training (4)
• Associate degree (5)
• Bachelor’s degree (6)
• Master’s degree (7)
• Professional degree (8)
• Doctorate degree (9)
• Prefer not to say (10)

Q8 What is your approximate yearly household income?

• $15,000 or less (1)
• $15,001 to $25,000 (2)
• $25,001 to $35,000 (3)
• $35,001 to $45,000 (4)
• $45,001 to $55,000  (5)
• $55,001 to $65,000  (6)
• $65,001 to $75,000  (7)
• $75,001 to $85,000  (8)
• $85,001 to $100,000  (9)
• $100,001 to $150,000  (10)
• $150,001 or over  (11)
• Prefer not to say  (12)

End of Block: Demographics

Start of Block: Emotional exhaustion

We'd like to hear your thoughts about feeling emotionally exhausted at work. Read the following statements and tell us whether they are never, almost never, rarely, sometimes, often, very often, or always true for you.

Q9 During my work, I feel emotionally drained.
• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q10 After working, I have enough energy for my leisure activities.
• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q11 After my work, I feel worn out and weary.
• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q12 After work, I tend to need more time than in the past in order to relax and feel better.
• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q13 There are days I feel tired before I arrive at work.
• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

End of Block: Emotional exhaustion

Start of Block: Work engagement

Now think about your engagement at work, which means being absorbed, vigorous, and dedicated. Read the following statements and tell us whether they are never, almost never, rarely, sometimes, often, very often, or always true for you.

Q14 I find new and interesting aspects in my work.
• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very Often (6)
• Always (7)

Q15 It happens more and more often that I talk about my work in a negative way.
• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very Often (6)
• Always (7)

Q16 Lately, I tend to think less at work and do my job almost mechanically.
• Never (1)
Q17 I find my work to be a positive challenge.

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very Often (6)
- Always (7)

Q18 Over time, I can become disconnected from the type of work I do.

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very Often (6)
- Always (7)

Q19 My job is the only type of work that I can imagine myself doing.

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very Often (6)
- Always (7)

Q20 I feel more and more engaged in my work.

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very Often (6)
- Always (7)

Q21 When I work, I feel energized.
Never (1)
Almost Never (2)
Rarely (3)
Sometimes (4)
Often (5)
Very Often (6)
Always (7)

End of Block: Work engagement

Start of Block: colleague support

How about the support you get from your colleagues? Read the following statements and tell us whether they are never, almost never, rarely, sometimes, often, very often, or always true for you.

Q22 If work gets difficult, my colleagues will help me.

Never (1)
Almost Never (2)
Rarely (3)
Sometimes (4)
Often (5)
Very often (6)
Always (7)

Q23 I get the help and support I need from colleagues.

Never (1)
Almost Never (2)
Rarely (3)
Sometimes (4)
Often (5)
Very often (6)
Always (7)

Q24 I get the respect at work I deserve from my colleagues.

Never (1)
Almost Never (2)
Rarely (3)
Sometimes (4)
Often (5)
Very often (6)
Always (7)

Q25 My colleagues are willing to listen to my work-related problems.

Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

End of Block: colleague support

Start of Block: Manager support

How about the support you get from your immediate supervisor? Read the following statements and tell us whether they are never, almost never, rarely, sometimes, often, very often, or always true for you.

Q26 I am given supportive feedback on the work I do.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q27 I can rely on my immediate supervisor to help me out with a work problem.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q28 I can talk to my immediate supervisor about something that has upset or annoyed me.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q29 I am supported through emotionally demanding work.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q30 My immediate supervisor encourages me at work.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q31 I trust that my immediate supervisor is completely honest with me.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q32 I trust that my immediate supervisor will share important information with me.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

End of Block: Manager support

Start of Block: Work demands

How about work demands? Read the following statements and tell us whether they are never, almost never, rarely, sometimes, often, very often, or always true for you.

Q33 Different groups at work demand things from me that are hard to combine.

• Never (1)
• Almost Never (2)
• Rarely (3)
Q34 I have unachievable expectations placed on me.

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very often (6)
- Always (7)

Q35 I have to work very intensively.

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very often (6)
- Always (7)

Q36 I have to neglect some tasks because I have too much to do.

