2023

Relationship Between Generational Age Differences, Gender, and Unemployment Rates: An Ex-Post Facto Study

Khader Jumah Al-Mahdawi
Walden University

Walden University

College of Management and Human Potential

This is to certify that the doctoral study by

Khader Al-Mahdawi

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. James Glenn, Committee Chairperson, Doctor of Business Administration Faculty

Dr. Kim Critchlow, Committee Member, Doctor of Business Administration Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2023

Abstract

Relationship Between Generational Age Differences, Gender, and Unemployment Rates:

An Ex-Post Facto Study

by

Khader Al-Mahdawi

MS, Park University, 2017

BS, Park University, 2014

Portfolio Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

August 2023

Abstract

Recent research has pointed out a critical problem of high rates of youth and young adults who are neither in school nor in the workforce. It is important for human resource managers to understand how to keep young adults engaged and gainfully employed to maximize economic output and maintain a stable social order. Grounded in the theories of frictional unemployment and the generational theory, the purpose of this quantitative ex post facto study was to examine the relationship between gender, different generational ages, and unemployment rates, to determine how to maximize youth employment and balance the workforce across genders and generational differences. Secondary data from the Bureau of Labor (BLS) was used to conduct the study using 1,476 data points over ten years to examine gender and generational differences. The results of the multiple linear regression indicated that the full model of 5 independent variables was significant in explaining the differences in gender, generational differences and their impact on unemployment, F (3, 1472) = 661.65, $p < .001$. Five of the predictor variables, gender (male/female) and generational differences (Generation Z, Millenials and generation X) made a statistically significant contribution to the model. The findings and recommendations from this study may potentially help human resource managers in organizations to attain a balanced workforce across gender and the different generational groups. The implications for positive social change include the creation of more productive and pleasant corporate culture, successful retention of generation Z and X, and higher employment in the communities in which companies operate thus providing higher tax receipts for those communities and the Federal government.

Relationship Between Generational Age Differences, Gender and Unemployment Rates: An Ex-Post Facto Study

by

Khader Al-Mahdawi

MS, Park University, 2017

BS, Park University, 2014

Portfolio Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

August 2023

Dedication

I dedicate this doctoral study to my family. My dear wife and children, my siblings as well as in the memory of late parents. My wife and children continously give me a purpose to work smart and soar to greater heights. My parents were always keen to see that my siblings and I got educated and they encouraged us for as long as they were here.

Acknowledgments

This doctoral study has been a both a challenging and insightful journey which I could not have achieved single handedly. My acknowledgments go to my family, my dedicated committee members, friends and colleagues. I had the privilege of having two committee chairs, first Dr. Betsy Macht and then Dr. Jim Glenn. I honestly found the initial stages of my study to be challenging, but Dr. Betsy steadfastly guided and encouraged me through the stages. I appreciate Dr. Jim's relentless support and guidance throughought the rest of my doctoral study. He created time to meet up, discuss and guide me on the necessary steps. I also wish to thank my second committee chair Dr. Critchlow and my URR Dr. Burchell for their timely and helpful feedback.

Table of Contents

List of Tables

List of Figures

Section 1: Background and Content

Historical Background

Recent research has pointed out a critical problem of high rates of "disconnected youth" - the youth and young adults who are neither in school nor in the workforce (Millett & Kevelson, 2018). On the other hand, some researchers argued that older generations desire permanency in their jobs to secure a lifetime employment in an organization (Zhang & Acs, 2019). According to Albanesi and Şahin (2018), convergence in female and male labor force attachment accounts for a great part of the closing of the gender unemployment gap that has been witnessed over time. The findings of these authors suggest that gender variance in industry composition is the main source of the cyclicality of the unemployment gap. Through this study, the relationship between generational differences, gender, and unemployment rates in the United States was demystified. Data from the Bureau of Labor Statistics (BLS) were used to examine the relationship between gender, generational differences, and unemployment rates in this study.

Organizational Context

Organizational Context for the Secondary Data

Secondary data for this study were derived from the BLS, a unit of the Department of Labor (DOL) of the United States. The BLS is charged with measuring price changes, activities in the labor market, productivity in the economy of the United States and working conditions (BLS, 2022). Statistics from the BLS are used to support decision making both at private organizations and public institutions.

Internal Context

Being a unit of the DOL, BLS works towards achieving the vision, mission, and strategic objectives of the DOL. The DOL's mission is to provide information technology solutions and leadership to advance the United States of America (DOL, 2022). Its vision is to provide premier technology solutions that empowers its mission as well as serve the American public through collaboration and innovation (DOL, 2022). In addition to its mission and vision statements, the DOL works with the following strategic goals (DOL, 2022):

i) Creation of DOL IT Platform Services.

ii) Modernize Legacy Applications.

iii) Secure and enhance the IT infrastructure.

iv) Transform the customer experience.

v) Based on DOL's stated goals, it is evident that DOL is committed to use IT to provide labor-related services to citizens of the United States.

The BLS is headed by a commissioner who is a nominee of the President of the United States and confirmed by the members of the U.S. Senate (BLS, 2022). About half of the employees in BLS are economists and statisticians.

The BLS has the following core values:

i) Just the Facts.

ii) Complete transparency.

iii) Confidentiality.

iv) Gold-standard data.

v) Customer input.

The BLS also works with a number of customer advisory groups (BLS, 2022):

i) Data Users Advisory Committee.

ii) BLS Technical Advisory Committee.

iii) Federal Economic Statistics Advisory Committee.

Last but not least, the BLS belongs two partnership groups namely:

i) BLS Labor Market Information Oversight Committee.

ii) Workforce Information Advisory Committee.

External Context

The BLS (headed by a political appointee) is a unit in the U.S. government's DOL. It is the principal fact-finding agency for (and funded) by the government of the United States in the sector of labor economics and statistics. The bureau is tasked with publication of these facts to the public and serves as a principal agency of the U.S. Federal Statistical System.

Introduction to the Topic

Through this study, I examined the relationship between gender, generational differences, and unemployment rates. I built on the existing research regarding the influence of gender and generational age differences on unemployment rates by examining employment between gender and the workforce across three generations. In their study, Fuller and Qian's (2022) findings suggested that despite similar risks of job loss relative to other groups, women (especially mothers of young children) have a very low likelihood of being re-employed in subsequent years. On the other hand, the authors

postulate that employers tend to be more sympathetic to risks to men's roles (for example, breadwinning role in the initial years of fatherhood). According to Uggla and Billingsley (2018), the rates of unemployment among young people are generally higher than the rates of unemployment among relatively older people. In this study, I addressed findings for Generation X, millennials, and Generation Z members as they pertain to the different generational ages. This research may provide useful information for organizations and help them identify various ways of managing their employees and ensure maximum productive capacity at the workplace. My findings may contribute useful insights that help different organizations identify and cope with employment gender gaps and balance the workforce among the different generations.

Problem Statement

Researchers have examined the importance of employment and its influence on people's lives. For many individuals, employment is the basis of a secure income and a substantial life, which allows them to have a sense of purpose in their day-to-day lives (Altweck et al., 2021). In this quantitative ex-post facto study, gender and generational differences were examined together with their influence on unemployment rates. Research on unemployment rates focused on both male and female genders and across different generational groups. The different generation groups in the study include Generation X, millennials, and Generation Z. This study examined the relationship between gender, different generational ages and unemployment rates in the United States. The general business problem is that human resource managers in organizations have not been able to balance their workforce across gender and generational age differences,

resulting in sustained negative impacts to organizational revenue. The specific business problem is that some human resource managers lack knowledge on the importance of balancing employees' expertise in companies based on gender and generational age differences.

Purpose Statement

The purpose of this quantitative ex post facto research design study is to examine the relationship between gender, different generational ages, and unemployment rates. The study focused on Generation Z, millennials, and Generation X members. The independent variables were the different generation ages and gender, while the dependent variable was unemployment rates. The dependent variable (unemployment rates) is a continuous variable that refers to the unemployed as a percentage of the labor force (BLS, 2023). The target population of this study was individuals aged 16 years and above in households in the United States (BLS, 2023). This study may help determine the relationship between gender, generation groups, and unemployment rates in the United States. The findings from this quantitative study may inform human resource managers in business organizations of the impact of gender employment gaps and the unbalanced generation age workforce within organizations. Business leaders could use the findings to manage their workforce, ensuring a sustainable business that could contribute to the local community by offering local jobs and supporting community-sponsored activities.

Target Audience

In this research study, I mainly seek to address human resource managers in organizations that are yet to attain a balanced workforce across both genders and the

different generational groups. An imbalanced workforce results in sustained negative impacts to organizational revenue. Human resource managers play very crucial roles organizations, helping them attract and retain employees in healthy working environments. Human resource management is responsible for hiring the right personnel for the right role and balancing the workforce, hence fostering unemployment reduction. Human resource managers are also tasked with building and improving employer-employee relationships, which contributes to employee satisfaction and productivity. Based on the roles and significance of human resource managers, they are the best placed audience for this study.

Other stakeholders who would be interested in the study include business leaders and the federal government. It is the role of business leaders to strategically set goals, mentor their respective teams, and most importantly, make decisions that are consistent with their organizational priorities (Balcerzyk, 2021). Findings from this study may help business leaders make informed decisions on the hiring and retainment of their workforce. The federal government may use the findings of this study to plan and make informed monetary and fiscal policies that relate to employment.

Research Question

What is the relationship between gender, different generational ages, and unemployment rates in the United States?

Hypotheses

H_0: There is no statistically significant relationship between gender, different generational ages, and unemployment rates in the United States.

H_1: There is a statistically significant relationship between gender, different generational ages, and unemployment rates in the United States.

Significance of the Study

This secondary data analysis is of value to business because the data was collected from households in the United States in the recent past (2021). The data is therefore a rich source of up-to-date information on unemployment rates across the United States. The findings from this study may therefore be instrumental in helping business leaders to make informed decisions in matters pertaining to employment and the distribution of their workforce genderwise and generation-wise.

Contribution to Effective Business Practice

This study is significant in that it examined the relationship between gender, generational age differences, and the unemployment rate in the United States, which may bring new insights into unemployment rates in the United States. The study's findings might help business leaders to build strategies that encourage equitable hiring practices. The findings might also help business leaders to consider hiring practices that enable effective and balanced generational representation across the business. Business leaders could use the findings to manage their workforce, ensuring a sustainable business that could contribute to the local community by offering local jobs and supporting community-sponsored activities.

Contribution to Positive Social Change

The federal government may use the findings of this study in planning of employment matters pertaining to citizens of the United States and put in place informed

monetary and fiscal policies. These policies could help people who may be disadvantaged (for example, underemployed) as far as employment is concerned. Human resource managers in organizations could benefit from this study because they may use the findings of this study to examine and help attain a balanced workforce across both genders and the different generational groups in their teams. A balanced workforce would help avoid potential sustained negative impacts to their organizational revenue.

The results from this study may also contribute to a positive social change by provoking business managers to be sensitive in their hiring process to ensure a uniformly distributed workforce. Findings from this study may help the business managers to make informed decisions. For instance, if the findings portray an unbalanced distribution of the workforce genderwise or generation-wise, business managers would scrutinize their workforce and be more sensitive to this matter in their hiring process.

Theoretical Framework

This study was grounded on two theories. The first is the Strauss-Howe generational theory (Strauss & Howe, 1991). The theory was developed by Strauss and Howe in the year 1991. The generational theory addresses differences in age (Strauss & Howe, 1991). Strauss and Howe (1991) argued that generations are a product of history, generations over time create history, and there is thus a connection between history and generations. The variable generational age differences was derived from the generational theory.

In this study, I also used the theory of frictional unemployment developed by Reder (1969). Reder asserted that the issue of unemployment is a component of the

economy. Reder also affirmed that the natural unemployment rate is an equilibrium whereby the number of workers seeking jobs and that of employers seeking workers reach a balance based on the relative prices of the two activities (Reder, 1969). Frictional unemployment is therefore a consequence of voluntary employment transitions by players in the economy. The unemployment rates variable was derived from the theory of frictional unemployment.

Representative Literature Review

Literature Review Opening Narrative

Some research has been done on gender distribution in the workforce, generational differences of employees in various sectors, employment and unemployment rates. While the gender unemployment gap has been closing over time (Albanesi & Şahin, 2018), there is still a variance in unemployment rates across gender as researchers have found that the female gender has a relatively higher unemployment rate to males (Altweck et al.; Carli, 2020; Manzoni & Mooi-Reci, 2020; Reichelt et al., 2020). Conventional gender roles still influence the distribution in the workforce and hence impact unemployment rates (Manzoni & Mooi-Reci, 2020; Qui, 2022). Researchers have shown in their findings that generational differences play a role in influencing the rates of unemployment among different working class members (Axelrad et al., 2018; Cheng & Mohamad, 2020; Tamesberger & Bacher, 2020). Researchers have used data from the year 2002 to the year 2008 to identify a critical problem of high rates of youth and young adults who are neither in school nor in the workforce (Millett & Kevelson, 2018). Older generations desire permanency in their jobs to secure a lifetime employment in an

organization (Zhang & Acs, 2019). However, there is a gap in the literature in such that no studies have been done to examine the relationship between generational differences, gender and unemployment rate in the US. I discovered this gap in the research conducted for my literature review which covers published research from the year 2017 to the year 2022. This study aims to bring more clarity on the variables and address the gap in literature.

This review includes the literature search strategy used for this study, the study's application to the applied business problem, a review of literature review pertaining to the study's dependent and independent variables and a summary of the section.

Literature Search Strategy

I conducted a search of the extant literature revolving around gender, generational differences, and unemployment rates. This search was enabled by performing an electronic search on the following databases: Academic Journal, Business Source Complete, EBSCO, Elsevier, ProQuest, Sage Journals. The following keywords were mainly explored in the databases: *generational differences, age differences, gender, unemployment, unemployment, millennials, generation X, generation Z, generational theory and frictional theory.* I searched the databases for peer-reviewed articles mostly published between 2017 and 2021.

Table 1

Sources Used in the Literature Review

Reference type	Shorter than 5 years	Longer than 5 years	Total	Cumulative %
Peer-reviewed journals	51	0	51	86
Non Peer-reviewed sources	9	0	9	15
Total sources	60	0	60	100

Application to the Applied Business Problem

The purpose of this quantitative ex post facto research design study is to examine the relationship between gender, different generational ages, and unemployment rates. The study focussed on generation Z, millennials, and generation X members

The following hypotheses were evaluated in the study:

H0: There is no statistically significant relationship between gender, different generational ages and unemployment rates in the United States.

H1: There is a statistically significant relationship between gender, different generational ages and unemployment rates in the United States.

This study was grounded on two theories: the Strauss-Howe generational theory (Strauss & Howe, 1991) and the theory of frictional unemployment by Reder (1969).

The Generational Theory

Strauss and Howe (1991) argued that generations are a product of history, generations over time create history, and there is thus a connection between history and generations. In this study, I examined the relationship between gender, different

generational ages and unemployment rates in the United States. Strauss & Howe (1991) stated that generations come in cycles and that every generation holds and maintains unique attributes. This distinction brings about a difference in how generations feel about themselves, their culture, country, environment, and the future (Strauss & Howe, 1991). Strauss and Howe (1991) identified four generational archetypes: prophet, nomad, hero, and artist. This is a cycle of four aspects that happen repeatedly.

