

Bethel University

Spark

---

All Electronic Theses and Dissertations

---

2020

## Girls in Career and Technical Education Affects Women in Business

Rachel B. Hari  
*Bethel University*

Follow this and additional works at: <https://spark.bethel.edu/etd>



Part of the [Educational Methods Commons](#), and the [Teacher Education and Professional Development Commons](#)

---

### Recommended Citation

Hari, R. B. (2020). *Girls in Career and Technical Education Affects Women in Business* [Master's thesis, Bethel University]. Spark Repository. <https://spark.bethel.edu/etd/272>

This Master's thesis is brought to you for free and open access by Spark. It has been accepted for inclusion in All Electronic Theses and Dissertations by an authorized administrator of Spark.

GIRLS IN CAREER AND TECHNICAL EDUCATION AFFECTS WOMEN IN BUSINESS

A MASTER'S THESIS

SUBMITTED TO THE FACULTY

OF BETHEL UNIVERSITY

BY

RACHEL BETH HARI

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MASTER OF ARTS

MAY 2020

BETHEL UNIVERSITY

GIRLS IN CAREER AND TECHNICAL EDUCATION AFFECTS WOMEN IN BUSINESS

RACHEL HARI

MAY 2020

APPROVED

Advisor: Molly J. Wickam, Ph.D.  
Program Director: Molly J. Wickam, Ph.D.

## Acknowledgments

Thank you to Molly Wickam for her support and guidance during this process, she is the reason I am where I am. I am so lucky to have gained a mentor and a friend in you. I would also like to thank Amy Rodriguez, without her I would not have gotten through this process. This is for my family and Stephen, who have supported me through everything. For my friend Nicole, who is an angel, and I know who has helped me every step of this journey in real life and in heaven. And mom, thanks for beating cancer; you inspire me to be the best.

## Abstract

The purpose of this literature review is to understand why fewer girls than boys enter nontraditional careers. Most girls have opportunities to pursue business and different career and technical education (CTE) courses but girls are still lacking in number. Some girls do not choose these CTE courses because they feel like they have been unfairly stereotyped and experience unnoticed gender biases. Girls also feel like they do not have women to look up to in business because there are few female leaders in the corporate world. There are myths that women do not translate to business leaders because of the work and family narrative but both men and women struggle with the balance of family and work. There emerged many different categories as to why girls do not choose CTE courses and business. These included CTE interest, school disparities in gender, factors contributing to the gender gap, gender and participation in classes, girls' perceptions of business careers, psychological barriers to business careers, high school transition to post-secondary, professional barriers, lack of female role models, lack of females in C-level positions, lack of comparable earnings, perceptions of work and family, gender attitudes, and attractiveness.

## Table of Contents

Signature Page.....	2
Acknowledgements.....	3
Abstract .....	4
Table of Contents.....	5
Chapter I: Introduction.....	7
History of Career and Technical Education.....	9
Purpose and Guiding Questions.....	10
Definition of Terms.....	11
Chapter Summary.....	12
Chapter II: Literature Review.....	13
CTE Interest .....	14
School Disparities in Gender.....	15
Factors Contributing to the Gender Gap.....	16
Gender and Participation.....	16
Girls' Perceptions of Business Careers.....	20
Psychological Barriers to Business Careers.....	22
High School Transition to Post-Secondary.....	24
Professional Barriers.....	28
Lack of Female Role Models.....	28
Lack of females in C-level Positions.....	29
Lack of comparable Earnings.....	30
Perceptions of Work and Family.....	34

Attractiveness.....	35
Gender Attitudes.....	39
Chapter Summary.....	42
Chapter III: Discussion and Conclusion.....	44
Summary of Literature.....	44
Professional Application.....	46
Limitations of the Research and Implications for Future Research.....	47
Conclusion.....	48
References.....	50

## CHAPTER I: INTRODUCTION

“In the future, there will be no female leaders. There will just be leaders.”

*Sheryl Sandberg, Lean In: Women, Work, and the Will to Lead*

Business is all around the world and essential to how the world works. At a young age, I realized that business was something that I needed to learn. Neither of my parents graduated from college, but both have been involved in business in one form or another. As a result, I was determined to go to college and graduate with a focus on business. My high school offered a wide variety of business career and technical education (CTE) classes and this sparked my interest even more. As a high school student, I was able to sell milkshakes in the lunchrooms and keep the profits, which was great. I created budgets and marketing campaigns to get attention from customers to create profits. It was these experiential learning subjects in high school that I knew would set me up for a better future. Frankly, I knew how to budget money and how not to accrue credit card debit at age 17. I also found that I enjoyed helping others and teaching them skills like budgeting and other business CTE subjects.

Having a passion for business and teaching led me to become a business teacher. This is meaningful because I get to see students' perceptions change with how I approach business as a subject matter. I have noticed that the majority of students in the high school business classes I teach are male, and I have wondered why my business classes enroll more males than females. I have also wondered why females are involved in our school's business clubs, but do not take business classes. This curiosity led to choosing this thesis topic.

A startling statistic is on average a woman makes 81.6 cents for every one dollar a male makes (Sonam-Sheth, 2020). Furthermore, women's annual earnings, on average, are \$9,766 less than men's, according to the most recent available data from the US Census Bureau (2018). This



gender gap remains prevalent, and research shows many different factors contribute toward the gender gap and fewer female in business than males.

Female business ownership rates have risen over the years, but there is still progress to be made. In 1972, there were 402,000 women-owned businesses in the U.S., which represented 4.6 percent of all firms. In 2018, there were 12.3 million women-owned businesses which represent 4 out of every 10 businesses in the U.S today (State of Women-Owned Businesses Report, 2018).

Data from Women CEOs of the S&P 500 (2020) found that women account for 51.4% of middle managers in the U.S. but only 6% of Fortune 500 CEOs; that is only 30 women CEOs out of 500. Women need to be disruptive and speak out (Johnson & Mohr, 2014). When women are not represented in all aspects of business, it seems to affect girls pursuing business.

The underrepresentation of women in business has trickled down and created an underrepresentation of girls in business classes (Toglia, 2013). In 2019 the number of Minnesota male students involved in CTE classes was 135,308 or 96% of all male students. The number of Minnesota female students was 96,919 or 73% of female students (Minnesota Department of Education 2019). Only 4 % of male students did not participate in CTE courses compared to 17% of female students.

This then creates a lack of diversity of workers in business. There is not just one person businesses are trying to target; more diversity in business benefits the company because then they are able to reach a bigger, more diverse population. When girls do not see women in leadership positions in business, it is discouraging to them. A reason business classes are so male dominated is because counselors do not recommend them as much as other classes (Toglia, 2013). Toglia (2013) stated, "Counselors often lack information and training related to gender-

free counseling. This—coupled with culturally acceptable perceptions regarding gender roles and occupational choices—can result in counselors directing women and girls away from nontraditional careers” (p.15).

### **History of Career and Technical Education**

Career and Technical Education (CTE) is the practice of teaching specific career skills to students in middle school, high school, and post-secondary institutions. CTE is divided into career clusters that apply to different high-demand careers (Weisgram et al., 2010).

Approximately 92% of students are involved in CTE classes in secondary education. There are 16 different career clusters concerning CTE: Architecture & Construction, Arts, Audio/Video Technology & Communications, Business, Management & Administration, Education & Training, Finance, Government & Public Administration, Health Science, Hospitality & Tourism, Human Services, Information Technology, Law, Public Safety, Corrections & Security, Manufacturing, Marketing, Sales & Service, Science, Technology, Engineering & Mathematics, Transportation, Distribution & Logistics (Career and Technical Education, 2010). Students in CTE classes develop employability skills. Compared to non-CTE students, CTE students are more likely to say they have better skills in problem-solving, research, critical thinking, time management, project completion, math, and work-related knowledge.

When a student takes one CTE class for every two academic classes, it can minimize the risk of dropping out (History of CTE, 2020). In fact, approximately 91% of high school graduates who earn 2-3 CTE credits enroll in college (CTE Basic Facts, 2020). At the start of the 21st century, students who were involved in CTE were mostly male, from smaller, lower income or rural schools, had disabilities, and entered high school with lower academic achievement. As

of 2010, CTE serves 92% of all high school students, including males, females, and students from multiple races and ethnicities (Career and Technical Education, 2010).

Beginning in the nineteenth century, the public education system and the workforce started to collaborate to create a stream of workers for different jobs. This is also when schools started to specialize in training students for the workforce. This collaboration of schools and workforce created the basic framework of career and technical education. In 1879, the foundation was set for modern career and technical education. A school in St. Louis, Missouri combined hands-on learning with classroom learning. However, what really accelerated CTE learning was both World Wars (History of CTE, 2020), as these wars created technical skills that were needed for defense purposes. In the 1980s, CTE courses shifted to prepare high school students for work and for postsecondary education (Career and Technical Education, 2010). In July, 2018, Congress passed the most recent Perkins ACT called the Strengthening Career and Technical Education for the 21st Century Act. This Perkins ACT gave federal funding for high school. According to History of CTE (2020), CTE programs are vital in preparing young adults for jobs in local and regional economies. Today's rigorous and relevant CTE prepares students for a wide range of high-wage, high-demand, and high-skill careers. This means CTE is important because it gives students the skills to learn to gain and maintain a job in the future (Career and Technical Education, 2010).