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very often (6)
- Always (7)

Q37 I am unable to take sufficient breaks.

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very often (6)
- Always (7)

Q38 I am pressured to work long hours.

- Never (1)
- Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q39 I have to work very fast.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q40 I have unrealistic time pressures.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

End of Block: Work demands

Start of Block: Control

How about feeling control over your job? Read the following statements and tell us whether they are never, almost never, rarely, sometimes, often, very often, or always true for you.

Q41 I can decide when to take a break.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q42 I have a say in my own work speed.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)  
• Often (5)  
• Very often (6)  
• Always (7)  

Q43 I have a choice in deciding how I do my work.

• Never (1)  
• Almost Never (2)  
• Rarely (3)  
• Sometimes (4)  
• Often (5)  
• Very often (6)  
• Always (7)  

Q44 I have a choice in deciding what I do at work.

• Never (1)  
• Almost Never (2)  
• Rarely (3)  
• Sometimes (4)  
• Often (5)  
• Very often (6)  
• Always (7)  

Q45 I have some say over the way I work.

• Never (1)  
• Almost Never (2)  
• Rarely (3)  
• Sometimes (4)  
• Often (5)  
• Very often (6)  
• Always (7)  

Q46 My working time can be flexible.

• Never (1)  
• Almost Never (2)  
• Rarely (3)  
• Sometimes (4)  
• Often (5)  
• Very often (6)  
• Always (7)  

End of Block: Control

Start of Block: Interpersonal relationships
How about interpersonal relationships at work? Read the following statements and tell us whether they are never, almost never, rarely, sometimes, often, very often, or always true for you.

**Q47 I am subject to personal harassment in the form of unkind words or behavior.**

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very often (6)
- Always (7)

**Q48 There is friction or anger between colleagues.**

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very often (6)
- Always (7)

**Q49 Relationships at work are strained.**

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very often (6)
- Always (7)

**Q50 In the past year, I have been subjected to workplace bullying.**

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very often (6)
- Always (7)

End of Block: Interpersonal relationships

Start of Block: Job Role

How about understanding your job role? Read the following statements and tell us
whether they are never, almost never, rarely, sometimes, often, very often, or always true for you.

Q51 I am clear what is expected of me at work.

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very often (6)
- Always (7)

Q52 I know how to go about getting my job done.

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very often (6)
- Always (7)

Q53 I am clear what my duties and responsibilities are.

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very often (6)
- Always (7)

Q54 I am clear about the goals and objectives for my department.

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
- Often (5)
- Very often (6)
- Always (7)

Q55 I understand how my work fits into the overall aim of the organization.

- Never (1)
- Almost Never (2)
- Rarely (3)
- Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

End of Block: Job Role

Start of Block: Organizational change

How does your organization manage organizational change? Read the following statements and tell us whether they are never, almost never, rarely, sometimes, often, very often, or always true for you.

Q56 Staff members are consulted about change at work.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q57 When changes are made at work, I am clear how they will work out in practice.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q58 Management makes sure employee concerns are heard before decisions are made.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q59 Job decisions are applied consistently across all affected employees.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q60 Employees are allowed to challenge or appeal job decisions made by managers.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q61 When decisions are made, all affected people are asked for their ideas.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q62 Management explains decisions and provides more information when asked.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

End of Block: Organizational change

Start of Block: Distributive justice

How about distributive justice, which refers to how fairly employee benefits are given out? Read the following statements and tell us whether they are never, almost never, rarely, sometimes, often, very often, or always true for you.

Q63 To the best of my knowledge, the amount of pay employees receive is distributed fairly.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q64 The amount of fringe benefits employees receive is fair.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q65 The workload at my organization is fairly distributed.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

Q66 The overall rewards received are fairly distributed.

• Never (1)
• Almost Never (2)
• Rarely (3)
• Sometimes (4)
• Often (5)
• Very often (6)
• Always (7)

End of Block: Distributive justice
APPENDIX C

IRB APPROVAL LETTER, RECEIVED ON OCTOBER 24, 2017
To: Dana Ingemann

From: Bart Van Voorhis, Coordinator
Institutional Review Board (IRB) for the
Protection of Human Subjects
bvoorhis@uwlaus.edu
608.785.6892

Date October 24, 2017

Re: RESEARCH PROTOCOL SUBMITTED TO IRB

The IRB Committee has reviewed your proposed research project entitled: “Assessing 10 Factors Associated with Psychological Wellbeing among Employees of Small Retail Businesses in La Crosse County, Wisconsin”.