Previous Applications

The generational theory has been widely used in the field of research (Alen et al., 2016; Katunina & Kashtanova, 2019; Okros, 2019; Wang, 2021; Zayko & Vinichenko, 2022). Katunina and Kashtanova (2019) conducted an empirical research to investigate whether or not the generational theory can be applied to manage digital content. While doing their research, Katunina and Kashtanova found out that the theory is instrumental in explaining issues like leadership, human reseource management, ethics, configuring of digital products and consumer behavior for different generations.

Okros (2019) carried out a cohort analysis on generational theory framework to examine groups age-wise and potentially predict key aspects of those groups in future. The authors concluded that different age groups acquire certain labels, stereotypes and characteristics that influence how other groups view them. Zayko and Vinichenko (2022) analyzed 66 articles written by people from 25 different countries to study the generational theory. The authors revealed that interest in the generational theory has been mostly shown in e-comerce, medicine, tourism and marketing sectors.

Wang (2021) and Alen et al. (2016) grounded their studies on the generational theory. Wang (2021) used the theory to analyze changes being experienced by journalism in the mainland of China. Similarly, Alen et al. (2016) used the theory to frame their study, which examined the tourism behavior of ssenior citizens. Authors from both studies asserted that generational theory was appropriate to use in studying matters pertaining to age differences, shifting social attitudes and cultural change.

Rationale for Using the Generational Theory

The Strauss-Howe generational theory provided a solid understanding of the distinctiveness of each generation as the study seeks to determine whether gender and age have an impact on the rate of unemployment.

The Theory of Frictional Unemployment

On the other hand, Reder (1969) asserted that unemployment is not just a random blemish in the economy but also a necessary system component. Reder (1969) affirmed that the natural unemployment rate is an equilibrium whereby the number of workers seeking jobs and that of employers seeking workers reach a balance based on the relative prices of the two activities (Reder, 1969). Frictional unemployment is therefore a consequence of voluntary employment transitions by players in the economy. It naturally occurs and is normal in a stable or growing economy. Frictional unemployment is constituted by people opting to abandon their workplaces to search for other ventures and workers getting into the workforce for the first time.

Rationale for Using the Theory of Frictional Unemployment

The theory of frictional unemployment relates to the study because the study looked at unemployment as impacted by generational age differences and gender. The theory explains the roots and essence of unemployment.

Gender and Unemployment

Globally, the gender gap in employment affects women more than men. Manzoni and Mooi-Reci, (2020) explained that studies concerning unemployment rates between the male and female genders show that the rates are not similar but rather vary in favor of the male gender. In a quantitative study conducted in Saudi Arabia, findings indicated that women were highly affected by unemployment with an unemployment rate of 35% while that of men was at 12% (Alfarran et al., 2018). The difference in unemployment rates between men and women could result from disparities in workplace composition. Men are more likely to have a larger composition in the workforce than women, especially in workplaces that require a manual labour.

Dynamics involving cumulative workforce disparities associated with unemployment are context-dependent and non-uniform. In a quantitative study conducted between a sample of working Dutch men and women, quantitative findings indicated that the unemployment rates differ depending on gender (Manzoni & Mooi-Reci, 2020). From the study analysis, findings show that unemployment rates are influenced by career quality. Additionally, the rate of career quality development and recovery varies depending on gender. Women's career quality is significantly affected during childbirth and rearing at the ages of 25 to 35. The career quality recovery speed for women is thus

slightly under that of their male counterparts. The variation in career quality recovery speed for women influences their re-employment, which became fragmented due to their absence at work. According to Reichelt et al (2020) it is men that are often employed in sectors such as those in manufacturing and construction and are potentially faced with unemployment if the task or contract is completed. On the other hand, women hold the majority of clerical and services jobs, which are more likely to be permanent. Manzoni and Mooi-Reci's findings showed that for Dutch workers, men are more likely to perceive significant unemployment distress than women. Society perceives men as the provider for their families, so employment offers them social approval (Altweck et al., 2021).

Lack of societal approval and various factors bring about unemployment disparities between the different genders. Such factors include social norms and perceptions of job commitment and capability regarding the female gender. Manzoni and Mooi-Reci (2020) explained that the assumptions and expectations of incompetence and commitment between the male and female gender are one of the contributors of unemployment disparities. According to Manzoni and Mooi-Reci (2020), in a population sample in Germany, participants portrayed the notion of men being the ideal employee. In that way, their expectations of women's commitment and competence at work are lowered and, as a result, negatively impact their chances of employment. In Saudi Arabia, socioeconomic restrictions imposed on women are one of the factors that contribute to high unemployment rates among women, compared to men who face fewer restrictions in the society (Alfarran et al., 2018). Such social and cultural attitudes surrounding gender

roles leads to reduced participation of women in the labor force. Due to some of the conventional norms of society, women have the potential to be undervalued and therefore have increased unemployment rates.

When women's work orientation and interference due to the cultural expectations and conventional norms of society of child-rearing and bearing are accordant with the conventional gender role expectations, such interferences will most likely be disregarded by employers and thus could negatively affect women in the hiring process. Manzoni and Mooi-Reci (2020) argued that gender role expectations can influence women's work orientation. Reichelt et al. (2020) found that in the workforce population of the U.S., Germany and Singapore societal norms and expectations contribute to shaping division of labor and influencing gender employment gap. Reichelt et al.'s findings also showed that these workforce and gender related attitudes influence women's participation in the workforce market. Lahtinen et al. (2020) explained that gender expectations regarding women's work also influences the possibility of re-employment after a long period of unemployment. Such conventional gender role expectations influence the employer's hiring process, bringing about career inequalities between men and women.

A study looking at employers hiring processes using a correspondence testing technique to explore if, during the hiring process, employers are biased against women based on hackneyed ideas or prejudices was conducted in Saudi Arabia. The data collection was carried out through four pairs of job resumes sent to 1,372 employment offers (González et al., 2019). The findings from the research study indicated that the recruitment process was in favor of the male gender, thus signaling gender bias. While

discrimination was reduced where the female workers had higher professional qualifications, it also increased where women were observed to have borne children (González et al., 2019). Gender discrimination grounded on employers' stereotypes contribute to higher unemployment rates among women and gender imbalance in the labor market.

Unemployment among women is a useful indicator of an womans possibility of future employment. In a study conducted in Germany to examine the rates and effects of unemployment, facts and statistics from the German Socioeconomic panel were used (Manzoni & Mooi-Reci, 2020). Manzoni and Mooi-Reci's study involved an analysis of career recovery rates among the different gender and age groups exposed to a long period of unemployment. According to Manzoni and Mooi-Reci, the findings indicated a disparity in the revival process between both genders and that women are much more affected than when compared to men. This may be because compared to men, who may find it difficult to stay unemployed, women are highly likely to assume family roles after unemployment (Altweck et al., 2021). As such, the career qualities of women may reduce and, therefore, affect their chances of re-employment. According to Ghosh et al. (2022), in a study conducted in the U.S. to compare the labor market outcome between men and women after a period of unemployment due international trade, findings indicated that the pre-employment wage difference between men and women is wide. Contrary to Germany, the success rate of re-employment between men and women after layoffs is almost similar (Ghosh et al., 2022). The revival process and career improvement of both

male and female genders is observed to be varying depending on the cultural and societal setting as seen in Germany and the United States.

Variance in the cultural and societal setting affect career quality in periods before unemployment and after unemployment, as well as the rate of recovery, differs with workers of different ages. According to Manzoni and Mooi-Reci, (2020), following unemployment, men between the ages of 25-34 years are slightly affected, while men at the age of 55-65 experience a bit of stability at initial unemployment but exhibit a longer period of career quality recovery. For men, career recovery after initial unemployment is contingent on the individual ages; while older men exhibit a higher career recovery period, younger men aged 25-35 are less affected (Manzoni & Mooi-Reci, 2020). In a study in France, analysis from French administrative data indicated that unemployed women have lower acceptance and starting wage than men (Le Barbanchon et al., 2020). Le Barbanchon et al.'s findings show that women are paid 4% less per hour than men. Such differences increase the gender gap in annual earnings between men and women.

The gender gap affects the work life of employees. When individuals of either gender are unemployed, there are challenges to securing employment and re-entering the workforce. Manzoni and Mooi-Reci (2020) explained that across both genders, unemployment states have virtually no relationship with recurrent or future unemployment states. In a study to examine whether the current unemployment state could result in a later unemployment experience, data from longitudinal surveys of young men in the United States between 1969 and 1971 indicated no relationship between previous unemployment and possible future unemployment (Manzoni & Mooi-Reci,

2020). The study further showed that unemployment periods of 30 weeks have relatively no effect on preceding unemployment experiences. Even though unemployment periods affect individuals' skills and career quality, the likelihood of one experiencing repeated unemployment after post-unemployment is totally unrelated to prior unemployment. The recurrence of unemployment may therefore be related to one's career progress.

Social class differences influences an employees career development and are often distinctly more predominant among men than among women. Men usually relate their social class to their jobs. Since they hold a higher composition of the global workforce than women, many of them hold a greater social class than their female counterparts and therefore are more protected from unemployment. Lahtinen et al. (2020) argued that in a population study in Finland, the relationship between the gender social class and unemployment rates is often in favor of the male gender. From the findings, it is observed that social status is frequently perceived as a more accurate measure of the social standing of males and somehow less important whenever centered on female professions. Altweck et al. (2021) postulated that in a similar study conducted in different regions in Germany to determine the effect of social class on income and employment rates among women and men, findings show that women have lower employment rates and their income levels are lower. The findings indicated that women face twice as much insecurity in regards unemployment compared to men. Men have unemployment risks of 13.15 whereas women face 31.4% risk of unemployment (Altweck et al., 2021). According to Menéndez-Espina et al. (2020), job insecurity and the risk of unemployment affect both men and women. For men, job insecurity significantly

correlates with education temporary work ($r = 0.329$, $p < .001$), job cartegory ($r = -0.189$), and salary cut ($r = 0.234$, $p < .001$). For women, job insecurity significantly correlates with temporary work ($r = 0.363$, $p < .001$), job cartegory ($r = -0.124$, $p < .001$), and salary cut ($r = 0.193$, $p < .001$). However, the circumstances in which the discernment arises are greatly influenced by gender inequality. Menéndez-Espina et al. (2020) conducted a study to investigate job insecurity across genders using a sample of 1,005 male and female workers aged 18 to 65. The findings from the study indicated that women experience significantly higher job insecurity risks as a result of various factors, including informal work, interim jobs, and wage cuts as compared to men ($t = -5.420$; $p < 0.001$). Additionally, Menéndez-Espina et al. (2020) asserted that job insecurity is influenced by the professional levels of men and women, thus playing a great role in determining the labor expectations of both male and female workers. The research findings indicated that men tend to put more attention on their work and career, while women, on the other hand, put their focus on both work and family matters (Menéndez-Espina et al., 2020). Women focus on being wives, mothers and also workers. As such, compared to men who are focused on their jobs, their social economic class is lower. Lahtinen et al. (2020) asserted that though the current findings have challenged this assumption; it is still believed that social status is predominantly a men's sign of social structuring and so reflects the disparity between men well than the disparity between women. Yu & Sun (2019) stated that working class origins are highly likely to influence unemployment risks. There is a huge difference between men in the upper class and those in the working class working in manual employment. While those in the upper class are

more protected from unemployment, men in the lower social class are highly affected by unemployment. Yu & Sun (2019) conducted a secondary study using data from the National Longitudinal Survey of Youth; research findings showed that the working class plays a great role in determining the unemployment risks of workers (*time series coefficient* = .365, $p < .001$). According to Yu & Sun (2019), the findings are in concurrence with the argument that workers of the higher working class enjoy enduring benefits in the job market due to having a higher class valued by the employers. The research findings indicated that lower-class workers are relatively underprivileged in the job market.

The difference in organizational composition of male and female professions in the various working classes economically affects men more than women. Lahtinen et al. (2020) explained that even though the general disparity in unemployment rates among both genders remains low, for example, in settings like Finland, men's unemployment rates are much more vulnerable to financial fluctuations than women. As such men face more unemployment and financial distress than women. This is largely detailed by the disparities in industrial diversity between the male and female professions. Altweck et al. (2021) explained that, in a country such as Sweden the work force population is mainly comprised of women while in other countries such as Ireland the workforce population comprises mainly of men. Similarly, unlike countries such as Sweden, the unemployment rate in West Germany is in favor of men more than women (Altweck et al., 2021). 50% of women in West Germany were in employment, whereas the rest were most likely housewives. Additionally, women faced higher unemployment risks which accounted for

31.4%, while their male counterparts were faced with 13.1% unemployment risk. Women thus faced twice as many unemployment risks compared to men. According to Altweck et al. (2021), Women in West Germany were significantly older then their male counterparts and reported a smaller income. The women also showed significantly lower education levels and mostly worked in part-time jobs ($p < 0.05$). From the findings, unemployment distress associated with social economic class is more pronounced among women than men in Sweden. These findings thus show that employment status influences the socio-economic class of working population and thus affects unemployment rates amongst both genders. The industrial occupation of men is highly likely to be in an area such as manufacturing which men mostly dominate. Therefore, in case of downturns, they face a huge unemployment rate than women. Lahtinen et al. (2020) postulated that the male gender is more likely to work in the private sector while women are conventionally employed in the public sector. Men are therefore exposed to extreme unemployment-sensitive jobs, leading to a higher risk of unemployment, especially in a recession period.

During recessions and downturns, men face high economic crises, especially in lower working-class jobs. According to Lahtinen et al. (2020), male predominance in high-unemployment risk sectors leads to much more divergent socioeconomic status variations regarding male unemployment, especially amid economic crises. Men of lower socioeconomic status face a higher risk of unemployment and, as such, have a delicate socioeconomic status, especially when their families depend on them.

Across both genders, the risk of unemployment is related to the employee socioeconomic and working class status. Employees with lower socioeconomic status often work in lower working class levels, hence experience higher job insecurity. In the study conducted in Finland, Lahtinen et al. (2020) found that there were significant inconsistencies in unemployment risks among the different genders across different levels of skilled manual class jobs ($p < 0.0001$). Regarding skilled manual labor, both genders face almost similar risks of unemployment; this may be explained by the convergence of gender disparities in employment. The results indicated that, earlier, the skilled male manual workers exhibited sigificant risks of unemployment than the skilled female manual workers ($p = 0.01$). However, with time the male skilled manual workers exhibited slightly lower unemployment risk as compared to their female counterparts. This inconsistency explains the 57-66% unemployment risk among both male and female skilled manual workers (Lahtinen et al., 2020). Lahtinen et al. (2020) further explained that male workers in the lower working class had a much bigger risk of losing their jobs than women in the early times. Males in the higher working class had slightly less unemployment risk than their female counterparts. During downturns, men in the lower working class tend to face a high risk of unemployment. At the same time, women have a slight risk of unemployment due to the difference in industrial occupations between men and women. Men work in unemployment-sensitive jobs while women tend to work in service jobs less affected by downturns.

Due to the difference in industrial occupation, the uneven distribution of employment opportunities among women significantly contributes to unemployment

rates in favour of men. Qui (2022) argued that in china, the female population in higher education is 44%, but contrary to this fact, the chances for employment for the females are much lower compared to that of the male gender.