### **Purpose and Guiding Questions**

There are many occupations or fields of work in which females comprise fewer workers than males, and these occupations are known as nontraditional occupations, like accounting, finance, sales, and information technology (Eardley, & Manvell, 2006). The purpose of this literature review is to understand why fewer girls than boys enter nontraditional careers. To

investigate this purpose, the guiding questions were twofold: 1) Does a gender gap deter high school girls from pursuing Career and Technical Education careers? 2) What, if any, are the professional barriers for high school girls who want to go into the field of business?

### **Definitions of Terms**

Important terminology used throughout this paper is defined as follows:

*Androgynous*: A term that refers to high femininity and high masculinity in a person (Leraas et al., 2018).

*C-Level*: Describes jobs that are the top executive or highest-level corporate positions in a company. For example, a CEO (Chief Executive Officer) holds a C-level job. Other C-level job titles include CTO (Chief Technology Officer), CFO (Chief Financial Officer), CIO (Chief Information Officer), COO (Chief Operating Officer), CCO (Chief Compliance Officer), CKO (Chief Knowledge Officer), CSO (Chief Security Officer), CDO (Chief Data Officer), and CMO (Chief Marketing Officer) (Carter and Silva, 2010).

*Career and Technical Education (CTE)*: The practice of teaching specific career skills to students in middle school, high school, and post-secondary institutions split into career clusters. Career clusters that apply to different high-demand careers. Examples of the clusters are: health science, business, sales, finance, information technology, and manufacturing (Weisgram, et al., 2010).

*Gender Bias*: Reference or prejudice toward one gender over the other. Bias can be conscious or unconscious, and may manifest in many ways, both subtle and obvious (Carter and Silva, 2010).

*Human Resources (HR)*: The department of a business or organization that deals with the hiring, administration, and training of personnel (Padavic, et al., 2020).

*Non-Traditional:* Occupations or fields of work for which individuals from one gender comprise less individuals employed in that field or occupation (Eardley, & Manvell, 2006).

*Science, Technology, Engineering, and Mathematics (STEM):* Usually referring to different classes of academia (Robnett, 2016).

*Subconscious Biases:* Defined as prejudice or unsupported judgments in favor of or against one thing, person, or group as compared to another, in a way that is usually considered unfair (Babcock et al., 2003).

*Work/Family Narrative:* A widely-accepted explanation for women's stalled advancement into senior professional positions; women's obligations to families conflict with these jobs' long hours, and the widely-championed solution has been policies designed to mediate this work-family conflict (Ely, 2020).

## **Chapter Summary**

Interest in business and teaching sparked my career as a business teacher. It also sparked my interest in the equitable representation of all my students as it pertains to CTE. To better prepare the future leaders of tomorrow it is important to know the history of CTE and why CTE courses are important. Currently, there are fewer women than men in C-level positions (Women CEOs of the S&P 500, 2020). The underrepresentation of women in business has trickled down and created an underrepresentation of girls in business classes. Chapter II of this literature review will focus on two areas why fewer girls than boys enter nontraditional careers: gender gaps in CTE and professional barriers that keep high school girls from focusing on careers in business.

## CHAPTER II: LITERATURE REVIEW

This chapter is a review of various research studies and literature reviews that analyze and explain factors contributing to the gender gap and how it contributes to girls who do not choose to pursue business careers. To locate the literature for this thesis, searches of ERIC, EBSCO MegaFILE, JSOR and Google Scholar were conducted on the impact of gender gap and how it contributes to girls not pursuing business careers. Various search terms were used to locate relevant studies and generally followed the format of “gender gap + students + CTE.”

This chapter will first focus on the gender gap and whether it deters high school girls from pursuing business and other CTE courses and careers in business. Next, literature surrounding the professional barriers of women that affects high school girls’ interest in business careers is reviewed. This chapter then summarizes the studies that emphasize the importance of the gender gap and how it contributes to girls not pursuing business and CTE courses.

### **CTE Interest**

The most common counter argument for why there are fewer females than males in CTE courses is that female students are not interested in nontraditional CTE courses. Eardley and Manvell (2006) found that female students were underrepresented in CTE courses and this was not because of lack of interest. In fact, interest comes from a variety of people who impact these female students’ lives such as teachers, friends, parents, counselors, as well as different social factors. Interest is also linked to exposure. These researchers found that the more female students are exposed to nontraditional CTE courses, the more willing they are to enroll in them. Another aspect of Eardley and Manvell’s (2006) research was that low enrollment of females in CTE courses is not due to the overall participation of CTE courses in schools, but instead is the discrimination and barriers in limiting young females’ opportunities to study nontraditional

careers. The distinctions found in the research suggested that the patterns are not about females' course choice alone, but the discrimination and barriers in limiting these young females opportunities to explore these nontraditional fields (Eardley & Manvell, 2006). The results suggest that discrimination and stereotyping contribute to a major reason why female students are so underrepresented in CTE courses. Eardley and Manvell (2006) stated that there are also legal conditions to the situation:

Many common practices limit girls' access to career and technical education opportunities and may violate federal and state anti-discrimination laws. These include, but are not limited to, failing to address sexual harassment by teachers, counselors, or peers; perpetuating sex stereotypes about girls' abilities; allowing boys to monopolize equipment or teacher attention in CTE courses or otherwise treating male and female students differently in class; counseling female students without providing full information about the consequences of career choices and nontraditional options; steering girls away from nontraditional training or toward traditional courses based on gender stereotypes or other concerns; selectively recruiting only boys for programs that are predominantly male; using recruitment materials for CTE programs that fail to portray women engaged in nontraditional courses; using admissions criteria for CTE programs that unfairly screen out, or otherwise discriminate against, girls; or any other conduct that limits girls' access to opportunities to pursue nontraditional training. (p. 403)

Through discrimination, there is also evidence of unrecognized gender bias. In 2004, the National Assessment of Vocational Education (NAVE) formed focus groups that were conducted for the federal government. They found that when a CTE class was no longer offered, students were placed into another class area that was traditional to their gender. For example, when a

cosmetology class was cut for two female students, they were enrolled in a child care class. However, when an automobile class was cut for a male student in the same school, he was enrolled in a computer class (US Department of Education, 2004).

Research also showed that sexual harassment and stereotyping has caused female students to avoid classes and situations where harassment might occur (Eardley & Manvell, 2006). In the study that included female students of high school grade level in 12 states across the U.S., the researchers found 40% of their documentation cases had some type of sex stereotypes and discrimination in fields like math, science, engineering and technology courses. This included male students bringing attention to female students' appearance in computer classes. The study found that one in four teachers failed to stop male students in technology classes from disparaging females, using sex stereotypes about the abilities of females, and monopolizing tools needed to complete work. Girl participants felt that in CTE classes societal stereotypes, sexual harassment by peers, and lack of female role models prevented them from entering nontraditional CTE courses (Eardley & Manvell, 2006).

The gender gap keeps females from going into CTE careers because females are taught at a young age to go into jobs that allow them to work with others, spend time with family, and develop their knowledge, while according to Weisgram et al. (2010) males are taught to value high salaries, risk taking, challenging tasks, and opportunities to advance. There are jobs that are viewed as more masculine and some that are viewed as more feminine. For example, cosmetology is viewed as more feminine, while financial advising would be viewed as more masculine. The 2010 U.S. Census showed that females hold most jobs in nursing, childcare, and education careers, while males hold jobs in physical science, computer programming, and engineering (U.S. Census, 2010).



The gender gap also affects the inclusivity of the classroom, depending on the gender of a teacher. Opie et al. (2019) showed that even though there has been more attention placed on getting girls and women involved in business, the concerns regarding education are creating an exclusive learning environment. Class participation plays a part in most schools not having as inclusive an environment as they should, meaning, the leadership in the classroom is not equally distributed. The study found that when girls have a professor that is also female, they participate and lead more than when they are in a male professor's class. This study is important because CTE classes and administrators need to work to lower the CTE instructor gender gap to build a more inclusive learning environment, which supports all students' development as leaders, male and female. Administration could work on closing the gender gap in CTE by directly advertising to women and girls to gain interest in teachers and in students.

### **School Disparities in Gender**

Children as young as six to eight years old start to eliminate career choices due to their gender and by their high school years students have a strongly defined gender role expectation about work and careers (Lufkin & Wiberg, 2007). This is a result of parent occupations and education levels, socioeconomic status, and parental expectations. According to Toglia (2013), there is evidence that guidance counselors have a significant effect on choices made by high school girls. Toglia's (2013) suggested that counselors often lack information and training related to gender-free counseling, which then leads to counselors who advise girls away from nontraditional careers, thus affecting girls' participation in CTE classes.

Eardley and Manvell (2006) sampled 12 states, of over 5,000 high schoolers across the U.S. and found that on average, girls made up only 15% of nontraditional class fields, but 87% of girls were enrolled in traditional class fields that were considered to be women's work

according to this research. In some states, there were as few as 6% of girls enrolled in CTE courses. Some more balanced patterns were found in certain CTE courses, computer technology for example, but there is still work to be performed before girls are equally represented in this field. Eardley and Manvell (2006) found that fewer females enrolled in CTE classes that were considered to be higher paying career paths. Out of the 12 states involved in the study, 40% of female CTE students (approximately 1,000,000 students) were preparing to work in child care at a medium wage of \$9.40 per hour, while only 100 female students were enrolled in plumbing courses, a field that averages an hourly rate of \$20.00 and is a career that is predominantly male. From an economic perspective, the traditional female careers pay substantially lower wages than nontraditional fields (Toglia, 2013). Toglia's (2013) data showed that the fields that girls traditionally have been encouraged to pursue provide lower wages than fields that boys are encouraged to pursue. For example, in the field of cosmetology, about 98% are represented by females and the median wage was only \$11.96 an hour (U.S Bureau of Labor Statistics, 2019). In the financial advising field, however, females make up about 33.5% and the median wage was \$42.73 an hour; that is almost four times as much as the cosmetology field (U.S Bureau of Labor Statistics, 2019).