The Committee has determined that your research protocol will not place human subjects at risk. The attached protocol has been approved and is exempt from further review per 45CFR46, 46.101(b)(2).

However, it is strongly suggested that Informed Consent always be used. Remember to provide participants a copy of the consent form and to keep a copy for your records. Consent documentation and IRB records should be retained for at least 3 years after completion of the project.

Since you are not seeking federal funding for this research, the review process is complete and you may proceed with your project.

Good luck with your project.

Bart Van Voorhis

cc: IRB File
Email/letter for business owners to request participation in survey:

Subject Line: Psychological Wellbeing in the Workplace Survey

Dear Fellow Community Members,

We currently have a graduate student intern from the Master of Public Health program at UW-L helping us here at the Health Science Consortium. Her name is Dana Ingemann, and she is conducting a survey to assess employee psychological wellbeing in the workplace among small retail businesses in La Crosse County. The purpose of this study is to assess risk and protective factors that our working community needs to improve upon in order to increase employee engagement, performance, and morale.

I am contacting you to ask if you would share information regarding this survey in your workplace. While you, as the business owner, are not eligible to take the survey, it would be much appreciated if you encourage your employees to participate. The survey is anonymous; however, aggregate data may be shared for business owners to reference and use for their own strategic plans.

If you would like to participate, you can simply copy and paste the bolded dialogue below in an email to your employees. However, since the focus of this study is small businesses, we do not want to collect data from businesses that employ more than 100 people.

Because of this, please do not share information regarding this study this if you employ more than 100 people.

If you decide to participate in this study, please response to this email with a simple "yes". You decide not to participate in this study, please respond to this email saying "no". Finally, if you employ more than 100 people and cannot participate in this study, please respond to this email with an "NA".

Thank you!

Executive Director
La Crosse Medical Health Science Consortium
(608) 785-5151

BOLDED TEXT BELOW:

Hello everyone,

A graduate student in the Master of Public Health program at UW–La Crosse is conducting a survey to assess employee psychological wellbeing in the workplace among retail businesses in La Crosse County. The survey asks for some
demographic information, but will not collect identifiable information such as your name or contact information. Therefore, all responses to the survey are anonymous and will not be linked to you or your employer in any way.

Taking part in this survey is voluntary and offers an opportunity for you to express your opinion about your workplace in a confidential manner. This study may help employers understand what needs to be done to make your experience as an employee more supportive and enjoyable. Please note that surveys may only be taken once.

To access the survey, please click on the link below or copy and paste it into the address bar of your web browser:

https://uwlacrosse.qualtrics.com/jfe/form/SV_0lkiZBbCkWxcjwp

Thank you!

Dana Ingemann
Principal Investigator
(920) 579-2604

Follow-up email/letter for business owners to request participation in survey, if principal investigator does not receive an initial response:

Subject Line: Study: Psychological Wellbeing in the Workplace

Dear Business Owner and/or Manager,

I am a graduate student in the Master of Public Health program at UW - La Crosse as well as an intern at the La Crosse Medical Health Science Consortium. My name is Dana Ingemann, and I am conducting a survey to assess employee psychological wellbeing in the workplace among small businesses in La Crosse County. The purpose of this study is to assess risk and protective factors that our working community needs to improve upon in order to increase employee engagement, performance, and morale.

You initially received an email regarding this survey from the Executive Director of the LMHSC. I am contacting you a second time to ask if you would share information regarding this survey in your workplace. While you, as the business owner, are not eligible to take the survey, it would be much appreciated if you encourage your employees to participate. The survey is anonymous; however, aggregate data may be shared for business owners to reference and use for their own strategic plans.