The gender role expectations of employers dictate the recruitment rate between male and female employees thus reducing the number of women entering the workforce. Bullough et al. (2021) stated that women are often associated with being gentle, sympathetic, and communal rather than bold, commanding, and self-sufficient, which are traits often affiliated with men. Such absurdity promotes women's gender role expectations of mothering and nurturing (Bullough et al., 2021). The predilection and gender role expectations influence the work performance of women, thus making their growth difficult. Employers' assumptions that men have averagely higher working performance affects their attraction and retention of young female employees, increasing the number of unemployed female graduates. Qui (2022) further detailed that gender discrimination among women is a notable obstacle for female graduates searching for employment. Female graduates are most likely demoralized when faced with discrimination, especially since it is their initial unemployment state. Due to such, female graduates face self-doubt regarding their potential and thus affecting their preceding employment undertakings. According to Khalifa (2018), in a study conducted in accounting firms in the United Arab Emirates, it was obtained that historically women were seen to be a threat to the accountant’s professional prestige and as such were allocated to low level accounting related jobs such as in bookkeeping. Gender inequality among women is a significant barrier to a healthy working environment.

Occupational gender division promotes gender inequality among women in the workforce and influences the rates in which men and women are faced with unemployment. During pandemics such as the COVID-19, compared to men, the female-dominated occupations are most likely seen as essential jobs and, as such, expose women to a high risk of working from home or unemployment. According to Carli (2020), over the Covid-19 pandemic in the United States, the rate of job loss in terms of gender has mostly favored men over women. The findings show that almost 5.4 million lost jobs were from the female gender throughout the pandemic period, with almost 1 million more lost jobs than men. Women were faced with higher unemployment rates and income losses than men since they are overrepresented in occupations such as school teachers and social workers that were highly hit by the pandemic.

During the pandemic, women in the United States were more affected by unemployment rates than men due to the gender difference in occupation. Carli (2020) findings indicated that more than 21.4 million women experienced high poverty levels due to unemployment in a study conducted between 2018 and 2019. A significant number of women is disproportionately affected by poverty. Most women are faced with gender inequalities and are highly likely to hold low-income occupations, which contribute to poor living conditions. According to (Dang & Viet Nguyen, 2021) findings showed that women expected a fall 0f 50% in their income and were by 24% more likely to face unemployment due to outbreaks such that of Covid-19. These facts explain a lot regarding the gender gap in industrial composition and unemployment rates due to pandemics. Some women are more likely to stay unemployed, assume household roles,

and depend on their husbands for financial support. Such norms of preferred unemployment and overdependence on male counterparts foster poor living conditions and poverty.

Among men, financial pressures due to overdependence and high unemployment rates are mostly influenced by the economic crisis, recessions, and even pandemics. Carli (2020) explained that during previous recessions in the United States, male-dominated occupations such as manufacturing sectors faced higher unemployment rates than female-dominated occupations such as education. Verho (2019) explained that due to recessions, an estimation of 58% reduction in jobs and income loss is experienced. Men experience a higher impact due to recessions and they suffer 5-8% income loss than women. During follow ups of recovery rate, men still suffer and are their employment recovery rate remains lower at 5% compared to women (Verho, 2019)). Since men are mainly providers of the family, the financial burden that comes with it increases much more due to such situations. As a result, men's recovery rate is slower than that of women. Over the covid-19 period, the pandemic has resulted in a rapid increase in job losses (Carli, 2020). During the pandemic, massive lockdowns and emergency policies are enacted, and as a result, employment is largely interrupted. Since there was minimum economic growth, most employees were laid down, leading to an increased unemployment rate.

The unemployment pattern and income losses are more dominant when it comes to women than when it comes to men. Carli (2020) findings indicated that due to the high unemployment rate for women during the pandemic, their income will significantly be affected together with their transition to other employment fields compared to men,

leading to an increase in gender inequality. Due to a reduction in COVID-19 cases, transitioning back to work is slightly slow. As such, there are difficulties, especially in occupations that were highly hit by the pandemic. Most female occupations were highly affected, and most were rendered unemployed, which consequently affected their income. Due to difficulties in job transition, most women are left unemployed and, as a result, contribute to inequality in labor composition.

Eight out of the thirteen studies reviewed in this section were quantitative studies (Alfarran et al., 2018; Altweck et al., 2021; Carli, 2020; Lahtinen et al., 2020; Le Barbanchon et al., 2020; Manzoni & Mooi-Reci, 2020; Reichelt et Al., 2020; Verho, 2019). Gender, one of the independent variables in my study, was discussed in ten out of the thirteen reviewed studies. The authors of two of the studies reviewed in this section discussed generational age differences, another independent variables in my study and the authors of four studies discussed unemployment rates, the dependent variable in my study.

The reviewed studies showed significant associations between gender and unemployment rates (Alfarran et al., 2018; Altweck et al., 2021; Carli, 2020; Reichelt et Al., 2020). Additionally, some studies showed significant relationships between unemployment and gender age differences (Manzoni & Mooi-Reci, 2020; Lahtinen et al., 2020). Although (Verho, 2019) establish contrasting results, the findings from the reviewed studies maintain consistency that women are highly affected by unemployment compared to men.

The Theory of Frictional Unemployment Applied to Gender and Unemployment

In a free labour market, there will always be some level of unemployment as workers search for jobs that align with their skills and preferences. Reder (1969) argued that unemployment is not just a random occurrence in the labour market but a necessary component of the system. The natural unemployment rate is an equilibrium due to the balance resulting from workers seek for employment and employers looking to find workers (Reder, 1969). Frictional unemployment can be affected by Gender. In the labour market, women are more likely to experience frictional unemployment. Alfarran et al. (2018) argued that women face various structural factors, such as socioeconomic norms and occupational segregation. Due to these structural factors, women may take time out of the workforce to take care of children and elderly family members, meaning that when they re-enter the labour force, it may be challenging for them to find employment that matches their skills and preferences, thus leading to longer spells of frictional unemployment for women. Overall, the theory of frictional unemployment has a relationship with Gender and unemployment, as women are likely to face prolonged periods of frictional unemployment due to structural factors in the workplace and society.

Generational Age Differences and Unemployment

In all business firms and organizations, the workforce comprises employees across all generational groups. Axelrad et al. (2018) postulate that in the current business environment, age difference greatly influences unemployment rates among different working-class members. Unemployment amongst the younger generations starts from the moment they attain the minimum legally acceptable working age (Axelrad et al., 2018)

asserted that unemployment difficulties in young people tend to be related to the business cycle and the policies made, whereas, in older people, unemployment problems tend to be a consequence of their age. The older employees grow, the more they are faced with the possibility of being unemployed.

In as much as some policies, such as retirement age, affect older employees, the many members of younger generations seeking employment are hindered by employment policies that do not address employment networks and minimum wages imposed on youths in the labor force. Additionally, older work applicants face age discrimination in labor markets while looking for employment. According to Axelrad et al. (2018), older workers looking for employment are treated differently compared to young workers looking for similar jobs. Statistics showed that older work applicants are more than 40% less likely to be recalled for job interviews than young job applicants. Study findings also showed that a significant number of workers in the age bracket of 45 or 50 and above who face job loss are more likely to secure jobs, regardless of how physically and intellectually fit they are. Axelrad et al. (2018) stated that an assessment was conducted in 34 Organization for Economic Cooperation and Development (OECD) countries to determine the effect of the business cycle on unemployment rates among the youths during the 2007-2009 economic crisis and 2009-2011 economic recovery and growth. Data used in the analysis indicated an increase in unemployment from 13.4% to 18.9% between 2007 and 2011 (Axelrad et al., 2018). On the other hand, the unemployment rate in adults over the same period was significantly low. Axelrad et al.'s findings showed that the unemployment rate among adults increased from 4% in 2007 to 5.8% in 2011. The

findings of this study confirm that most of the younger employees in the workforce are more affected by business cycles compared to their older counterparts. Luthi and Wolter (2020) assert that business cycles alleviate youth unemployment and that policymakers should be concerned with economic crises that worsen youth unemployment. Older employees are more likely to have more labor market experience than younger ones. During such economic business cycles, employers may be inclined to lay off younger employees, citing their limited experience at work.

As much as young workers have minimum employment experience, the number of young generational workers in the business and organizational workforce composition increases over time. Members of older generations retire as members of younger generations enter the labor market. Fry (2018) stated that many post-millennial generation members had reached working age by 2018. Compaired to the 56 million millennial aged between 21 and 36 and employed or looking for jobs, almost nine million members of this generation aged between 16 and 20 are either unemployed or looking for employment. Findings showed that the post millenal generation comprises 5% of the working force in the United States while the millennials comprise of 35% of the total work force (Fry, 2018). As the younger generation flood the labor market, the workforce composition of other generations reduces. Stirpe et al. argued that the labor force population is aging due to increased life expectancy and the reduction of birth rates. 75.3% of the workforce in the United Kingdom are between 50 years and the pension age bracket (Stirpe et al., 2018). These findings explain the influence of the aging workforce on the young generation regarding employment. Findings indicated that for lower aging

workforce, there is a significant relationship between high performance work systems and the retention rate and notable when combined with high value of flexible work programmes ($ß = 0.055$, $SE = 0.010$, $p = 0.000$) and lower ones ($ß = 0.019$, $SE = 0.006$, $p = 0.002$). While in some countries, the workforce population is mainly comprised of young workers, in other countries, such as the United Kingdom, the workforce mostly comprises aging employees (Stirpe et al., 2018). Young generations in employment are more innovative, enthusiastic, and possess new skills. Fry (2018) postulated that with an increase in the labor force provided by the millennial generation, a noticeable drop of 84% to 82% of the workforce by generation x is observed. Younger generations provide new skills to business organizations, and an increase in their workforce composition leads to decreased unemployment levels across the generation.

An employee's age potentially dictates the amount skills gained in an organization and the probability of being re-employed after experiencing unemployment. Young people are more enthusiastic and have more innovative ideas and therefore are more likely to be employed after unemployment. Axelrad et al. indicated that workers between the ages of 30-44 have a higher probability of securing a job compared to those aged 45 to 59 after being unemployed. Axelrad et al.'s findings further revealed that the rate at which older people 50 years and above are hired is lower than that of young workers aged between 25 to 49 years. This low rate may be attributed to the employer's reluctance to give the older working generation jobs. In a study involving older workers conducted in France, Charni (2019) found that over the years since the 1970s, the level of employment among working seniors above the age of 50 was low. Charni's findings also

revealed that 47.1% of individuals between the age of 55 and 64 were employed in 2014 whereas those employed in 2014 between the age of 60 and 64 was 23.3%. It is, therefore, evident that as individuals age, the rate of retainment in employment reduces. Young employees tend to bring more creative ideas and new skills that help build the business firm and hence have a longer period of retaining their employment. On the other hand, older workers approaching retirement may conceivably be seen by employers as having reduced potential and, thus, less productive. Older employees may not be considered for employment compared to young workers.

Unemployment rates are more pronounced among young people than older people due to their low productivity, which is attributed to their minimum job experience. Unemployment among young commences when they attain an eligible working age. Axelrad et al. (2018) argued that the unemployment rates between older people aged 45 years and above and youth aged 15-24 vary in many ways. Statistics from the Global labor office indicate that young people are increasingly experiencing difficulties securing their first job (Axelrad et al., 2018). According to Axelrad et al. (2018), the increase in unemployment among young people may be attributed to the persistent stumbling block they face in almost all economies, such as difficulties in accessing productive and meaningful jobs, which contribute to preventing their smooth transition from school to the job market.

Even after the transition from school to work, many young workers tend to secure only temporary working contracts, some of which short-term and therefore increasing the risks of unemployment after the termination of the contracts. Axelrad et al. (2018)

explained that the potential risk of unemployment amongst young people is higher than older people, and when they secure their first job, they are most likely to be unstable and not long-term. According to Hedvicakova (2018), a study conducted in the Czech Republic using data from the ministry of education, youth, and sports showed that the chances of an individual experiencing unemployment are 15%. Hedvicakova's findings showed that the likelihood of unemployment after 3-12 months of graduation is 30.8%. Thus, in such situations, the chances of young people securing jobs are low, and most young people who manage to secure jobs are most likely able to secure temporary and low-wage jobs. In many developing countries, some young people endure a short period of unemployment while others risk the probability of staying unemployed for a very long time (Axelrad et al., 2018). The period between subsequent employment terms among the various young workers varies. Axelrad et al. (2018) found that individuals who face longer periods of unemployment are more likely to face higher risks of social exclusion. This finding explains the persistence of unemployment terms for individuals with longer unemployment periods since they tend to face social inclusion.

Young people in the labor force are more likely to be unemployed due to pandemics or economic crises compared to older workers. Pandemics result in longer unemployment periods since it minimizes social interaction, thus reducing the chances of re-employment. During the COVID-19 pandemic situation, for example, the labor market state for young workers can be conceivably challenging. However, Pit et al. (2021) asserted that the COVID-19 pandemic directly affected the work and employment of older individuals, thus adding more to the aging problem. The research findings indicated

that across the countries affected by COVID-19, the pandemic had increased job inequalities among older employees (Pit et al., 2021). Tamesberger & Bacher (2020) postulated that amid the COVID-19 pandemic, most European countries would experience a rise of 26% in the rates of unemployment among the young generation. According to Tamesberger & Bacher (2020), in every 1% increase in unemployment among adults, a 1.7% increase in the unemployment rate among young people is attained. Young employees have limited experience at work, and employers are often inclined to lay off younger employees rather than older ones.

Compared to the older generation, the young generation has a potentially slow rate of changing jobs which may be attributed to the narrowness of their experience in different business and organizational labor markets. Tamesberger & Bacher (2020) assert that the main reason for the slow rate of resigning or finding alternative jobs among the young generation is the fewer qualifications they possess. Age can potentially influence the level of education and qualification attained; thus, young people are less likely to be unemployed due to age. Additionally, Patel et al. (2020) argued that young people are more vulnerable to unemployment than older individuals as a result of the rapid increase in their population size, inadequate job qualification, and skill and the possession of lower education levels. With low education qualifications and inadequate work experience, young people face barriers to securing jobs, thus limiting their employability. According to Figueiredo and Paiva (2019), age plays a significant role in determining an individual's employability. Age influences the employability relationship between job insecurity and employee satisfaction (Figueiredo & Paiva, 2019). Young workers are

more likely to experience lower employability than older workers. This could cause young employees to remain in an unhealthy working environment rather than resign and be unemployed. Similarly, their lower labor market skills and qualifications limit their chances of seeking other job alternatives (Tamesberger & Bacher, 2020). As such, in the case of layoffs, most young workers have a hard time finding new employment.

Higher levels qualification increase the chances of securing new employment and facilitates the reduction in unemployment levels across different generational groups. According to Axelrad et al. (2018), higher qualifications and level of education attained increase the chance of being employed. Older people 55 years and above have a reduced effect of age on the probability of being employed if they have higher academic qualifications (Axelrad et al., 2018). Employees approaching retirement have higher chances of remaining in the workforce if they have higher job qualifications. Higher education levels and qualifications among older employees mean the employees offer continued productivity for the business organization and therefore equates to a longer working period. Axelrad et al. further explain that adults aged 30-34 have a higher chance of getting a job if they have experience in vocational education training. Education level plays a crucial part in the employment process across the working generation and influences the employment rate across the different generational groups.