A study done by Kemple (2004) surveyed 100 males and females at a high school age level and college aged students, with a school CTE academy model, and university for post-secondary schooling. The survey collected data that compared male and female students graduation rate and payoffs for the future. The study showed that high school CTE classes had a higher pay-off for males; these pay-offs included longer periods of employment, more hours worked, and higher wages. Also, in the study high school females had a higher graduation rate at 74.6% while males had a rate of 70.7%. When looking at starting salary and wages males had a

13.3% higher salary than females graduating at the same time. These same courses had little to little effect on young girls' career opportunities and wages. The main purpose of CTE courses is to prepare all students for career opportunities, not just graduating programs. It is important for females to have equal access to pathways of all careers, not just those that fit their gender.

### **Factors Contributing to the Gender Gap**

The gender gap has been prevalent throughout history yet, in spite of movement toward gender equality, little progress has been made to close the gap. Learning about the factors that contribute to the gender gap reveals a better understanding of why there is little progress, and how to make better progress in the future. It has been hypothesized that most females do not identify with the business field. Most business majors and workers are categorized as male (Zaman, Bibi, & Karim, 2018) and females have limited resources when studying business, which leads to a bigger gap in the field (Riebe, 2012). Females are also told that they cannot handle the challenges of the business realm, which then discourages girls from taking CTE classes (Riegle-Crumb, 2010). Girls have seen adult women get paid substantially less than males with the same jobs. This has encouraged them to go into a different field, a more traditional field, where they can get better pay for their future (Toglia, 2013).

### **Gender and Participation**

Traditionally, gender was made up of two different dimensions, masculinity and femininity; now the term gender has become much more fluid as there are more than 78 ways people identify with gender (Jenson & De Castell, 2010). There is an important difference between “gender” and “gender identity” (O’Halloran, 2020). Gender encompasses three aspects: male, female, or neutral. Gender identity refers to the association one makes the same or different from a person’s sex assigned at birth (Human Rights, 2020). Leraas, Kippen, and

Larson (2018) defined the characteristics of masculinity as that which includes self-reliance, assertiveness, dominance, and independence. In contrast, the researchers found femininity to have characteristics such as affection, loyalty, warmth, and soft spoken. There are four gender types: masculine (high masculinity), feminine (high femininity), androgynous (high femininity and high masculinity), or undifferentiated (low masculinity and low femininity). Androgynous individuals are considered to be most adaptable and more suitable for post-secondary education. Leraas et al. (2018) suggested that androgynous individuals have higher self-esteem and more effective coping styles (Leraas et al., 2018).

Women experience gender-sensitive issues in and outside of the classroom concerning business (Riebe, 2012). As a result, women need a safe place within U.S. universities and businesses to not only receive the conventional business knowledge they need, but also challenge the gendered nature of leadership and nurture those nontraditional skills and perspectives found to be powerful indices of success for women in business and women entrepreneurs. When women do not have this, or opportunities to be involved in chances like this, they tend to move toward something other than business (Riebe, 2012). Women need to see, hear, and learn from other women to know that they belong in the space of business. Without this, it is hard for women to know how they can belong in an industry that is male-dominant (Riebe, 2012).

Risk-aversion is applicable because researchers state that it is a reason why girls do not pursue CTE classes and careers (Laury et al., 2019). There are many reasons why girls tend to participate less in classes. One reason is risk-aversion. A study done by Laury, Lee, and Schnier (2019) surveyed 277 students, with a roughly equal split between upper and middle school students. Boys comprised 48% of the participants. The participants ranged from grades seven and eight and with those of older students grades 11 and 12. On average, girls were more risk

averse than boys by comparing choices made by the girls in school. It was noted that high school-age girls were sought to be more able to face risk than middle school girls (Laury et al., 2019). High school girls were more willing to take risks than girls at any other age while middle school boys seem to be the most competitive, opting to compete 60% of the time. However, girls will only willingly partake in competition 40% of the time. Even though girls are more likely to take a risk; boys are found to be more competitive. Gender bias is another reason why some girls participate less in CTE classes. Robnett (2016) found that women in math-related undergraduate majors, including accounting and finance, experienced more gender bias that predominantly stemmed from their male peers. When these women encountered these gender biases, they had a lower STEM self-concept than participants who did not encounter this bias. Robnett surveyed a subset of 108 girls who reported that they were interested in pursuing a STEM career. Their mean age was 16.57 years. This concluded that there is a link to positive peer connections that are valuable for women in the STEM pipeline and STEM careers. If there are positive peer connections, then women are more likely to continue their journey in STEM programs. Results found that when women faced negative peer interaction, like gender stereotypes 61% dropped out of STEM classes. An increased level of risk-taking and competition can also correspond with confidence in self-concepts in certain subjects.

### **Girls' Perceptions of Business Careers**

Perception of business careers comes from different factors in one's life. In a survey study done by Zaman et al. (2018) looked at girls and why they do not pick certain majors or careers. The study was a set of semi-structured interviews of girls who had recently made or were about to make their choices of university major. Zaman et al. (2018) performed a focused group discussion about major choice with 20 girls of a median age of 22. The two interviewers were

female. Some girls felt that they did not identify with business because the majority of business majors are men. According to Zaman et al. (2018) in an interview a participant stated, “I have seen in my department that females are very few (in number) in my class compared to males (p.45).” and another states, “I think females naturally have less interest in business education; rather, I would say it is not in their genes (p.45).” Additionally, when women see other women doing a job, such as accounting or marketing, they know that they can identify with that kind of work. When women see men doing most of the accounting, they do not identify with this and often do not select the job or the classes in that field (Zaman et al., 2018).

According to a study by Zaman et al. (2018), females seemed to shy away from the thought of a nine to five job because they valued flexibility. Zaman et al. (2018) concluded that females in the study liked to have a more flexible work. In the study, females preferred the teaching or doctoral route because it seemed to have more flexibility than business. Zaman et al. (2018) quoted a participant saying,

In our society 9 to 5 job is not considered favorable for females.

Teaching is usually 9 to 3 jobs. But banking and (other similar) jobs are usually 9 to 5 or 9 to 6 or 9 to 7 and females do not seem to be fit with these timings. But they perfectly fit in teaching and that is (a) very respectful profession. Medical is also (a) very respectable profession for female. These are not new in our society; our people accept these professions very conveniently. (p.46)

This was not to say that females were not up for the work of business; the study showed that women did not mind the work of a doctor and they even liked the daunting challenge of medical studies that were far more difficult than business studies. The same females in the study felt

dispirited with business; this mental state will change when society becomes more progressive thinking (Zaman et al., 2018).

Another reason as to why there are fewer women in business is that high school girls believe there are fewer opportunities. Some younger girls perceive the business profession as being saturated for both men and women as business graduate rates have risen too high for the market demand. Additionally, whenever new jobs are created, in general men are likely to be preferred over women (Zaman et al., 2018).

Thus, in the business world, girls perceived that they had to create their own opportunities because they were not given to them like traditional careers, where there have been traditionally more women in that field. What the study concluded is that girls did not view business as an honorable profession, like girls would view the honorable fields of teaching or medicine. This view makes girls think that it is a difficult field to get into and it is not for girls. What happens is girls do not get into business because it does not spark their interest, and they do not see other females in positions they think they could (Zaman et al., 2018).

### **Psychological Barriers to Business Careers**

A student's psychological needs will contribute to how they feel in school and what classes they take, thus contributing to what major and career they pick in the future. Demirbas-Celik (2018) examined the roles of basic psychological needs and meaning of life on high school students' happiness. When looking at 295 high school students (142 male and 153 female) high schoolers' psychological needs, happiness or subjective well-being contains three components: life satisfaction, positive affect and negative affect (Demirbas-Celik, 2018). Researchers used scale to measure the satisfaction of basic psychological needs. The BPNS scale consists of 21 items relating to the needs of autonomy, competence and relatedness. Eight,

six and seven items out of these 21 items measure the needs of competence. What was found was people who are motivated take action and are able to start their own activities, take responsibility, and make decisions that are defined as self-determined for that individual (Demirbas-Celik, 2018).

This definition coincides with how high schoolers find themselves to be happy or have their psychological needs met. Demirbas-Celik (2018) study concluded that there is a correlation between meaning in life and well-being. Of the three variables stated above, 56% of the participants (295 high school students: 142 male and 153 female) found they felt like meaning in life also connected to their well-being in life (Demirbas-Celik, 2018). For females in high school, well-being thinking was more important than for males. Demirbas-Celik (2018) also found that females felt counseling to be an important part of their high school career. The results also showed that if females discuss subjects they are involved in or they are going to take, then they feel more meaning in life and have a better self-concept (Demirbas-Celik, 2018).