If you would like to participate, you can simply copy and paste the bolded dialogue below in an email to your employees. However, since the focus of this study is small
Hello everyone,

A graduate student in the Master of Public Health program at UW–La Crosse is conducting a survey to assess employee psychological wellbeing in the workplace among small retail businesses in La Crosse County. The survey asks for some demographic information, but will not collect identifiable information such as your name or contact information. Therefore, all responses to the survey are anonymous and will not be linked to you or your employer in any way.

Taking part in this survey is voluntary and offers an opportunity for you to express your opinion about your workplace in a confidential manner. This study may help employers understand what needs to be done to make your experience as an employee more supportive and enjoyable. Please note that surveys may only be taken once.

To access the survey, please click on the link below or copy and paste it into the address bar of your web browser:
https://uwlacrosse.qualtrics.com/jfe/form/SV_0lkiZBbCkWxcjwp

Thank you!
Dana Ingemann
Principal Investigator
(920) 579-2604
Email to be sent to business owners who do not consent to participate:

Subject Line: Psychological Wellbeing in the Workplace survey

Dear [Business Owner],

Thank you for taking the time to consider sharing my survey. Should you later decide to participate, you may reach me at ingemann.dana@uwlax.edu or (920) 579-2604. Best of luck to you and your business!

Sincerely,

Dana Ingemann
Principal Investigator
(920) 579-2604

Email to send to business owners halfway through survey distribution to "check in":

Subject Line: Psychological Wellbeing in the Workplace survey

Hello [Business Owner],

Thank you again for your willingness to share information regarding my survey on employee psychological wellbeing in the workplace. We're about halfway through the survey collection period, so I just wanted to check in with you. Please let me know if you need more materials, would like me to re-send the link to the survey, or if you have any other questions for me at this time. I would also appreciate it if you would remind your employees to take the survey if they haven't yet. You can reach me anytime at ingemann.dana@uwlax.edu or (920) 579-2604.

Thank you,

Dana Ingemann
Principal Investigator
(920) 579-2604
APPENDIX E

ADDENDUM TO ORIGINAL IRB SUBMISSION, SUBMITTED ON DECEMBER 15, 2017, APPROVED ON DECEMBER 18, 2017
Dear IRB Committee Members,

Due to some concerns we became aware of during the data collection stage of the project, we are submitting this request for modification for the approved protocol “Assessing 10 Factors Associated with Psychological Wellbeing among Employees of Small Retail Businesses in La Crosse County, Wisconsin”, approved from 10/30/2017 to 5/31/2018.

In Part 1 of the narrative, it was detailed that:

“Using existing contact information, the Executive Director at the La Crosse Medical Health Science Consortium, and Chamber of Commerce member, will reach out via email to the business owners and/or managers to request participation in this study and provide access to the survey. The Executive Director will not have access to survey responses. If the business owner and/or manager chose to have their business involved in the research, the email includes a text to forward to employees requesting that they complete the survey. The researcher will also supply hard copy cards and flyers with the link that may be distributed to employees. When the researcher supplies these materials, she will inquire as to how many employees work at the business. All promotional and recruitment materials, including email dialogue, are included in this IRB submission following this narrative. If business owners do not respond to the initial request for participation, the Executive Director will attempt to contact them a second time via email to maximize survey response rate.”

For this modification, we would like to propose that, in lieu of the Executive Director making secondary contact via email, the principal investigator would make secondary contact via email. Additionally, after the second email is sent from the primary investigator, she would like to go to each of the businesses that were emailed and did not reply to follow-up with the business owner and/or manager, as well as provide the hard copy cards and flyers...
mentioned in the original IRB. The proposed dialogue for this interaction is attached to this addendum.

Dialogue for principal investigator to use when visiting businesses that were emailed but did not reply:

Principal Investigator (PI): “Hello, my name is Dana Ingemann, and I am a graduate student at the University of La Crosse, pursuing my Master of Public Health degree. I recently emailed a survey to you to forward to your employees regarding psychological wellbeing in the workplace. Did you receive this email?”

If the business owner did not receive the email: the PI would request an updated email address, would leave marketing materials, and send the original email to the updated email address.

If the business owner did receive the email: the PI would request participation in the survey. If the business owner agrees, the PI will leave marketing materials and inquire as to how many employees work at the business. If the business owner declines, the PI will thank them for their time and leave.