The level of qualification across all labor forces potentially increases with the period spent in the workforce. Young employees have limited time in the labor market and are thus likely to have limited qualifications and experience. Therefore, unemployment among youth may be higher, and they are likely to have lower job

qualifications. According to Yeves et al. (2019), higher qualifications increase the employability of individuals, and thus older workers have the advantage of holding senior jobs. Findings indicated that the combination of age and perceived employability positively influences the correlation between job insecurity and intrinsic (perceived employability: $\beta = 0.15$; $p < 0.001$; age: $\beta = 0.06$; $p < 0.05$) and extrinsic job satisfaction (perceived employability: $\beta = 0.17$; $p < 0.001$; age: $\beta = 0.08$; $p < 0.05$). Axelrad et al. (2018) stated that the employment rate in Israel increases with age. The rate of employment from the eligible age of 35 years is less than 25%, while that of workers between the ages of 50 to 64 years is almost 50% (Axelrad et al., 2018). Axelrad et al.'s findings also showed that the number of employees in each generational age group between 25 and 60 years is about 100 000 secured. The lower employment rate among the younger generation of workers may likely be due to the natural advancement of the young workers. According to Mpendulo et al. (2018), youth unemployment rates are influenced by the slow job growth in work areas that require adequate levels of skills and experience. The slow job growth reduces the likelihood of young people with minimum skill levels entering the job market. Mpendulo et al. (2018) argued that high unemployment levels due to low skill levels among youth result from low education qualifications. Yeves et al. (2019) argue that older employees may spend more time unemployed due to their high qualifications and employability since some take their time to select and analyze jobs, looking out for benefits and wages that meet their standards. Due to the selectiveness of older and qualified employees, employers are likely to be reluctant to hire them and therefore are more likely to experience higher unemployment

rates. Despite adequate education qualifications from higher learning institutions, young people still need help securing employment. According to Hossain et al. (2018), in a study conducted in Malaysia, findings indicated that a significant number of employers have negative views on the employability of young graduates, arguing that graduates lack the adequate experience and qualifications required by the organizations. Additionally, employers suggest that young graduates fail to show necessary job performance and exhibit poor employability skills (Hossain et al., 2018). Due to the negative employer views, young workers face poor job security and thus lack the protection from employment termination.

The young generation of workers potentially lacks the policies and programs that shield them from contract termination or dismissal. Relatively fewer young employees enter into contract agreements with their employers compared to older working generations (Axelrad et al.,2018). According to Axelrad et al. (2018), the number of employees under the collective agreement grows with age. The older working generation, therefore, tends to have greater protection from dismissal by the collective agreement. In contrast, the younger working generation is likely to be easily dismissed because they enter into personal contracts and which is not liable to protection by the collective agreement (Axelrad et al., 2018). Due to this lack of protection, more young employees than older employees face a higher risk of dismissal or contract termination by their employers and, therefore, higher job insecurity risk and unemployment rates among the young working generation.

Similar to the unemployment rate between young and older working generations, the unemployment level among teenagers can probably be higher compared to that of young adults due to poor job security. In a study conducted in Malaysia, findings show that in 2018 the youth unemployment rate was 10.9% (Cheng & Mohamad, 2020). Unemployment levels among these young people mostly leaned toward teenagers. Cheng and Mohamad (2020) found out that young people aged between 15 and 19 years have higher unemployment rates than those aged between 20 and 24 years. Teenage workers in Malaysia are 1.7 times more likely to be unemployed than young adults and five times more likely to be unemployed than the overall population (Cheng &Mohamad, 2020). These findings help acknowledge the significance and influence of age on unemployment levels among members of young generations. The high rates of unemployment may be due to low job and education qualification since most teenagers have inadequate education and training.

The level of education attained by different age groups in the workforce influences the generation's age difference in unemployment rates. Cheng & Mohamad (2020) postulated that the graduate unemployment rates are less than teenage because young adults have tertiary education while teenagers have secondary education. The level of education attained dictates the job types that the person secures. According to Cheng and Mohamad, tertiary education holders are more likely to secure a permanent job, while teenagers with secondary education often get employed in temporary jobs and therefore face a higher risk of unemployment. Some of the highly educated youth may sometimes face long periods of unemployment. According to Demissie et al. (2021), the

high unemployment rate among young graduates is due to waiting for a long to be accepted into formal jobs. Demissie et al. (2021) found that there is a significant relationship between unemployment and graduate analytical characteristics ($\beta = -0.404$; $p = 0.014$). The findings also indicated that older graduates exhibit lower rates of unemployment, while fresh graduates take more time to be accepted for a job ($\beta = -0.922$; $p < 0.001$). The formal employment sector needs to expand for these unemployment rates to reduce. Demissie et al. argued that in developing countries such as Ethiopia, graduates stay unemployed for a long period despite investing a lot of time and finances in pursuing their educational goals. Although higher educational levels increase the chances of employment, long periods of waiting for employment potentially demoralize individuals who want to attain their set entrepreneurial and career goals.

The potential to venture into business varies across generational ages. The probability of individuals venturing into business may be dependent on their age. In a study carried out to examine the relationship between age and entrepreneurship in the United States, a multidimensional blended logistic regression model was used to investigate the impact of the age concept on predisposition to entrepreneurship (Zhang & Acs, 2018). Zhang and Acs's findings show that tendency to venture into entrepreneurship increases with age until almost 80 years. The predisposition of inexperienced and informal businesspeople has a U-shaped age pattern, culminating around the age of 60, whereas the predisposition of full-time workers drops from the 30s (Zhang & Acs, 2018). Apart from age, the tendency to venture into business depends on occupational choice. Young full-time workers have a lower tendency to venture into

business, while younger part-time workers are highly likely to do so (Zhang & Acs, 2018). Zhang and Acs (2018) argued that between ages 44 to 51, the predisposition for established entrepreneurs diminishes for generation X but not for millennials; this inclination also falls quicker for the Boomer generation than for Traditionalists aged between 63 and 70 years. Self-employment through entrepreneurship is more pronounced among middle-aged individuals than when compared to older and young people across different generations (Zhang & Acs, 2018). Amongst these generational groups, as depicted by the above findings, millennials and Boomers have a higher potential for entrepreneurship than other generations. Unemployment is therefore much higher among the older generations and younger generational groups as compared to middle-aged generations.

Ten out of the twelve studies reviewed in this section were quantitative studies (Axelrad et al., 2018; Charni, 2019; Cheng & Mohamad, 2020; Demissie et al., 2021; Fry, 2018; Hedvicakova, 2018; Luthi & Wolter, 2020; Stirpe et al., 2018; Tamesberger & Bacher, 2020; Yeves et al., 2019). Generational age difference, one of the independent variables in my study was explored in eleven out of reviewed studies. Gender, another independent variable in my study was discussed in three of the reviewed studies. Unemployment rate, the dependent variable in my study, was examined in seven out of the twelve studies.

The findings from the reviewed studies established significant relationships between age differences and unemployment rates (Hedvicakova, 2018; Luthi and Wolter, 2020; Charni, 2019; Tamesberger & Bacher, 2020). Most of the studies showed

consistent findings that young people are highly affected by unemployment compared to adults. However, some of the studies (Charni, 2019; Axelrad et al., 2018) provided contrasting findings that the level of employment among older citizens of 50 years and above was lower. According to Charni (2019), the chances of finding employment decrease with an increase in age. For men, the chances of securing a job are 36% for those aged 30 to 44, 29% for the aged 45 to 54, and 17% for those age 55 to 59. For women, the chances of employment are 31% for the age of 30 to 44, 20% for the age of 45 to 54, and 9% for the age of 55 to 59.

The Theory of Frictional Unemployment Applied to Generational Age Difference and Unemployment

Individuals of different generational age groups experience varying unemployment rates due to the difference in time spent searching for and securing jobs. Reder (1969) argued that unemployment is a natural component of the labour market and is associated with the time taken for workers to secure jobs and for employers to find suitable employees. Young generational workers have higher levels of frictional unemployment since they spend more time searching for and securing employment than older-generation workers due to their minimum experience and skills (Tamesberger & Bacher, 2020). On the other hand, older generation workers may spend less time searching for and securing employment due to the marketable skills and experience they already possess. Additionally, depending on the employer's job description and wage standards, older employees with high job qualifications may spend more time unemployed, looking for jobs with benefits and those that meet their wage standards

(Yeves et al., 2019). On the other hand, young employees are enthusiastic and ready to accept any job in search of skills and experience, thus spending less time securing employment. The theory of frictional unemployment applies to generational age difference and unemployment in the sense that differences in generational age in the labour market can impact the levels of frictional unemployment.

Employment Levels Across Generation Z, Millennials, and Generation X

Generation X, Millennials, and generation Z are primarily active in the workplace. Members of these generations were born and brought up in different circumstances and timeline hence they exhibit different workplace and social characteristics. According to Jung and Yoon (2021), different employment characteristics are depicted across the three generations. Jung and Yoon (2021) explain that generation X highly regards career goal achievement and progress in professional opportunities. In contrast, millennials, also known as generation Y, seek independence and freedom in employment places and stress transparency at work. On the other hand, generation Z values personal welfare and work flexibility (Jung & Yoon, 2021). Findings indicated that although there was no meaningful difference in generation work flexibility, generation Z portrayed the largest improvement in work engagement as a result of work flexibility. Additionally, the research findings indicated that generation Z workers preferred an active and strategic workplace environment. Jung & Yoon (2021) indicated that as the number of generation Z employees is progressively increasing, notable implications are experienced. Scholz and Grotefend (2019) argue that generation Z is generally less committed to careers, less focused on financial gains, and more willing to search for meaningful and exhilarating

work and a valuable and exciting private life. According to Mahmoud et al. (2021), both generations Y and Z pursue realization and meaningfulness altogether by absolutely blending work and social life. Moreover, contrary to the earlier generations, both generations Y and Z are perceived to exhibit higher ethnical diversity. Generation X was the main generation in the workforce in the former era; millennials are in the current employment market from the entry stage, whereas generation Z is currently being infiltrated into the diminishing workforce.

As the older generations, members of generation X and millennials combined comprise of the largest part of the employed population. Out of all generational workforce compositions, generation Z conceivably holds the smallest portion of the labor force population, given that they are the youngest generation eligible to work. Jung and Yoon (2021) conducted a quantitative study conducted in South Korea and out of the 277 employees who participated in the study, generation X and millennials comprised 29.6% and 47.7% of the participants, respectively. Jung and Yoon's findings revealed that generation Z comprised only 22.7% of the participants. Generation Z is the newest generation to enter the labor market; they hold significantly higher levels of unemployment compared to the generation that entered the labor market earlier than them (Jung & Yoon, 2021). Generation X was born between the years 1960 to 1980, whereas millennials were born between the years 1980 to 1990 (Glazer et al., 2019). Generation X and millennials together constitute the majority of the workforce since they have more years of being eligible for employment than generation Z. The age differences between these generational groups influence their workforce composition, views, and norms at

work. Generation Z cohorts, born in technological error, are likely to be more oriented to digital life than the previous generations (Glazer et al., 2019). Glazer et al. (2019) argue that people born around a certain period share similar social and historic experiences. According to Mahmoud et al. (2021), generational cohorts are members that share characteristic historical life occurrences during their childhood development stages. Such historic events include technological advancements and economic and political events that occur during their early ages and shape their views, identities, behaviors, and beliefs (Mahmoud et al., 2021). These distinctive norms, views, and beliefs between the generational groups can bring workplace differences. Nonetheless, Mahmoud et al. (2021) argues that that distinct generational differences could merely influence workplace practice and outcomes. Individual generational age characteristics such as adaptability thus significantly influence the organization's performance.

Young employees who exhibit flexibility and adaptability contribute to higher business success. Employee flexibility at work influences productivity and, consequently, the employer's tendency to retain them. Jung and Yoon (2021) conducted a study investigating the impact of employment flexibility on the involvement, fulfillment, and dedication to work at deluxe hotels in South Korea. From the study, Jung and Yoon's findings indicated that generation Z improved employee participation due to work flexibility. The study's authors found out that in comparison to other generations, generation Z has higher regard for employment flexibility. The findings showed that due to the high regard for workplace flexibility, generation Z portrayed an increased engagement ($\beta = 0.545$; $t = 9.871$; $p < 0.001$) and satisfaction ($\beta = 0.326$; $t = 5.159$; $p <$

0.001) in their workplace and employment, which consequently contributed to enhanced workplace performance. According to Mahmoud et al. (2021), the younger generation demonstrates flexibility and readiness to engage with changing employment to aim for a reliable and secure job. The extent of job insecurity is attributed to unfavorable changes in staffing and layoffs. The findings show that unemployment levels in Egypt increased from 7.5% to 9.6%. Thus, generation Z adopts flexibility and willingness to participate in uncertain job conditions while focusing on acquiring more stable jobs. They exhibit the ease of fitting work into their lives, such as having flexible work hours or doing work remotely. As such, generation Z cohorts get a better social life less interrupted by work and slightly lower job insecurity due to social distractions.

The generational differences due to social conflict, varying beliefs, values, and norms between the generational groups have the potential to influence the way the employees and employers carry themselves. (Glazer et al., 2019) Argued that different generational age groups have significantly different expectations of how much the employer has to provide, how employees must act, how they are being organized, and how they ought to oversee everyone else. Glazer et al. assert that managerial and executive positions are mostly held by members of generation X, while a majority of subordinates is comprised of generation Z members and Millennials. Mahmoud et al. (2020) stated that generation X members, who are the parent generation of members of generation Z constitute the senior members of the workforce. Generation X members therefore tend to have lower job insecurity risks compared to Millennials and generation members.

While generation X, Millennials, and generation Z hold varying norms and perceptions, such vastly differing perceptions could foster apparent intergenerational workplace disputes. Such workplace conflicts, however, may not be new to employers and employees. Glazer et al. (2019) found that traditionalists born before 1945 recount Baby Boomers born from 1945 to 1965 and difficult to engage when they initially get into the workforce. Like traditionalists, generation X view millennials members as people exhibiting related concerns (Glazer et al., (2019). Jung & Yoon (2021) argued that intergenerational workplace disparities contribute to numerous intergenerational conflicts, which compromise business performance. Appelbaum et al. (2022) argued that conflict due to intergenerational disparities could lead to reduced employee interaction and communication. This lack of communication contributes to poor teamwork due to a lack of collaboration, and as such, the organizational goals and performance are compromised. Other than undermining workplace performance and productivity, such conflicts affect the workplace environment and the maintenance and retention of employees. Businesses with poor workplace environment and low employee maintenance foster an increase in unemployment and a reduction in business performance and productivity.

Like other generations influenced by the environment born in, generation Z may be considered more tech-savvy since they were born in modern society. As such, generation Z are likely to exhibit distinct views of how they perceive the world. According to Benitez-Marquez et al. (2022), generation Z is the newest generation, born between the 1990s to the early 2010s. Concurrently, according to Appelbaum et al.

(2022), generation Z individuals were born between 1995 and 2012. Generation Z is considered the most racially neutral generation, where approximately 49% of the generation Z population are non-whites. This generation arose and developed in a digital and advanced technological surrounding (Benitez-Marquez et al., 2022). Due to their conventional norms and being used to technology, the workplace environment and employment of generation Z are influenced. Generation Z members might only exhibit confidence working in a technological workspace. Mahmoud et al. (2020) argued that generation Z are digital natives who are used to technology and consider it an essential aspect of their daily lives. Generation Z's entry into the labor market brings a lot of cultural and environmental changes to the organization. Jung & Yoon (2021) postulated that generation Z will constitute 20% of the labor force in the next five years, representing a significant part of the labor force. To reduce unemployment rates by attracting this generation's members, business managers should improve their organization's technology. However, Benitez-Marquez et al. (2022) indicated that since generation Z interacted with technology and many social networks early, they are considered addicted to technology. Excessive reliance on technology may result in reduced individual productivity, business productivity, and consequently reduced employee retention. Additionally, this generation is most ambitious and filled with confidence. They are also realistic and sensible (Benitez-Marquez et al., 2022). Mahmoud et al. (2021) further argued that generation Z is prone to changing their employment more often than the previous generations due to their desire to seek employment satisfaction and expand their skills. The desire to change occupation or

employment may be due to the need to expand the knowledge and skill base, thus providing an opportunity to earn higher pay.