High school is one of the most important times of growth for both male and females. Growth support in school and family that helps basic psychological needs during adolescence is significantly important because it determines a purpose in life (Weinstein, Ryan & Deci, 2012). Keeping in mind that students spend a significant portion of their time at school, the positive conclusions of the basic psychological needs of students being met by the school is vital. This vital need can, in part, be accomplished through guidance services at schools. Counselors could hold study groups around these needs and function as an important bridge for the mental health of students. In addition, female students need more support to be successful than males do. In the study done by Demirbas-Celik (2018), male students did not feel the need for extra support in order to be happy, while female students did feel that need for extra support. Demirbas-Celik



(2018) stated that an uplifting school environment where the administration, teachers, and school counselors cooperate and support the basic psychological needs of students can contribute to the well-being of students. This could also lead to more on-the-job training for teachers because meeting students' basic psychological needs in the classroom environment increases the levels of self-esteem.

### **High School Transition to Post-Secondary**

There is a transition for high school students who move onto post-secondary, one that can impact future careers. Utilizing the data from the Texas Higher Education Opportunity Project (THEOP), Riegle-Crumb (2010) surveyed a total of 13,803 student surveys that were completed by seniors during the academic year 2001–2002, 70% were male. Riegle-Crumb (2010) determined that girls' higher academic performance in high school was an important factor behind their gender advantage in four-year college attendance. The myth that girls do not do as well in college business classes are proven false in this study. Data shown among white students, 54% of women go to 4-year colleges and stay there, compared to 44% of men (Riegle-Crumb, 2010). When girls have a better high school career, in an academic sense, then they were more likely to attend a four-year college. An example would be to graduate high school and get into a four-year college of their choice.

Additionally, Riegle-Crumb (2010) noted that compared to their male peers, girls have greater levels of social skills, like forming more academically-focused friendship groups in high school, that were associated with higher rates of college attendance. When girls had friendships that centered around studying and school it helped them gain acceptance to a four-year school, and they received better grades in their field of study, like business. Better grades can also translate to a better job. For girls the analysis suggests that all of the factors considered explained

substantially less of the female advantage in two-year college than they do for the female advantage in four-year college.

Not only does the inequality affect business majors but it also affects STEM (science, technology, engineering and math) majors. Although finance and accounting use math and technology, they are not considered STEM majors, but many business students are required to take STEM classes as a prerequisite, thus making it relevant to females in business (Robnett, 2016). A study done by Robnett (2016), examined girls' and women's reported experiences with gender bias in STEM. Robnett (2016) surveyed 400 girls, however for the study it was focused on a subset of 108 girls who reported that they were interested in pursuing a STEM career. Their mean age was 16.57 years. Robnett (2016) found that 70% of women participants who were pursuing an education in math-intensive fields (i.e., computer science, engineering, math, and physical sciences) experiencing more gender bias than participants who were pursuing an education in the life sciences major. Women were at a disadvantage because of gender bias and were less likely to succeed in these classes. Also, females had lower interest in taking these classes and obtaining a major in STEM subjects (Robnett 2016).

Robnett (2016) reported that over the year the gap for women remained constant; however, support increased for men in their pursuit of their STEM degree from the middle to the end of the year. Females, on the other hand, did not see this increase of support (Robnett, 2016). One thing that stood out was the clear social disadvantage that females face. Females seemed to have a lower self-efficacy and interest. These findings suggested that the gender differences in undergraduate classes and majors are particularly meaningful. Thus, the gender gap occurs within and before these courses.

Concerning undergraduate students, (Hunt and Song, 2013) both male and female were

surveyed, at a post-secondary level. One hundred twenty-four women and 112 men participated in this study and mean age was 20 years of age. Participants were put into three groups of majors (male-dominated, female-dominated, and gender-neutral) for an analysis of discrepancy and an analysis to look at the impact of the factors on major choice. The study found a higher rate of women to men with a gender distortion that continued into their career path. 61% of women participants reported experiencing gender bias in the past year. Within some instructions, there is a pattern of internal sex segregation whereby women and men still sort themselves into gendered subdivisions, a pattern that is apparent in undergraduate business management programs. Hunt and Song's (2013) study was undertaken to understand why this segregation happens. The study found that 83% of men and women use the same selection process in selecting a business major, including beliefs about success and how it fits, as well as advice from others.

Hunt and Song (2013) found that men considered social fit, career success, and advice from others to be seriously more important. Compared to men, women considered individual fit as extraordinarily more important. Additionally, the study indicated that these factors coordinated with each other. The impact of these decision factors on self-selection for a major controlled other factors in order to obtain an unbiased conclusion in school (Hunt & Song, 2013).

Hunt and Song (2013) also found that gender had an impact on career success, individual fit, and advice considerations, but not on social fit or academic experience considerations. This means their second theory which predicted that gender-based beliefs, evaluation, and attitudes will mediate the relationship between gender and the selection of business majors, focused on the three personal norm decision factors. Young men and women weighted different factors while choosing a major, even though Hunt and Song (2013) found that the process was similar. All students highlighted the same factors when making specialization choices, and weighted

different aspects to factor in a pattern like gendered choices. The more weight a student gave career success as a decision factor, the more likely he or she was to choose a male-dominated business major, although the more weight a student gave fit as a decision factor, the more likely he or she is to choose a female-dominated major. Similarly, males were more preoccupied with career success issues and less occupied about individual fit and social fit. This means that men were more likely to be attracted to a major they thought would lead to material success, social status, and renown; these included Entrepreneurship, Finance, and Economics and Management Science. Women were more likely to seek a major they thought would be a good fit with their skills, interests, and preferences; this focused on human resources management which is a female dominated industry (Hunt and Song, 2013). The researchers also found that there were two gender neutral majors: Accounting and Marketing.

Although some majors are equally looked at by both genders, both women and men view men as having a greater chance of success in all specializations of business than women. An exception for the this is the female dominated field of human resources management, as stated above (Hunt & Song, 2013). One area that seemed to be an outlier of equal success was marketing. Participants that were women predicted more of a gendered success gap than did men, meaning women knew that there was going to be a gap with gender and success. Women who did choose to major in human resources felt that outside their specialty men had a greater advantage than women did in either male-dominated or gender-neutral fields (Hunt & Song, 2013). Finally, men tended to weigh career success as a greater factor when selecting a business major. What women valued as a factor when making major choices was to highlight the potential for a good fit and innate goal achievement in fields like finance and entrepreneurship. Hunt and Song (2013) found that educators might consider positioning students to the potential for

extrinsic and intrinsic goal achievement across management specialties to help close the gender gap in business majors.

### **Professional Barriers**

This section discusses professional barriers to women entering the field of business. These barriers include lack of female role models, lack of females in C-level positions, lack of comparable earnings, perceptions of work and family, attractiveness, and gender attitudes.

**Lack of female role models.** Girls seem to be less charmed by business, meaning they've realized that there are very few future opportunities for them. Essentially, girls see people in business positions that do not reflect them. They feel as if they cannot relate because a male is the chief executive officer (CEO), and few other women who they see or can relate to are in business. There are many business majors at universities and when picking a major, most girls do not want to be part of the crowd. Women's representation in business schools declined from 44.7% in 2003 to 41.1% in 2011, while the number of male students enrolled increased by 15% between 2003 and 2011 (Davis & Geyfman, 2015). Usually the crowd is predominantly male, as shown in the increase in numbers, who have relatives who they already know in business which is one reason why they feel more comfortable picking this major than girls. Davis and Geyfman (2015) concluded that girls are also not exposed to many women in business. This leads them to think that it is not for them and they will have many obstacles to get them to higher levels in business than that of a male counterpart. While 74% of males (ages 18-22) identified and felt as if they belonged with others who are like them, women and girls felt alienated and could not find that community in business (Davis & Geyfman, 2015).

Some may say that the gender gap has closed. According to Carter and Silva (2010), this assumption is not factual. Carter and Silva (2010) did a survey with 4,100 MBA students, half

men and half women. What was found was that women advanced at an equal pace were those who began their post-MBA careers at middle management or above but only 10% of women started at those levels, compared with 19% of men. Meaning 9% more of men are climbing the corporate ladder faster than females, even though they have the same credentials. Although the gender gap has begun to close, there is still more to be done. Women are behind their male counterparts in business by the hiring process and in job consideration (including higher level positions in corporate settings).

**Lack of females in C-level positions.** While post-secondary colleges and universities are seeing a slight incline in women enrolling in business school, the corporate world is seeing few women in c-level positions. C-level positions are positions like chief executive officer, chief financial officer, chief investment officer. Women's ability to advance beyond middle level management has been both disappointing and unremarkable, while their male counterparts are advancing. Women seem to fall behind men in every single stage of the workplace world (Carter & Silva, 2010). This begins with their first professional job. This is not a culture or location issue, it is happening around the business world. The small number of women who do have an executive leadership or 'C-level' position are sometimes members of families who own the business or who succeed their spouses in their positions of authority. Not only in c-level positions are women underrepresented but also in the public sector of public officials and elected officials. Carter and Silvia (2010) reported on data collected by Catalyst Inc. (2009):

3% of chief executive officers and 13.5% of executive officer positions within Fortune 500 corporations are women. This number represents an increase from 2007 data, which showed 2.5% of chief executive officer positions in *Fortune 500* firms being occupied by women. (p.20)

This shows that firms need to understand how their talent management and talent search process contributes to this problem. Firms make assumptions about entry level jobs that leave women at a disadvantage. These assumptions are the following: women leave to start families, women do not aspire to upper management, regional differences skew the results and have become handy excuses for gender inequity in the management ranks. An assessment of 100 resumes was done where the names were removed to see if gender bias was part of the hiring process. The results were that women started off weaker because of bias in the entry level jobs and looking at c-level jobs, men were also overwhelmingly dominant. This comparison is a harsh number especially considering the bigger rise of women in business school at a college or university.