Change in career or occupation facilitates employee satisfaction and provides an opportunity to learn more and increase job experience, thus resulting in more income earned. Additionally, career change increases the chances of promotion due to skills obtained. Generation Z's members' ambitions of landing promotions will mean a reduced risk of job loss and a reduced unemployment rate. Benitez-Marquez et al. (2022) argued that generation Z is more into entrepreneurship than the millennials and is driven to get their preferred employment and seek more opportunities to improve their skills. Given their sensibility and confidence, the propensity for generation Z to venture into business is more pronounced (Benitez-Marquez et al., 2022). Self-employment among these generation members facilitates income generation and reduces unemployment risk due to dependence on others for employment.

Generation X shares different workplace beliefs with generation Z members due to the different circumstances they were born in. According to Glazer et al. (2019), generation X members got into employment in the 1990s to 2000s. They were the first generation to be born and grow up under circumstances of divorce and mothers in employment (Glazer et al., 2019). As a result, generation X members are more responsible and value challenges. Mahmoud et al. (2020) explained that generation X was born during a period that experienced rapid changes and is focused on balancing work and private life. They are less impressed by authority and micromanagement, therefore, are perceived to be self-directed. Concurrently, Glazer et al. (2019) found that this

generation was highly influenced by the emergence and extensive use of computers and the restructuring of corporate America. As such, this generation displayed little regard for position or rank and was described to be disloyal to their employers. However, they had great value for personal contributions, achievements, and also regard for a balanced work and social life (Glazer et al., 2019). These views affect their perceived expectation of the younger generations, and the majority of current employers are more likely to attract and retain less ambitious employees than ambitious ones who are more likely to change jobs. According to Benitez-Marquez et al. (2022), generation X respond by increasing their organizational commitment when they perceive career advancement fulfillment. Employees with a high desire to improve their expertise are more inclined to take the necessary actions to guarantee that their requirements are fulfilled (Benitez-Marquez et al., 2022). This desire to satisfy an employment position helps guarantee job security in a business organization and thus reduces the risk of unemployment. Generation X members are more committed to their job and thus have a lesser risk of unemployment.

Generation X members are viewed as individuals who value gratitude and appreciation at their workplaces, especially from their employers. According to Benson et al. (2018), generation X members have less patience, are less inclined to wait for recognition, are more prone to dissatisfaction with their job advancement, and want instant appreciation and advancement. Benson et al.'s findings also indicated that generation X is accustomed to quick satisfaction and is more prone to react whenever their demands are not fulfilled. Since they value attention to satisfy their needs, they hold secure and comfortable employment (Benson et al., 2018). This high regard for

satisfaction is a result of their flexibility and amenability to change, and as a result, makes them important employees. According to Mahmoud et al. (2021), for generation X employees to have assured job security and satisfaction, organizations are required to acknowledge their importance and contributions to the organizations. By doing this, organizations maintain workplace balance between the knowledgeable generation X employees and the young Millennial and generation Z employees. According to Mahmoud et al. (2021), organizational outcomes of increased job insecurity is a observed to be a small concern for generation X members. Mahmoud et al. (2021) asserted that generation X cohorts ($\beta_x = -0.066$; $p = .638$) have higher job satisfaction and are less vulnerable compared to the younger generations, generation Z ($\beta_z = -0.638$; $p < .01$) and generation Y ($\beta_y = -0.374$; $p < .01$) which exhibit high work stressors and are more likely to disengage. Additionally, Benson et al. (2018) stated that generation X is always ready to take advantage of other employment alternatives whenever they do not get their wish. With a vast number of employment options, compared to other generations, generation X exhibit higher job satisfaction and, therefore, less job insecurity.

Generation X members tend to be more self-sufficient and hardworking and therefore tend to have higher employability and retention than other generations. Glazer et al. (2019) explained that this generation was focused on their careers and employment life due to the huge layoff and unemployment of their Baby Boomer parents. Further, Benson et al. (2018) illustrated that at the time generation X got into employment, there were many economic declines, resulting in a crumble in well-paying manufacturing employers and an increase in low-paying jobs. Due to these occurrences, generation X

became aware that there was no more room for loyalty and that a single employer was unreliable for long-term employment (Benson et al., 2018). These perceptions made generation X members more self-reliant and adaptable to change. Contrary to their parent generation, they hold fewer unemployment risks. Mahmoud et al. (2021) explained that generation X employees are well satisfied with their employment and thus have fewer risks of job termination. The findings showed that while looking for work satisfaction, generation X members are not influenced by authority. From the study, 61 to 77% of generation Y and Z members would undertake more vigorous and aggressive ways to achieve satisfaction in regards to their management aspirations. On the other hand, 57% of generation X would engage in aggressive approaches to achieve satisfaction, thus significantly minimizing the risks. In contrast, younger generations are more vulnerable to job dissatisfaction and therefore have a higher risk of unemployment.

Millennials, also known as generation Y, constitute the future workforce population. With time, the millennial workforce composition gradually increases. Glazer et al. (2019) indicate that Millennials are expected to comprise 75% of the total employment workforce globally in the coming ten years. Concurently, Omilion-Hodges & Sugg (2018) argued that by 2025, generation Y members will comprise 75% of the total labor force population in the whole world. Naim and Lenka (2018) assert that during the past few years, there had been a notable change in the workforce composition due to the continued influx of millennial employees. Millennials are workforce members predicted to rise to the top of the organizational ladder smoothly. In the United States, millennials were born in an era where they observed some foreign terrorist activities on

their home soil (Glazer et al., 2019). Additionally, Naim and Lenka (2018) hold that that Millennials had experienced occurrences such as the popularity of social media, increased environmental awareness, and increased terror activities. As a result, millennials are oriented as the agents of reform in a well-articulated environment.

Millennials search for important jobs that fortify independence and freedom and are inclined to depart from employers who are used to traditional management techniques. According to Mahmoud et al. (2021), organizational outcomes of increased job insecurity is a observed to be a small concern for generation X members. Mahmoud et al. (2021) asserted that generation X cohorts have higher job satisfaction and are less vulnerable compared to the younger generations, which exhibit high work stressors and are more likely to disengage. According to Omilion-Hodges & Sugg (2018), the generation Y cohorts tend to be self-centered, pay more attention to individual performance and achievement, and have high regard for promotions. Moreover, generation Y cohorts tend to be flexible and are more likely to look for ideal employment and increased wages while at the same time demanding rapid promotions (Anugrah Putri et al., 2020). Additionally, Anugrah Putri et al. (2020) argued that generation Y is more likely to be committed to single employment, which thus influences their employability and retention. Most employers are from the older generations, who hold different beliefs, and are accustomed to the traditional system (Glazer et al., 2019). Glazer et al. stated that although the inclination to leave non-righteous and bureaucratic employers is a stepping stone to reform for millennials, it also exposes them to a high risk of job insecurity and unemployment. Glazer et al. (2019) explained that millennials seek transparency. Thus,

for employers to retain millennial employees, they ought to provide feedback, direct performance prospects, and benefits for quality performance. Naim and Lenka (2018) argued that millennials crave an immediate response about their employee performance and are also inclined to require timely acknowledgment of their work. Additionally, contrary to other generations, Millennials focus on pursuing autonomy at work and insist on transparency in communication (Jung & Yoon, 2021). Since they put more value on transparency and accountability, business and organizational responsibilities must always satisfy millennials' requirements. Millennials are more inclined to have a fortified relationship with their employers due to the transparency between them and hence are more likely to work in a healthy environment.

Four out of the seven studies reviewed in this section were quantitative research studies (Benson et al., 2018; Glazer et al., 2019; Jung & Yoon, 2021; Naim & Lenka, 2018). Authors of four of the seven studies discussed generational age differences, one of the independent variables in my study and two explored on gender, another independent variable. The dependent variable in my study (unemployment rates) was examined in three of the reviewed studies.

The relationship between the different generations, generation X, generation Y and generation Z and employment levels as well as unemployment rates was found to be significant (Jung & Yoon, 2021; Glazer et al., 2019). The consistent findings across the studies establish that generation Z hold the highest unemployment rate compared to the generations before them (Mahmoud et al., 2021; Benson et al., 2018). This has been attributed to the fact that they are the newest to enter the labor market.

The Generational Theory Applied to Employment Levels Across Generation Z, Millennials, and Generation X

Strauss and Howe (1991) suggested that each generation exhibits a distinct set of characteristics and behaviours that can influence the unemployment frequency in that particular generational group. Generation X, Millenials and Generation Z are generations born and brought up in different circumstances and timelines; hence, they portray varying employment and social characteristics (Jung & Yoon, 2021). Since they were born in different timelines, these generations are a consequence of different histories hence a relationship between history and generations. According to Strauss and Howe (1991), generations appear in succession, and each generation possesses distinct characteristics. This variation in generations can lead to differences in attitudes, motivations, and behaviours which influences the levels of unemployment among the different generations. Generation X puts high regard on career goal achievements; Millenials do not put much consideration on career goals but seek independence and freedom at work. On the other hand, Generation Z highly regards values of personal well-being and employment flexibility (Jung & Yoon, 2021). Young generations may be open to occupational change, while older employees are risk-averse and are likely to stay with a stable job (Benitez-Marquez et al., 2022). The generational theory applies to the employment levels across generation X, Millenials and generation Z in that it helps explain why different generation groups experience different levels of unemployment.

Unemployment Among Different Gender Types

Previously conventional norms regarding gender identity have changed over time. In the modern world, many individuals do not conform to society's assumption of gender in a binary framework of male and female genders. Feldman et al. (2021) explain that these individuals establish their gender identity beyond the conventional binary construct and define their identities as transgender or gender diverse. According to Shannon (2022), in the United States, trans and gender-diverse individuals represent a small portion of the adult population, representing 1.4 million, which is 0.6% of the overall population. Wagner et al. (2019) indicated an increase of 0.7% in the prevalence of young people between 13 and 17 identifying as trans and gender diverse. In a quantitative study conducted in Brazil, the findings showed that out of the overall population, 2% of the individuals represented a gender-diverse adult population which is almost 3 million individuals (Spizzirri et al., 2021). Even with the small number of transgender people, the population of these individuals is of significant importance. According to Davis & Yeung (2022), individuals who identify as transgender experience rough employment outcomes due to the inadequacy of workplace equity. The lack of equity in labor markets is a result of inadequate trans-inclusive non-discrimination measures and policies that help protect transgender employees. Additionally, the research findings proposed that improving transgender equity in the labor market through education and awareness can help develop positive employment outcomes for transgender individuals or significantly minimize challenging workplace outcomes (Davis & Yeung, 2022). Shannon (2022) report that increased awareness of transgender societies has been experienced in recent years.

Through such awareness, policies and laws are made to protect these people from discrimination and risks of violence. According to Shannon (2022), the United States supreme court came up with policies and laws to control discrimination by employers. With such measures, gender-diverse individuals are helped to reduce unemployment rates and improve their income earnings.

Due to gender-associated body qualities, gender-diverse people exhibit poor employment and income levels as a result of discrimination. In Brazil, 85% of gender-diverse men and 50% of gender-diverse women revealed experiences of discrimination due to their gender identities (Spizzirri et al., 2021). Such discriminations are significant contributors to unemployment among trans and gender-diverse individuals (Spizzirri et al., 2021). Concurrent discrimination patterns shown in a study conducted in Germany revealed that 43% of transgender individuals reported having faced discrimination at work (Spizzirri et al., 2021). Such discrimination at work resulted from the prejudice toward transgender society. According to Shannon (2022), 31% of the US thinks that it is immoral to identify contrary to the gender assigned during birth. Such views negatively affect the workplace environment and employability of trans and gender-diverse individuals. In a research study to evaluate the correlation between sexual orientation declaration and perceived workplace discrimination, Fric (2019) indicated that transgender individuals choose not to disclose their sexual orientation in unfriendly working environments. Additionally, increased discrimination among transgender individuals correlates with increased concealment and less likelihood of disclosing discrimination experiences (Fric, 2019). Due to the increased discriminatory incidents

and fear of reporting them, the morale of transgender employees is affected, leading to problems such as absenteeism, which significantly contributes to unemployment. According to Van de Cauter et al. (2021), for many transgender workers, absenteeism was a major factor used by employers in deciding whether to discharge an employee. The issues that mostly promoted absenteeism were often psychological and often resulted from the nature and status of their gender promote discharge and also unemployment (Van de Cauter et al., 2021). The mental and social well-being of transgender workers can only thrive in the presence of culture and a gender-diverse workplace.

Even though the population of trans and gender-diverse people is small, in gender-diverse workplaces, transgender and gender-diverse people exhibit low workforce population compared to the general work population. A quantitative survey conducted in the US indicated higher unemployment rates among the transgender population compared to the entire US population. The findings indicated that the average unemployment rate of the US population is 5.3%, whereas the unemployment rate among the transgender population was significantly higher at 16% (Shannon, 2022). The employment environment for trans and gender-diverse individuals is affected by the high rates of discrimination at work. Granberg et al. (2020) argued that transgender individuals face increased discrimination levels. In a survey conducted in the United States, 50% of a sample of 6,436 transgender male and female employees reported having faced intimidation and harassment. Additionally, 44% of the respondents argued that to have experienced employment discrimination due to their identity (Granberg et al., 2020). The findings indicated that transgender applicants with minimum or medium levels of

experience faced little or no significant discrimination χ^2 (1) =2.45, N = 713, p = 0.118, and χ^2 (1) = 2.54, N = 756, p = 0.11. However, transgender individuals with more experience faced significant discrimination, χ^2 (1) = 4.75, N = 755, p = 0.029. These facts, therefore, show the harsh reality that trans and gender-diverse people face. Such discrimination contributes to high unemployment rates among gender-diverse individuals and adversely impacts their well-being.

Trans and gender-diverse individuals are more highly affected by pandemics such as COVID-19 than the general population as a result of isolation and discrimination, thus making it hard for them to secure re-employment. Smout et al. (2022) reported that 40% of transgender and sexual minority individuals (r = 0.947, p < 0.001) in the United States work in low-income industries such as restaurants and bars. As a result of the COVID-19 pandemic, the majority of trans and gender-diverse populations face unemployment. With the long prevalence of the COVID-19 pandemic, many small establishments, such as restaurants, faced temporary or permanent closure. (Smout et al., 2022) Indicate that most transgender individuals who worked at these venues experienced significant income reduction and unemployment.According to Smout et al. (2022), for individuals who reported negative change in employment, 34.3% were highly likely to report change in housing compaired to those who did not report a negative change (χ^2 (1) = 7.45, N = 342, p < .01). Zwickl et al. (2021) reported that the unemployment rate of transgender individuals in a quantitative study in Australia was 22.4%, thrice the normal rate. The high unemployment rates were due to job losses and restrictions imposed to curb the spread of the COVID virus (Zwickl et al., 2021). Coupled with fear and isolation from

society, especially where there is a lack of acceptance, transgender workers face difficulty in looking for a job. As a result, the chances of getting reemployed remain low, thus fostering their unemployment rates.