**Lack of comparable earnings.** Women continue to earn less than their male counterparts even though they are performing the same duties (Babcock, et al., 2003). As of 2019, women earn just 79 cents for every dollar a man makes (U.S Bureau of Labor Statistics, 2019). Women earn less, on average, for the same performance, and are underrepresented in top jobs. Three separate studies were done to find out that men are more likely than women to negotiate for what they want. The lack of negotiation is costly for companies and it requires management intervention because resources are given to men more because they speak out but women less because they are seen to negotiate less (Babcock, et al., 2003).

In the first study, researchers took data from the U.S. census which complied of 291 males and females. Results of the data were compared with salaries of males and females who recently graduated with an MBA. The starting salary of males who had recently graduated with an MBA was on average \$4,000 more than for females with an

MBA. Interestingly, only 7% of women had attempted to negotiate their salary; whereas, 57% of their male counterparts, eight times as much as females, had asked for more.

Babcock, Laschever, Gelfrand, and Small also concluded from another study they tested the gender difference in a lab. Participants, 10 males and 10 females from the age of 35-40, were instructed to play a word board game. They were told that after playing, they would be paid between \$3-\$10 for playing. After the board game was done, someone came out and said, "Here's \$3. Is \$3 OK?" The man responded that it was not good with him and asked for more money. Men's request of more money exceeded the women's by 9:1 ratio (Babcock et al., 2003).

In the third study from Babcock et al. (2003) surveyed hundreds of people online, both male and female ranging from ages 35-40, who held a job in business. This study asked about the most recent attempted or initiated negotiations and when they expected their next negotiation. Women claimed their most recent negotiation had been four weeks prior while men claimed it had taken place within the previous two weeks. When asked when they next expected to negotiate, women reported in four weeks, while men reported within the next week. The results showed that men put themselves in negotiations more often than women did and expected more of their interactions as possible negotiations (Babcock et al., 2003).

Negotiations can happen when women feel more equipped and informed about finance. According to Hample-Milagrosa (2010), making finance more accessible to women will help improve women's businesses. Hample-Milagrosa (2010) looked at the World Bank's Doing Business in 2010 that has seven series of annual reports that measures and compares the quality of business regulations worldwide. It was investigated that regulations and quantitative 'indicators' measures the total number of days, procedures and costs that affect various stages of a business' life. After surveying several women business owners from these reports, Hample-



Milagrosa concluded that women face trouble with commercial credit and knowing how to access it. By giving female business owners financial information in education form it could help their business in the long run. Hample-Milagrosa (2010) also concluded that when lenders and borrowers both have strong legal rights, the fear of legal complications coming from financial transactions gone wrong is lower. Stating that when women are more informed about financial information then they are more comfortable with it.

When females do not receive help on financials it can lead to less women in business, this can also lead to fewer leaders in businesses. Businesses are having trouble retaining women and promoting them to senior ranks or C-level positions. Women made progress gaining positions of power and authority through history in the 1970s and 1980s concerning equal rights, but that progress slowed in the 1990s and has plateaued in this time (Ely, 2020). Ely surveyed a random amount of business professionals that said high-level jobs require long hours, and women's devotion to family makes it impossible for them to put in those hours, and as a result, their careers suffer. Ely called this the work/family narrative. In a 2012 survey of more than 6,500 Harvard Business School alumni from many different industries, 73% of men and 85% of women invoked this term to explain women's stalled advancement. Although many marked the work/family narrative as true, Ely's (2020) research called it into question.

Over the course of eight months, Ely (2020) interviewed 107 consultants, women and men, partners and associates. The majority of the surveyed people, 68%, resorted to some version of the work/family narrative to explain the paucity of female partners (Ely, 2020). The study found that the more time one spent with people at the firm, the more one found that their explanations didn't correspond with the data that Ely had collected. Women weren't held back because of trouble balancing the competing demands of work and family, because men too,

suffered from the balance problem and advancement. The study actually found that women were held back because, unlike men, they were encouraged to take accommodations, such as going part-time and shifting to internally facing roles which derailed their careers. Another aspect found was a general culture of overwork that hurt both men and women and locked gender inequality in place.

One of the firm's motives for reaching out was that it wanted help addressing "women's higher turnover rate." When Ely's research came out (the data for the preceding three years) it turned out there had been virtually no difference in turnover rates for women and men.

One participant recalled a particularly painful Saturday when he told his son he couldn't come to his soccer game. The son was sad, cried, and the man said he wanted to quit his job right away (Ely, 2020). Two-thirds of the associates were fathers and reported this kind of work/family conflict, but only one of the fathers had been taking steps to accommodate this painful feeling (Ely, 2020). In Ely's study, a male thought that as women were going to have kids, they would not want to work because of their kids. It was also conveyed that women may not want to travel like some jobs require due to their kids. The men in the study also concluded that women do not want to live the consulting lifestyle which often demands 70 hour work weeks (Ely, 2020).

Ely's (2020) conviction that women's personal preferences were the obstacle to their success, left the study unable to account for such women who did not have children and whose promotion record was no better than that of mothers. In his calculation all women were mothers, a conflation that was common in Ely's study. Women without children were nowhere in people's minds, maybe because they contradicted the work/family narrative that others were so used to, because it is not considered the norm (Ely, 2020).

While Hunt and Song (2013) found that women look into career success when choosing a career, a study done by Lerchenmueller, Sorenson, and Jena, (2019) found that women receive less recognition than men for equal accomplishments. This can also be a factor as to why females do not choose business. Lerchenmueller, Sorenson, and Jena, (2019) took a group of 22 professors at a university who published work to see how gender disparities in academia were apparent. Lerchenmueller, Sorenson, and Jena, (2019) found that women researchers seemed to promote their work less often than males 21% of the time. Self-promotion, especially in research, is crucial to getting attention. Self-promotion deviates in several ways from other means of promotion. In research, self-promotion helps for applied grants and for negotiated pay, and it is shown that individuals have control over how much one self-promotes and shares. Self-promotion is up to the individual (Lerchenmueller, et al., 2019). When women do not self-promote, this leads to lower pay compared to men who self-promote. Fewer promotions contribute to the gender gap.

**Perceptions of work and family.** According to Ely's (2020) study, the core problem is the impossibly long work hours, and the substitute problem in the firm's inability to promote women. By presenting work/family accommodations as the solution to the substitute problem, the firm added to an invisible and self-reinforcing social-defense system. Meaning one company gave accommodations for work/family narrative, but found that this created a divide in the company between workers taking these accommodations and not taking them. This system of accommodations of work practices made the gender disparities more apparent because it assumes all females want a family. This move gave firm leaders an unresolvable and always available problem to worry about, because they wanted to make all employees happy, which results in unavoidable problems at the core (Ely, 2020). As a result, two ideologies supporting the status

quo remained in place: long work hours are necessary, and women's stalled advancement is inevitable, thus contributing to the work/family narrative. These findings also align with a growing consensus among gender scholars: What holds women back at work is not some unique challenge of balancing the demands of work and family but rather a general problem of overwork that prevails in contemporary corporate culture, not something that starts in the post-secondary universities (Ely, 2020).

To conclude Ely's study (2020), both women and men suffer as a result of these findings. What seemed to be a gender issue is more like an overworked, over hour issue for both males and females (Ely, 2020). Women seem to pay higher professional costs than men. If families and employees push back against overwork, it may make a way for others to follow. If more research is able to show the business advantage of reasonable hours, some employers will come to question the wisdom of grueling schedules.

Another way that prevents women and men achieving workplace equality is the myth that females value family more than males. The conflict between women's family obligations and professional jobs' long hours lies at the heart of the gender inequality in the corporate world (Padavic, et al., 2020). Yet, research suggests that this "work-family narrative" is inconclusive, as men also experience it and still advance. Businesses' effort to lessen this through flexible work policies has not improved women's advancement and often hurts them in the long run (Padavic, et al., 2020). The solution has the reverse effect on the problem. Padavic (2020) undertook a case study of a professional service firm and developed a multilevel theory to explain why businesses are caught in this problem. Padavic's (2020) study took place over 18 months for three separate interview-based studies centering on gender-related research questions. The two were the requested culture study (a study of men's professional identities) and a study of women's and

men's leadership identities. Two executive leaders served as connections to the firm and the study which provided the contact information for potential participants. The study relied on random sampling for the initial research questions stated above.

For the culture study, Padavic (2020) ensured that the data was comprehensive and not biased toward any particular view of the firm. The study design used random sampling, which allowed the researchers to look at how widely shared the narratives and processes were. It was also substantial for obtaining the new constructs of interest in the study. The total sample included 107 consultants (partners and associates) and five human resource (HR) personnel. Of the 33 women consultants interviewed, eight were partners (five married, seven with children), and 25 were associates (16 married and 14 with children). Of the 74 men consultants, 21 were partners (20 married, 20 with children), and 53 were associates (32 married, 18 with children). Most participants were white; there was little to no racial variety. Padavic's (2020) study also interviewed the head of human resources (HR) and four other senior HR personnel.