Many countries in today's era promote the acceptance of trans and gender-diverse individuals and recognize them by law. As a result, the subjection to the risk of violence and discrimination is minimized. Van de Cauter et al. (2021) argued that by recognizing then by law, the acknowledgment of transgender individuals now varies from country to country, and thus different work compositions and unemployment rates of transgender individuals in different countries. Quantitative findings in a study conducted in various European countries, including Belgium, Denmark, Germany, Italy, France, Netherlands, and Sweden, show disparities in unemployment rates among transgender populations compared to cisgender populations.

The variation in unemployment rates in the European countries under study could be a result of the changing work environment and culture, the sociopolitical perspective, and the progressive diversification of management. The findings showed that the turnover of transgender employees in Belgium and those in other countries were more in line with the overall population. The turnover of transgender employees accounted for 20% of the overall employee population, while the lower countries accounted for a 17% turnover of transgender employees for the general population. Van de Cauter et al. (2021) indicted a lower proportion of transgender people in workplaces compared to the overall population composition at work. It was further shown that depending on the country studied, the employment levels of trans and gender-diverse individuals ranged between 42% and

75%, and their unemployment rates ranged between 9% and 21% (Van de Cauter et al., 2021). Socioeconomic disadvantage, the huge burden of health conditions, and inefficient transgender care experienced by trans and gender diverse people contribute to their high unemployment rates compared to the cisgender population. In Australia, the unemployment rates of transgender people are 21.3%, while the general population's unemployment rate is 6% (Cheung et al., 2018). Even with significant levels of education ($\chi 2$ (1) = 27.57, $p < 0.001$), transgender individuals experience low-income levels and employment rates. The low-income levels and high unemployment rates are due to some influential factors. Such factors include conflicting gender references or names, mental health states, insecurity, the uncertainty of disclosure, and discrimination from colleagues and employers.

In this section seven out of the eight reviewed studies were quantitative studies (Cheung et al., 2018; Shannon, 2022; Smout et al., 2022; Spizzirri et al., 2021; Wagner et al., 2019; Van de Cauter et al., 2021; Zwickl et al., 2021). Gender was discussed In all the reviewed studies in this section, generational age differences were discussed in three of the studies, and unemployment rates in the labor force were explored in four of the reviewed studies in this section.

The research studies showed significant associations between trans and gender diversity and unemployment rates in the labor force (Feldman et al., 2021; Cheung et al., 2018; Van de Cauter et al., 2021). The research established consistent findings that transgender individuals experience high rates of unemployment compared to the general population (Zwickl et al., 2021; Smout et al., 2022; Shannon, 2022). Additionally,

quantitative findings across the studies show that transgender and gender diverse individuals experience low-income levels compared to the cisgender population in the workforce (Cheung et al., 2018).

The Theory of Frictional Unemployment Applied to Unemployment Among Different Gender Types

Different gender types face varying rates of unemployment. Reder (1969) postulated that unemployment is inevitable in any economy due to the imbalance between the number of available jobs and the characteristics of the job seekers. Various factors, such as differences in educational or skill levels or geographical locations, may influence frictional unemployment among the different gender types. Gender-diverse and transgender individuals in the labour market are often affected by these factors, thus contributing to higher frictional unemployment among these groups of individuals. Granberg et al. (2020) argued that gender-diverse and transgender individuals face much discrimination and thus may have limited access to proper education and training opportunities that other job seekers have. Additionally, transgender and gender-diverse individuals may face higher frictional unemployment where job opportunities are available in workplaces or geographical areas that exhibit high discrimination and less acceptance for these groups of individuals (Van de Cauter et al., 2021). The theory of frictional unemployment provides a perspective lens of how transgender and gender-diverse individuals may have higher frictional unemployment due to discrimination and poor acceptance in job markets.

Summary

The reviewed studies have revealed a consistency of findings with most authors finding a relationship between gender and unemployment rates (Alfarran et al., 2018; Altweck et al., 2021; Carli, 2020; Reichelt et Al., 2020; Manzoni & Mooi-Reci, 2020; Lahtinen et al., 2020). There is also a consistency of findings that there is a relationship between unemployment rates and gender diversity (Spizzirri et al., 2021; Van de Cauter et al., 2021; Cheung et al., 2018). There was however a contrast in findings from the reviewed studies on the relationships between generational age differences and unemployment rates. Whereas a significant relationship was found in some studies (Axelrad et al., 2018; Hedvicakova, 2018; Luthi & Wolter, 2020; Charni, 2019; Tamesberger & Bacher, 2020), authors in other studies (Charni, 2019; Axelrad et al., 2018) found contradicting results.

Despite these findings, no studies have examined the relationship between generational differences, gender and unemployment rate in the United States. There is a gap in the literature in such that no studies have been done to examine the relationship between generational differences, gender and unemployment rate in the US. I intend to address this gap in my study.

Transition

In section 1, I illustrated the background of the problem, problem and purpose statements of the study, target audience, formulate research questions and hypothesis, provide theoretical framework, explained the significance of the study and provided a review of professional and academic literature. This study was grounded on two theories:

The Strauss-Howe generational theory (Strauss & Howe, 1991) and Reder (1969)'s theory of frictional unemployment. Secondary data for this study was derived from the BLS, a unit of the DOL of the United States (U.S.). The data was analyzed quantitatively and findings interpreted. My findings may contribute useful insights that help different organizations identify and cope with employment gender gaps and balance the workforce among the different generations.

I also conducted a literature review where I established a consistency of findings that researchers have shown a significant relationship between gender and unemployment rates and a significant relationship between unemployment rates and gender diversity. There was however a contrast in findings from the reviewed studies on the relationships between generational age differences and unemployment rates. Whereas a significant relationship was found in some studies, authors in other studies found contradicting results. Despite these findings, no studies have examined the relationship between generational differences, gender and unemployment rate in the United States. There is a gap in the literature in such that no studies have been done to examine the relationship between generational differences, gender and unemployment rate in the US. I intend to address this gap in my study.

In section 2, I discussed more about the research method and design of my study and in section 3 I conducted data analysis and report descriptive statistics, inferential statistics, conclusions and recommendations based on the findings.

Section 2: Project Design and Process

With workers from Generation Z, millennials, and Generation X entering the workforce and the narrowing of the gender gap in matters of unemployment, human resource managers need to understand the relationship between generational differences, gender and unemployment rates. In Section 2, I describe the purpose of the project, research method, and design. In my study, I examined the relationships between generational differences, gender, and unemployment rates. In this section, I also describe the methodology that was undertaken in the study. I discuss the rationale and use of the quantitative method for the study, variables and validity of the data set used, statistical tests conducted, and ethical principles. I conclude the section with a concise summary.

Method and Design

The Project Purpose

The purpose of this quantitative ex post facto research design study was to examine the relationship between gender, different generational ages, and unemployment rates. The study focused on Generation Z, millennials, and Generation X members. The independent variables were the different generation ages and gender, while the dependent variable was unemployment rates. The target population of this study were individuals aged 16 years and above in households in the United States. This study may help determine the relationship between gender, generation groups, and unemployment rates in the United States. The findings from this quantitative study may inform human resource managers in business organizations of the impact of gender employment gaps and the unbalanced generation age workforce within organizations. Business leaders

could use the findings to manage their workforce, ensuring a sustainable business that could contribute to the local community by offering local jobs and supporting community-sponsored activities.

Research Question and Hypotheses

Research Question

What is the relationship between gender, different generational ages, and unemployment rates in the United States?

Hypotheses

H_0: There is no statistically significant relationship between gender, different generational ages and unemployment rates in the United States.

H_1: There is a statistically significant relationship between gender, different generational ages and unemployment rates in the United States

Quantitative Ex Post Facto Research Design

To address the research questions in this quantitative ex post facto study, the specific research design was the ex post facto research design. This approach was appropriate because this study examined the relationship between gender, generational age differences, and unemployment rates based on data that already existed and as a researcher, I did not manipulate the data. The qualities of these groups of independent variables were already known and were be used to determine if there was a relationship with the dependent variable (unemployment rates).

Salkind (2010) defined an ex post facto study (also referred to as after-the-fact research) as a given research design whereby investigation begins after the fact has

occurred, with no interference by the researcher. Data on unemployment rates in the United States were extracted from a database maintained by the U.S. DOL, BLS. The quantitative analysis helped determine the relationship between gender, generational age differences, and unemployment in the United States of America. The advantages of quantitative research include being focused, systematic, rigorous, and controlled (Scalcău, 2021). On the other hand, the main disadvantage of quantitative research is that simplistic and reductionist with an inadequate exploratory capacity because of working with numbers and averages (Scalcău, 2021).

The data set that was used for this study is continuous secondary data from the U.S. BLS. The data were collected from the Current Population Survey (CPS) conducted in 2021. CPS is a household survey conducted by the Bureau of Census for the BLS on a monthly basis. Every person who is aged 16 years and above in the sample is classified as employed, unemployed, or not in the labor force. Thus, individuals aged 16 years and above in households in the United States form the population for my study. Both states and territories are included in the survey. Participants in the survey provided data on 13 factors including employment, unemployment, people in the labor force and people not in the labor force, earnings, and hours of work plus demographics. The G*Power software was used to do a priori power analysis to determine the minimum acceptable sample size for the study. The power analysis included statistical power (1 - ß = 0.95), 95% confidence interval ($\alpha = 0.025$), and large Cohen's f^2 effect size of 0.5. I chose a large effect size because according to Sullivan and Feinn (2012), using a large effect size

makes it possible to detect such an effect in relatively smaller sample size numbers. The minimum sample size returned following the power analysis was 119.

Variables that were used in the study included gender, generational age differences, and unemployment rates. Validity of the secondary data that were used has been evaluated by doing a comparison of the various attributes that were collected in the dataset and this study's variables. The study's dependent variable (unemployment rate) is reflected as unemployment rate in the data set, with numerical values. Gender, one of the study's independent variables, has been collected as 'Sex' in the data set, with Dummy variables for this—explain.n. Generational age differences, the other independent variable, has been collected as 'Age' in the data set, with six levels measured: 16-19 years, 20-24 years, 25-34 years, 45-54 years, and 55 and above years. I used these levels to group into the three main generations being investigated in the study: Generation X, millennials, and Generation Z. The comparison of the variables in the data set and those in this study show that the data set indeed measures what it is supposed to measure as far as the variables are concerned.

Multiple regression was conducted to analyze the data. The multiple regression test was conducted using version 28 of the Statistical Package for Social Sciences (SPSS) software. After converting the dataset into the SPSS format, the following steps were followed to conduct the multiple regression: Analyze>>Regression>>Linear>>(Move Unemployment rate to the dependent variable box)>>(Move Gender and Generational age differences to the independent variables box)>>Click on Statistics tab and select Model fit, Estimates, R_Squared Change and Descriptives) then click continue>>Click

on the Plots tab to and check Histogram to include the test for Heteroskedasticity. The independent variables in the model included gender and generational age differences, while the dependent variable was unemployment rates. Gender was measured on a nominal scale with two levels; male and female. Generational age differences were measured on an categorical scale with three levels: Generation X, millennials, and Generation Z. The dependent variable (unemployment rates) was measured on the ratio scale. The significance or lack thereof of the findings were interpreted using the p-value of the whole model and p-values for coefficients of the variables. A p-value less than 0.05 was interpreted to show presence of a significant relationship while a p-value greater than 0.05 was interpreted to show absence of a significant relationship.

The assumptions for multiple regression include normality, linearity, outliers, heteroskedasticity, and absence of multicollinearity. The assumption of normality requires the dependent variable to have an approximately normal distribution within the independent variables. Normality of the data was evaluated using a histogram. A symmetrically shaped histogram was interpreted to mean that the data are normally distributed, while a skewed histogram would have been interpreted to mean that the data were not normally distributed.

The assumption of multicollinearity requires that the independent variables in the model are not too highly correlated. This assumption was assessed using Variance Inflation Factor (VIF) values. VIF values of less than 5 were to be interpreted to mean the data has met the assumption, while VIF values of greater than 5 were to be interpreted to mean that the data had violated this assumption.

The assumption of heteroskedascity requires the variance of residuals in a regression analysis to be consistent across the predictor variables. This assumption was evaluated using a histograms of residuals that was generated during the regression. A symmetrically shaped histogram was interpreted to mean that the data met this assumption, while a skewed histogram was to be interpreted to mean that the data has violated the assumption.

Since the data did not have missing values, there was no need to clean missing data. Similarly, I did not discuss confidentiality and ethical protection of participants or use any specific sampling procedure because the data I used in this study had already been collected and is in the public domain. The final doctoral study included the Walden IRB approval number.

The BLS is part of the U.S. DOL. The employees of the organization track inflation and prices, unemployment, productivity, pay and benefits, and unemployment (BLS, n.d.) The bureau engages in data collection on different subjects and publishes that data. BLS leaders have reported data related errors in some previous publications. For example, the original publication for June 2009 to September 2010 Employment Cost Index data contained errors for several series (BSL, 2021). Despite the possibility of posting erroneous data once in a while, any realized errors are rectified and the corrected files republished (BSL, 2013). No errors have however been posted for the data set that I used in my study.

Summary

This section comprised of my study's quantitative research methodology and ex post facto design. The purpose of this quantitative ex post facto research design study was to examine the relationship between gender, different generational ages, and unemployment rates. I discussed the rationale and use of the quantitative method for the study, variables and validity of the data set used, statistical tests to be conducted and ethical principles. Data on unemployment rates in the United States were extracted from a database maintained by the U.S. DOL, BLS. Multiple regression was conducted to analyze the data. Section 3 (the deliverable) includes an executive summary with a presentation of quantitative data analysis, descriptive and inferential results and conclusions of the statistical analyses, recommendations, and social change impact.

Section 3: The Deliverable

Introduction

The purpose of this quantitative ex post facto research design study was to examine the relationship between gender, different generational ages, and unemployment rates.

Research Question

What is the relationship between gender, different generational ages, and unemployment rates in the United States?

Hypotheses

H_0: There is no statistically significant relationship between gender, different generational ages, and unemployment rates in the United States.

H_1: There is a statistically significant relationship between gender, different generational ages, and unemployment rates in the United States

Assumption Testing

Multicollinearity

The assumption of multicollinearity requires that the independent variables in the model are not too highly correlated. This assumption was assessed using VIF values. All the VIF values for the independent variables were found to be less than 5 thus to mean the data met the assumption of multicollinearity (see Table 2).

Table 2

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	11.977	.170		70.578	.000		
	Gender	.652	.170	.065	3.844	<.001	1.000	1.000
	Millennials	-7.514	.208	-.710	-36.152	<.001	.750	1.333
	Generation X	-8.392	.208	-.793	-40.378	<.001	.750	1.333

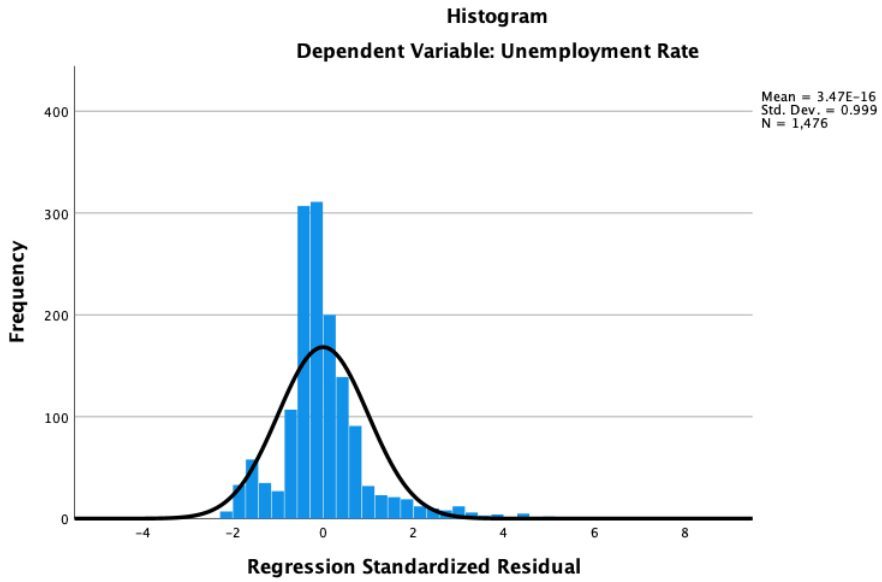
a. Dependent Variable: Unemployment Rate

Heteroskedascity

The assumption of heteroskedascity requires the variance of residuals in a regression analysis to be consistent across the predictor variables. This assumption was evaluated using a histograms of residuals that were generated during the regression. As shown in Figure 1, the histogram was symmetrically shaped to mean that the data met this assumption.

Figure 1

Standardized Residuals for Unemployment Rate



Normality and Outliers

The assumptions of normality and outliers were evaluated using Skewness and Kurtosis. According to Brown (2006), skewness values that fall between -3 and +3 are acceptable, while kurtosis values in the range of -10 to +10 are acceptable. The skewness of the data was found to be 1.75 while the kurtosis was 3.44. This is an indication that the data met this assumption of normal distribution. The data had a relatively low kurtosis within the acceptable range thus indicating an absence of outliers within the dataset (Wagner, 2020). Table 3 illustrates the skewness and kurtosis results.

Table 3

Skewness and Kurtosis

Unemployment Rate		
N	Valid	1476
	Missing	0
Skewness		1.752
Std. Error of Skewness		.064
Kurtosis		3.442
Std. Error of Kurtosis		.127

Linearity

The assumption of linearity was assessed using a normal Q-Q plot for the the variable Unemployment Rates. A visual inspection of the normal Q-Q plot indicated that the variable met the assumption of linearity. This is because a generally straight line generated over the normal Q-Q plot along the points on the plot. Figure 2 below shows the normal Q-Q plot.

Figure 2

Normality Q-Q plot

Results

Descriptive Statistics

The descriptive statistics for the dependent variable were as follows (M = 7.00, SD = 4.99). This means that the average unemployment rate was 7, which reflects a fairly healthy economy. Table 4 below depicts the results.

Table 4

Descriptive Statistics

	Mean	Std. Deviation	N
Unemployment Rate	7.001	4.9906	1476
Gender	.50	.500	1476
Millennials	.3333	.47156	1476
Generation X	.3333	.47156	1476

Inferential Statistics

To investigate whether there is a significant relationship between gender, different generational ages and unemployment rates in the United States, a multiple regression analysis ($\alpha = .05$) was conducted. The independent variables were different generational ages (Generation X, millennials, and Generation Z) and gender (with two levels: male and female), while the dependent variable was the unemployment rates. The independent variables were categorical variables and were therefore dummy coded. For gender, 1 represented male while 0 represented female. Since generation age had three levels (Generation Z, millennials, and Generation X), the three various levels were were dummy coded, while Generation Z was used as the reference variable.

The model was statistically significant: F (3, 1472) = 661.65, $p < .001$ in predicting the unemployment rate as shown in table 5. Since $p < .05$, I reject the null

hypothesis and conclude that there is a statistically significant relationship between gender, different generational ages, and unemployment rates in the United States. The effect's size was medium ($R^2 = .574$), indicating the model accounted for approximately 57.4% of the variance unemployment rates in the United States.

Table 5

Model Summary[b]

				Std. Error of	Change Statistics				
Model	R	R Square	Adjusted R Square	the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.758[a]	.574	.573	3.2599	.574	661.646	3	1472	<.001

a. Predictors: (Constant), Generation X, Gender, Millennials

b. Dependent Variable: Unemployment Rate

Both Gender (ß = .065, $p < .001$) and generational age differences: Generation X ($p < .001$), Millennials ($p < .001$), and Generation X ($p < .001$) were found to be significant predictors of unemployment rates.

The final predictive equation of the model was:

Unemployment rates = 11.98 Generation Z + .652 (Gender) - 7.51 (Millennials) - 8.39 Generation X. The unstandardized coefficients for gender indicated that females as compared to males realize a .652 unit increase in unemployment rates. The unstandardized coefficient for Millennials indicated that Millennials as compared to Generation Z realize a 7.51 unit decrease in unemployment rates. Furthermore, the unstandardized coefficients also revealed that Generation X members as compared to Generation Z members realize a 8.39 unit decrease in unemployment rates. The following tables depict the multiple regression results.

Interpretation of Findings

The results from the study indicated that both male and female genders are significant predictors of unemployment rates. These findings concur with the findings of Manzoni & Mooi-Reci (2020) and Reichelt et al. (2020), whose findings showed that gender role expectations and perceptions of job commitment and capability significantly influence unemployment disparities between men and women. Reichelt et al. found workforce and gender-related attitudes to significantly affect women's participation in the workforce market. These findings are also consistent with the findings of Gonzalez et al. (2019), Lahtinen et al. (2020), Altweck et al. (2021), Menéndez-Espina et al. (2020), and Carli (2020), who conducted research studies and found employers' assumptions of commitment and competence at work between male and female gender are significant contributors of unemployment disparities.

The results of the study also indicated that generational age differences: Generation X, millennials, and Generation Z are significant predictors of unemployment rates. These findings are consistent with various prior studies, including findings from Axelrad et al. (2018), Luthi and Wolter (2020), Stirpe et al. (2018), Yeves et al. (2019), and Hossain et al. (2018), whose findings indicated that generational age differences influence unemployment disparities in that younger employee who lack the skills and knowledge compared to older employees are more likely to be unemployed. Further, the findings from Jung and Yoon (2021), Benitez-Marquez et al. (2022), Glazer et al. (2019), Mahmoud et al. (2021), and Naim and Lenka (2018) revealed that generational groups are born and brought up in different circumstances and as such exhibit varying workplace

and social characteristics which significantly influence unemployment rates among these three generations. According to Glazer et al. (2019), Generation X, millennials, and Generation Z hold varying norms and perceptions which encourage apparent intergenerational workplace disputes. Concurrently, Jung and Yoon (2021) found out that intergenerational workplace disparities contribute to numerous intergenerational conflicts which affect the workplace environment and foster an increase in unemployment.

The generational theory and theory of frictional unemployment grounded my study. Strauss and Howe (1991), the theorists behind the generational theory, argued that generations come in cycles and they maintains unique attributes which inform their employment status and outcomes. This distinction brings about a difference in how generations feel about themselves, their culture, country, environment, and the future (Strauss and Howe, 1991). The findings of this study corroborated the generational theory by indicating that generational age differences are significant predictors of unemployment rates. The theory of frictional unemployment was also used in this study because it explains the roots and essence of unemployment. Reder (1969), the proponent of the theory, asserted that unemployment is not just a random blemish in the economy but also a necessary system component. The findings of this study were consistent with the theory by revealing that gender and generational age differences are significant predictors of unemployment rates. In terms of the theory, age and generational age differences (among other factors) bring about the necessary equilibrium of unemployment rate.

Recommendations

Factors that influence unemployment rates among the male and female genders include occupational segregation and social norms. According to Alfarran et al. (2018), women face numerous structural obstacles, including occupational segregation, which significantly impact their unemployment rates. More research should be conducted to investigate the factors that foster occupational segregation and understand its influence on unemployment rates across both genders.

When examining the contributing factors to unemployment rates among gender-diverse and transgender individuals, mental health and its impact have not been studied widely. In the reviewed literature on unemployment among different gender types, only Van de Cauter et al. (2021) and Cheung et al. (2018) highlighted mental health as a contributing factor that fosters high unemployment rates among transgender individuals. There is a critical need to conduct more research studies that focus on mental health among gender-diverse and transgender individuals in order to understand the contributing factors and their impact on the unemployment rates. Additionally, focusing on mental health among these gender types, future research studies can be crucial in developing suitable policy interventions that prioritize conducive working environments, the mental well-being of all gender types, and a more inclusive and equitable labour market.

For most of the literature reviewed in this study, the unemployment gender gap was found to be influenced by traditional occupational disparities, whereby a particular gender primarily dominates some occupations. The rapid advancement in technology plays a significant role in shaping traditionally gendered occupations. To better

understand the impact of technological advances on gender and unemployment, future research should focus more on how the trends in technology influence gender roles in workplaces and the gender adaptation to technological shifts.

Social Change Impact

The findings of this study contribute to positive social change in many ways. Through this quantitative research study, I examined the correlation between gender, different generational ages, and unemployment rates. I compared the unemployment rates among Generation X, millennials, and Generation Z as they pertain to the different generational ages and the unemployment rates among men and women. The finding of this quantitative research study can help business leaders develop informed organizational practices that will potentially foster equitable hiring processes.

The findings of this study may also encourage business leaders to focus on hiring practices that promote inclusive and balanced generational representation across all industry occupations. Through the findings of this study, the federal government may also establish policy interventions that promote equity in the hiring process. Such policies will also potentially contribute to positive social change by ensuring that business managers do not discriminate during the hiring process but make fair decisions promoting a balanced workforce. Business managers may benefit from this study since by ensuring that the workforce is balanced across all generational groups and is gender diverse, the organization may have improved impacts on the organizational revenue. A balanced workforce enhances creativity and innovation, improves the productivity of employees and fosters improved decision-making within the organization.

I recommend that business managers, human resource managers, and government agencies use this study's findings to help identify unemployment gaps within the labour market and develop policies that ensure that all workers, especially gender-diverse and transgender individuals, are considered in hiring processes.

Conclusion

This ex-post facto study examined the relationship between gender, generational age differences and unemployment rates. The findings of the study indicated that gender and generational age differences are significant predictors of unemployment rates. The findings and recommendations from this study will potentially help human resource managers in organizations to attain a balanced workforce across both genders and the different generational groups in their teams. The federal government may also use the findings of this study in planning of employment matters and to put in place informed monetary and fiscal policies.

References

Albanesi, S., & Şahin, A. (2018). The gender unemployment gap. *Review of Economic Dynamics, 30*, 47-67. https://doi.org/10.1016/j.red.2017.12.005

Alén, E., Losada, N., De Carlos, P. (2016). Understanding tourist behaviour of senior citizens: Lifecycle theory, continuity theory and a generational approach. *Ageing and Society*, *37*(7), 1338-1361. https://doi.org/10.1017/s0144686x16000325

Alfarran, A., Pyke, J., & Stanton, P. (2018). Institutional barriers to women's employment in Saudi Arabia. *Equality, Diversity and Inclusion: An International Journal, 37*(7), 713-727. https://doi.org/10.1108/edi-08-2017-0159

Allen, M. (2017). Variables, continuous. The SAGE Encyclopedia of Communication Research Methods. https://doi.org/10.4135/9781483381411.n657

Altweck, L., Hahm, S., Muehlan, H., Gfesser, T., Ulke, C., Speerforck, S., Schomerus, G., Beutel, M., Brähler, E., & Schmidt, S. (2021). The interplay of gender, social context, and long-term unemployment effects on subjective health trajectories. *BMC Public Health*, *21*(1). https://doi.org/10.1186/s12889-021-10324-8

Ann, S., & Blum, S. (2020). Motivating senior employees in the hospitality industry. *International Journal of Contemporary Hospitality Management, 32*(1), 324-346. https://doi.org/10.1108/ijchm-08-2018-0685

Annabi, H., & Lebovitz, S. (2018). Improving the retention of women in the IT workforce: An investigation of gender diversity interventions in the

USA. *Information Systems Journal*, *28*(6), 1049-1081. https://doi.org/10.1111/isj.12182

Anugrah Putri, A., Dhewanto, W., & Fadhil Nurdayat, I. (2020). Understanding the role of job satisfaction in workplace from Millennial Generation's perspective toward organizational performance. KnE Social Sciences. https://doi.org/10.18502/kss.v4i6.6662

Appelbaum, S. H., Bhardwaj, A., Goodyear, M., Gong, T., Sudha, A. B., & Wei, P. (2022). A study of generational conflicts in the Workplace. European Journal of Business and Management Research, 7(2), 7–15. https://doi.org/10.24018/ejbmr.2022.7.2.1311

Axelrad, H., Malul, M., & Luski, I. (2018). Unemployment among younger and older individuals: Does conventional data about unemployment tell us the whole story? *Journal for Labour Market Research*, *52*(1), 3. https://doi.org/10.1186/s12651-018-0237-9

Azimi, S., Andonova, Y., & Schewe, C. (2021). Closer together or further apart? Values of hero generations Y and Z during crisis. *Young Consumers*, *23*(2), 179-196. https://doi.org/10.1108/yc-03-2021-1300

Balcerzyk, D. (2021). The role of a leader in contemporary organizations. *European Research Studies Journal*, *XXIV*(Issue 1), 226-240. https://doi.org/10.35808/ersj/1959

Benítez-Márquez, M. D., Sánchez-Teba, E. M., Bermúdez-González, G., & Núñez-Rydman, E. S. (2022). Generation Z within the workforce and in the workplace:

A bibliometric analysis. *Frontiers in Psychology*, *12*, 1-16. https://doi.org/10.3389/fpsyg.2021.736820

Benson, J., Brown, M., Glennie, M., O'Donnell, M., & O'Keefe, P. (2018). The generational "exchange" rate: How generations convert career development satisfaction into organisational commitment or neglect of work. *Human Resource Management Journal*, *28*(4), 524-539. https://doi.org/10.1111/1748-8583.12198

BLS. (2022). *About the U.S. Bureau of Labor Statistics*. Bureau of Labor Statistics. https://www.bls.gov/bls/infohome.htm.

BLS. (2023, February 3). *Quick Guide*. U.S. Bureau of Labor Statistics. https://www.bls.gov/bls/empsitquickguide.htm

Bullough, A., Guelich, U., Manolova, T. S., & Schjoedt, L. (2021). Women's Entrepreneurship and Culture: Gender Role Expectations and identities, societal culture, and the entrepreneurial environment. Small Business Economics, 58(2), 985–996. https://doi.org/10.1007/s11187-020-00429-6

Carli, L. L. (2020). Women, gender equality and COVID-19. *Gender in Management: An International Journal*, *35*(7/8), 647-655. https://doi.org/10.1108/GM-07-2020-0236

Carnahan, S., & Greenwood, B. (2018). Managers' political beliefs and gender inequality among subordinates: Does his ideology matter more than hers? *Administrative Science Quarterly*, *63*(2), 287-322. https://doi.org/10.1177/0001839217708780

Charni, K. (2019). Do the French pension reforms increase re-employment of older unemployed workers? *Applied Economics*, *52*(19), 2015-2043. https://doi.org/10.1080/00036846.2019.1682114

Cheng, C., & Mohamad, J. (2020). Youth unemployment in Malaysia & the region. *Young*, *10*(15), 49-53. https://www.jef.or.jp/journal/pdf/229th_Special_Article.pdf

Cheung, A., Ooi, O., Leemaqz, S., Cundill, P., Silberstein, N., Bretherton, I., Thrower, E., Locke, P., Grossmann, M., & Zajac, J. (2018). Sociodemographic and clinical characteristics of transgender adults in Australia. *Transgender Health*, *3*(1), 229-238. https://doi.org/10.1089/trgh.2018.0019

Dang, H.-A. H., & Viet Nguyen, C. (2021). Gender inequality during the COVID-19 pandemic: Income, expenditure, savings, and job loss. *World Development*, *140*, N.PAG. https://doi.org/10.1016/j.worlddev.2020.105296

Davis, N. B., & Yeung, S. T. (2022). Transgender Equity in the workplace: A systematic review. SAGE Open, 12(1), 215824402210828. https://doi.org/10.1177/21582440221082863

Demissie, M., Herut, A., Yimer, B., Bareke, M., Agezew, B., Dedho, N., & Lebeta, M. (2021). Graduates' Unemployment and associated factors in Ethiopia: Analysis of higher education graduates' perspectives. *Education Research International*, *2021*, 1-9. https://doi.org/10.1155/2021/4638264

DOL. (2022). *Mission/Vision*. U.S. Department of Labor. https://www.bls.gov/bls/infohome.htm.