This study suggested that the work–family explanation has become a status-quo-preserving story that really has no fact behind it. Padavic et al. (2020) also went through the systems-psychodynamic theory to show how businesses should use this narrative and attendant policies and practices as an unconscious “social defense” to help employees fend off anxieties raised by a 24/7 work culture that promotes men to the firm's leaders, and in so doing, keeps the inequality in the workplace. Due to the social defense, two things remain, the thought that it is necessary to work long hours and the lack of women's stalled advancement in the business world. The result is that women's thin representation at senior levels remains in place (Padavic, et al., 2020).

There are two major findings in the study. First, psychodynamic desires and conflicts are

also at play, making the path toward equality even more difficult to traverse. Second, women's advancement is slowed because of social defenses at the organizational level, along with the equally resistant-to-change wider cultural beliefs Ridgeway discussed (Padavic, Ely, & Reid, 2020).

The work/family narrative based on social defense suffers from weaknesses, the work/family narrative is something that companies fall back on because they are unsure of the inequality of men/women in their business (Padavic, Ely, & Reid, 2020). As women and men employees continue to feel frustrated and as researchers point to productivity losses from long work hours, other accounts may displace it, making it less available for social defense purposes and creating space for other, less-entrenched formulations of the problem. It fails to fully release either the pain men feel over disconnection from family or the pain women feel over the stark choice they are handed between work and family (Padavic, Ely, & Reid, 2020).

Padavic's (2020) study revealed that progress toward gender equality will be slowed to the extent that efforts are focused exclusively on women. The findings also show that efforts to include men requires many companies to become fluid in culture visions (Padavic, Ely, & Reid, 2020). This would look like letting and encouraging men to use the policies businesses have at the same rate similar to women. This would level the work-field for both men and women. This would not create a worse culture of overwork, but it would create a culture that is more informed and alert to social injustice in the business culture. When this happens the old gender system will be dismantled and become irrelevant. Only when women and men can pursue their lives, either work or family or the balance of both, so that the demands and satisfactions of one or another need not take value over the other will women achieve workplace equality with men (Padavic et al., 2020).

**Attractiveness.** While the work/family narrative was proven to be a myth and just an issue for females, the myth that more attractive women cannot be trusted seems not to be. Wieckowski (2019) mocked up articles that quoted a company leader explaining that layoffs within a company happened because of economic conditions rather than some failure within the organization. The study included information of executives announcing the firings. It has participants, 25 men and women, ages 30-50, who worked in the business industry, read the explanation of why certain workers were laid off. This study provided pictures of executives that fired the workers. Next, the participants rated the honesty of the leaders pictured and decided whether they should be fired. Participants saw an attractive woman, others a less-attractive woman, some an attractive man, others a less-attractive man. Then participants were asked to rate the attractiveness of leaders presented, and each participant only saw one leader. The study also used photos of two different men and women in each category of attractiveness level to see if attractiveness does have an impact.

Wieckowski (2019) also asked some attractiveness factor questions. For example, how much did they trust the reason the executive gave for the layoff, and did he or she seem honest?

Wieckowski (2019) also examined whether the leaders should be fired for their role in the layoffs. The beautiful women were perceived to be less truthful, less trustworthy as leaders, and more deserving of termination than less beautiful looking female leaders (Wieckowski, 2019). The study also concluded if a woman was not attractive, then participants found her to be more honest and trustworthy, higher than both attractive and less attractive men (Wieckowski, 2019).

While the participants found more attractive women to be less trustworthy, the opposite was true for men. It did not matter if the man was more or less attractive; participants found men to be trustworthy and the layoffs to be acceptable. In some cases, if a man was deemed more

handsome than that man was also deemed more trustworthy. Wieckowski (2019) also found a certain bias in the workplace and things that people do not want to talk about at work. One was that very attractive people or people who might be overweight or unattractive would be left out in the workplace. Participants recognized this but were hesitant about correcting or discussing it. This bias increased during the interview process. Although the interview process was supposed to level the playing field, attractiveness and physical appearance played a role in the hiring process.

Women face many issues that males do not face in the business world. They face the work/family narrative, the pay gap, and the attractiveness and trustworthiness issue. Wieckowski (2019) found clear benefits to being beautiful and stated that an attractive woman in sales is more likely to succeed than someone who is unattractive. A person does get a lot of criticism from both men and women if one is viewed as flaunting one's beauty or sexuality, even though they may not have control over this. Clearly, female leaders face a lot of double standards and for women in business, being beautiful is a liability (Wieckowski, 2019).

**Gender attitudes.** Johnson and Mohr (2014) drew in participants of 2,816 executives from 149 countries enrolled in executive education courses. Participants filled out a self-assessment survey and invited other professionals to join too, thus widening the pool of participants to 22,244. Males and females rated their leaders, and both rated female leaders more favorably than male leaders (Johnson & Mohr, 2014). Other results showed a difference in gender attitude. Women also had lower ratings on envisioning. Johnson and Mohr (2014) suspected this occurred because women do not value envisioning as a vital leadership quality at the same level as men. Women take pride in their concrete, no-nonsense, straightforward attitude and practical outlook toward everyday work problems.



Another obstacle found in Johnson and Mohr's (2014) study was that female leaders lacked the willingness to take risks or to go out 'on a limb' and go for bigger risk challenges. In fact, women adopted a defensive, often rigid, posture, and rely less on their imagination and creativity which often lead to women to stick to safer choices. Although women stuck to the safe choices, they also seemed to work better in groups because they are not afraid of competition. Johnson and Mohr (2014) discussed the differences between school and work with women in the workplace at corporate companies in the U.S. (companies and information was disclosed). Johnson and Mohr (2014) concluded that:

Until our culture evolves, as a woman, you'll have to do this (self-promote) within the context of the double-bind. You'll (women) often have to do better work than male counterparts to stay ahead, but you'll be shamed or gaslighted if you toot your own horn. So, find the forms of self-promotion that work — for a woman — within your workplace. They will likely be subtler than those that typically work for men. (p.1)

By involving their male peers in the cooperation of the creation process in business projects, female leaders may get less credit for the result of the project. In conclusion, women are facing the challenge of dismissiveness. Women need to make their visions known and take risks even though they may not get the reward they want (Johnson & Mohr, 2014).

Men and women's attitudes, behaviors, and dispositions are different (Tinsley, et al., 2019). In a study of Harvard Business School graduates, nearly everyone, regardless of gender, placed a higher value on their families than on their work (Ely et al., 2015):

Some men attempt an under-the-radar approach, quietly reducing hours or travel and hoping it goes unnoticed, while others simply concede, limiting the time they spend on family responsibilities and doubling down at work. Either way, they maintain a

reputation that keeps them on an upward trajectory. Meanwhile, mothers are often expected, indeed encouraged, to ratchet back at work. They are rerouted into less taxing roles and given less “demanding” clients. (p.1)

Concerning the work/family balance, men and women are very similar; however, once they become parents that puts them in dissimilar places (Tinsley et al., 2019). 80% of women are grouped into the ‘mother’ category, when most people need to realize every woman might not want to be a mother. In their article Tinsley et al. (2019) noticed when companies see the differences in men and women, the overall success rates of women and men, or in behaviors that are vital to effectiveness, they can actively seek to understand the organizational conditions that might be the cause, and then they can implement change to the conditions. When analyzing more than 200 studies, Tinsley, et al. (2019) noticed that businesses started to train men and women differently as early as age 23. Companies should change conditions and training to realize gender bias and that both men and women experience the work/family narrative (Tinsley et al., 2019).

Mazei and colleagues (year) went through more than 433 potential studies, a total of 51 studies met the criteria for inclusion in this meta-analysis. The remaining 382 studies were excluded for the following reasons: One hundred twenty-four studies were excluded because they investigated other dependent variables than economic outcomes such as negotiators’ propensity to initiate negotiations. The meta-analysis studies inspected whether men and women negotiate different outcomes, though it was determined that gender disparities were too small at negotiating. This means men have a slight advantage in negotiations when they are advocating only for themselves and had obscurities about the stakes or opportunities. meaning they did not think about the stakes of negotiating but only its value (Mazei et al., 2015). Larger

inconsistencies happened when the outcome of the negotiators either had no prior experience or were put in a place where they were forced to negotiate, as in a training exercise (Tinsley et al., 2019). This study refuted the theory that women are more cooperative than men (Balliet et al., 2011).

Competition is thought to be the downfall to women accepting higher leadership positions. Women in business are less likely to get mixed in with the display and competition of ‘macho chest puffing’ and are less likely to take unnecessary risks. On the other side, women also seemed to be too cautious to make high-risk, high reward investments that might pay off in the future (Tinsley et al., 2019). Men and women were both likely to accept a leadership role when offered, but men were 50% more likely to have been offered one. Women were more likely than men to say that they had fears about jeopardizing their current careers by pursuing a higher leadership position. Women also feared that they could not recover from the failure and did not want to take on the risk. Tinsley and Ely (2019) also found that companies and managers felt more positive when they saw themselves as part of the solution rather than part of the problem. For example, managers would help more if they felt like they were helping rather than someone pointing at them as the problem.

### **Chapter Summary**

The gender gap remains constant when girls disown CTE classes in high school and counselors in school do not recommend CTE classes (Toglia, 2013). Throughout college, women do not break into the business majors because they do not want to be part of a crowd of men, this is why human resources is largely female dominated (Davis and Geyfman, 2015). It is also important to look at the past to gain a better understanding of what the future looks like. Studying the patterns of women dominated careers can help the progression for the future of

females in the business world (Williams and Multhaup, 2018). Barriers for females of the business world include lack of female role models, lack of females in C-level positions, lack of comparable earnings, perceptions of work and family, attractiveness, and gender attitudes. What companies must do is to address gender disparities and create a learning culture that gives all employees opportunities for full potential. Once this is done, more opportunities for women and young girls will be noticeable (Tinsley et al., 2019).

### **CHAPTER III: DISCUSSION AND CONCLUSION**

The purpose of this literature review is to understand why fewer girls compared to boys enter nontraditional careers. This research focused on the gender gap and whether it deters girls from pursuing CTE careers, classes, and the professional barriers for high school girls who want to go into business. Chapter III will explain an overview of the literature, give professional application, explain limitations, and give further implications for research. To investigate this purpose, the guiding questions were twofold: 1) Does a gender gap deter high school girls from pursuing Career and Technical Education careers? 2) What, if any, are the professional barriers for high school girls who want to go into the field of business?

#### **Summary of Literature**

While there has been progress made in closing the gender gap it is still prevalent. Some organizations deny that the gender gap still exists while other organizations are overly aggressive in their attempts to close the gender gap. Research found that girls do not pursue business careers because of professional barriers they see in corporate America, post-secondary issues, psychological barriers, girls disowning different careers, and through the gender stereotypes and participation (Eardley, & Manvell, 2006).

Femininity is fluid and can be described in many ways. From the research, femininity is considered to have characteristics such as affection, loyalty, warmth, and soft-spokenness (Leraas, Kippen, & Larson, 2018). Even though femininity is described as such, not all of these characteristics fit all women, because gender is fluid.

Concerning participation in business classes, Robnett (2016) found that girls often do not participate because they do not feel like business and CTE classes are relatable. Girls seem to go into classes and careers where they can picture themselves in that career or class. When

classes and business careers are male dominant, then girls are less likely to participate because they cannot relate.

As for disowning different careers, girls do this for many reasons. Some girls do not go into business for the fact that they do not see females like them in that field or in leadership positions. Furthermore, understanding why females disown different careers is vital to understanding why females do not choose business as a career. Students are influenced by people around them, especially female students, and the lack of exposure to female students in CTE courses is an unnoticed bias of school leaders (Eardley and Manvell, 2006).

Psychological barriers are important to understand because they support some underlying truths about why the gender gap remains prevalent. In some cultures, males tell females that they are weak and that they cannot do what men can, which leads to a psychological barrier that if males are working in business, then a female cannot (Riegle-Crumb, 2010). The literature also focused on females' need for extra support in their secondary schooling. The literature pointed out that high school guidance counselors are not equipped on CTE classes and thus do not recommend business classes to females as often as males (Toglia, 2013).

Overall there are many career myths that are said to hold females back in the business world. The family/work narrative is often used as one that often gets pushed onto females as a reason why they do not go into business and/or stay in business, though the literature declares that to be a myth. Males and females both have an equal amount of family/work narrative guilt, though more females than males act upon this (Ely, 2020). Another issue concerning the gender gap is that women are still paid significantly less than their male counterparts. This is

discouraging to women, even though they are doing the same jobs as their male counterparts (Babcock et al., 2003).

### **Professional Application**

This research can be applied in many ways in the professional world. One of the most important aspects of the research is to remember that many ideas surrounding the work/family narrative were discarded as myths. Knowing this helps professionals better create solutions by closing the gender gap, businesses need to realize they need to be a part of the solution by listening and taking action. Businesses can make safe work environments where women feel comfortable speaking out and taking risks. This could look like not getting penalized by applying for a leadership role or simply not just hearing the louder voice in a work environment and looking at the big picture.

For secondary teachers, knowing that girl students see themselves in careers that women like them already have is important. Bringing in female guest speakers who are in business would promote business careers. By broadening students' understanding of business, this could help their interests grow. One example would be a career fair that includes females who pursued non-traditional business careers, and females who became high-level business leaders and entrepreneurs. At this fair, female students could learn more about different CTE careers and courses and how the classes could lead them to pursue careers they otherwise may not have considered.

Additionally, schools could make greater attempts to encourage girls to enroll in CTE classes (Opie et al., 2019). To gain more attention and to involve girls in business and CTE courses, schools can offer different classes geared just towards females. According to Riebe (2012), offering different education classes and opportunities that go beyond the typical

business curriculum helps women not only be interested in business but helps their future business goals, like becoming an entrepreneur. Offering educational classes that directly address the needs and barriers that women face in business will also be helpful. Offering classes for women in careers in business helps them learn about and contribute to economic development (Riebe, 2012). This is a way for schools to innovate and advance their educational and outreach missions while contributing to the economic development and vitality of their business aspirations.

Talking to guidance counselors about CTE courses can help broaden all students' horizons of classes; it can involve all different types of students, specifically girls. When CTE teachers talk to counselors it grows a relationship that allows counselors to know more about CTE courses, which can lead more students to sign up for CTE classes.

### **Limitations of the Research and Implications for Future Research**

Research has certain limitations that may affect the outcomes of the research study. This thesis has four primary limitations. One, it was hard to find articles that focused on girls and high school business and/or Career and Technical Education. Most articles focused on the gender gap in the business world, which is very important, but it is also important to understand where the gender gap problem starts. Some articles were vague about their study population and did not go into detail about participants. Future research could be performed on teachers that are teaching business and CTE classes in high school while including more details about participants and demographics. It would be interesting to study whether factors such as teaching style affects whether girls take business and other CTE classes. Understanding the ratio of boys to girls in business classes would also be interesting, as it could help teachers, counselors, and schools better understand how they can help promote girls going into business.



Second, the focus of these studies was mainly on caucasian people, and not only caucasian people face the gender gap. Researching multiple races could provide information on how different races react to gender. More research needs to be conducted on female students of other races because they are also affected by the gender gap, in similar and different ways. This research could help understand how women of other races cope with the gender gap differently.

Third, definitions of gender are more fluid than ever and are in constant change. According to the U.S. Human Rights Organization (2020), gender has many different aspects like gender expression which is the external aspect of one's gender identity. Though these studies and this literature review only focused on the gender gap of men and women, it could have been expanded to include a more fluid view of gender.

Fourth, some of the research is old. The preference would have been to read research that had been performed within the past 10 years, but this was not possible, because there were a limited number of studies on this specific literature review topic. It was necessary to read older research to understand the history of the gender gap and how it has changed over the past two generations.

## **Conclusion**

Girls have been faced with discrimination and stereotyping in nontraditional CTE courses (Eardley & Manvell, 2006). Girls were found to be stereotyped into classes that fit their gender in the traditional sense. This led to fewer girls pursuing CTE business classes because they felt like they did not fit. Girls also showed little interest in CTE courses because of the discrimination they face while in the classes. When girls saw women leaders in business, they

felt motivated to pursue the same career path. However, the lack of women in leadership positions in business means girls often cannot relate to this profession (Hunt & Song, 2013).

## References

- Babcock, L., Laschever, S., Gelfand, M., & Small, D. (2003). Nice girls don't ask. *Harvard Business Review*, (8832), 1–4.
- Balliet, D., Li, N. P., Macfarlan, S. J., & Vugt, M. V. (2011). Sex differences in cooperation: A meta-analytic review of social dilemmas. *Psychological Bulletin*, 137(6), 881–909. doi: 10.1037/a0025354
- Career and Technical Education: Research Roundup. (2010). Retrieved from <https://www.edutopia.org/stw-career-technical-education-research-roundup>
- Carter, N. M., & Silva, C. (2010). Women in management: Delusions of progress. *Harvard Business Review*, 88(3), 19- 21.
- Calkin, S. (2016). Globalizing ‘Girl Power’: Corporate social responsibility and transnational business initiatives for gender equality. *Globalizations*, 13(2), 158–172. doi: 10.1080/14747731.2015.1064678
- Conroy, T., & Weiler, S. (2015). Where are the women entrepreneurs? Business ownership growth by gender across the American urban landscape. *Economic Inquiry*, 53(4), 1872–1892. doi.10.1111/ecin.12224
- CTE Basic Facts. (2020). Retrieved from <https://www.acteonline.org/why-cte/what-is-cte/basic-facts/>
- Davis, L. M., & Geyfman, V. (2015). The glass door remains closed: Another look at gender inequality in undergraduate business schools. *Journal of Education for Business*, 90(2), 81–88. doi.10.1080/08832323.2014.980715