Feldman, J., Luhur, W., Herman, J., Poteat, T., & Meyer, I. (2021). Health and health care access in the US transgender population health (TransPop) survey. *Andrology*, *9*(6), 1707-1718. https://doi.org/10.1111/andr.13052

Figueiredo, E., & Paiva, T. (2019). Senior entrepreneurship and qualified senior unemployment. *Journal of Small Business and Enterprise Development*, *26*(3), 342-362. https://doi.org/10.1108/jsbed-01-2018-0006

Fine, C., Sojo, V., & Lawford-Smith, H. (2019). Why does workplace gender diversity matter? Justice, organizational benefits, and policy. *Social Issues and Policy Review*, *14*(1), 36-72. https://doi.org/10.1111/sipr.12064

Fric, K. (2019). How does being out at work relate to discrimination and unemployment of gays and lesbians? Journal for Labour Market Research, 53(1). https://doi.org/10.1186/s12651-019-0264-1

Fry, R. (2018). *Millennials are the largest generation in the U.S. labor force*. Pew Research Center. Retrieved 12 September 2022, from https://www.pewresearch.org/fact-tank/2018/04/11/millennials-largest-generation-us-labor-force/.

Fuller, S., & Qian, Y. (2022). Parenthood, gender, and the risks and consequences of job loss. *Social Forces*, *100*(4), 1642–1670. https://doi.org/10.1093/sf/soab078

Ghosh, I., Larch, M., Murtazashvili, I., & Yotov, Y. (2022). Negative trade shocks and gender inequality: Evidence from the USA. *Economica*, *89*(355), 564-591. https://doi.org/10.1111/ecca.12410

Glazer, S., Mahoney, A., & Randall, Y. (2019). Employee development's role in organizational commitment: a preliminary investigation comparing generation X and millennial employees. *Industrial and Commercial Training*, *51*(1), 1-12. https://doi.org/10.1108/ict-07-2018-0061

Gong, B., Greenwood, R., Hoyte, D., Ramkissoon, A., & He, X. (2018). Millennials and organizational citizenship behavior. *Management Research Review*, *41*(7), 774-788. https://doi.org/10.1108/mrr-05-2016-0121

González, M. J., Cortina, C., & Rodríguez, J. (2019). The role of gender stereotypes in hiring: A field experiment. European Sociological Review, 35(2), 187–204. https://doi.org/10.1093/esr/jcy055

Granberg, M., Andersson, P. A., & Ahmed, A. (2020). Hiring discrimination against transgender people: Evidence from a field experiment. Labour Economics, 65, 101860. https://doi.org/10.1016/j.labeco.2020.101860

Guerrero, M., Amorós, J., & Urbano, D. (2019). Do employees' generational cohorts influence corporate venturing? A multilevel analysis. *Small Business Economics*, *57*(1), 47-74. https://doi.org/10.1007/s11187-019-00304-z

Hedvicakova, M. (2018). Unemployment and effects of the first work experience of university graduates on their idea of a job. *Applied Economics*, *50*(31), 3357-3363. https://doi.org/10.1080/00036846.2017.1420895

Hossain, M. I., Yagamaran, K. S., Afrin, T., Limon, N., Nasiruzzaman, M., & Karim, A. M. (2018). Factors influencing unemployment among fresh graduates: A case

study in Klang Valley, Malaysia. International Journal of Academic Research in Business and Social Sciences, 8(9). https://doi.org/10.6007/ijarbss/v8-i9/4859

Jung, H.-S., & Yoon, H.-H. (2021). Generational effects of workplace flexibility on work engagement, satisfaction, and commitment in South Korean deluxe hotels. *Sustainability (2071-1050), 13*(16), 9143. https://doi.org/10.3390/su13169143

Katunina, I., & Kashtanova, V. (2019). The application of generational theory to digital content management. *Proceedings of the International Conference on Technology & Entrepreneurship in Digital Society*. https://doi.org/10.17747/teds-2018-106-110

Khalifa, R. (2018). Enhancing female graduate employment through a women-only professional services firm in an economically remote city. *Journal of Economic and Administrative Sciences*, *34*(1), 36-47. https://doi.org/10.1108/jeas-06-2017-0051

Lahtinen, H., Sirniö, O., & Martikainen, P. (2020). Social class and the risk of unemployment: Trends, gender differences and the contribution of education. *Acta Sociologica*, *63*(3), 303-321 https://doi.org/10.1177/0001699318817594

Le Barbanchon, T., Rathelot, R., & Roulet, A. (2020). Gender differences in job search: Trading off commute against wage*. *The Quarterly Journal of Economics, 136*(1), 381-426. https://doi.org/10.1093/qje/qjaa033

Lüthi, S., & Wolter, S. C. (2020). Are apprenticeships business cycle proof? *Swiss Journal of Economics & Statistics*, *156*(1), 1–11. https://doi.org/10.1186/s41937-019-0047-1

Mahmoud, A. B., Hack-Polay, D., Reisel, W. D., Fuxman, L., Grigoriou, N., Mohr, I., & Aizouk, R. (2021). Who's more vulnerable? A generational investigation of COVID-19 perceptions' effect on organisational citizenship behaviours in the MENA region: Job insecurity, burnout and job satisfaction as mediators. *BMC Public Health*, *21*(1), 1–17. https://doi.org/10.1186/s12889-021-11976-2

Manzoni, A., & Mooi-Reci, I. (2020). The cumulative disadvantage of unemployment: Longitudinal evidence across gender and age at first unemployment in Germany. *PloS one*, *15*(6), e0234786 https://doi.org/10.1371/journal.pone.0234786

Menéndez-Espina, S., Llosa, J. A., Agulló-Tomás, E., Rodríguez-Suárez, J., Sáiz-Villar, R., Lasheras-Díez, H. F., De Witte, H., & Boada-Grau, J. (2020). The influence of gender inequality in the development of job insecurity: Differences between women and men. Frontiers in Public Health, 8. https://doi.org/10.3389/fpubh.2020.526162

Millett, C. M., & Kevelson, M. J. C. (2018). Doesn't get better with age: Predicting millennials' disconnection. Policy information report and ETS Research Report Series No. RR-18-42. *ETS Research Report Series*

Mpendulo, G., & Mang'unyi, E. E. (2018). Exploring relationships between education level and unemployment. Journal of Social Sciences (COES&RJ-JSS), 7(2), 86–102. https://doi.org/10.25255/jss.2018.7.2.86.102

Naim, M., & Lenka, U. (2018). Development and retention of Generation Y employees: A conceptual framework. *Employee Relations, 40*(2), 433-455. https://doi.org/10.1108/er-09-2016-0172

Okros, A. (2019). Generational theory and cohort analysis. *Management for Professionals,* 33–51. https://doi.org/10.1007/978-3-030-25726-2_2

Omilion-Hodges, L. M., & Sugg, C. E. (2018). Millennials' views and expectations regarding the communicative and relational behaviors of leaders: Exploring young adults' talk about work. Business and Professional Communication Quarterly, 82(1), 74–100. https://doi.org/10.1177/2329490618808043

Patel, L., Graham, L., & Chowa, G. (2020). Evidence of non-economic indicators as markers of success for youth in youth employability programs: Insights from a South African study. Children and Youth Services Review, 118, 105404. https://doi.org/10.1016/j.childyouth.2020.105404

Pit, S., Fisk, M., Freihaut, W., Akintunde, F., Aloko, B., Berge, B., Burmeister, A., Ciacâru, A., Deller, J., Dulmage, R., Han, T. H., Hao, Q., Honeyman, P., Huber, P. C., Linner, T., Lundberg, S., Nwamara, M., Punpuing, K., Schramm, J., … Yap, J. C. (2021). Covid-19 and the ageing workforce: Global Perspectives on needs and solutions across 15 countries. International Journal for Equity in Health, 20(1). https://doi.org/10.1186/s12939-021-01552-w

Qiu, H. (2022). Analysis on the female unemployment in the United States. In *2021 International Conference on Social Development and Media Communication (SDMC 2021)* (pp. 713-717). Atlantis Press https://doi.org/10.2991/assehr.k.220105.131

Rahi, S. (2017). Research design and methods: a systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*,6(2),1-5. https://doi.org/10.4172/2162-6359.1000403

Reder, M. (1969). The theory of frictional unemployment. *Economica*, *36*(141), 1. https://doi.org/10.2307/2556239

Reichelt, M., Makovi, K., & Sargsyan, A. (2020). The impact of COVID-19 on gender inequality in the labor market and gender-role attitudes. *European Societies*, *23*(sup1), S228-S245. https://doi.org/10.1080/14616696.2020.1823010

Salkind, N. (2010). *Ex Post Facto study*. Encyclopedia of Research Design. https://doi.org/10.4135/9781412961288.n145

Scalcău, A. (2021). Research methods in discourse analysis: Quantitative, qualitative and mixed-methods approaches. *PCTS Proceedings (Professional Communication & Translation Studies)*, *14*, 114–122.

Shannon, M. (2022). The labour market outcomes of transgender individuals. *Labour Economics*, *77*, 102006. https://doi.org/10.1016/j.labeco.2021.102006

Smout, S., Wall, C., Mason, K., Stanford, M., O'Neill, K., Carrico, M., & Benotsch, E. (2022). An exploration of psychological distress, employment, and housing

among transgender and gender diverse individuals during the COVID-19 pandemic. *Psychology of Sexual Orientation And Gender Diversity*. https://doi.org/10.1037/sgd0000555

Smout, S. A., Wall, C. S. J., Mason, K. L., Stanford, M. K., O'Neill, K. A., Carrico, M. A., & Benotsch, E. G. (2022). An exploration of psychological distress, employment, and housing among transgender and gender diverse individuals during the COVID-19 pandemic. *Psychology of Sexual Orientation and Gender Diversity*. https://doi.org/10.1037/sgd0000555

Spizzirri, G., Eufrásio, R., Lima, M. C. P., de Carvalho Nunes, H. R., Kreukels, B. P. C., Steensma, T. D., & Abdo, C. H. N. (2021). Proportion of people identified as transgender and non-binary gender in Brazil. *Scientific Reports*, *11*(1), 1–7. https://doi.org/10.1038/s41598-021-81411-4

Strauss, W., & Howe, N. (1991). *Generations: The history of America's future, 1584 to 2069*. New York: William Morrow

Stirpe, L., Trullen, J., & Bonache, J. (2018). Retaining an ageing workforce: The effects of high-performance work systems and flexible work programmes. Human Resource Management Journal, 28(4), 585-604. https://doi.org/10.1111/1748-8583.12205

Sullivan, G. M., & Feinn, R. (2012). Using effect size—or why the *p* value is not enough. *Journal of Graduate Medical Education*, *4*(3), 279–282. https://doi.org/10.4300/jgme-d-12-00156.1

Tamesberger, D., & Bacher, J. (2020). COVID-19 crisis: How to avoid a 'lost generation'. *Intereconomics*, *55*(4), 232-238. https://doi.org/10.1007/s10272-020-0908-y

Uggla, C., & Billingsley, S. (2018). Unemployment, intragenerational social mobility and mortality in Finland: heterogeneity by age and economic context. *Journal of Epidemiology and Community Health*, *72*(11), 1003–1008. https://doi.org/10.1136/jech-2018-210457

U.S. Department of Labor. (2021). Unemployment rate 3.0 percent for men ages 45 to 54 in November 2021. Bureau of Labor Statistics. https://www.bls.gov/opub/ted/2021/unemployment-rate-3-0-percent-for-men-ages-45-to-54-in-november-2021.htm.

Van de Cauter, J., Van Schoorisse, H., Van de Velde, D., Motmans, J., & Braeckman, L. (2021). Return to work of transgender people: A systematic review through the blender of occupational health. *PLoS ONE*, *16*(11), 1–43. https://doi.org/10.1371/journal.pone.0259206

Verho, J. (2019). Economic crises and unemployment persistence: Analysis of job losses during the finnish recession of the 1990s. *Economica*, *87*(345), 190-216. https://doi.org/10.1111/ecca.12300

Wagner, III, W. E. (2020). *Using IBM® SPSS® statistics for research methods and social science statistics* (7th ed.). Sage Publications.

Wagner, J., Sackett-Taylor, A., Hodax, J., Forcier, M., & Rafferty, J. (2019). Psychosocial overview of gender-affirmative care. *Journal of Pediatric and*

Adolescent Gynecology, *32*(6), 567-573. https://doi.org/10.1016/j.jpag.2019.05.004

Wang, H. (2021). Generational change in Chinese journalism: Developing Mannheim's theory of generations for contemporary social conditions. *Journal of Communication*, *71*(1), 104–128. https://doi.org/10.1093/joc/jqaa040

Yeves, J., Bargsted, M., Cortes, L., Merino, C., & Cavada, G. (2019). Age and perceived employability as moderators of job insecurity and job satisfaction: A moderated moderation model. *Frontiers in Psychology*, *10*, 799. https://doi.org/10.3389/fpsyg.2019.00799

Yu, W.-hsin, & Sun, S. (2019). Race-ethnicity, class, and unemployment dynamics: Do macroeconomic shifts alter existing disadvantages? Research in Social Stratification and Mobility, 63, 100422. https://doi.org/10.1016/j.rssm.2019.100422

Zayko, T., & Vinichenko, V. (2022). Generational theory: An overview of the research conducted. *International Scientific Siberian Transport Forum TransSiberia - 2021*, 802–809. https://doi.org/10.1007/978-3-030-96383-5_88

Zhang, T., & Acs, Z. (2018). Age and entrepreneurship: nuances from entrepreneur types and generation effects. *Small Business Economics*, *51*(4), 773-809. https://doi.org/10.1007/s11187-018-0079-4

Zhang, T., & Acs, Z. (2019). Does generation matter to entrepreneurship? Four generations of entrepreneurs. *Southern Economic Journal*, *86*(2), 459–477. https://doi.org/10.1002/soej.12350

Zwickl, S., Angus, L., Qi, A., Ginger, A., Eshin, K., Cook, T., Leemaqz, S., Dowers, E., Zajac, J., & Cheung, A. (2021). The impact of the first three months of the COVID-19 pandemic on the Australian trans community. *International Journal Of Transgender Health*, 1-11. https://doi.org/10.1080/26895269.2021.1890659