- Demirbas-Celik, N. (2018). Happiness in high school students: autonomy, relatedness, competence and meaning in life. *Cypriot Journal of Educational Sciences*, 13(3), 422–430.
- Eardley, E., & Manvell, J. (2006). Legal remedies for girls' under-representation in nontraditional career and technical education. *International Journal of Manpower*, 27(4), 396–416. <https://doi-org.ezproxy.bethel.edu/10.1108/01437720610679232>
- Eisend, M. (2019). Gender roles. *Journal of Advertising*, 48(1), 72–80. Doi-10.1080/00913367.2019.1566103
- Ely, R. J., & Padavic, I. (2020, February 19). What's really holding women back? Retrieved from <https://hbr.org/2020/03/whats-really-holding-women-back>
- Ely, R. J., Stone, P., Ammerman, C., Ibarra, H., Ely, R., Kolb, D., ... Abrahams, R. (2015, January 16). Rethink what you "know" about high-achieving women. Retrieved from <https://hbr.org/2014/12/rethink-what-you-know-about-high-achieving-women>
- Geyfman, V., Force, C., & Davis, L. (2016). Women in business: Influences on the undergraduate major choices. *Administrative Issues Journal Education Practice and Research*, 5(2), 51–63. doi: 10.5929/2015.5.2.2
- Hampel-Milagrosa, A. (2010). Identifying and addressing gender issues in doing business. *European Journal of Development Research*, 22(3), 349-362.
- Hardin, E., & Longhurst, M. (2016). Understanding the gender gap: Social cognitive changes during an introductory STEM course. *Journal of Counseling Psychology*, 63(2), 233-239.
- History of CTE. (2020). Retrieved from <https://www.acteonline.org/history-of-cte/>

- Human Rights Campaign. (2020). Sexual Orientation and Gender Identity Definitions. Retrieved From <https://www.hrc.org/resources/sexual-orientation-and-gender-identity-terminology-and-definitions>
- Hunt, G., & Song, F. (2013). Gender and specialty in business management education. *Canadian Journal of Higher Education, 43*(1), 129–145.
- Jenson, J., & De Castell, S. (2010). Gender, simulation, and gaming: Research review and redirections. *Simulation & Gaming, 41*(1), 51-71.
- Johnson, W., & Mohr, T. (2014). Women need to realize work isn't school. Retrieved from <https://hbr.org/2013/01/women-need-to-realize-work-isnt-schol>
- Kemple, J. J., & Manpower Demonstration Research Corp., N. Y. N. (2004). Career academies: impacts on labor market outcomes and educational attainment. In MDRC. MDRC.
- Laury, S. K., Lee, D. J., & Schnier, K. E. (2019). Will girls be girls? Risk taking and competition in an all-girls' school. *Economic Inquiry, 57*(3), 1408–1420.  
doi:10.1111/12765
- Lerchenmueller, M. J., Sorenson, O., & Jena, A. B. (2019, December 20). Research: How Women Undersell Their Work. Retrieved from <https://hbr.org/2019/12/research-how-women-undersell-their-work>
- Leraas, B., Kippen, N., & Larson, S. (2018). Gender and student participation. *Journal of the Scholarship of Teaching and Learning, 18*(4).  
<https://doi.org/10.14434/josotl.v18i4.22849>
- Lufkin, M. E., & Wiberg, M. M. (2007). Gender equity in career and technical education. In S. S. Klein (Ed.), *Handbook for achieving gender equity through education* (2nd ed.), (pp. 421-443). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

- Mazei, J., Hüffmeier, J., Freund, P. A., Stuhlmacher, A. F., Bilke, L., & Hertel, G. (2015). A meta-analysis on gender differences in negotiation outcomes and their moderators. *Psychological Bulletin, 141*(1), 85–104. doi: 10.1037/a0038184
- Minnesota Department of Education (2019). Males and females enrolled in career and technical education classes.
- New report examines factors contributing to the gender pay gap. (2007). *On Campus with women, 36*(2). Retrieved from [https://link-gale-com.ezproxy.bethel.edu/apps/doc/A172251402/PROF?u=clic\\_bethel&sid=PROF&xid=00418dca](https://link-gale-com.ezproxy.bethel.edu/apps/doc/A172251402/PROF?u=clic_bethel&sid=PROF&xid=00418dca)
- O’Halloran, K. (2020). *Sexual orientation, gender identity and international human rights law: Common law perspectives*. London ; New York, NY: Routledge.
- Opie, T. R., Livingston, B., Greenberg, D. N., & Murphy, W. M. (2019). Building gender inclusivity: Disentangling the influence of classroom demography on classroom participation. *Higher Education, 77*(1), 37–58. <https://doi-org.ezproxy.bethel.edu/10.1007/s10734-018-0245-2>
- Padavic, I., Ely, R. J., & Reid, E. M. (2020). Explaining the persistence of gender inequality: The work–family narrative as a social defense against the 24/7 work culture. *Administrative Science Quarterly, 65*(1), 61–111. <https://doi.org/10.1177/0001839219832310>
- Riebe, M. (2012). A place of her own: The case for university-based centers for women entrepreneurs. *Journal of Education for Business, 87*(4), 241–246. <https://doi.org/10.1080/08832323.2011.591846>

- Roberts, A. (2015). The political economy of “transnational business feminism.” *International Feminist Journal of Politics*, 17(2), 209–231.  
<https://doi.org/10.1080/14616742.2013.849968>
- Robnett, R. D. (2016). Gender bias in STEM fields: Variation in prevalence and links to STEM self-concept. *Psychology of Women Quarterly*, 40(1), 65–79.  
<https://doi.org/10.1177/0361684315596162>
- Riegle-Crumb, C. (2010). More girls go to college: Exploring the social and academic factors behind the female postsecondary advantage among Hispanic and white students. *Research in Higher Education*, 51(6), 573–593.  
<https://doi-org.ezproxy.bethel.edu/10.1007/s11162-010-9169-0>
- Russo, C. J., & Kaynama, S. (2012). The Impact of Personality Type and Gender on Students’ Performance in a Business Capstone Course. *Academy of Educational Leadership Journal*, 16(1), 60–83. doi: 77842176
- Sandberg, S. (2018). *Lean in: Women, work, and the will to lead*. New York: Alfred A. Knopf.
- Shapiro, M., Grossman, D., Carter, S., Martin, K., Deyton, P., & Hammer, D. (2015). Middle school girls and the “Leaky pipeline” to leadership. *Middle School Journal*, 46(5), 3-13.  
 doi:10.1080/00940771.2015.11461919
- Sonam Sheth, S. G. (2020). 7 charts that show the glaring gap between men's and women's salaries in the US. Retrieved from <https://www.businessinsider.com/gender-wage-pay-gap-charts-2017-3>
- THE 2018 STATE OF WOMEN-OWNED BUSINESSES REPORT. (2018). From  
[https://about.americanexpress.com/files/doc\\_library/file/2018-state-of-women-owned-businesses-report.pdf](https://about.americanexpress.com/files/doc_library/file/2018-state-of-women-owned-businesses-report.pdf)

Toglia, T. V. (2013). Gender equity issues in CTE and STEM education: Economic and social implications. *Tech Directions*, 72(7), 14–17.

Tinsley, C. H., & Ely, R. J. (2019). What most companies get wrong about men and women. Retrieved from <https://hbr.org/2018/05/what-most-people-get-wrong-about-men-and-women>

United States Census Bureau. (2018). Retrieved from <https://data.census.gov/cedsci/table?q=s2002&tid=ACSST1Y2018.S2002>

U.S Bureau of Labor Statistics. (2019) Barbers, Hair Stylists, and Cosmetologists: Occupational Outlook Handbook. Retrieved from <https://www.bls.gov/ooh/personal-care-and-service/barbers-hairstylists-and-cosmetologists.htm>

U.S. Census. (2010). Detailed occupation for the civilian employed female population 16 years and over. Retrieved from <https://data.census.gov/cedsci/table?q=B24116:DETAILED OCCUPATION FOR THE CIVILIAN EMPLOYED FEMALE POPULATION 16 YEARS AND OVER&hidePreview=true&tid=ACSST1Y2018.B24116&t=Occupation>

US Department of Education (2004), “Final report to Congress: Executive summary”, Retrieved from [www.ed.gov/rschstat/eval/sectech/nave/naveexesum.pdf](http://www.ed.gov/rschstat/eval/sectech/nave/naveexesum.pdf)

Weinstein, N., Ryan, R. M. & Deci, E. L. (2012). Motivation, meaning and wellness: A self-determination perspective on the creation and internalization of personal meanings and life goals. In P. T. P. Wong (Ed.), *The human quest for meaning: theories, research, and applications* (pp. 81–106). New York: Routledge.



Weisgram, E. S., Bigler, R. S., & Liben, L. S. (2010). Gender, values, and occupational interests among children, adolescents, and adults. *Child Development, 81*(3), 778–796. <https://doi-org.ezproxy.bethel.edu/10.1111/j.1467-8624.2010.01433.x>

Women CEOs of the S&P 500. (2020). Retrieved from <https://www.catalyst.org/research/women-ceos-of-the-sp-500/>

Wieckowski, A. G. (2019). For women in business, beauty is a liability. Retrieved from <https://hbr.org/2019/11/for-women-in-business-beauty-is-a-liability>

Williams, J. C., & Multhaup, M. (2018). For women and minorities to get ahead, managers must assign work fairly. Retrieved from <https://hbr.org/2018/03/for-women-and-minorities-to-get-ahead-managers-must-assign-work-fairly>

Wong, A. (2019). The U.S. teaching population is getting bigger, and more female. Retrieved from <https://www.theatlantic.com/education/archive/2019/02/the-explosion-of-women-teachers/582622/>

Zaman, N. U., Bibi, Z., & Karim, J. (2018). Why girls disown business education: A qualitative study. *Bulletin of Education and Research, 40*(2), 41–63. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1209667&site=ehost-live&scope=site>